2008

WASC Capacity and Preparatory Review Appendices, WASC References

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8. Report of the Learning Assessement Task Force (2/2008)

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72. Ad Hoc Committee on Business Practices Members

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CHARTER
BOARD OF ADVISORS TO THE PRESIDENT, NAVAL POSTGRADUATE SCHOOL

A. Official Designation: The Committee shall be known as the Board of Advisors to the President, Naval Postgraduate School (hereafter referred to as the Board).

B. Objectives and Scope of Activities: The Board, under the provisions of the Federal Advisory Committee Act of 1972 (5 U.S.C., Appendix, as amended), shall provide the Secretary of Defense, through the Secretary of the Navy and the President, Naval Postgraduate School, independent advice and recommendations on organization management, curricula, methods of instruction, facilities and other matters of interest to Naval Graduate Education Programs. The Secretary of the Navy or designated representative may act upon the Board's advice and recommendations.

C. Board Membership: The Board shall be composed of not more than nineteen members, who are eminent authorities in the field of academia, business, and the defense industry.

Board Members appointed by the Secretary of Defense, who are not full-time federal officers or employees, shall serve as Special Government Employees under the authority of 5 U.S.C. § 3109. Board Members shall be appointed on an annual basis by the Secretary of Defense, and shall serve terms of four years. Following their initial four-year tour Board Members may, at the discretion of the President, Naval Postgraduate School, be nominated for additional terms on the Board. The Board Membership shall select the Board's Chairperson and the Board Chairperson shall select the Board's Vice-Chairperson. The Board Chairperson, if reappointed, shall serve no more than two years as the Board Chairperson. Board Members shall, with the exception of travel and per diem for official travel, serve without compensation.

D. Board Meetings: The Board shall meet at the call of the Designated Federal Officer, in consultation with the Chairperson and the President Naval Postgraduate School. The estimated number of Board meetings is two per year.

The Designated Federal Officer shall be a full-time or permanent part-time DoD employee, and shall be appointed in accordance with established DoD policies and procedures. In addition, the Designated Federal Officer shall attend all Board and subcommittee meetings.

The Board shall be authorized to establish subcommittees, as necessary and consistent with its mission, and these subcommittees or working groups shall operate under the provisions of the Federal Advisory Committee Act of 1972, the Government in the Sunshine Act of 1976 (5 U.S.C. § 552b, as amended), and other appropriate federal regulations.

Such subcommittees or workgroups shall not work independently of the chartered Board, and shall report all their recommendations and advice to the Board for full deliberation and discussion. Subcommittees or workgroups have no authority to make decisions on behalf of the chartered Board nor can they report directly to the Department of Defense or any federal officers or employees who are not Board Members

E. Duration of the Board: The need for this advisory function is on a continuing basis; however, it is subject to renewal every two years.

F. Agency Support: The Department of Defense, through the Secretary of the Navy and the President, Naval Postgraduate School, shall provide support as deemed necessary for the performance of the Board's functions, and shall ensure compliance with the requirements of 5 U.S.C., Appendix, as amended.

G. Termination Date: The Board shall terminate upon completion of its mission or two years from the date of this Charter is filed, whichever is sooner, unless the Secretary of Defense extends it.

H. Operating Costs: It is estimated that the annual operating costs, to include travel costs and contract support, for this Board is $61,000.00. The estimated annual personnel costs to the Department of Defense are 0.5 full-time equivalents (FTEs).

I. Recordkeeping: The records of the Panel and its subcommittees shall be handled according to section 2, General Records Schedule 26 and appropriate DoD policies and procedures. These records shall be available for public inspection and copying, subject to the Freedom of Information Act of 1966 (5 U.S.C. § 552, as amended)

J. Charter Filed: February 29, 2008

DEPARTMENT OF THE NAVY
OFFICE OF THE SECRETARY
1000 NAVY PENTAGON
WASHINGTON, DC 20350-1000

SECNAVINST 5420.190A
NAVPGSCOL
9 May 2001

SECNAV INSTRUCTION 5420.190A

From: Secretary of the Navy

Subj: THE BOARD OF ADVISORS TO THE SUPERINTENDENT, NAVAL POSTGRADUATE SCHOOL

Ref: (a) The Federal Advisory Committee Act, Public Law 92-463 (1972)
(b) 41 C.F.R. 101-6.10
(c) SECNAVINST 5420.60H

1. Purpose. To reissue the operating procedures of the Board of Advisors to the Superintendent, Naval Postgraduate School (BOANPS) as a Secretary of the Navy Federal Advisory Committee. This instruction is a substantial revision and should be reviewed in its entirety.

2. Cancellation. SECNAVINST 5420.190.

3. Scope. The function of the BOANPS is solely advisory in nature. It is not empowered to make policy or management decisions. Reports and recommendations of the BOANPS shall be submitted to the Secretary of the Navy via the Superintendent, Naval Postgraduate School (NAVPGSCOL) and the Chief of Naval Operations for approval.

4. Mission. The Board advises the Superintendent, NAVPGSCOL, the Chief of Naval Operations, and the Secretary of the Navy on NAVPGSCOL graduate education programs by assessing the curricula, instruction, physical equipment, administration, state of morale of the student body, faculty and staff, fiscal affairs, and other program matters. The objective of the Board is to provide an avenue of communication by which a distinguished group representing a broad range of perspectives from individuals in academia, private industry, the national media, politics, and former military members may advise the Superintendent of the Naval Postgraduate School and the Secretary of the Navy on Department of the Navy (DON) graduate education programs. The varied backgrounds of the Board members provide a level of insight and experience, a degree of detachment, and a civilian sense of responsibility to the Secretary of the Navy that could not be achieved internally. The Board assesses the effectiveness

of the School in accomplishing its mission by regularly convening on a formal basis.

5. Membership. The BOANPS consists of 13 non-Federal government members to include a retired Marine Corps General Officer. Members are nominated and appointed according to DON committee management guidelines in references (a), (b), and (c). The members will be appointed by the Secretary of the Navy with concurrence by the Office of the Secretary of Defense, for a period not to exceed 4 years. Terms will be staggered to provide for rotation of members while maintaining adequate continuity of membership. Board members normally serve for no more than 4 years unless the Secretary reappoints them for an additional period of service. The Chief of Naval Research; the Director, Naval Training and Education Division (N79) from the Office of the Chief of Naval Operations staff; and the President, National Defense University will serve as additional standing members to this committee.

6. Chairperson. The Chairperson of the BOANPS will be selected from the BOANPS membership by a vote of the members. The Chairperson will select a Vice Chairperson. In the absence or unavailability of the Chairperson, the Vice Chairperson will act in his or her behalf.

7. Sponsor. The sponsor of the BOANPS is the Secretary of the Navy.

8. Designated Federal Officer. The Superintendent of the Naval Postgraduate School is the Designated Federal Officer (DFO) responsible for BOANPS oversight and shall provide the necessary financial and administrative support for the effective operation of the BOANPS.

9. Meetings. The BOANPS will normally conduct unclassified, semi-annual meetings open to the public at such times as specified by the DFO in coordination with the BOANPS Chairperson. A simple majority shall constitute a quorum for conduct of business of the committee. In pursuing its objectives, the BOANPS may operate in panels or subcommittees composed of selected members to conduct detailed examinations of matters related to DON graduate education programs.

10. Action. The Superintendent, Naval Postgraduate School will provide information and access to facilities and staff support as required for the accomplishment of the Board's work.

11. Reports. The reports of the BOANPS are exempt from report control by SECNAVINST 5214.2B.

Robert B. Pirie, Jr.
Acting

Distribution:
SNDL A (Navy Department)
B3 (College and University) (NDU, only)
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Western Association of Schools & Colleges
Accrediting Commission for Senior Colleges & Universities

WASC

December 20, 2006

Colonel David A. Smarsh
Acting President
Naval Postgraduate School
One University Circle
Hermann Hall, Mezzanine Room
Monterey, CA 93943-5002

Dear Colonel Smarsh:

At its December 12, 2006 meeting, a panel of the Proposal Review Committee considered the Naval Postgraduate School Institutional Proposal submitted in preparation for its next reaffirmation of accreditation review. The panel appreciates making yourself available by conference call and appreciated the opportunity to discuss the proposal with your colleagues, including Julie Filizetti, Association Provost for Academic Affairs, ALO; Christine Cermak, Executive Director, Information Resources and CIO; Fran Horvath, Director of Institutional Research; Rob Dell, Associate Professor of Operations Research; and Leonard Ferrari, Provost. As you know, your proposal has been approved.

The panel found the proposal responsive to WASC standards and reflective of the NPS's SWOT analysis, strengths, weaknesses, opportunities and future challenges in the creation of the master plan. While the panel viewed the written proposal as clear and precise, the depth of the School's deliberation and thoughtfulness was not truly evident until the conference call. Any questions that the panel had were more than adequately covered during the call, prompting the panel to suggest that in preparation for the reviews themselves, that NPS give attention to including the level of detail communicated in the conference call. It brought to light the depth of careful consideration and strategic planning that underlies the future direction of the institution.

The timeline for review will remain with the Capacity and Preparatory Review conducted in spring 2009 and the Educational Effectiveness Review in fall 2010 (specific dates are yet to be determined). The proposal now becomes the framework for the accreditation review process and represents a plan of action and commitment by the institution. The proposal will be shared with the visiting teams for both the Capacity and Preparatory Review and the

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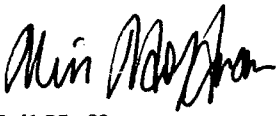
Educational Effectiveness Review, and with the Commission following each Review. It is understood that adjustments in the activities undertaken under the proposal will be made as implementation occurs. Major changes to the proposal, such as in the direction or focus of institutional activities for the accreditation review process, are to be approved in advance by Commission staff.

Please accept my congratulations on behalf of the Proposal Review Committee. Let me know if I can be of assistance as you implement your proposal and prepare for your Capacity and Preparatory Review.

Sincerely,



Neil Hoffman
Associate Director

Cc: Julie Filizetti, Associate Provost for Academic Affairs
Proposal Review Committee
Ralph A. Wolff

I have appointed a Steering Committee for the WASC re-accreditation process. The Steering Committee will serve from now until the accreditation review is completed following the WASC visit in Fall 2010. This committee will be guiding all the WASC efforts including examining data, drafting documents and working with WASC officials. The committee members act as representatives from each of their areas. Campus members are urged to contact their representative with any comments or questions regarding the WASC process at any point. Thanks for your cooperation.

Steering Committee Members:

Julie Filizetti, Co-Chair
Rob Dell, Co-Chair
Doug Moses, GSBPP
Andres Larraza, GSEAS
Knox Millsaps, GSEAS
Daniel Dolk, GSOIS
Daniel Moran, SIGS
John Mutty, Faculty Council
Douglas Fouts, Research
MAJ Glenn Woodson, Student
Deborah Baity, Staff
Christine Cermak, Information Resources
CAPT Paula Jordanek, DOS/DOP
Megan Reilly, Comptroller
Eleanor Uhlinger, Library

Committee Staff:

Fran Horvath, Institutional Research
Alan Richmond, Institutional Advancement

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2007 Learning Assessment Task Force Charter

The 2007 Learning Assessment Task Force will directly address theme two, integrating a campus-wide program of continuous improvement, from the recently accepted NPS Institutional Proposal for WASC (Western Association of Schools and Colleges) Accreditation. The proposal is available on the NPS intranet, http://intranet.nps.edu/WASC/docs/WASC_Final_Proposal.pdf and theme two is provided as an attachment.

The task force will form in February 2007 and finish by September 2007 (before the start of the 2008 fiscal year).

The task force will:

1. Participate in the NPS Office of Continuous Learning workshop on "Outcomes Based Faculty Development" as described in the attachment.
2. Catalog assessments conducted by each department. Task Force can use Appendix F of the Institutional Proposal as a starting point but should collect additional information.
3. Identify best assessment practices across departments.
4. Recommend a baseline set of assessments that should be required for each department.
5. Recommend how thesis quality should be addressed.
6. Recommend how frequently similar learning assessment reviews should be conducted and a long-term strategy for their implementation.

Dave Olwell, Chair of the Systems Engineering Department will chair the Task Force. The Task Force will report their findings to the WASC Steering Committee.

NPS INSTITTUTIONAL PROPOSAL

THEME TWO: Integrating a campus-wide program of continuous improvement

NPS has a number of mechanisms for assessing the effectiveness of its academic programs and support activities. It is not clear, however, that their use is as effective as it might be, in order to continuously improve the curricula and research programs. NPS curriculum reviews provide insight into how well the needs of sponsors and students are met. The educational outcomes are refined and validated during these reviews. Academic program reviews validate NPS academic quality. Surveys of students, faculty, alumni, and staff provide valuable information about educational quality and support services. And, faculty members use a variety of methods to assess student learning and achievement of educational outcomes. Nearly every student completes a thesis, or major project, as a culminating experience in his or her degree program. NPS is also expanding the faculty development program to address more effectively the issues of student learning, assessment, and innovation in teaching.

NPS programs are also accredited by AACSB, NASPAA and ABET. Departments and faculty members have developed ways to assess effectiveness in support of these other accreditation self-studies, or in ways to improve their own individual performance. As NPS moved into distributed learning, there have been improvements in the way faculty teach and enable learning in their classrooms, both on campus and in a distributed learning environment. However, currently there is no systematic way of identifying, validating, and sharing good practices. The feedback loop is not documented as effectively as it should. When those experiences are identified and collected, NPS will be far more effective as an institution.

In considering this theme, NPS will address the following questions:

- How are assessments used as a measure of NPS' effectiveness as an institution?
- How well does the faculty development program prepare faculty for the current and future learning environment?
- What isn't known about educational effectiveness and how might it be measured?
- How does NPS better integrate the curriculum and academic program reviews in a way that enhances both relevance and academic excellence?
- Is NPS prepared for the future in terms of students, technology, and innovations in learning?

NPS anticipates the following outcomes from this inquiry:

- The development of a more robust system of assessments and feedback to provide a more complete picture of effectiveness and an integrated framework for aligning resources to improve quality.
- A Faculty Development program that enables faculty to tap into the full system of assessments and understand how to improve student learning.
- Enhancements to current assessment tools and development of new assessment mechanisms.

The Millennial Learner Series
An Outcomes Based Faculty Development Project (WASC)

March –July 2007

Overview: The Millennial Learner Series will examine best practices and relevant educational benchmarks for excellence within the context of the unique attributes and expectations of the millennial learner. Discussions and practical exercises will highlight the changing roles of the teacher and learner; the use of technology to enable learning; standards for course design and expanded access and interaction with course content; and multiple measures that assess learning. Participants will disseminate information and enlist the support of colleagues to apply it to specific tasks that are aligned with the WASC accreditation process.

Learner Outcomes: Faculty Participants will:

- Examine current practices, WASC criteria, and student exit survey data to answer questions such as:
  - How do we define quality?
  - How does the term "intentional" apply to teaching, learning, and assessment?
  - How do you know your students are learning?
- Identify the ways in which WASC standards provide a framework for planning and implementing the educational mission of NPS and the Navy Education Strategic Plan.
- Develop common language and acceptance of a continuous improvement model to quantify and evaluate best practices for teaching, learning, and assessment.
- Identify observable attributes and develop definitions and measures that document quality learning, instruction, and assessment.
- Collect benchmark information from NPS schools about the type, frequency, and use of information obtained from program assessments.
- Recommend common standards for instructional best practices, student expectations, and assessments.

Participant Requirements: The members of the WASC 2007 Learning Assessment Task Force and representative faculty from each school/department will constitute a core team for this project. The core team members will participate in all four sessions and will be responsible for the completion of exercises planned for each session. This project will require an 8-10 hour time commitment over a period of five months General faculty members are also welcome to participate in individual seminars or the series.

Dates: Seminars will be conducted on Tuesday afternoons 1500-1630.

March 6, 2007	Session 1	Common Language
April 10, 2007	Session 2	Demonstrating Quality
May 8, 2007	Session 3	Learner Centered Course Development and Expectations
July 10, 2007	Session 4	Building Competencies of the Millennial Learner: Critical Thinking across the Curriculum

Deliverables:

1. Common descriptors & definitions that define quality with respect to best practices, teaching, learning, and assessment.
2. Rubrics to: measure quality; define common learner expectations; and to recommend minimum standards to measure thesis quality.
3. Information about current assessment practices used at NPS:

- Current list & process (departments/schools) of what is assessed and how the information is used.
- Standards for course review, refresh, and updating with advance distributed learning options.

Report of the Learning Assessment Task Force
2/19/2008
Background

The learning assessment task force (LATF) was chartered in March 2007 (Enclosure 1). Members were Dave Olwell, GSEAS, Chair; Brent Olde, GSOIS; James Suchan, GSBPP; and Anne Clunan, SIGS.

Report of the Learning Assessment Task Force
2/19/2008

Background

The learning assessment task force (LATF) was chartered in March 2007 (Enclosure 1). Members were Dave Olwell, GSEAS, Chair; Brent Olde, GSOIS; James Suchan, GSBPP; and Anne Clunan, SIGS.

The LATF met intermittently until September 2007. The results were briefed to the WASC steering group in October 2007.

The WASC steering group has requested a written summary. This report provides that summary.

Scope

The LATF focused on four study questions.

> "How do we know we are teaching the right material?"
> "How do we know we are teaching it well?"
> "How do we know our students are learning it?"
> "Are our feedback mechanisms adequate and do they work?"

Summary of findings

We found that the NPS biannual curricular review process in general was an excellent process for assuring that NPS was teaching the appropriate material to its students.

We found that there was a wide spread in practices that assessed teaching effectiveness at NPS, and that pockets of excellence could serve as exemplars for the rest of campus. In particular, we found that reliance solely on student opinion reports (SOFs) to assess faculty teaching effectiveness was a poor practice. NPS has not adopted earlier committee recommendations to improve the assessment of teaching effectiveness.

We found that there were several excellent practices in selected departments for the assessment of student learning. In particular, we single out ME and ECE for their thesis review and assessment process. We also found that the curricular review process gave insights into longitudinal student retention of material.

Finally, we found that those departments that were subject to external review, such as ABET or AACSB, had better feedback processes than those that did not. The emphasis on outcomes assessment of the various accrediting bodies was a useful prod to assure a formal feedback process.

The NPS curricular review process: teaching the right material

NPS publishes an instruction (1550.1D) on curricular reviews. Curricular reviews are to be conducted biannually. The reviews are conducted by the Navy official with oversight for a given curriculum, called the sponsor.

NPS is the Navy's corporate university. As such, it does not compete on the open market for students. Naval Officers are assigned to duty at the NPS to study a given curriculum. They are then (nominally) assigned to a billet upon graduation that uses the education they have received.

Billets with advanced education requirements (ESRs) are designated with 'P-codes'. Associated with each P-code is a set of educational skill requirements laying out the required competencies for that position. The ESRs are almost always a superset of the degree requirements. ESRs are set by the curriculum sponsor, who is also responsible for assuring that the correct billets have the associated P-code.

The ESRs are subject to careful scrutiny and revision if necessary at the biannual reviews. The NPS instruction specifically requires that the existing ESRs be validated against both Navy and joint needs, that new ESRs be proposed as necessary, and that the execution of the curriculum be assessed to see if it "supports customer needs."

Thus there is an excellent feedback loop provided by the Navy. The sponsor represents the commands that gain our graduates, and provides biannual feedback on their preparation for service.

After each curricular review, the NPS President and sponsoring flag officer receive a summary brief from the review team. Final decisions are rendered on any issues raised during the review. The results are summarized in letter form that includes a general overview, list of attendees, summary of action items, and restatement of ESRs. The action items are assigned to a responsible party with a due date. This provides a means for the Director of Programs to assure that the decisions are implemented.

There are two weaknesses with the current system. First, the curriculum sponsors tend to be graduates of the curriculum they oversee, and there is a certain amount of intellectual inbreeding that can result. Second, not all curricula receive the biannual curricular reviews, especially those that are sponsored by a non-Navy agency. In particular, while most of the Navy-sponsored, resident curricula are current in their curricular reviews, many of the DL and non-Navy sponsored curricula are delinquent. Some do not have sponsors and some have never been reviewed.

Assessment of Teaching Effectiveness

The primary tool used for the assessment of instructional effectiveness at NPS is the student opinion report (SOF). This report provides each student an opportunity to numerically rate each course against 16 attributes, and to also make comments. Numerical summaries are

provided to the academic chain of command while comments are returned only to the instructor.

As with any feedback system based on student opinion, there are issues with the SOF. They have been previously examined by faculty committees (see most recent report from August 2003, Prof. M. Fargues, chair, and an educational assessment committee chaired in April 2003 by Prof. C. Eoyang.) Issues of correlation with grades, rigor, non-resident status, and class hours have been raised as confounding issues that dilute the reliability of the SOF as an instrument. Nonetheless, they provide a consistent longitudinal framework for comparisons of faculty against other faculty, courses against other courses, resident against non-resident delivery means, and departments against other departments. They are the only formal institutional mechanism for assessing teaching effectiveness, and are used heavily in pay, promotion, and tenure deliberations.

The 2003 Fargues report recommended a balanced portfolio of teaching assessment tools, including student exit interviews, peer review, and alumni questionnaires. The committee also recommended the development of a teaching fellow program, to provide a pool of mentors to faculty in need of coaching. These recommendations were not uniformly adopted across campus, although pockets of excellence exist on campus.

The committee found several instances of departments supplementing the SOFs with other means to assess instructional effectiveness. These means included chair classroom visits, student sensing through formal and informal means, the use of peer review through a 'teaching buddy' program, and monitoring by course coordinators.

A few departments have regular programs of chair classroom visits. In these, the chair requests an invitation to observe a class, observes it at an agreed time, and then provides formal written feedback to the instructor. This is a best practice for several reasons. First, it signals that quality of instruction is a priority for the department. Second, the observation checklist provides a set of rubrics for faculty to consider when they conduct self-assessment. Third, it provides an independent context to balance the student opinion forms. Last, by preserving a written record, the visits can be used for faculty evaluation or to provide additional perspective in a promotion or tenure case.

An example chair observation sheet is attached at annex A.

Department evaluation committees also do teaching evaluations at P&T milestones. Those evaluations also include classroom visits.

Many departments have formal and informal student sensing mechanisms. These range from student interviews each quarter, to student interviews upon graduation, to monitoring of issues raised to education technicians, to simply asking students 'how it is going' daily upon encounters. These are recorded in a variety of means and with a varying consistency. To be effective as feedback systems, the student input must be captured, recorded, and the resulting action identified. At least one department keeps a working spreadsheet of student identified issues and their resolution.

The Fargues report specifically mentioned peer review. One department has implemented a teaching buddy program. This program requires two faculty members to partner for a quarter. They agree to review each other's syllabi and final examinations, and to observe at least one class taught by their buddy. The observations are shared only in the buddy team; they report to the chair only that they have complied with the program.

Course coordinators have an important role to determine that the content specified for the course is actually delivered. They do so by monitoring of course journals, required by the Faculty Handbook, and by discussions with instructors teaching the course. We found that the submission, archival, and analysis of course journals is not consistent across campus; this is an opportunity for improvement.

The advent of DL offers another, underutilized, opportunity for the assessment of teaching effectiveness. Courses delivered by video-tele-education and by Elluminate© are web archived and can be reviewed by teaching buddies or administrators. This offers another less intrusive means to observe classroom performance. Departments that review these archived sessions and provide feedback to instructors demonstrate another best practice.

We find that the Fargues report has not been adopted uniformly across campus.

The Eoyang committee report in April 2003 formally recommended that NPS "develop a university-wide framework for educational outcomes assessment and improvement." We do not find evidence that this has occurred.

In conclusion, this area retains strong potential for improvement.

Assessment of Student Learning

The assessment of student learning occurs repeatedly during courses. It also occurs at the end of degree work with the assessment of a student's thesis, and in the case of doctoral students, qualifying examinations.

There are techniques for using common assessment items longitudinally across course offering, and tracking student performance on those items to measure longitudinal changes in student learning. We did not find any evidence of a systemic use of these techniques on campus.

Course journals, which include student performance statistics and copies of examination and other assessment instruments, offer a rich lode for data-mining to assess student learning and its changes over time, if any. Again, we did not find any systemic use of course journals in this fashion.

The GSBPP is shifting, under the impetus of the AACSB, to an "Assessment of Learning" paradigm for student evaluation. Their approach is presented in Appendix B. The key point is that GSBPP is in the process of shifting from indirect measures of student learning, such as course grades, to direct measures, such as "performance on exams, exams for certification and

licensure, projects, student portfolios, case studies." Once implemented, this may be a best practice.

Other schools at NPS also assess student learning in courses. But there is no evidence of formal longitudinal or systematic assessment leading to feedback that drives change in course delivery.

MAE and ECE conduct exemplary thesis reviews and do have a formal program to capture observations and channel them back into the classroom. In ECE, each student's thesis research is independently assessed for accreditation purposes on the basis of five attributes:

(1) Originality,
(2) Technical merit,
(3) Defense relevance,
(4) Quality of thesis presentation and
(5) Quality of written thesis.

Written records are kept for ABET evaluation purposes. ECE uses these records as part of its biannual curriculum review process, and considers them quarterly.

The curricular review process mentioned earlier also provides a coarse longitudinal feedback. Curriculum sponsors are asked if graduates are well prepared for their duties, and one dimension of that is how well they have learned the material.

Doctoral programs have unique opportunities for assessment of student learning, as they have both written and oral comprehensive examinations. We found no evidence of a formal systemic mining of the history of those examinations for opportunities for improvement of student learning, although we believe that informal feedback does occur. This has strong potential for improvement.

Again, we find departments subject to external accreditation of their programs have more formal and effective processes in place.

Feedback Mechanisms

We attach at appendix C the schematic for the ECE feedback processes. Driven by ABET, these processes formally take the outcome assessments and incorporate them into revisions of content and delivery in the curriculum. The departments subject to external review (MAE, ECE, GSBPP) have more formal and effective feedback processes in place.

Other departments rely on the curricular review process as their impetus to incorporate feedback into revisions.

The assessments of content coverage, teaching, and learning that do occur on campus are useless without feedback systems that use the assessments to drive change. This applies at the department, graduate school, and institutional level.

Closing comments

NPS has reviewed assessment several times over the past decade. Both the Fargues and Eoyang committees recommended changes to improve NPS practice, yet neither set of recommendations appears to have been adopted. We have resisted the adoption of outcomes assessment as a routine way of doing business at NPS.

The professional societies have driven selected departments towards outcomes assessment by the threat of withholding accreditation of programs. This has resulted in good programs in ECE, MAE, and GSBPP, as well as departments such as SE that contemplate accreditation. The other departments have not felt such an impetus.

If NPS wishes to standardize across campus, it could select either the ABET or the AACSB standards and require the other departments to adhere to them. Or it could develop standards on its own, and promulgate them.

It appears evident that without the adoption of school wide standards and enforcement/incentives, as recommended by both of the 2003 committees, that uniformity will not be achieved.

Recommendations

We recommend that the following practices be adopted across campus.

1. Some form of annual peer review of teaching effectiveness be required of each department.
2. Chairs should visit at least one class per faculty member per year, and provide formal feedback. More frequent visits should be encouraged.
3. Each department should do an independent thesis evaluation of each thesis or capstone project and provide the results to the course coordinators and chair.
4. Chairs should assure that course journals are completed and used for assessment.
5. Chairs should maintain records that show rates of completion of peer reviews, class visits, theses evaluations, and course journals. Deans should require these rates be discussed in the chairs annual faculty appraisal.
6. Chairs should assure that these records are made available as feedback to curriculum and course committees.

Appendix A

SE FACULTY OBSERVATION FORM

COURSE: _____ ***DATE:*** _____

INSTRUCTOR: _____ ***OBSERVER:*** _____

LESSON NUMBER AND TITLE: _____

Circle below using this scale:

0= not present/not applicable 1= ineffective 2= effective 3= extremely effective

1.	Did the instructor confidently demonstrate knowledge of the subject matter?	0	1	2	3
2.	Were the learning objectives presented, clearly and in a logical sequence?	0	1	2	3
3.	Was the instruction organized and easy to follow?	0	1	2	3
4.	If used, were all media clear, legible and supportive of the instruction?	0	1	2	3
5.	If VTE, were controls and technologies used well?	0	1	2	3
6.	Did supplementary material support the lesson objectives?	0	1	2	3
7.	Was comprehension assessed and were student difficulties addressed?	0	1	2	3
8.	Was the classroom environment free of distraction?	0	1	2	3
9.	Was the lesson placed in overall context of the course?	0	1	2	3
10.	Was there evidence of student preparation?	0	1	2	3
11.	Was student involvement stimulated and encouraged?	0	1	2	3
12.	Were previous assignments discussed and returned in a timely manner?	0	1	2	3
13.	Was the lesson plan prepared and followed?	0	1	2	3
14.	Did the syllabus include course objectives, grading and assessment scheme, course outline, texts, instructor contact info, office hours, schedule, and a catalog course description?	0	1	2	3

COMMENTS:

Content/Subject Matter:

Presentation/Procedures:

Overall Instruction:

Suggestions for improvement:

Best practices identified for sharing:

Instructor initials: Observer initials:

Note: for teaching buddies, this form is to be kept by one of them. For other observers, please pass to the department chair.

Appendix B

WASC Report
GSBPP

The Graduate School of Business and Public Policy is slowly transitioning from a school that has focused its instructional energies on what we should teach to a school that's beginning to think systematically about how students learn, the best environment (residential and distance learning) under which students learn, and methods of measuring student learning. What's partially spurring this process is the American Association of Collegiate Schools of Business (AACSB) Assurance of Learning Standards (AOL) that have become integral to their accreditation process.

Currently, GSBPP is undergoing the NASPA accreditation process. Unlike AACSB, NASPA does not demand the same assurance of learning rigor as AACSB. In fact, the NASPA assessment standard states that "assessment procedures and measures make take any form appropriate to the program and its circumstances, but each program shall develop and use procedures for determining how well it carries out its mission. Like most NPS schools GSBPP uses the following assessment procedures. These procedures meet NASPA assessment criteria

- Input from current students
  --evaluation meetings with current students in the program
  --formal exit questionnaires
  --end of curricula exit interviews/critiques with graduating students
  --review of SOF data

- Input from curriculum sponsors
  --biennial curriculum reviews of all subspecialty programs
  --sponsor campus visits
  --informal curriculum reviews with sponsors

- Input from graduates/alumni
  --ad hoc contact with graduates
  --GSBPP alumni survey (planning stages)

- Input from Faculty
  --Faculty Instructional Committee monthly meetings
  --Supervision of course coordinators (review of course syllabi and course outlines)

These assessment inputs are all indirect measures of student learning. As will be discussed later, we are starting to develop direct measures to meet AACSB requirements.

Like other NPS schools, GSBPP and its academic concentrations (GSBPP does not have departments but concentration areas supported by and assessed by military sponsors) have

curriculum reviews, student exit interviews, and questionnaires to help determine student satisfaction with our programs and their perception of the quality of their educational experience. This report will not focus on these activities. What this report does concentrate on are the strategies that the business school has instituted to provide a better balance between what we teach and how students learn, the shifts in thinking about instruction that AOL is causing GSBPP to confront, and the plans that GSBPP has to implement AOL. We believe a number of these activities could be characterized as "best practices" that could be implemented in other NPS departments.

A. Course Merge Process

GSBPP students have exceedingly heavy course workloads; some quarters they take 5 or 6 courses totaling 17-19 credit hours. This workload is the result of JPME, certificate programs, and program sponsor requirements. Because of the large number of courses students take, it's imperative that course exams, papers, presentations, major quizzes, and so on are staggered throughout the quarter to insure that students can prepare for these tasks and, more importantly, learn during that process.

To make sure GSBPP faculty stagger their assignments, we conduct a "course merge" at the beginning of each quarter for students in quarters 1-4 of their program. Here's how the process works:

1. All faculty provide a detailed syllabus to the course merge coordinator a week before classes start
2. The coordinator creates a large matrix that maps course deliverables (exams, papers, etc.) for all courses in that quarter with their due dates
3. The Academic Associate for the MBA core analyzes the matrix to determine potential choke points. All instructors teaching in that quarter receive a copy of the matrix.
4. Instructors teaching students in the same quarter meet to resolve the chokepoints. The AA for the MBA core facilitates the meeting

Aside from staggering assignments to support student learning, this process, particularly the instructor meeting, provides opportunity for faculty to discuss points of connectivity between courses and joint assignments. For example, during a meeting among instructors teaching 3rd quarter students, the Operations Management and Managerial Communication instru7ctors fashioned a joint assignment that met the needs for instructors from both classes.

B. Vertical and Horizontal Integration

Many MBA programs are organized along functional area stovepipes: accounting, economics, management, operations/logistics, etc.. This method of organizing fragments information and learning, resulting in students becoming analysts who lack the breadth to see and assess organizational situations and problems from multiple perspectives. To combat the problem of information fragmentation that results from courses in functional area stovepipes, GSBPP has

restarted the process of integrating course concepts vertically (clusters of courses in different quarters that introduce concepts that build on each other or are used in different ways) and horizontally (courses in the same quarter)

We've embarked on this process so students can better develop their ability to integrate and synthesize information from different areas (e.g. financial management, economics, and managerial finance) to better understand complex organizational situations/problems and come to well-reasoned conclusions and solutions, testing them against the theories, principles, and models they've learned in a variety of courses.

Vertical Integration. GSBPP has first attempted to integrate vertically, that is between a cluster of courses from different functions that share some degree of commonality. For example, our Financial Reporting and Analysis, Managerial Finance, Cost Management, and Defense Budget and Financial Management Policy make up one cluster. We've determined there are three clusters in the MBA core (approximately the first four quarters of a six quarter program). What follows is a brief description of the process we've used to integrate vertically.

1. Course coordinators collect the syllabi from all faculty (permanent and adjunct) teaching a particular course. One important job of GSBPP course coordinators is to insure that there is at least a 70-80% overlap (a number have 100% overlap) in content and requirements between all segments of the same course. The course coordinator synthesizes the information from the syllabi into a series of themes and subthemes that characterize that particular course.

2. Course coordinators share this information with each other to map potential points of intersection and overlap between and among the courses. Course coordinators communicate this information map to all faculty teaching in the course cluster.

3. All faculty in the course cluster meet to discuss how they can reinforce similar concepts in different courses (e.g. net present value is treated from the perspective of bonds in course, capital budgeting in another, and from the public budgeting perspective in a third). Also, during these meetings cluster faculty discuss possibilities of shared cases, readings that build on each other, and other possibilities for integration.

This process serves as a catalyst for groups of cluster faculty to meet with each other to continue the process of vertical integration.

Students have noticed and commented on these integration attempts. They pointed out that they just can't flush concepts after they've learned them but must use and understand them from a different perspective in different courses. Also, students have stated that they're pleasantly surprised that faculty teaching different courses do spend time talking with each other. In other words, the vertical coordination and integration is something they notice.

What GSBPP has not done is systematically measure students' ability to integrate and synthesize information. A latter section describes the processes that GSBPP are starting to be able to do that.

Horizontal Integration. Integration across courses during a quarter is challenging. Approximately 5 years ago, when the MBA was first instituted, we attempted to integrate horizontally. That initiative lost momentum because it was time consuming and the rewards for horizontal integration didn't match the expenditure of time and energy.

GSBPP's plan is revitalize this attempt at horizontal integration. The catalyst for this revitalization is the Assurance of Learning process that GSBPP is just starting.

AACSB Assurance of Learning

AACSB represents the gold standard of business accreditation. Only about 35% of business schools have earned AACSB accreditation. Recently AACSB has instituted what they call Assurance of Learning (AOL) as an essential factor in accreditation maintenance. The AOL process focuses on assessment rather than evaluation. That represents a significant shift in thinking about instruction. GSBPP is starting this process.
What follows is a description of several large-scale shifts in thinking that GSBPP is beginning to wrestle with.

Shift Focus to Assessment Versus Evaluation

Assessment focuses on the student and learning environment; evaluation focuses on the professor and the teaching environment. To put it another way, assessment keys on what students are able to do at the end of the course, the quarter, and the program rather than what the instructor does.

SOF scores and the use of SOFs for pay and particularly for promotion and tenure decisions create a NPS instructional culture that keys on evaluation rather than learning. The challenge GSBPP is facing is how can it create an instructional culture that also focuses on students and the learning environment within a larger NPS environment that privileges evaluation. This challenge is particularly acute in our DL programs where competitive pricing, and the need to break-even on cost result in large class sizes, numerous offsite locations per cohort, and less than adequate communication technologies at the remote location. These three factors can create a student offsite environment that is not conducive to learning.

Recognize that Grades Alone Don't Measure Learning

Grades alone are no longer regarded as adequate indicators of student learning. AACSB AOL experts give several reasons for the limitations of grades: grades in one course or section may be recorded using different standards in another, and, more importantly, students who receive good grades (GSBPP and NPS have both suffered from significant grade inflation over the last two decades) may lack the knowledge, skills, and ability that one should have with an advanced degree. Shifting thinking from grades as a measure of student learning to more direct measures is a challenge to current GSBPP thinking.

Shift from Indirect Assessment to a balance of Direct and Indirect Assessment

In the AOL framework, direct assessment measures take precedence over indirect ones. GSBPP and NPS have prided themselves on our use of curriculum reviews, contact with officers for whom our former students work, student exit surveys, student interviews, student focus group sessions, and so on. AACSB views these data gathering efforts as indirect assessment measures because they acquire evidence about students' perceptions or feelings about learning and their learning environment. In contrast, direct assessment measures gather evidence about student learning and the learning environment such as performance on exams, exams for certification and licensure, projects, student portfolios, case studies. Furthermore, the unit of analysis for direct assessment is the individual student versus the team. Since GSBPP regularly uses teams for class projects and program projects, meeting direct assessment criteria will be a significant challenge.

Broad-Based Questions that Influence Assessment

Listed below are several broad-based questions that GSBPP is in the process of answering about student learning. These questions represent a process that we will follow to develop, monitor, evaluate, and revise the content and delivery of each of our degree programs and, most importantly, to assess the impact of our curricula on learning.

1. Learning Goals: What do we want our students "to be" or to "look like" when they graduate from our programs and go off to their next job? For each degree program we will generate approximately 5 or 6 learning goals that reflect the intellectual characteristics our sponsors want our graduates to have. Here's an example of one learning goal: Strategic thinking—ability to use concepts from courses with a strategic management focus to determine relevant from useless information, integrate that information, use appropriate decision making techniques and concepts from multiple business functions to make decisions in quickly-changing, unpredictable environments.

2. Learning Objectives: What should our students be able to **do** when they graduate from our programs? What behaviors have they exhibited or products they have produced that indicate they have met each learning goal? The following illustrates a learning objective: conduct a comprehensive analysis of a DoD organization including an analysis of key stakeholders and an assessment of its strengths, weaknesses, opportunities, and threats in a turbulent environment to reach a decision about a feasible short and mid-term direction for the organization.

3. Curriculum Alignment: Where in the curriculum (what courses) is this learning objective taught? What instructional methods are used to teach this objective?

4. Direct Assessment Measures: What measurement instruments are used to determine that students have met the stated learning objective? What are the rubrics used to measure variability in student learning? Why is the assessment instrument appropriate? A rubric is a scoring guide used to assess student performance on outcomes connected to a specific learning objective. Rubrics contain a scale along with a description of the features or characteristics of work at each point on the scale. Developing rubrics

requires time, careful thought, and practice. Also, we want to embed assessment in teaching and learning so that it's largely transparent. Furthermore, we'd like assessments to involve real tasks in a real or simulated environment that gives the task some degree of face validity.

5. Assessment Results**:** In a general sense, how well are students doing? Our goal is not a fine grained analysis of specific student results in each class that treats some aspect of a learning objective, but a way of determining if students are learning "much better," "good enough," or not "good enough" in relation to our learning objectives.

6. Actions Taken from Assessment Results: What have we learned from the assessment results? What are we going to do about it? When and how are we going to do it?

GSBPP recognizes that this assessment process outlined above represents a significant shift in thinking about instruction and learning. Furthermore, this process will need to engage large parts of the faculty, will require a decent amount of faculty time, and will require resources—financial and support staff. We believe, though, that there are significant institutional barriers that GSBPP will need to overcome to launch an effective assessment process. Those barriers include lack of rewards for faculty service, a focus on evaluating teaching effectiveness rather than determining student learning, scarce resources to sustain the assessment process, and lack of support staff to record, manage, and analyze assessment data.

Innovative GSBPP Instructional Practices

Faculty were surveyed to gather examples of innovative instructional practices. The following Appendix contains a representative sample of these practices. These responses have not been edited so that readers hear the "voice" of each faculty member describing the innovation.

Appendix A-1

Innovative Instructional Assignments
GSBPP

Learning by Doing

I adopted a learning by doing approach in the budget course I teach in our EMBA, MSA, MSCM and MSCM DL curricula. There are no exams in my course. Grades are assigned based upon students' relative success in completing a series of tasks, all of which utilize real time budget materials. I either provide the materials or direct the students to sites where they can access them for themselves. The materials are always taken from the budget that is currently being worked by Congress during the period the course is in session and involve the decisions taken by that same sitting Congress and its committees. These tasks range from modifying the most recent president's budget submission IAW criteria drawn from administration policy documents, to writing a memo for a member of Congress interpreting the most recent administration tax proposal and suggesting how that member might convey her/her position to constituents

Perhaps the most innovative piece of this approach is the use of what I call Research, Reporting and Writing (R2W) questions. Here's how it works.

Early in the course, students look at how the federal budget is organized (transportation, energy, defense, Social Security, etc) and pick a category (technically, a budget function) they would like to work with during the course. I try to give everyone their first or second choice, and it usually works. Once they have been assigned a budget function, they encounter a series of questions during the course that they must answer about that function. These four questions are attached. As you will note, in each case the students must access one or more data bases and then do some searching and thinking before writing up and submitting their answers. The questions are linked to readings and PPT presentations they are working with in the course. (The PPT presentations include a video introduction, a little music, then audio. i.e., my voice explaining each chart, all compressed for easy access using a software program called Articulate. I can show you what that looks like if appropriate, but I think you have seen it). The R2W questions build upon one another, expanding the students' understanding of a particular portion of the federal budget from both a policy and a process perspective. When they have completed the course, students see Congress and the federal budget through new eyes, and know where to go to find answers to budget questions.

Working with the Experts

We hold about five or six 2 hour VTC or in-person sessions presented by our senior FM practitioners from the Pentagon or at NPS for direct contact of those leading in executing in the field and our 5th qtr MBA(FM) students. This provides the students the opportunity to discuss

Plans and Execution challenges as well as near future changes anticipated as the students transform from the "books to the field implementation".

b. One of our VTC sessions has three or four MBA(FM) graduates reporting from the field on the curric coverage, or lack thereof, in preparing them for the jobs they were assigned. This has been very productive in timely adjustments to our course content based on their input and open discussions with participating students.

c. We have the classes broken into Service Unique teams to develop and present solutions to a 3% reduction in the current Budget Problem, which will be on their desk or email many mornings when they're in a budget billet.

Managing Expectations and Getting Students to Read the Material

- **Provided detailed writing guidance** so students understand the expectation for writing assignments (expectations management!) Copy attached.
- **Removed all my slides from blackboard**. I've noticed students like to substitute the reading assignments for my slides. Again, expectations management...I expect them to read the assignments that I select and be ready to discuss in class. In return, I've narrowed the focus of the readings to include only relevant readings and eliminated what I think is duplicative material. I've also identified those readings that are optional...for the over achievers, still good material but beyond the scope of classroom discussion.
- **Converted some written assignments to verbal exercises**. This way students must read the material, understand it (or question it in class), and verbalize their understanding of the material via thought-provoking questions that are discussed in class. This provides more depth to their knowledge base and appeals to those that learn by verbalizing vs writing.
    - These are graded exercises and I use the attached to record their participation level. It is arranged by seating position in the classroom. To manage the participation expectations, there is participation guidance in my syllabus.
    - I also use this tool to record daily participation (beyond the graded exercises).

My intent with those three actions (particularly the last two) is to force students to read the material and demonstrate their knowledge (or confusion) in class for a grade. I'm trying to eliminate students from taking the shortcut of using my slides as their knowledge base and then not engaging in class.

"Novel" Pedagogy used in MN3118: Strategies for Consensus-building in Post-Conflict Environments": Journal Entries

<u>Pedagogy</u>

The pedagogy for this course will be somewhat different from that you have experienced in other courses. A major objective of this course is to build your individual skills in negotiation, persuasion, problem solving, and consensus building. Given that objective, this course has a

significant experiential element. In other words, we will be doing exercises and role plays that will require you to actually put into practice the skills and concepts you will be reading about. You will also be asked to reflect (in Journal Entries) as to what you have learned through these experiences, both in terms of concepts and personal growth and development.

Journal Entries

Unlike the homework assignments which are prepared in advance of a specific discussion or exercise, Journal Entries are prepared following exercises and role plays. They are intended to allow you to reflect back on the experience and describe what you learned from the event. Throughout the list of scheduled assignments, you will find approximately seven (7) Journal Entry requirements. For each, I have outlined specific questions for you to address in these assignments. These questions may specifically pertain to the reading assignment for that day, or ask you to analyze the role play using multiple concepts and models. In general, there are four primary criteria used in grading the journal entries:

- Demonstrated understanding of the concepts, ideas, theories, models that were illustrated in the conduct of the exercise or role play.
- Analysis of factors that contributed the effectiveness of the role play or exercise.
- Quality of analysis of your own personal skills and abilities in specific exercise and role play (e.g., ways you were effective; ways you can improve effectiveness).
- Clarity of writing.

The Beer Game Simulation and Elluminate

I used Elluminate to run a classroom exercise, and the results were surprisingly good.

The exercise is called ‘the beer game’ and it teaches about supply chain dynamics (the ‘bullwhip effect’). It is always well-received by students in a face-to-face environment. The supply chain dynamics work between students, and frustration levels run high. In a classroom, the noise level often gets loud, and the instructor has to shout to be heard by the whole class. I often spend my time in a face-to-face class running between supply chain ‘teams’ and working out misunderstandings. But the play rules are complicated, and I’ve been frustrated with the game in a VTC environment because it is difficult to monitor and control. At least one VTC site always failed to complete the game, because they simply couldn’t follow the rules properly. Also, because of the need to more tightly control the game, I’ve had to discourage peer-to-peer communication, to make sure that everyone was following my direction.

I evaluated an internet version of the game in 2000, but rejected it as being not interactive enough, and losing the peer-to-peer interaction that is important between students. But the online game did have the strong advantage that it enforced play rules, and made it simpler for the students to avoid misunderstanding, and complete the game.

Elluminate allows me to have the advantage of the online game without sacrificing interaction. Students were able to communicate with each other using the ‘chat’ feature without disrupting game play. In the VTC environment, students would often ‘mute’ their interactions; they

would miss instructions, and give misleading information to each other. I was surprised at how much interaction there was with Elluminate – it reminded me of the face-to-face classes. But even better: I was able to monitor that interaction, to make sure they weren't misleading each other. I found Elluminate created an environment which was more interactive than VTC and facilitated give-and-take between students that is difficult to achieve, without disrupting the class, even in a face-to-face classroom.

Developing a Deep Interest in Economics

Some of the students in my class get quite excited about the power of economics in helping them understand the world, especially in helping them understand the effects of government policy. So in 2004, 2005, and 2006, I put a readings course together for 3 to 6 hand-picked students. My criteria were that they had to have earned at least a B+ in the econ course they had had with me and that they have a personal interview so I could assess the extent of their interest. I reached out to a number of the B+ and higher students and ended up taking every student who said yes.

I told them that because I was teaching the course out of hide (that is, I wasn't being paid for it), I didn't want to spend a lot of time grading them. Therefore I made the course Pass/Fail and told them they would pass if they showed up for every session, showed by their comments that they had read the paper, and did a reasonable job of presenting the paper they presented.

For the first meeting, I presented a paper from an economics journal (not one written by me) on an economic policy issue, so that they could see how it's done, and we discussed it. Then every other class after that, one of the students presented a paper from an economics journal, explicating it and criticizing it somewhat. Together we chose what papers to cover. The ground rules were that it had to be something most of the students were interested in (with "most" defined somewhat vaguely, but this didn't present problems) and the students were encouraged to present something on a topic they were particularly interested in. This last was important, especially for one student who was not as academically oriented as the others. Over the previous months, I had learned about his deep interest in, and knowledge about, cars, and so when he was having trouble choosing an academic paper to analyze, I suggested a paper in the Journal of Economic Perspectives that analyzed the effects of the Corporate Average Fuel Economy (CAFE) standards for cars and trucks. He attacked his topic with relish and did a very good job.

Over the quarter, the discussion got better and better as the students realized, in varying degrees, that they could be players in the academic economics realm. I will do it again if time permits.

Making Accounting Interesting

I just finished teaching GB4520 (Internal Control and Audit) this last term.

I used short video clips (usually 15-20 minutes long) that reinforced the concepts covered in the textbook.

For example, when discussing fraud in accounting and auditing situations, I showed video clips that discussed fraud and how to detect fraud in financial statement audits.

After presenting new material from the textbook chapters using PowerPoint slides and a discussion format, I showed the video clips that pertained to those certain topics, which helped the students understand the concepts better.

On a weekly basis, I also researched and found current scholarly articles that related to the topics being covered in the textbook, which helped reinforce the concepts also. I posted them on Blackboard (with a link to the Library) so that the students had an opportunity to read them prior to class. In class, we usually had lively discussions of the articles.

The students seemed to like this new approach that I used this term.

Hands-on Research Experiments: Food and Beer

In GB4044 Defense-Focused Managerial Inquiry, we have the students conduct a "Demonstration Project." This project allows the students to develop a research experiment (with our guidance), from start to finish. We use these projects as a focal point for discussions of concepts and principles throughout the course, while encouraging students to "have fun."

Thus far, the projects have involved food or drink. In the first class, which was seminar-sized (12 students), we conducted a class-wide study to determine: "Who produces the best-tasting fresh salsa commercially on the Monterey Peninsula?" The students contacted local producers and developed a research project—including a campus-wide taste-test in the academic quad, a survey of retailers, and a focus-group taste-test with local "experts" (e.g., a panel of chefs and restaurant owners)—concluding with a statistical analysis and summary of results for the local producers. In the second class, we conducted a similar experiment that focused on barbecue sauces manufactured in California.

The course has become increasingly popular, and in the most recent offering, we had over 90 students. We divided the students into two larger groups: one that investigated breakfast pastries (since we had class at 8 AM), and another that looked at various types of beer (since we met in the late afternoon). Further, these two larger sections were divided into five groups each, so that we could better manage the demonstration projects
and ensure that each student participated equally. From all accounts, the students have enjoyed the projects and benefited from their application in class to highlight important research concepts and principles.

Thin Client Servers

GSBPP is the only school at NPS using thin-client computers to provide a hands-on computing experience for courses that would otherwise have to do without. The thin-client architecture allows a classroom of students to share the software loaded on a single server using keyboards and monitors installed at each student's workspace. Without this centralized server approach, GSBPP's technical support personnel would not be able to keep up with the software installation and maintenance requirements. The need to provide computing technology to our

classrooms became even more urgent as the average class sizes of our MBA program outgrew the seating capacity of the conventional computer labs maintained by the university's central IT support organization.

Making Operations Management Concepts Concrete

1.I ask the students to create an exercise in Operations Management using their work experience as the theme of the exercise. Later, I edit/review/revise them and use as questions in the exam. The purpose is to show that the techniques taught in class are not abstract, but can be used to improve their performance at work. Some students get very creative writing interesting plots for these exercises.

2.I give a set of 5 readings, usually taken from McKinsey Quarterly or similar sources, in addition to one GAO report. After they have read them, I ask for their view of how the Supply Chain Management practices in DoD should be in the future. They post their thoughts in a Blackboard discussion board where they receive comments from their peers and reply to the comments. I have strict rules about what is an acceptable comment, to prevent the generation of superficial one-liners. They tend to be very excited about this assignment.

In both cases, Blackboard is a key instrument executing the assignment.

Integrating Personal Experience with Developing Theory

Individual Term Paper: Students select from their previous experience an incident where they were involved in or were close to an *unexpected emergency situation* where there was significant *disruption* to work routines and/or possibly loss of life—an experience where they were *thrown in over their head*. The assignment is to write about one such incident and to organize the paper in five parts. Parts are due throughout the quarter and reflect revisions of work from previous drafts.

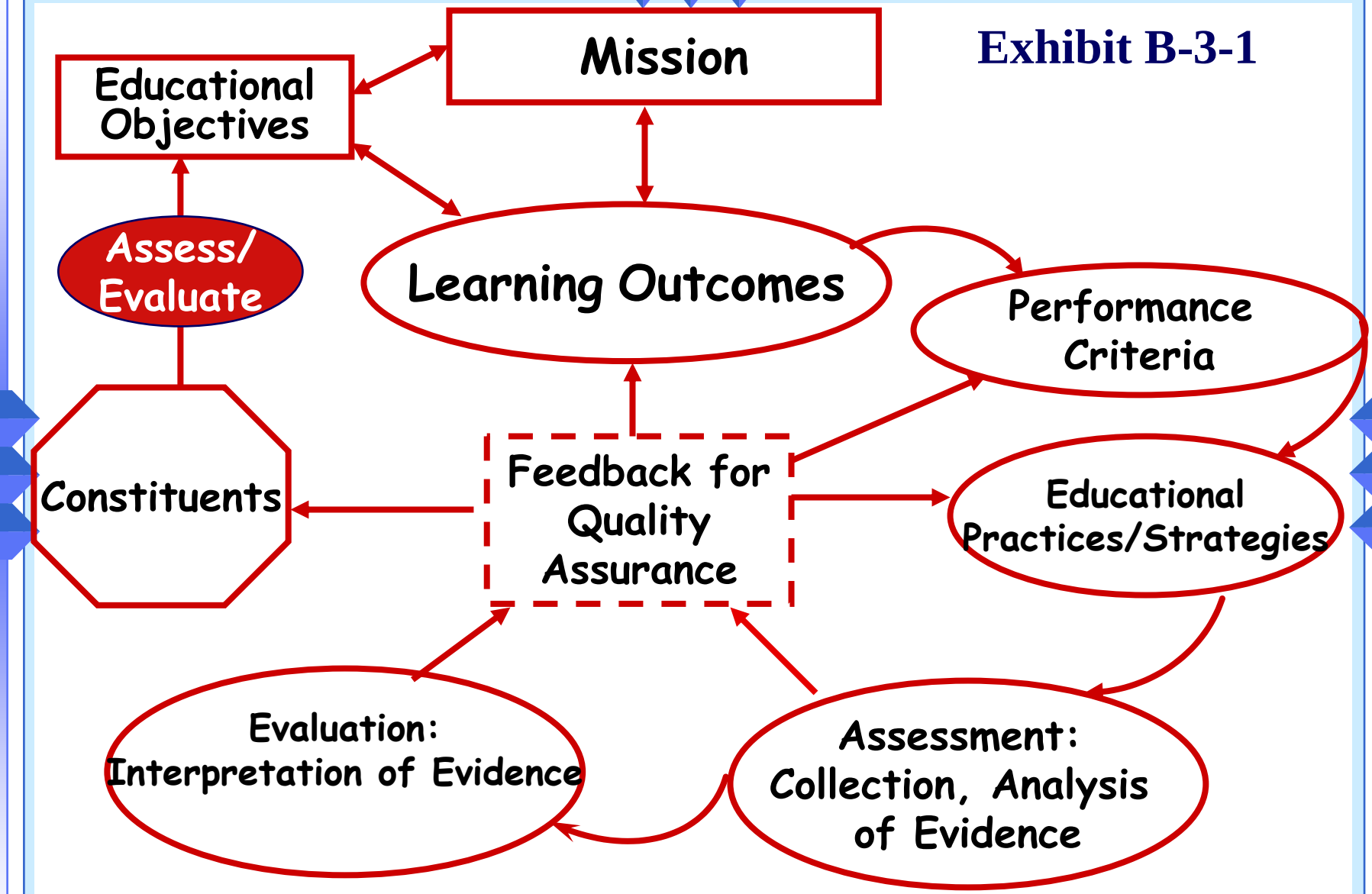
> Part 1 is a **summary of the incident**: what happened; where did it happen; who were the key players; what was their role; what was its magnitude, duration, and intensity; how many people were involved; and so forth.
>
> Part 2 articulates the **main concerns** of those involved. Ask what is the main issue of those involved. What is uppermost in their minds? What are they most concerned about?
>
> Part 3 describes the **resolution of the incident**. What mechanisms, processes, technologies, interventions, thought processes, innate characteristics, and so forth were used to help them deal with the incident?
>
> Part 4 **develops a theory** that explains how the organizational unit resolved its main concern. This is a conceptual building aspect of the paper. What are the key concepts that explain what is going on in the incident and how are those concepts related. This

part of the paper has very little (if any at all) description of the incident. Also, this should not include other theoretical models we discussed in class, but a theory of what is going on.

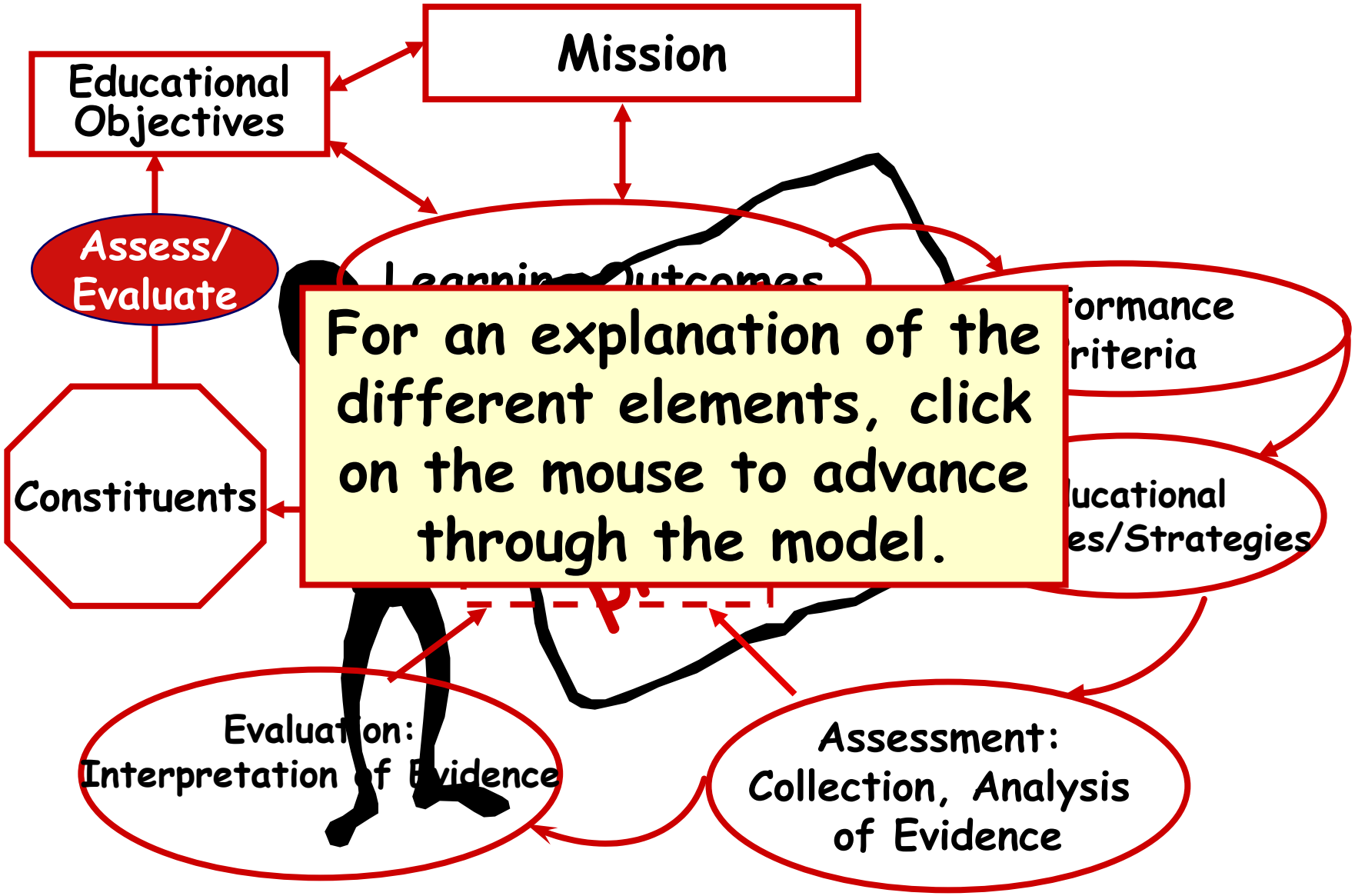
Part 5 **integrates other theoretical models** that are connected to their theory and is intended to complement the work already completed. They identify theoretical models discussed throughout the course and choose one or two that helps make sense of what is going on in their case. Part 5 is one aspect of the final exam.

The paper is an analytical tool that accomplishes several objectives for the class. First, it asks junior officers to reflect deeply on previous experience. This reflective process enables them to step back and critically assess their performance and competence in their work. Second, using newly acquired knowledge of models from the class, students begin to apply the concepts learned to concrete experience. Finally, The process helps them integrate knowledge and make connections across several social and behavioral domains, from motivation theory to organizational change and structure.

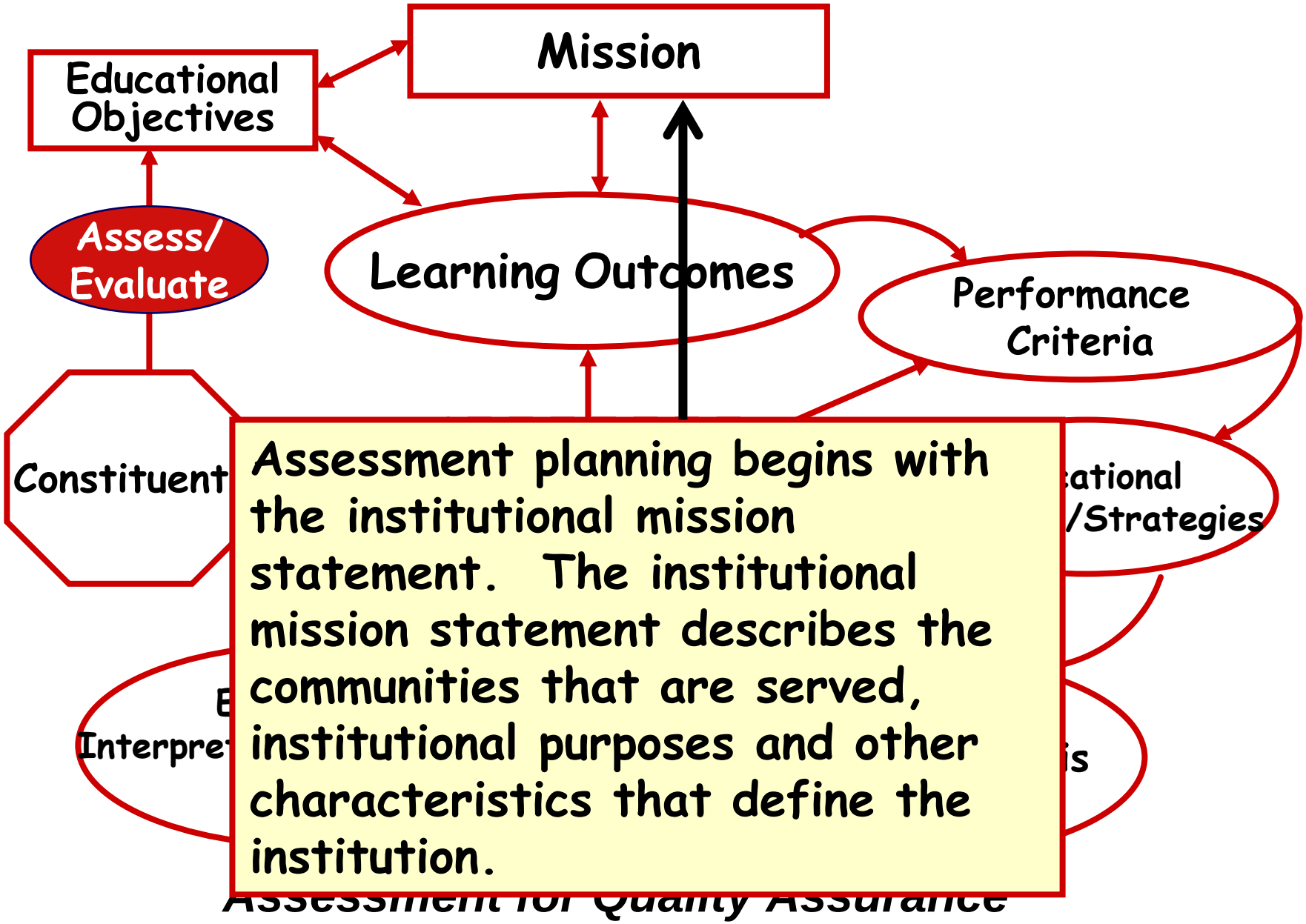
Appendix C- ECE process



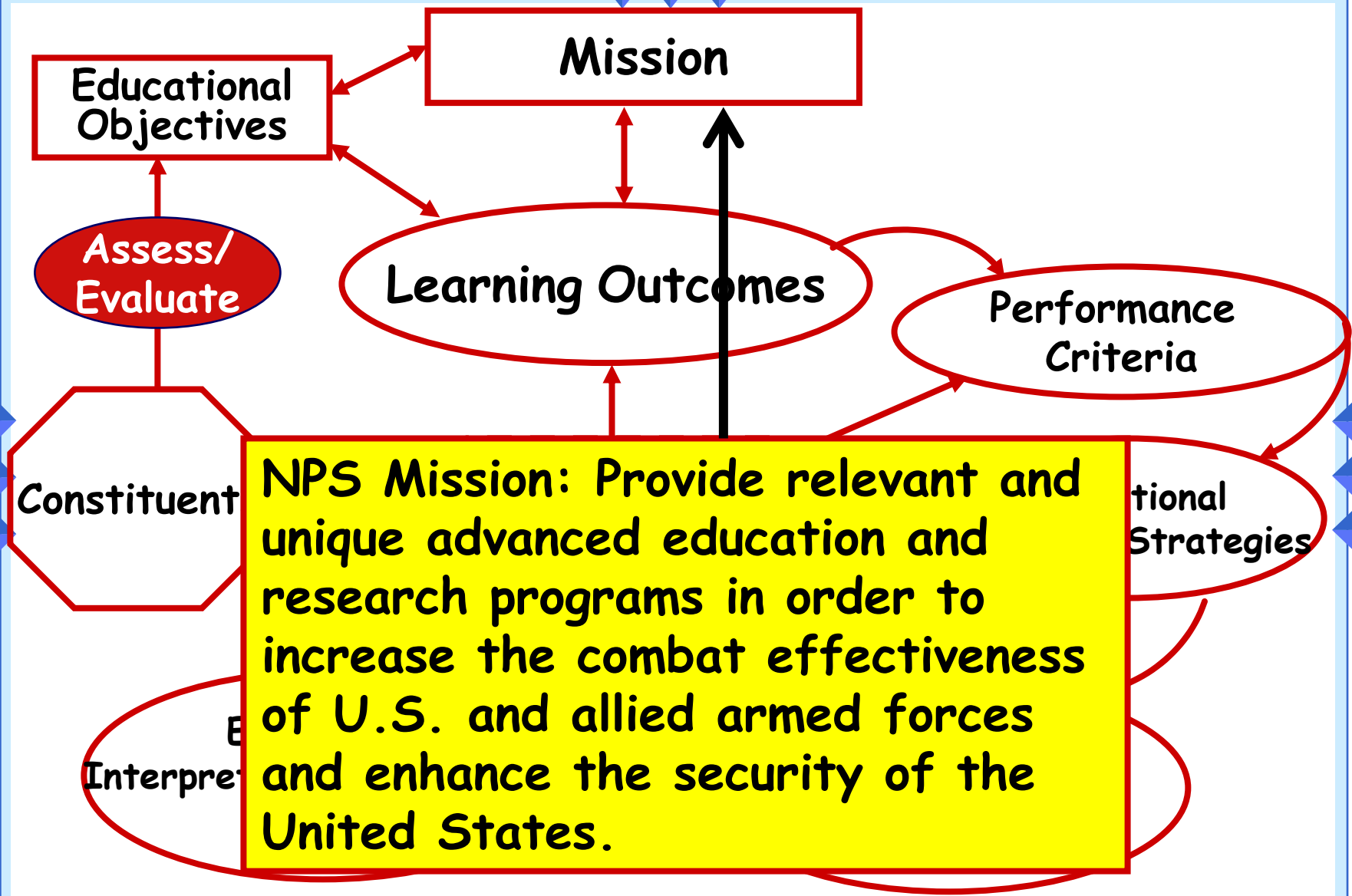
NPS MSEE Degree Program QA Process

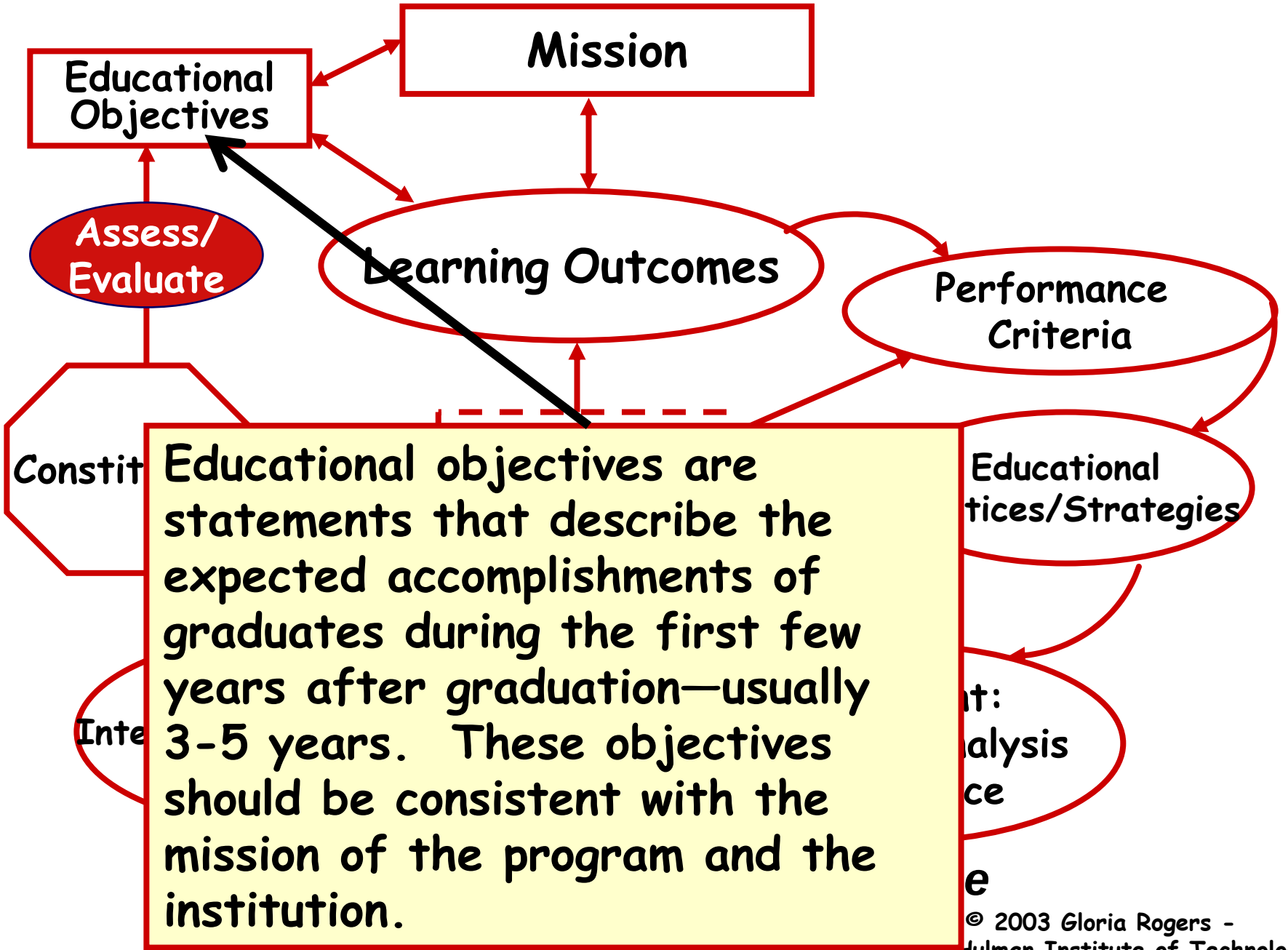


Assessment for Quality Assurance

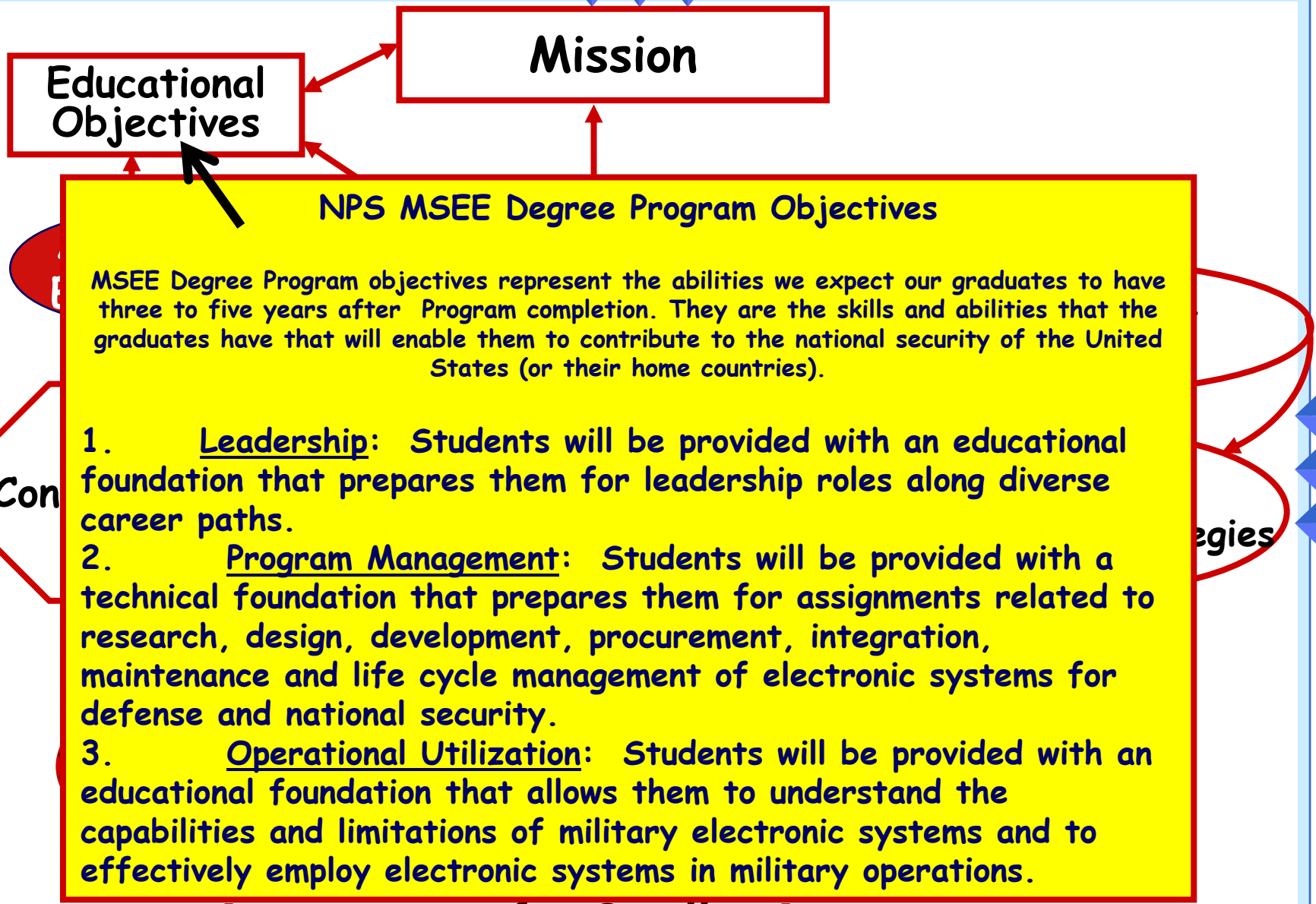


Assessment planning begins with the institutional mission statement. The institutional mission statement describes the communities that are served, institutional purposes and other characteristics that define the institution.

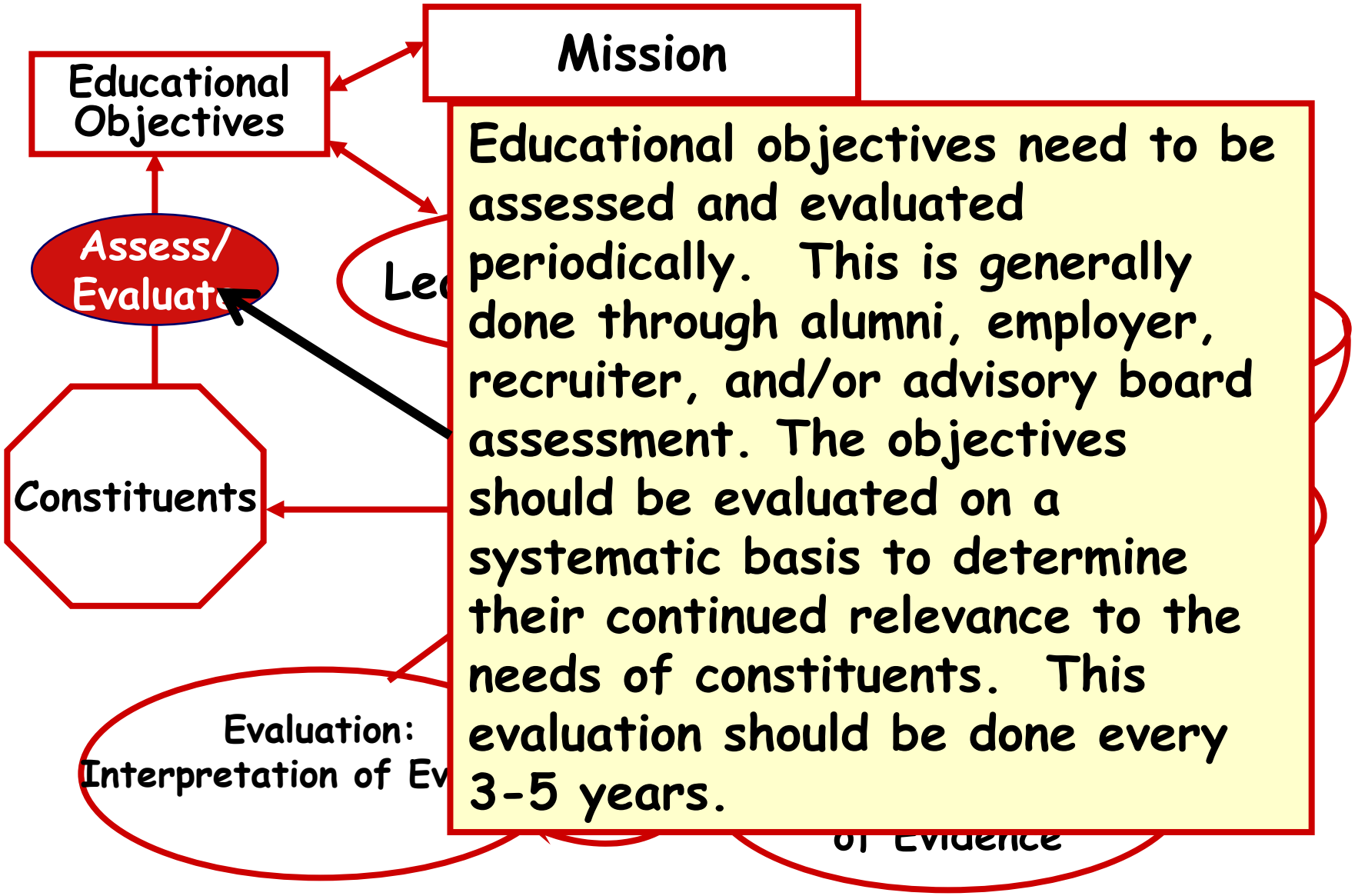




Educational objectives are statements that describe the expected accomplishments of graduates during the first few years after graduation—usually 3-5 years. These objectives should be consistent with the mission of the program and the institution.



Assessment for Quality Assurance



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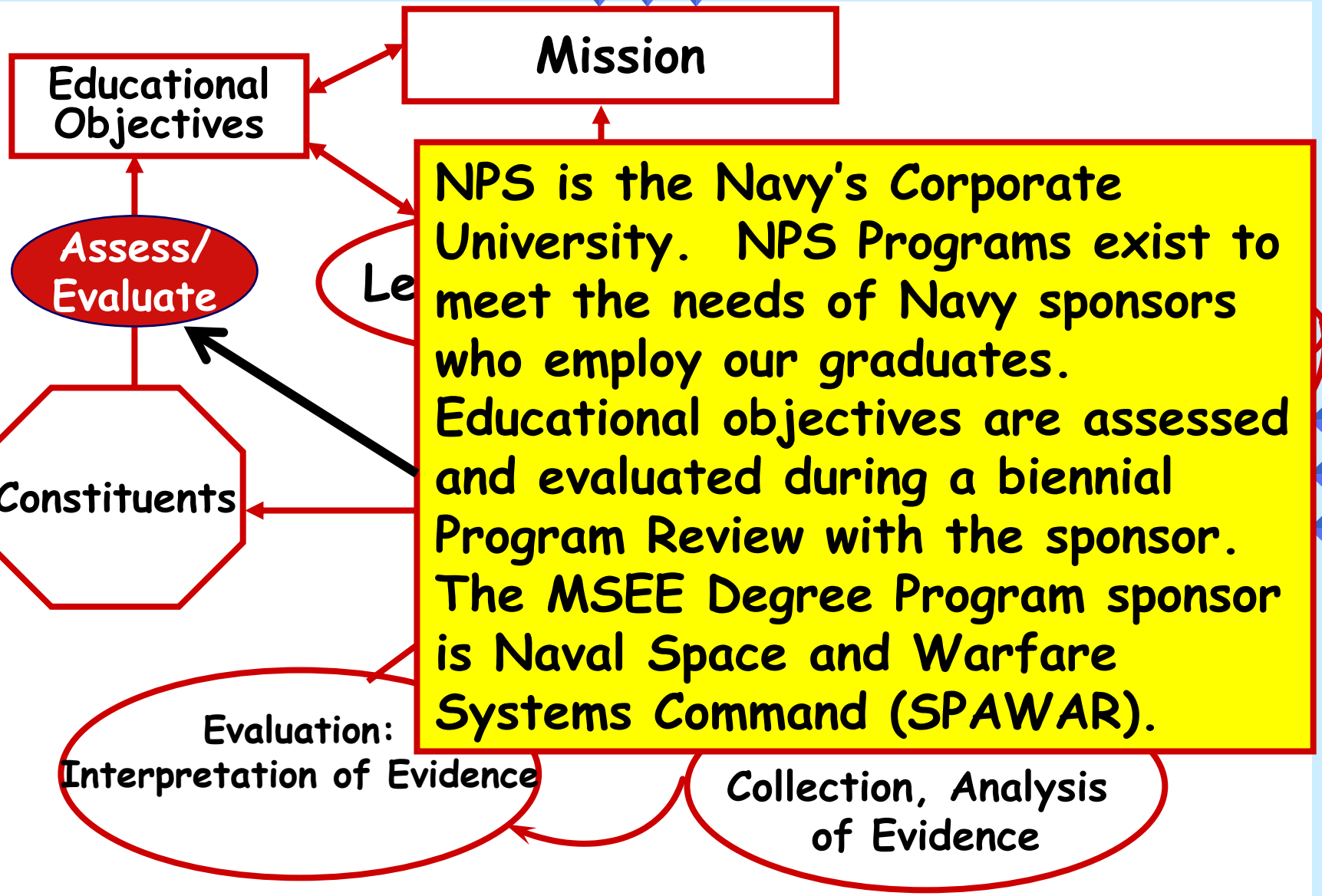
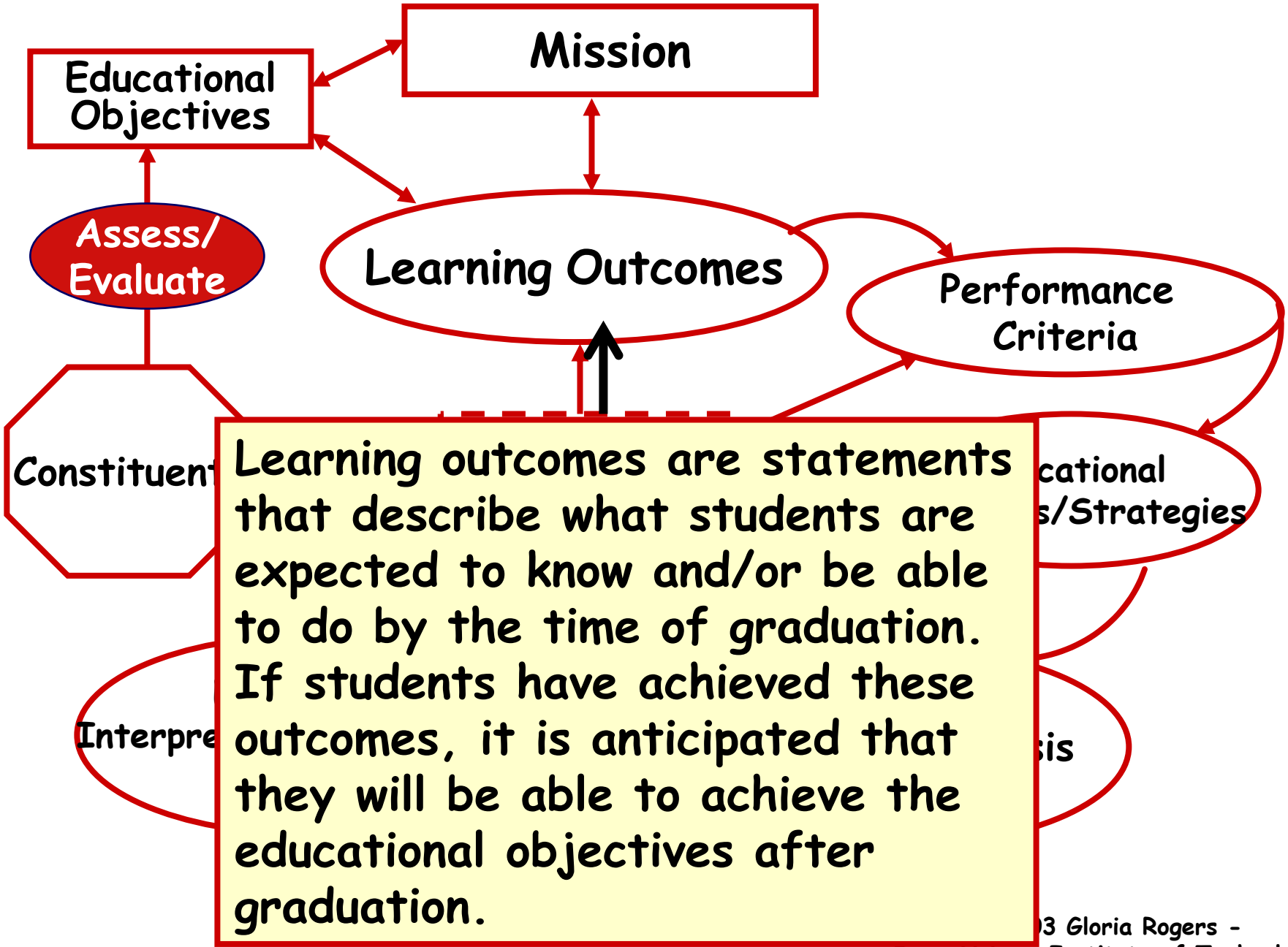
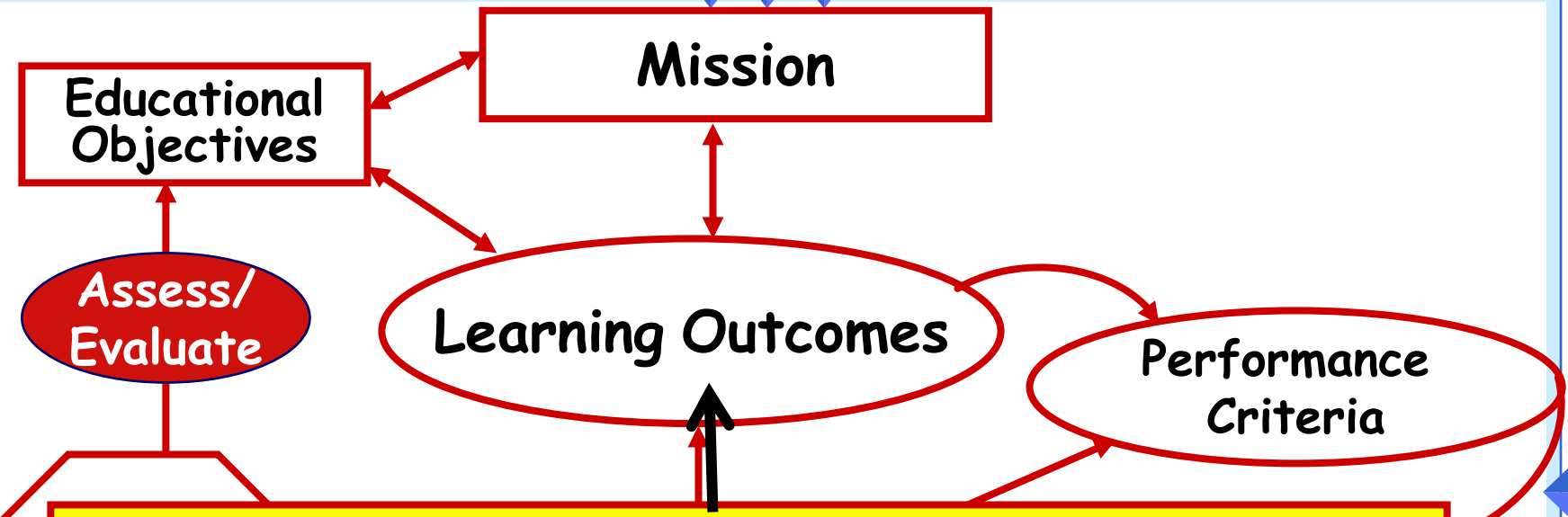


Assessment for Quality Assurance



Learning outcomes are statements that describe what students are expected to know and/or be able to do by the time of graduation. If students have achieved these outcomes, it is anticipated that they will be able to achieve the educational objectives after graduation.



NPS MSEE Degree Program Outcomes

MSEE Degree Program outcomes represent the skills, abilities and knowledge students are expected to have at the time of graduation that will enable them to achieve the longer range program objectives.

1. Breadth: Students will possess and be able to apply knowledge and principles at a graduate level in two or more of the following areas: electronics, power, controls, signal processing, communications, computers, sensors or network engineering. Students will also possess and be able to apply knowledge of systems engineering principles.

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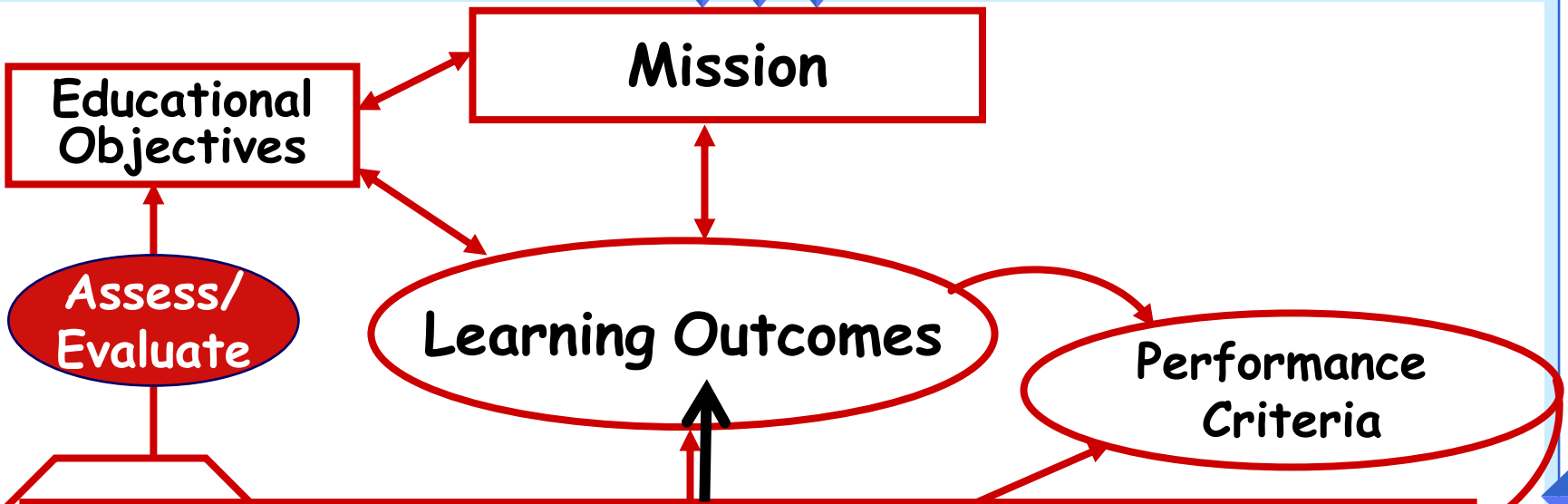
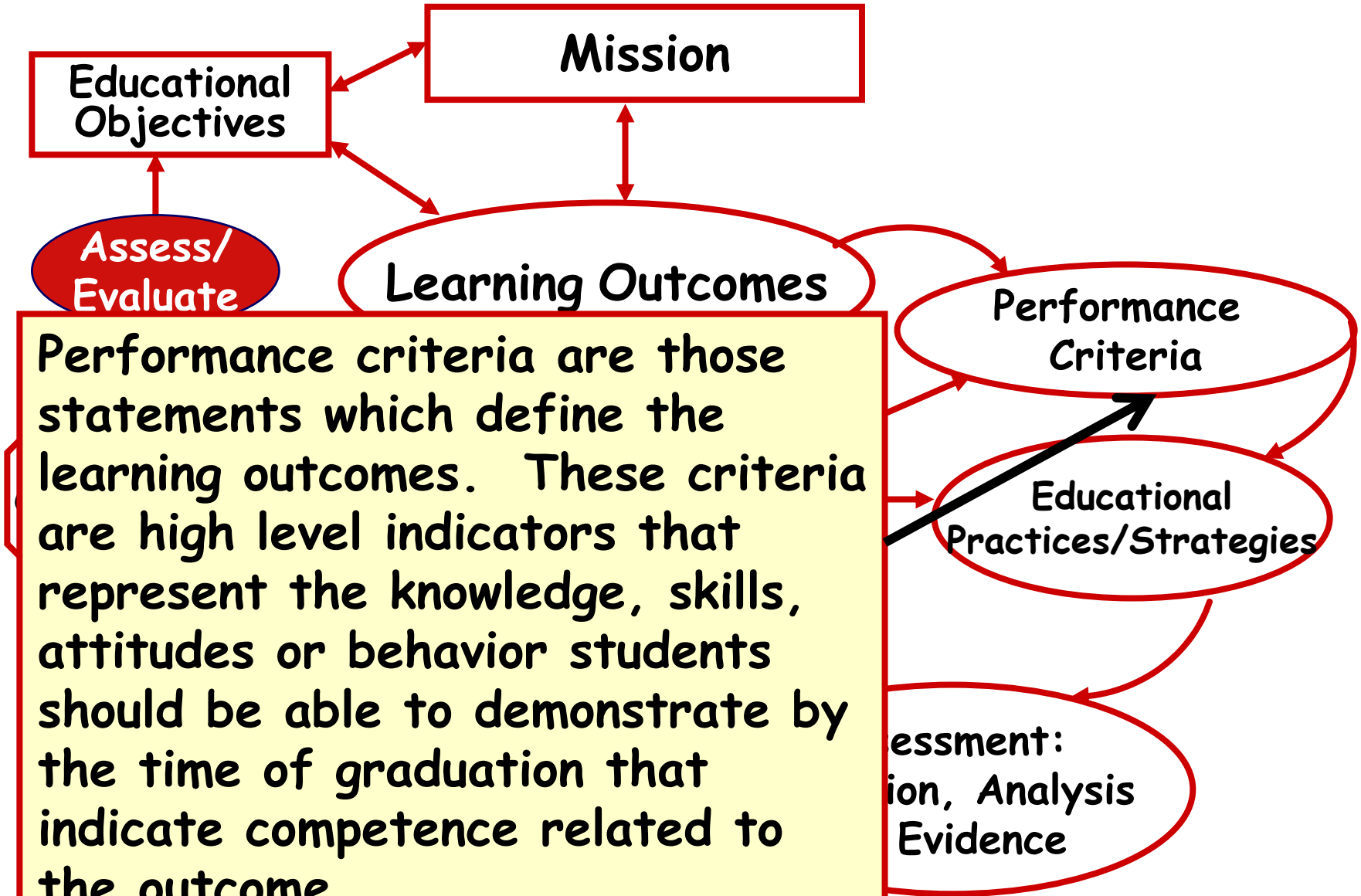


2. Depth: Students will possess and be able to apply knowledge and principles at a graduate level in one or more of the following areas of electrical and computer engineering: electronics and power systems, control systems, signal processing systems, communication systems, sensor systems, computer systems or network engineering.

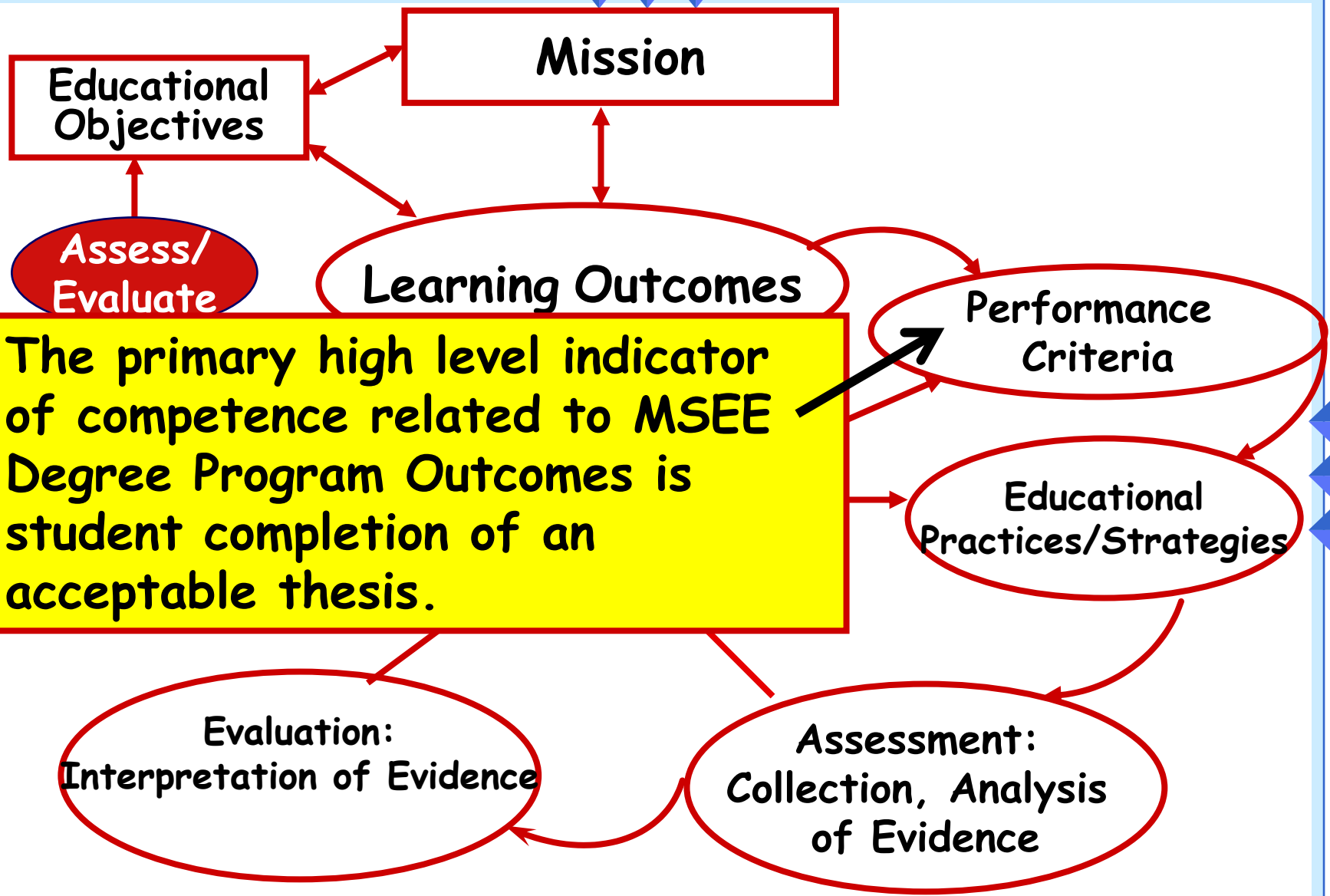
3. Independent Investigation: Students will develop the ability to conduct and report the results of a technically challenging, defense-relevant independent investigation.

4. BSEE Equivalency: Students will have BSEE degrees from ABET-accredited programs, or will have BSEE degree equivalency.

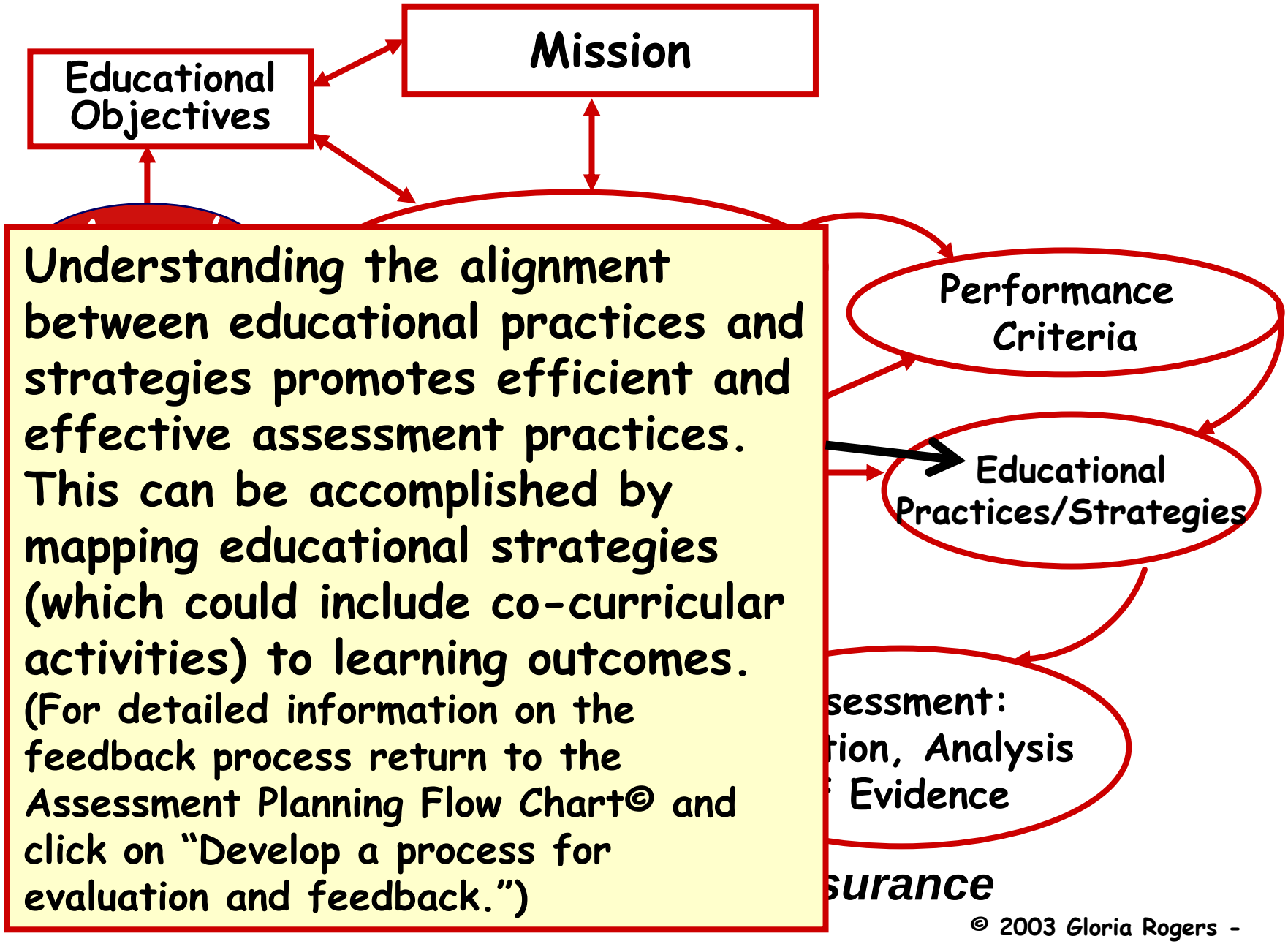


Performance criteria are those statements which define the learning outcomes. These criteria are high level indicators that represent the knowledge, skills, attitudes or behavior students should be able to demonstrate by the time of graduation that indicate competence related to the outcome.

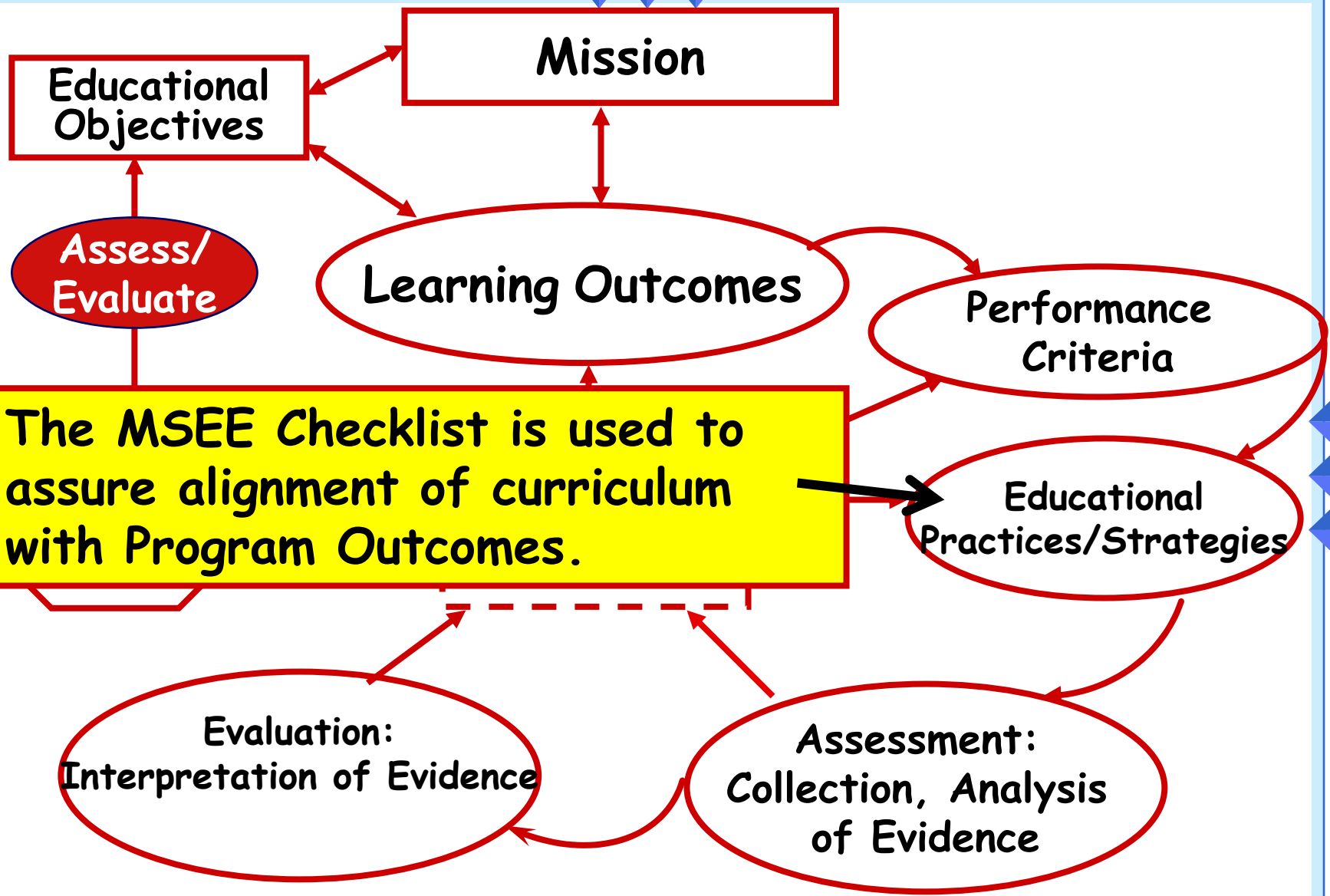
Assessment for Quality Assurance



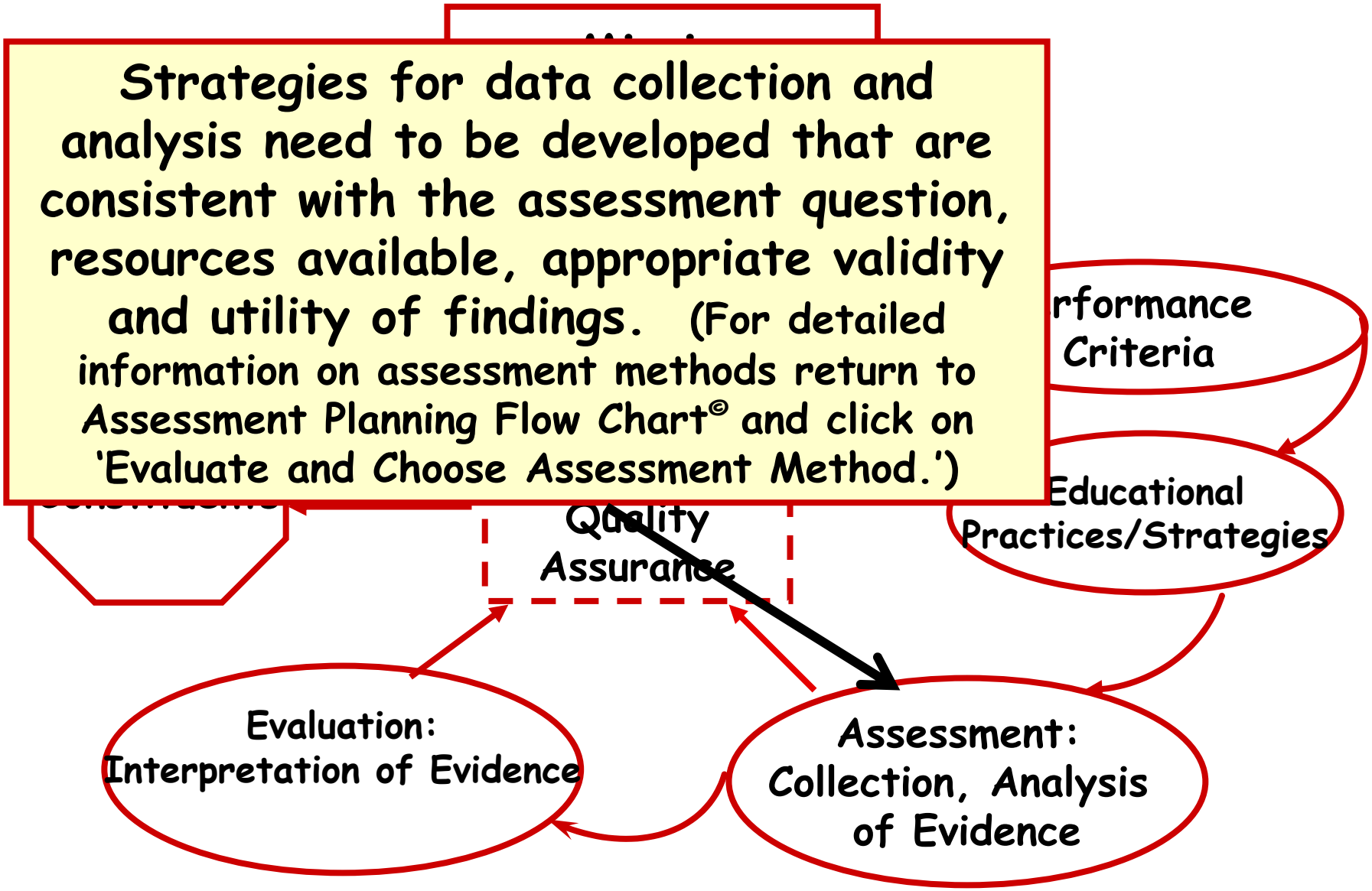
Assessment for Quality Assurance



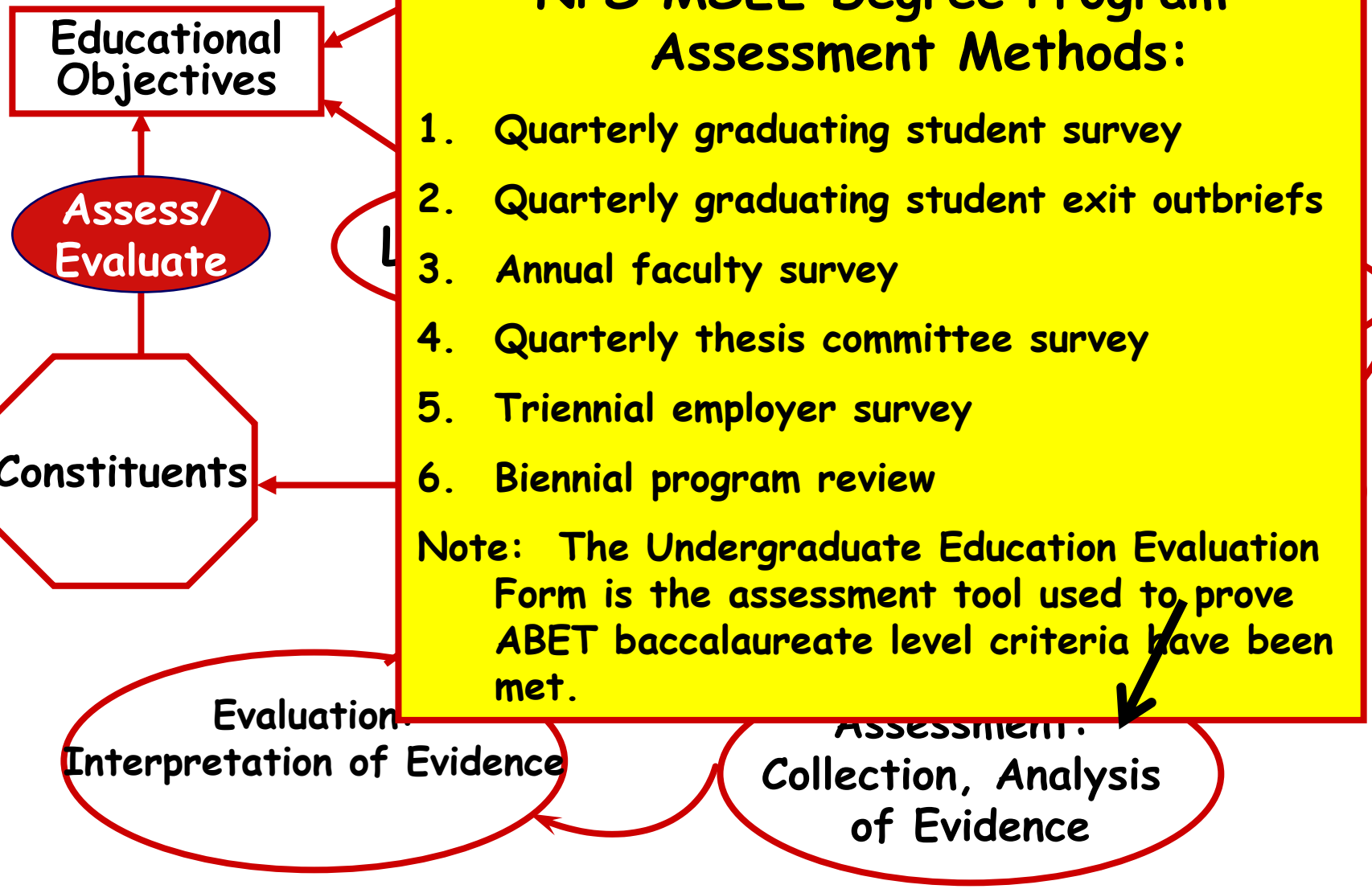
Understanding the alignment between educational practices and strategies promotes efficient and effective assessment practices. This can be accomplished by mapping educational strategies (which could include co-curricular activities) to learning outcomes. (For detailed information on the feedback process return to the Assessment Planning Flow Chart© and click on "Develop a process for evaluation and feedback.")



Assessment for Quality Assurance



Assessment for Quality Assurance

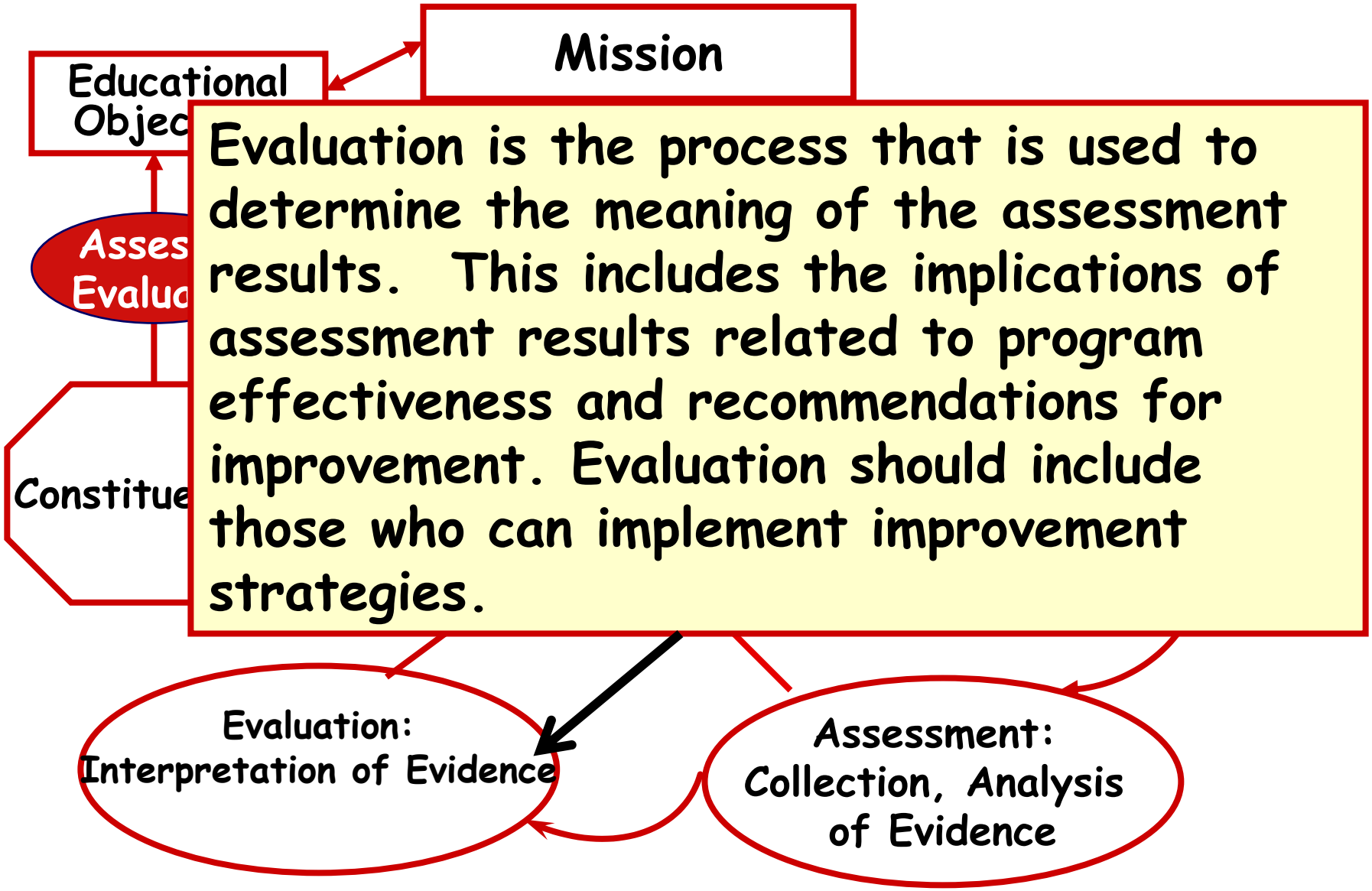


NPS MSEE Degree Program Assessment Methods:

1. Quarterly graduating student survey
2. Quarterly graduating student exit outbriefs
3. Annual faculty survey
4. Quarterly thesis committee survey
5. Triennial employer survey
6. Biennial program review

Note: The Undergraduate Education Evaluation Form is the assessment tool used to prove ABET baccalaureate level criteria have been met.

Assessment for Quality Assurance



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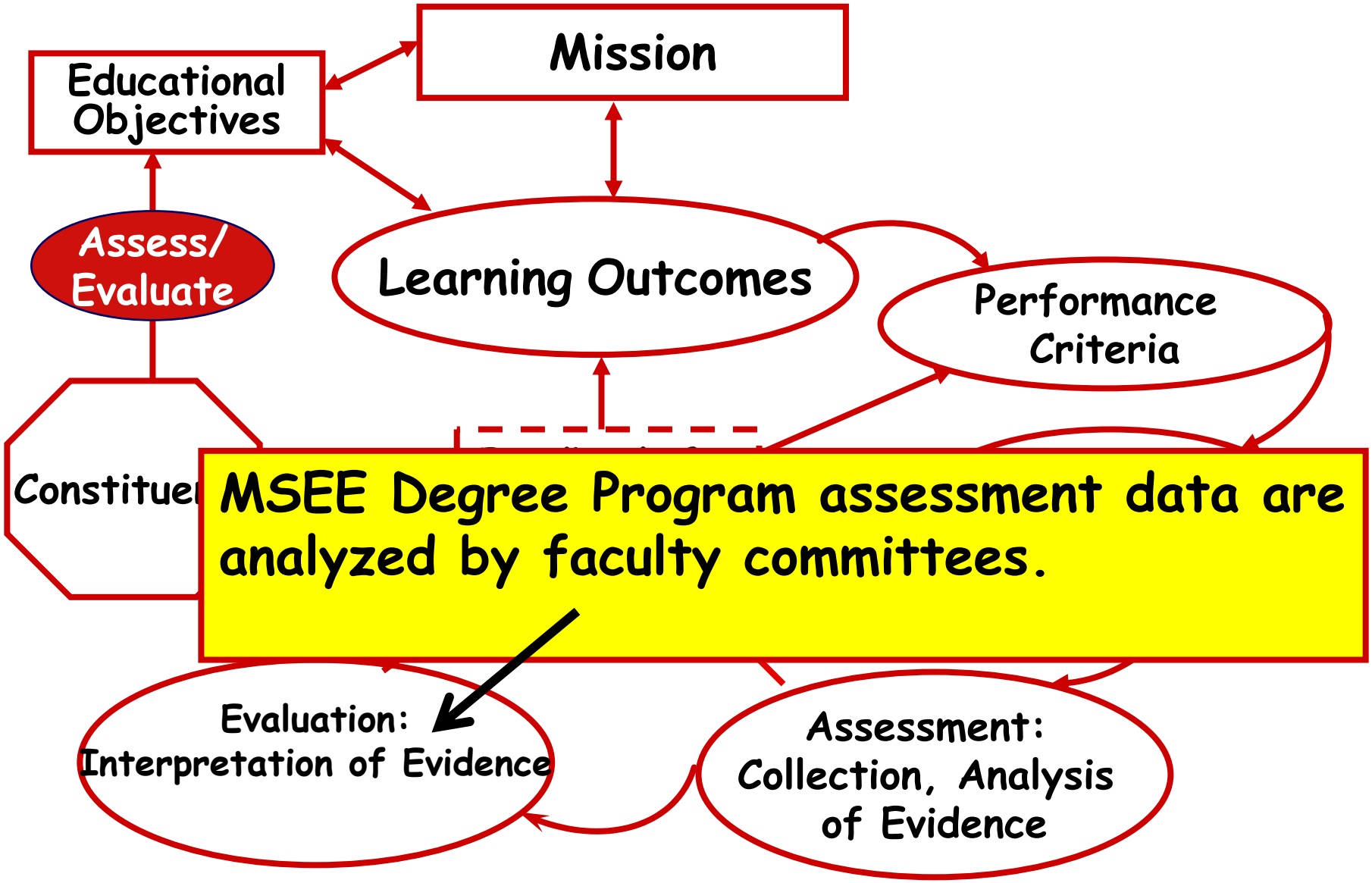
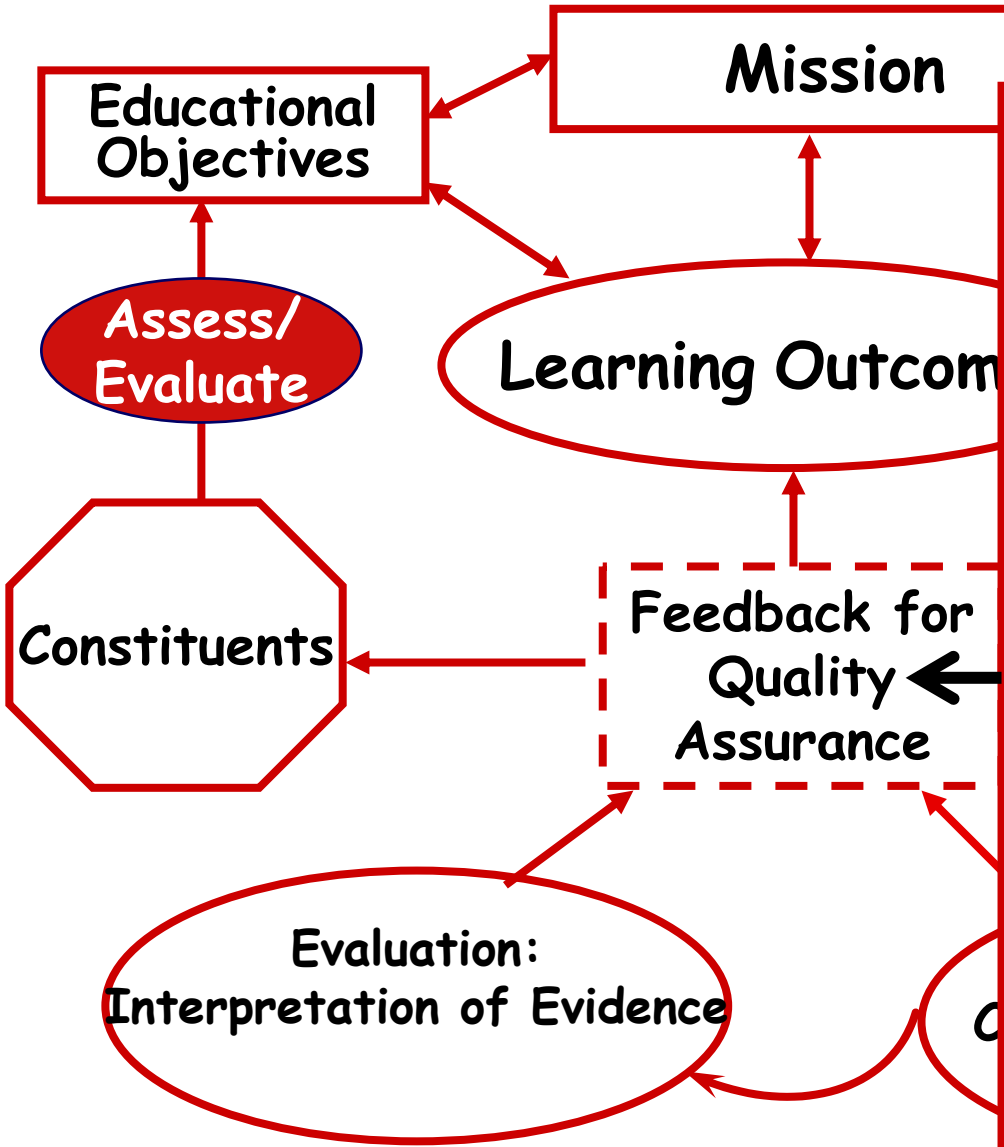
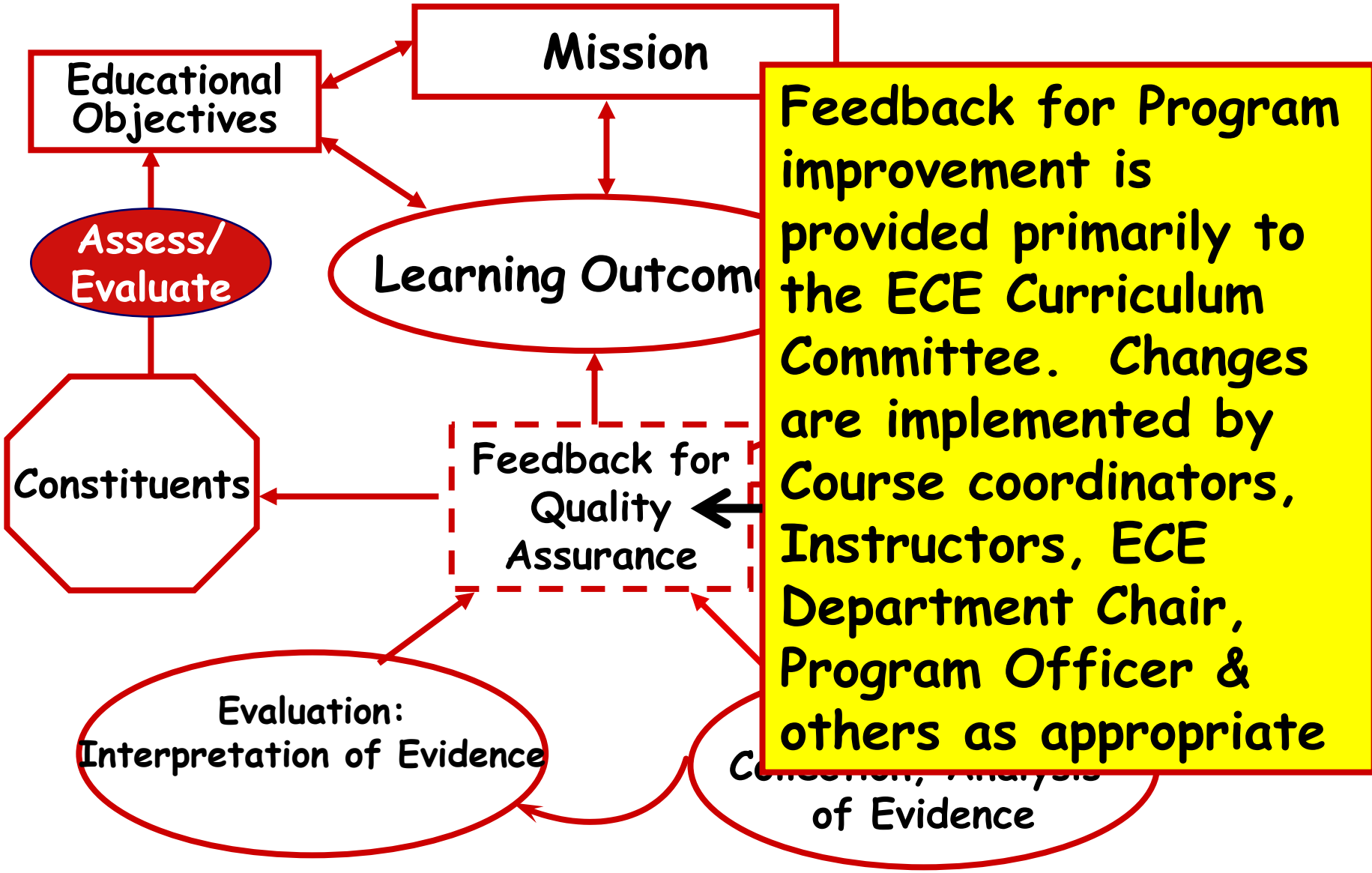


Assessment for Quality Assurance



The feedback process is critical to creating and maintaining a systematic quality assurance system. When successfully implemented, all elements of the quality assurance process interact with one another. (For detailed information on the feedback process return to the Assessment Planning Flow Chart© and click on 'Develop a process for evaluation and feedback.')

Assessment for Quality



Assessment for Quality Assurance

NPS Educational Effectiveness Task Force
(2007-present)

Dr. Robert Dell, Chair, Department of Operations Research, Graduate School of Operations and Information Sciences; Co-Chair, WASC Steering Committee

Lieutenant Colonel Bryan Hudgens, US Air Force**,** Lecturer, Graduate School of Business and Public Policy; AACSB Coordinator

Dr. Knox Millsaps, Chair, Department of Mechanical and Astronautical Engineering, Graduate School of Engineering and Applied Science.

Dr. Daniel Moran, Associate Professor of National Security Affairs, School of International Graduate Studies; Chair, Faculty Council

Dr. Doug Moses, Vice Provost for Academic Affairs; Co-Chair, WASC Steering Committee

Dr. David Olwell, Chair, Department of Systems Engineering; Graduate School of Engineering and Applied Sciences

Ms. Ali Rodgers, Faculty Development Director, Academic Affairs

Ad hoc:
Dr. Fran Horvath, Director of Institutional Planning and Advancement; WASC Accreditation Liaison Officer

July 6, 1999

Robert C. Chaplin, RADM

Superintendent

The Naval Postgraduate School

One University Circle, Room M-12

Monterey, CA 93943-5002

Dear Superintendent Chaplin:

At its meeting on June 23-24, 1999, the Commission considered the report of the evaluation team that visited your campus February 2-5, 1999. The Commission also had available to it the self study prepared by the Naval Postgraduate School in preparation for this visit and the Naval Postgraduate School's May 10, 1999 response to the team report. The Commission appreciated NPS's response to this report and the opportunity to meet with Richard S. Elster, Provost and Academic Dean; Gilbert Howard, Director of Academic Planning; M. R. Bills, Deputy to the Superintendent; and you. Your comments were very helpful.

The Commission commends the Naval Postgraduate School for utilizing an innovative non-traditional, topics-based accreditation review and self study. NPS elected in consultation with WASC to focus its self study on:

· Position(ing) NPS to meet the Challenges of the Revolution in Military Affairs;

- Increasing the efficiency and effectiveness of NPS through the Assessment of Institutional Performance;
- Develop(ing) NPS as a Department of Defense Technologically Integrated University of the Future

- Develop(ing) a consensus within each service on the importance of graduate education as an investment in human capital;

· Obtaining the resources needed to accomplish its mission;

- Recruiting, developing, and retaining high-quality staff and faculty; and

· assessment.

The self-study documentation also included a portfolio in which NPS addressed each of the nine WASC Standards.

The Commission was gratified that this approach resulted in active campus-wide commitment and involvement precipitating a highly effective analysis and critique of your planning themes as well as a positive and rewarding team review for WASC and the Naval Postgraduate School.

The Commission was pleased to observe your statement "applaud(ing) the efforts of WASC to move into new models of accreditation" and your "look(ing) forward to continuing to work with WASC in the future." The Commission observed that the evaluation team shared your enthusiasm for this new model approach when it stated that "the planning process stimulated by the WASC Self-Study and the NPS Strategic Plan has energized the campus, caused significant reorganization, and stimulated campus-wide discussions on teaching and assessment."

The evaluation team found much about the Naval Postgraduate School to commend. The team found NPS deeply concerned about its students; dedicated to research, teaching and student development and creating an active learning environment; enthusiastic and effective about faculty efforts to sustain curriculum innovation and improvement; expanding diversity; fostering respect, and committed to integrating technology into all aspects of the School and using it effectively in the delivery of instruction on- and off-campus. The team also found at NPS a bold sense of institutional confidence rooted in a record of academic excellence, "a superb faculty and very talented and motivated student body."

The Commission commends NPS for its efforts to respond to concerns identified by the previous visiting team and in the last Commission action letter . There has been demonstrable progress, and the Commission finds NPS a fundamentally sound institution that is fulfilling its mission effectively.

The evaluation team identified a number of important recommendations for further consideration by the institution. The Commission endorses those

recommendations. In addition, the Commission wishes to highlight a number of areas warranting special attention for the NPS community to address as it looks to the future.

Inclusiveness and Diversity: The Commission commends NPS for its commitment to diversity. However, the Commission shares the evaluation team's perspective that NPS could be more successful in the area of recruiting and retaining women and minority faculty and encourages NPS to bolster its efforts to recruit and retain qualified women and underrepresented minorities for its faculty. The Commission views campus climate playing a major role in attracting and retaining faculty, and expects NPS to examine how the social experiences that contribute to the high retention of its present faculty might be used to attract more minority and women faculty to its campus.

Program Assessment and Educational Effectiveness: While there is evidence of significant assessment activities underway on the campus, the Commission agrees with the team observation that NPS "must take further steps to improve its assessment process and to institutionalize a formal (systematic) academic program review process centering on external validation of academic quality." The team sees NPS as a "festival of opportunities to be taken . . . to cement its place in both naval and academic constellations . . . ensuring that its academic programs are clearly and firmly perceived as excellent." The Commission strongly endorses the team's analysis. The Commission sees the need for NPS to go the next step and make assessment an integral part of its institutional culture. NPS is thus encouraged to expand its assessment efforts and to integrate the results into all aspects of campus planning, with the goal of improving programs, teaching effectiveness and student learning. The Commission encourages NPS to build an assessment infrastructure that will permit it to systematically use the information that has been gathered. The expected outcomes of such an undertaking would be (1) greater collaboration among faculty, staff and administration in institutional direction and growth; (2) greater understanding of and appreciation for the effectiveness of co-curricular programs, faculty governance, organizational structures, and research activities; and (3) a fusing of financial realities with program needs in the decision-making process.

Technology and Learning Resources: The Commission suggests that the Naval Postgraduate School examine carefully how it will meet the special opportunities and demands of the transition to becoming a more technologically integrated "University of the Future" to meet the needs of the "Revolution in Military Affairs." This evolution will require evaluation by the faculty of traditional teaching methods and challenge the faculty to engage in dialogue

and educational innovation to explore how new computing/information technology and learning resources may serve the needs of on- and off-campus programs. As this transition occurs, the assessment plans developed by NPS should be directed to evaluate the educational effectiveness of these efforts.

The Commission endorses the team's recommendation that the Naval Postgraduate School sustain its commitment to "comprehensive training of new and existing faculty, to prepare them for the challenges and opportunities of the Revolution in Military Affairs and the special demands of the technologically integrated University of the Future. This includes the opportunities, demands, and special problems of distance learning technologies, as well as more traditional teaching processes."

Planning, the Curriculum and the Quality of Instruction: The Commission was most impressed with the strategic and curricular planning directions reflected in the NPS self study and expects NPS to sustain the momentum to operationalize and implement these academic and strategic initiatives. The Commission believes that NPS is at a critical juncture in that it is now poised to implement, at all levels within the campus community, a set of sanctioned and widely understood curricular and planning directions. The Commission encourages NPS to be mindful of the opportunity to monitor outcomes measures and resource requirements to accomplish the identified institutional goals and directions. The Commission expects the School to develop an effective system of data collection and analysis to support its planning initiatives and processes. By integrating assessment data into its decision-making process (including planning, resource allocations, and academic program reviews), NPS will allow faculty, staff and administration to continue being involved in discussing the School's direction and in setting policies.

The Commission endorses the team's recommendation that as the campus moves forward in the implementation of its planning strategies, it will need to assure that: it integrates technology into both academic programs and administrative services, and that it sets priorities, assigns resources appropriately, incorporates measurements, and assures widespread campus involvement. The Commission sees this approach maintaining the record of academic excellence and strong involvement of graduate students in research and scholarship that NPS has established.

The Commission acted to:

1. Reaffirm the accreditation of the Naval Postgraduate School.

2. Request **ten (10)** copies of a Fifth-Year report due March 1, 2004. Enclosed is a memorandum providing guidance on the format and content of the Fifth-Year report.

3. Schedule the next comprehensive visit for the spring of 2009. A draft of the self- study undertaken in preparation for the visit will be due October 15, 2008. The final self-study report will be due two months before the site visit.

Please contact me if you have questions or comments about this letter or the action of the Commission.

Sincerely,

Ralph A. Wolff

Executive Director

RW/brn

cc: Marilyn P. Sutton

Richard S. Elster

Erwin Seibel

Members of the Team

Enclosure

NPS Policies updated 7/23/08	URL
Faculty	http://intranet.nps.edu/faculty/
IT	http://intranet.nps.edu/ITACS.htm
Library	http://www.nps.edu/Library/LibraryInfo/Library%20Information.html
NPS Administration	http://intranet.nps.edu/code00/Default.htm
NPS Administration Resources	http://intranet.nps.edu/Administration.htm
Academic Policy Manual	http://www.nps.edu/Academics/AcademicCouncilPolicyManual.html
Admissions and Registrar	http://www.nps.edu/Admissions/index.html
Facilities	BROKEN: http://intranet.nps.edu/PublicWorks/FacilitiesPlans.html
	INTERNAL ONLY: http://intranet.nps.edu/PublicWorks/FacilitiesUtilizatio
Human Resources Office	http://www.nps.edu/Adminsrv/HRO/index.html
NPS Comptroller	http://intranet.nps.edu/Comptroller/index.html
NPS Instructions	http://intranet.nps.edu/Code00/Instructions/IndexNew.html
NPS Notices	http://intranet.nps.edu/code00/Notices/not.html
Office of the Provost	INTERNAL ONLY: http://intranet.nps.edu/Code01/Default.htm
Security Manager's Office	INTERNAL ONLY: http://intranet.nps.edu/security/
Occupational Health & Safety	INTERNAL ONLY: http://intranet.nps.edu/safety/
NSDM Base Police	INTERNAL ONLY: http://www.nps.edu/Adminsrv/police/index.html
Disaster Preparedness	http://www.nps.edu/AboutNPS/disasterhelp/index.html
Research	http://www.nps.edu/research/rspo.html
Navy	
Manuals, Handbooks and Guidance	http://www.npc.navy.mil/ReferenceLibrary/ManualsandHandbooks/
Military Navy Personnel Command	http://www.npc.navy.mil/Channels/
Internal Pages	
Students	INTERNAL ONLY: http://intranet.nps.edu/Students.htm
Faculty	INTERNAL ONLY: http://intranet.nps.edu/Faculty.htm
Staff	INTERNAL ONLY: http://intranet.nps.edu/Staff/SDAC.html

NPS Instructions

These instructions require Adobe Acrobat Reader to view. Click here to download it, or contact our TAC for more information.

- 1000-2000
- 2001-5000
- 5001-6000
- 6001-13000

1000-2000

1000.1A CH-1	22 JUN 93 29 DEC 93	NAVAL POSTGRADUATE SCHOOL (NPS) MILITARY ADMINISTRATIVE PROCEDURES MANUAL (THE FOLLOWING LINK WILL SEND AN E-MAIL TO NPS FLAG ADMIN)
1000.2B	19 NOV 03	CIVILIAN PERSONNEL MANAGEMENT TRAINING REQUIREMENT FOR ALL MILITARY PERSONNEL IN A SUPERVISORY POSITION
1430.1A	29 NOV 01	PROFESSIONAL DEVELOPMENT BOARD
1520.1H	28 JAN 05	STANDARD PROCEDURES FOR ADMINISTRATION AND MANAGEMENT OF NAVY FULLY FUNDED GRADUATE EDUCATION PROGRAMS AT CIVILIAN INSTITUTIONS AND THE LAW EDUCATION PROGRAM (LEP)
1520.2C	15 DEC 06	DISENROLLMENT FROM THE NAVAL POSTGRADUATE SCHOOL
1520.6E	4 OCT 05	ACADEMIC REGISTRATION AND GRADE PROCESSING PROCEDURES
1520.14D	7 JUL 09	EXPERIENCE TOURS IN PROGRAMS LEADING TO GRADUATE DEGREES
1520.7A	23 Feb 07	NON-CREDIT SHORT COURSE RECORDS
1521.3H	21 JUL 09	TEXTBOOK ALLOWANCE FOR U.S. NAVY STUDENTS

PROFESSIONAL ORGS

CLUBS

VOLUNTEER

1522.1D	8 MAR 06	STUDENT TEXTBOOK ISSUANCE FOR INTERNATIONAL OFFICERS
1524.1B	9 JUN 10	SECRETARY OF THE NAVY GUEST LECTURE SERIES
1530.1C	17 JUL 09	NAVAL POSTGRADUATE SCHOOL ACADEMIC PROBATION PROCEDURES
1550.1E	21 MAY 10	GUIDELINES FOR CONDUCTING CURRICULAR REVIEWS
1610.1D	11 DEC 09	FITNESS REPORTS, PERFORMANCE EVALUATIONS, AND COUNSELING
1650.1E ENCL 1-33 ENCL 34-77	10 NOV 08	ACADEMIC AWARDS
1650.1E (CH-1)	24 NOV 08	ACADEMIC AWARDS
1650.2	9 AUG 05	NAVAL POSTGRADUATE SCHOOL HALL OF FAME AND DISTINGUISHED ALUMNI PROGRAMS
1650.3C	10 JAN 08	NAVAL POSTGRADUATE SCHOOL SAILOR OF THE QUARTER/YEAR PROGRAM
1700.1B	15 MAY 02	CONTROL OF ALCOHOLIC BEVERAGES
1710.16D	11 DEC 02	MANAGEMENT AND USE OF THE NAVAL POSTGRADUATE SCHOOL AMATEUR/MARS RADIO STATION
1740.1A	30 DEC 03	SOLICITATION AND CONDUCT OF PERSONAL COMMERCIAL AFFAIRS
1740.3A	14 APR 04	TRANSITION ASSISTANCE MANAGEMENT PROGRAM/ RELOCATION ASSISTANCE PROGRAM
1752.1C	18 DEC 00	FAMILY ADVOCACY PROGRAM
*1752.2A	18 APR 07	SEXUAL ASSAULT VICTIM INTERVENTION (SAVI) PROGRAM
1754.1B ENCL 1 ENCL 2 ENCL 3 PT-1 ENCL 3 PT-2	17 MAY 01	EXCEPTIONAL FAMILY MEMBER PROGRAM
1770.1D	23 OCT 03	CASUALTY ASSISTANCE CALLS PROGRAM (CACP) AND REPORTING SERIOUS INJURIES AND DEATHS OF ACTIVE DUTY PERSONNEL

Next Page (2001-5000)

NPS Administration - Notices

Directory of NPS Notices

The following notices are made available in Adobe PDF format. If you don't have the Adobe reader, please go here to download it, or contact our TAC for more assistance.

View this Notice (PDF)	1520 - United States Strategic Command Excellence Deterrence Writing Award Effective Date - 25-Mar-10
View this Notice (PDF)	1540 - Academic Year 2010 Spring Quarter Enrichment Week Effective Date - 9-Sep-10
View this Notice (PDF)	3050 - Application to CNO Strategic Studies Group (CNO SSG) Associate Fellow Program Effective Date - 7-May-10
View this Notice (PDF)	5215 - Numerical Index of Effective NAVPGSCOL Directives Effective Date - 1-May-07
View this Notice (PDF)	5216 - SIGNING OF OFFICIAL CORRESPONDENCE AND NAVAL MESSAGES FOR THE NAVAL POSTGRADUATE SCHOOL Updated 6-Apr-07

Academic Policies Survey Report, June 2008

Introduction

The Naval Postgraduate School (NPS) maintains a constant commitment to high quality education and research that fulfills a unique need – that of graduate education relevant to the mission of the Navy and Department of Defense (DoD). The School has consistently monitored the DoD uniqueness and relevance, as well as other important qualities over the years.[1]

As part of the NPS Western Association of Schools and Colleges (WASC) re-accreditation process, the *2008 Academic Policies Survey* was conducted to begin to document the special academic policies, processes and practices that exist within each of NPS's schools and academic departments. The survey asks for input from each department concerning practices in three broad academic areas:

- **Faculty Development**: What processes do you have in place designed to support and review faculty achievement?
- **Education Program Review**: What processes do you have in place designed to assure the quality and effectiveness of education programs?
- **Student Learning**: What processes do you have in place designed to document and improve learning achieved by students?

As part of the required WASC review process, this effort supports the self-study of NPS, broadly documenting how NPS operates and how effective education is achieved at NPS.

Methodology

The survey consisted of a 19 item open-ended questionnaire, representing the three broad academic areas, as identified above. The survey targeted input from deans and chairs of each NPS academic department; they were notified via email about the survey posting and for their valued input. They were given a two week response period. The total number of academic departments surveyed was 14, representing four schools. There was a range of 14-16 respondents per survey item, resulting in a response rate of 67-76 percent (2 respondents from 1 department). Each school and academic department represented in this study is listed below:

[1] Naval Postgraduate School Exit Survey 1993-2004: A Twelve Year Trend Study

Academic Policies Survey Report, June 2008

School Academic Department

GSBPP	Business and Public Policy
GSEAS	Applied Mathematics
GSEAS	Electrical & Computer Engineering
GSEAS	Mechanical and Astronautical Engineering
GSEAS	Meteorology
GSEAS	Oceanography
GSEAS	Physics
GSEAS	Space Systems
GSEAS	Systems Engineering
GSOIS	Computer Science
GSOIS	Information Sciences
GSOIS	Operations Research – Operations Analysis
SIGS	Defense Analysis
SIGS	National Security Affairs

Results

Analysis

A content analysis of the survey data was performed in two steps. First, responses for each question were grouped into two categories: *Yes* or *No.* Based on the total number of responses per category, a percentage of total respondents was calculated for each. Second, recurring issues were identified among the respondents; however, given the small number of chairs/deans surveyed, most responses reflected the unique academic processes or operations of those departments.

While most respondents provided extensive and detailed responses to the questions, few responses were brief and non-descriptive. A summary of results are provided in Appendix A; actual response data are provided in Appendix B.

Findings

An overall distribution of the three academic areas is represented in Table 1. Of the 19 survey items, four have a *No* response level of 33% or less.

Academic Policies Survey Report, June 2008

Table 1
Overall Distribution of Academic Areas

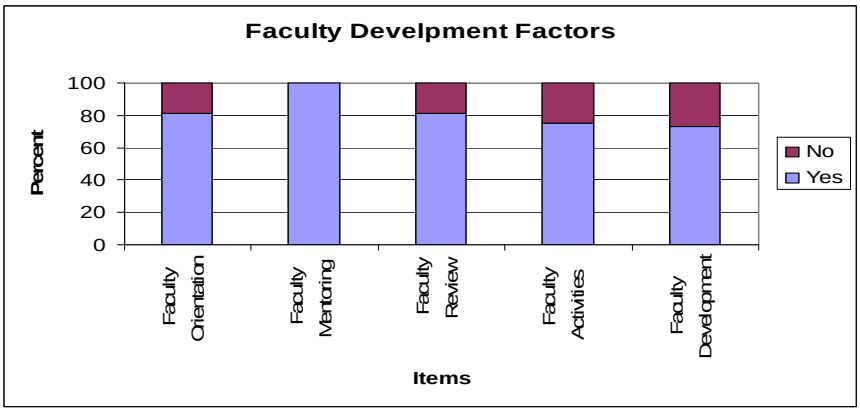
	% Yes	% No
Faculty Development		
1. Faculty Orientation	81	19
2. Faculty Mentoring	100	--
3. Faculty Review	81	19
4. Faculty Activities	75	25
5. Faculty Development	73	27
Education Program Review		
6. Curriculum Reviews	100	--
7. Internal Reviews	93	7
8. Academic Reviews	57	43
9. New Programs and Courses	93	7
10. Program Quality Data	93	7
11. Program Accreditation	14	86
12. Program Ratings	29	71
Student Learning		
13. Learning Outcomes	14	86
14. Teaching Effectiveness	64	36
15. Outcomes Assessment	100	0
16. Student Feedback	100	0
17. Course Journals	73	27
18. Thesis Assessment	100	--
19. Distance Learning Assessment	33	67

A summary of the survey findings, as organized by the three academic areas, are as follows:

Faculty Development: What processes do you have in place designed to support and review faculty achievement?

There are five factors which address *Faculty Development* (faculty orientation, faculty mentoring, faculty review, faculty activities, and faculty development, Figure 1). For all five factors, the analysis show that the majority of respondents (73% and above) indicate their department has a strong system in place supporting faculty achievement.

Figure1

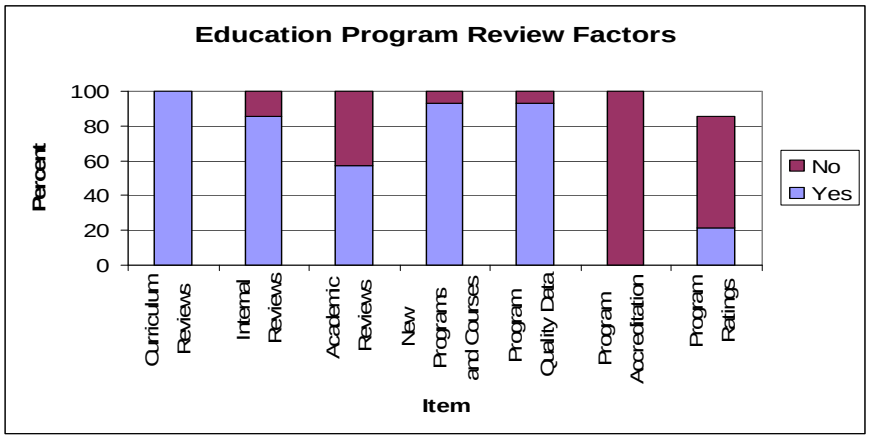


Academic Policies Survey Report, June 2008

Education Program Review: What processes do you have in place designed to assure the quality and effectiveness of education programs?

There are seven factors which address *Education Program Review* (Figure 2). The analysis found 4 of the 7 factors as being strong toward measuring the quality and effectiveness of their department's educational program. Specifically, the factors are curriculum reviews, internal reviews, new programs and courses, and program quality data. Two factors (program accreditation and program ratings) have different meanings. The "No" responses indicate no additional requirements for these factors. One factor (academic reviews) was in the middle.

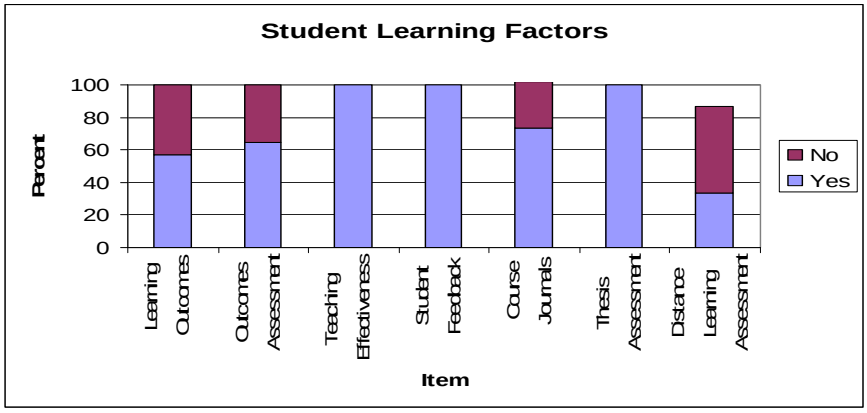
Figure 2



Student Learning: What processes do you have in place designed to document and improve learning achieved by students?

There are seven factors which address *Student Learning* (Figure 3). The analysis showed 4 of the 7 factors as a strong measure of student learning. Specifically, the factors are teaching effectiveness, student feedback, course journals, and thesis assessment. Two factors (learning outcomes and outcomes assessment) were in the middle. One factor (distance learning assessment) has a different meaning on its assessment. The "No" response indicates no additional requirement for this factor.

Figure 3



Conclusions and Recommendations

The *June 2008 Academic Policies Survey* addressed input from NPS's schools and academic departments regarding faculty development, education program review, and student learning. The academic components of the survey consisted of 19 factors. The outcome of this effort documented and examined the academic policies, processes, and practices, necessary for continued educational program development, and for accountability and accreditation.

Overall, 73% of respondents sited evidence of effective organizational structures and processes.

<u>Faculty Development</u>
Analysis showed strength among all NPS academic departments for having a process in place designed to support and review faculty achievement, for all five factors measuring this area.

<u>Education Program Review</u>
The majority of factors for this academic area show no weakness. Findings of two factors from this area are reflective of NPS review processes.

- Program accreditation is not a requirement for some academic programs, while some individual academic degree programs have separate accreditation by ABET, NASPAA or AACSB. Beyond these known accrediting bodies, no additional ones were identified from the survey.

- Program ratings are not as applicable. NPS is not comparable to other elite universities due to the unique DoD and military focus. However, when NPS is ranked among other top universities, the Public Affairs program has been rated within the top 50 universities nationally; the National Security Affairs Department was ranked ninth nationally in the area of International Affairs and Development in the Faculty Scholarly Productivity Index. The department of Applied Mathematics was noted in the American Mathematical Society (AMS) for its viable PhD program, and Operation Research was ranked fourth from 50 national universities.

Student Learning

- Learning Outcomes. Over half of the respondents (57%) have learning objectives for their department or degree program published either on the department website, in the course catalog, as an internal document, or specified in the syllabi produced by each faculty member. Since nearly half of the respondents (43%) do not have written learning outcomes, this factor is an area for consideration and enhancement among some departments.

- Outcomes Assessment. While the majority of respondents (64%) indicate their department has written procedures for determining if students have achieved learning outcomes, some departments (36%) require development within this area.

- Distance Learning Assessment. When asked if student evaluation processes are different for resident versus distance learning students, 67% indicated that they were not. Therefore, the “No” response indicates there are no major differences in the process of evaluating the two programs rather than a weak assessment.

Since some responses were not descriptive, assessment of these factors may not reflect actual departmental practices. It is well within our institutional interest to follow-up on these areas for further clarification and assessment.

Appendix A.

	Responses		Response Issues
Faculty Development:	**%** Yes	**%** No	
Faculty Orientation: *Does your department have an orientation program, formal or informal, for newly hired faculty? What steps are taken to assist new faculty toward success upon arrival at NPS?*	81% Formal 37.5% Informal 43.8%	19%	• Receive Formal briefing • Assigns Mentors • New Orientation Checklist • Meet with Chair; Set Goals
n=16			
Faculty Mentoring: *Is there a formal or informal program of faculty mentoring within your department? Please describe.*	100%		• All departments have a faculty mentoring system in place, with a good majority (approximately 75%) applying a formalized program, to include an annual report.
n=16			
Faculty Review: *Beyond the NPS institutional Promotion and Tenure (P&T) process, does your department have any systematic processes for the review and evaluation of faculty accomplishments? (e.g., Such processes might be related to teaching performance, research accomplishments, reappointment decisions, annual paystep actions, etc.) Please describe.*	81%	19%	• Most go beyond P&T process for the review and evaluation of faculty accomplishments. • Review Committee. Tenure based on research publications in top-tier journals, teaching evaluations; • Annual reviews – determine merit and pay-step action • 3rd year review for tenure-track.
n/a=1 n=16			
Faculty Activities: *All NPS faculty complete annual work plans, outlining planned activities for an upcoming year, and Faculty Activity Reports (FARs) summarizing accomplishments for the previous year. Beyond these two mechanisms, are there are additional systematic processes by which your department tracks faculty accomplishments? Please describe.*	75%	25%	• 69 -75% have an additional system for tracking faculty accomplishments: - Department newsletters (4); - Quarterly assessment reviews/updates to work plans (5); - Record keeping of faculty accomplishments and activities during the year (3)
n=16			
Faculty Development: *Please*	73%	27%	• Provide some additional process or

mention any other policies or processes, not mentioned above, that are practices in your department for supporting and assessing the success of your faculty.			emphasizes an approach for assessing success, i.e. faculty meetings (4).
n=15			
Education Program Review:			
Curriculum Reviews: *NPS has a long-established process of formal curriculum reviews with sponsors, which nominally occurs biannually. Does this process cover all of the degrees, curricula or programs in your department? How often, and by what means, are your curricula reviewed (formally or informally) in consultation with curriculum sponsors or stakeholders?*	100%		• All respondents have at a minimum, an annual, or biannual review with their sponsors and representatives
n=14			
Academic Reviews: *NPS has instituted a program of "Academic Program Review" (APR), the purpose of which is to support and facilitate external "peer" review of NPS degree programs by qualified academics. This APR program is not yet wide-spread across campus and so has touched few departments. Beyond APRs, does your department engage in any process, formal or informal, by which academics external to your department have provided assessments or critiques of your programs? External observers [e.g. visiting committees]?*	57%	43%	• Over half have some type of external assessment • Not much elaboration on responses
n=14			
Internal Reviews: *Do you also have periodic or ad hoc procedures for reviewing and adjusting the contents of your curricula internally, e.g. during annual course planning? If so please describe.*	93%	7%	• Most departments have an ongoing review and evaluation of curricula content

Academic Policies Survey Report, June 2008

n=14			
New Programs and Courses: *How does your department develop new curricula? New courses? In particular, does your department have an acknowledged curriculum committee (or analogous group) whose purpose includes the review and/or initiation of new curricula?*	93%	7%	• All Departments but one have at least a committee, counsel, group, or process for review of new curricula
n=14			
Program Quality Data: *Apart from SOFs, does your department regularly collect information (from students, alumni, faculty, sponsors, visitors, etc.) for the purpose of monitoring program quality? If so, please describe. How is this information used to validate or improve current programs?*	93%	7%	• Student data are collected for monitoring program quality o effectiveness of student performance in follow-on commands o various methods are specified for soliciting student feedback, i.e. interviews, surveys/questionnaires
n=14			
Program Accreditation: *Some individual academic units and degree programs at NPS have separate accreditations by ABET, NASPAA or AACSB. Those three are know and need not be repeated here. Beyond that, are there individual academic or professional accreditations or certifications that are available to academic programs within your department? Please identify the potential accreditation or certification and indicate its applicability to your program(s).*		100%	• No individual academic or professional accreditations or certifications within the department.
n=14			
Program Ratings: *Program ratings exist in various forms. There are program or school ratings that exist in the popular press (e.g., US News). Some*	29%	71%	• Public Affairs Program rated in top 50 by US News in past

professional societies assess and rate programs in their discipline. On occasion academic research studies conduct assessments or rating of schools or programs. Do you know of external assessments or ratings that are applicable to your department or programs? Please mention.			
n=14			
Student Learning:			
Learning Outcomes: *Apart from the ESRs negotiated with your curriculum sponsors, does your department have written learning outcomes for its degree programs? If so, where are they located? Are your programs designed to satisfy the requirements of external professional licensing or certification organizations? If so, please describe.*	57 %	43%	• Most of this group (6) have learning objectives for the department/degree program; published either on website, syllabi produced by each faculty member, or internal document. • Some (2) instructors identify learning objectives along with their courses as well as specify in course catalog. • 2 depts have external licensing or certification
n=14			
Outcomes Assessment: *Does your department have written procedures for determining if students have achieved the learning outcomes described in your answer to question 1? If so, where are they located? If these procedures are not written but there is a common practice, please describe.*	64%	36%	• Most respondents (9) indicated some kind of procedure for determining achievement of student learning outcomes; although some (4) referred to thesis, ABET, Exit Survey as their means to accomplishing this. One department identified a criteria check; another department relies on written and oral demonstration of learning outcomes.
n=14			
Teaching Effectiveness: *The NPS SOF process provides one indicator of teaching effectiveness. Beyond the SOFs, does your department engage in any systematic practices designed to appraise and/or improve*	100%		• Class visits, student interviews/talk, observe teaching by "outstanding" teachers and peer program (teaching buddies); • Guidance by course coordinators; share written comments by students/surveys

teaching? (Examples might include classroom visits, review of course syllabi, peer review of teaching by colleagues, student surveys, etc.). Please describe.			• Only one department responded for " PPT actions".
n=15			
Student Feedback: *Please describe formal or informal mechanisms within your department designed to capture student feedback concerning their experience in their graduate program. (Examples might include student interviews either during the program or upon graduation, periodic student surveys, meetings with academic associates or program officers, etc.)*	100%		• All respondents indicate they have a system to capture NPS experience; mostly student interviews, meetings, questionnaires, and representatives; held quarterly and at graduation. • Many respondents (9) have a formal system of gathering student feedback.
n=15			
Course Journals: *A "Course Journal" refers to an organized collection of course materials (e.g., course outline, syllabus, schedule, list of assignments) assembled at the completion of a course that provides a record of the course as taught. Submission of Course Journals by instructors and maintenance of the collection of Course Journals by the department was once common practice at NPS. Are Course Journals, or other similar sets of course records, submitted and maintained in your department, and used for assessment.*	73%	27%	• The majority of respondents (11) have a course journal; about one third (5) maintain journal data in an electronic format.
n=15			
Thesis Assessment: *How is the quality of theses or capstone projects ensured? Does your department have a systematic process that evaluates the quality and competencies demonstrated*	100%		• All have a "checks and balance" system, but some describe a more comprehensive process (9) vs. a simple description, i.e. "the chair reads all thesis"

in theses or capstones? If there are written procedures, where are they located? If there is a common practice, please describe.			• Reviews by Academic Associates/Program Officers/Chair; Thesis process is highlighted in lecture series • Recognition/awards for "quality work"
n=15			
Distance Learning Assessment: *Is the process of evaluating student learning different for resident versus distance programs? If so, please describe how.*	33%	67%	• 2 depts do not have DL courses • DL course require more instructor tracking and monitoring of student comprehension/learning.
n=15			

NAVAL
POSTGRADUATE
SCHOOL

Strategic Plan - 2008

Vision for a New Century

NAVAL POSTGRADUATE SCHOOL

STRATEGIC PLAN: *VISION FOR A NEW CENTURY*

INTRODUCTION

The Naval Postgraduate School (NPS) is a unique graduate school — an institution dedicated to providing education and research with a focus on relevance to the defense and security arenas and on recognizing and innovatively solving problems in support of our military forces, our country's global partners and our national security. While there are many civilian universities that provide graduate education, there are few that are dedicated to providing national security-related graduate educational programs for military officers, as well as federal, state and local government civilian employees and contractors. The Naval Postgraduate School is such a place.

MISSION STATEMENT

NPS provides high-quality, relevant and unique advanced education and research programs that increase the combat effectiveness of the Naval Services, other Armed Forces of the U.S. and our partners, to enhance our national security.

I. BACKGROUND

At NPS, four world-class Schools oversee fourteen academic departments that provide more than 42 master's and 18 doctoral degree programs and certificates to 1,800 resident students, including 300 international students, as well as approximately 900 distributed-learning students worldwide. Four Institutes, multiple secure research facilities and twenty-three Centers of Excellence add to the wealth of resources. Non-resident courses are delivered to students through online, web-enabled, video-tele-education systems and/or by visiting faculty. Continuous learning, refresher and transitional educational opportunities abound, and short-term executive education courses and a variety of short courses are also offered by NPS, both in Monterey and abroad.

Approximately 500 scholars and professionals, 10 percent of whom are military officers and half of whom are tenured or tenure-track, comprise the NPS faculty. To strengthen expertise and program relevance, and to expedite research successes at NPS, a robust mix of tenured faculty, lecturers and visiting professionals integrate teaching with research, demonstrating the immediate applicability of

"The Naval Postgraduate School is a national -- and international -- treasure. With its rigorous curriculum, talented faculty and a diverse student body that includes students from all the US armed forces, other federal agencies and more than 60 nations, NPS contributes greatly to enhanced joint, coalition and interagency effectiveness. Knowledge and imagination are the keys to dealing with the challenges of this new era, and here at NPS those keys are forged. The School rightly boasts an illustrious past, but I am convinced that its future burns even brighter."

Admiral Michael G. Mullen
Chairman of the Joint Chiefs of Staff
Former Chief of Naval Operations
NPS, Class of 1985
Operations Research

defense-related theories to defense-related solutions, many times resulting in patent-eligible technologies.

The NPS Board of Advisors functions as an eighteen-member federal advisory committee that provides guidance to NPS, and reports to the Secretary of the Navy, the Chief of Naval Operations and the Commandant of the Marine Corps on matters pertaining to the School and its graduate education and research programs.

Well-positioned to continue to develop as the nation's premier educational and research institution for defense and national security, *Vision for a New Century* details the School's strategic drivers and goals through 2012, and is designed to guide the university in making the critical choices necessary to maintain and enhance its leadership position and to increase its support of the U.S. military and of our nation's security.

"We strive to maintain an agile and flexible force that can not only contribute to winning our Nation's wars but also can assist in preventing future conflict to the extent possible—whether by dissuasion, deterrence, humanitarian action or disaster relief."

Honorable Donald C. Winter
Secretary of the Navy
Speech before House
Armed Services Committee
Feb. 28, 2008

II. STRATEGIC VISION AND GOALS

In October 2007, the U.S. Navy, the U.S. Marine Corps and the U.S. Coast Guard published an "historical first," an initiative titled *A Cooperative Strategy for 21st Century Seapower,* which outlines how these services will collaborate to assist the United States in preventing wars as well as winning them, and in protecting U.S. vital interests and global prosperity.

> "Guided by the objectives in the *National Security Strategy, National Defense Strategy, National Military Strategy and the National Strategy for Maritime Security,* the United States Navy, Marine Corps and Coast Guard will act across the full range of military operations to secure the United States from direct attack; secure strategic access and retain global freedom of action; strengthen existing and emerging partnerships and establish favorable security conditions."

At the heart of the success of this maritime strategy are adaptability and flexibility from the unified forces, and a blend of peacetime engagement and major combat operations capabilities. Mission-tailored force packages will require interoperability and integrated approaches, as well as enhanced cooperation with multinational partners that possess varying levels of technology; maritime domain awareness, and intelligence, surveillance and reconnaissance capacities must be increased; robust information-assurance measures must be secured to protect information from compromise; and a powerful fleet of ships, aircraft and joint forces that can project power ashore, selectively control the seas and protect both friendly forces and civilian populations from attack must be maintained.

Recognizing the challenges and opportunities proposed in the maritime strategy, particularly as mission-tailored joint forces are dispersed under a decentralized authority in multinational environments, NPS also recognizes the vital role it will play in supporting the ambitious vision of the Sea Services.

MAJOR CHALLENGES

- To provide graduate education to more Navy Unrestricted Line Officers and U.S. military officers, while the US military is engaged in wartime activities
- To enhance the quality and relevance of the NPS mission while urgent military needs compete for resources
- To engage other agencies of the U.S. government and other nation states in support of homeland, national and international stability and security

NPS VISION

As a naval/defense-oriented research university, the Naval Postgraduate School will operate as a geographically distributed educational system that provides a broad range of high-quality graduate education in support of national and international security.

Chartered originally to focus on science and technology, NPS has evolved from a single engineering department at the U.S. Naval Academy into an institution that serves naval, defense and national security related interests by providing current and future readiness, advances in technology, and educational and operational programs that directly support all facets of national defense and homeland security. In support of its mission and vision, NPS has identified four main goals in this strategic plan, *Vision for a New Century*, upon which the School will engage its primary efforts:

GOAL 1. NPS WILL SUSTAIN CONTINUOUS IMPROVEMENT IN THE QUALITY AND RELEVANCE OF OUR GRADUATE EDUCATION AND RESEARCH PROGRAMS.

NPS will continue to excel by offering a wide array of graduate and professional programs and research of national prominence; by recruiting, developing and maintaining a distinguished faculty; by producing exemplary graduates; by valuing the discovery, dissemination and application of new and significant

"NPS is the hidden jewel in the Federal crown of military and government education. Here is where you find cutting-edge technological research; advanced training in civil-military dynamics; the best and only master's program for government officials in Homeland Security operations; and critical real-time training exercises in peacekeeping and stabilization and reconstruction activities. Nowhere else does a single dollar of investment go so far in advancing America's agenda of peace through strength. I am proud of the work done by faculty, staff and students at this institution."

The Honorable Sam Farr
Congressman, 17th District of California

"We will build a Navy with appropriate force structure and develop the strategic lay down necessary to implement the Maritime Strategy, continue to be the dominant and most influential naval force, globally and across all maritime missions, and instill in our military and civilian force a focus on mission and individual readiness that is underpinned by a warrior ethos … We will prevent war, dominate any threat and decisively defeat any adversary, and to do this, we will remain a superbly trained and led team of diverse Sailors and civilians, who are grounded in our warrior ethos, core values and commitment to mission readiness and accomplishment. … We are indeed the fortunate few who have the privilege to serve in the United States Navy."

Admiral Gary Roughead
Chief of Naval Operations
2007-2008 CNO Guidance

knowledge; and by providing the educational and technological resources required for superior graduate-level education and research. NPS will improve its instructional programs and will achieve breakthroughs in its military and security-related research and applications of research, and rank among the most respected institutions of higher learning in the United States.

The quality of the NPS educational programs is only as good as the quality of its faculty. Cultivating and sustaining an intellectual community of scholars, scientists and engineers is a crucial institutional priority and will include opportunities for multi-disciplinary conversations, seminars and guest speakers, as well as funding for new program development and other academic community-building strategies.

NPS will make an institutional commitment to provide the infrastructure and resources required for the research-related support of the academic enterprise. Investment strategies will involve support for initiatives that exhibit excellence, maintain their centrality to the core mission of NPS, and are responsive to the emerging needs of the Navy and the Department of Defense. Partnerships with industries, peer institutions, research laboratories, Joint Service commands, and local and state governments will remain essential components of leveraging resources and ensuring access to the technology and intellectual capital required for the continued success of the School.

NPS must continue to assess its existing programs and determine their excellence through the Academic Review process, and by using benchmarking indicators. Quality indicators include not only those used at the local levels through comparisons with peer institutions, but also national-level metrics that include rankings, publications, citations, research dollars, postdoctoral appointments, doctoral degrees awarded, surveys of stakeholders, patents and licenses, honors and awards and endowed Chairs. Important indicators of performance include curricular reviews, faculty memberships on defense and homeland security boards, partnerships with other commands, continuing and executive education programs, distributed-learning programs, and recognition in national and international media.

GOAL 2. NPS WILL EXTEND EDUCATION TO THE TOTAL FORCE AND TO OUR GLOBAL PARTNERS.

NPS graduate educational and research programs will facilitate collaboration among all members of the Total Force, comprised of personnel from all military services, coalition allies and defense agencies, so that they may be able to quickly identify and address new defense and national security-related challenges. NPS will serve the Total Force at our campus in Monterey, through

our educational and research outreach activities, and by expanding distributed-learning programs to reach more Unrestricted Line Officers and other U.S. and international officers.

Because the Navy's operational tempo makes it difficult for URL officers to attend residential programs in Monterey, NPS — with its unique repository of scientific, technical, cultural, management and security expertise — has developed the ability to deliver programs to other operational units around the world. NPS will continue that practice, and will continue to serve the Total Force at its campus in Monterey, as well as its satellite campuses. Capitalizing on the faculty expertise at NPS and its partner universities, programs will be structured so that research will be conducted in collaboration with both university and laboratory personnel who are employed at federal laboratories, agencies or other institutions. Demand for these programs has already been identified in Dahlgren and Pax River, Va., and San Diego, Calif., therefore, NPS will focus its initial efforts in these two areas. To help fill graduate-level vacancies within the federal government, NPS will enroll U.S. civilians in Scholarship-for-Service educational programs that are focused on science, engineering, business, national security and technology of critical importance to the Department of Defense, its international partners and federal agencies. NPS will also increase the number of executive and non-degree educational opportunities, lending support to the National Capital Region by establishing an EMBA and related programs that are focused on government financial processes, including acquisition, procurement, accounting and regulations.

A leader in the nation's partnership-building programs, NPS has specialized in providing analytical decision-making and resources management for military officers from all services and civilian officials of the U.S. and 125 other countries. These programs assist foreign nations in resolving civil-military conflicts resulting from defense transformation, stability and support operations, counterterrorism and other security challenges; increase oversight and cohesion among Department of Defense international education providers; and promote efforts to advance U.S. State and Defense Department goals throughout the world. NPS will continue to provide new opportunities for U.S. military, civilian and international students and organizations such as those established with the National University of Singapore. Similar joint-degree program concepts will be extended to the Geneva Center for Security Policy, the Graduate Institute of International Studies and the University of Geneva in Switzerland, a world center for security and stability studies and humanitarian relief, and emerging opportunities for collaboration with Mexican, German and Canadian defense-related colleagues.

With its classified research capabilities, its diverse educational systems and its proven ability to apply interdisciplinary research to warfare development and operations, homeland security and defense, business practices and security policy issues, NPS can help the DoD and federal agencies by expanding its Scholarship-for-Service programs to all qualified U.S. citizens, and by offering career development opportunities in science, engineering, systems management and program management to national-security workers.

Dr. Leonard Ferrari
Provost, Naval Postgraduate School

"The battlefield of today and the battlefield of the future are going to continue to be uncertain, chaotic, plagued with fog and friction, and very dangerous. We need military leaders who can work and thrive in that particular environment. An NPS education, bolstered by student and faculty research, produces a graduate whose intellectual agility and flexibility will prove increasingly valuable to the Naval Services and the Joint Force in dealing with such uncertainty."

General Michael W. Hagee
Former Commandant of the Marine Corps
NPS, Class of 1969
Electrical Engineering

GOAL 3. NPS WILL BROADEN RESEARCH IN NATIONAL SECURITY.

A vigorous research program assures that students will be taught the most up-to-date and relevant information by NPS faculty, that the latest processes materials and technologies will be transferred to the Navy and Marine Corps to strengthen our nation's defense. Research also contributes to the School's national and international prominence, thereby facilitating recruitment of the best possible faculty and increasing the value of our degrees to NPS graduates. NPS will therefore broaden its research programs in national security by increasing the funding of basic research, expanding its interdisciplinary research and field experiments, and by developing strong partnerships with the Department of Homeland Security and other federal agencies, including the Department of Defense, the Department of Energy and the private sector. Specific areas of growth will be dependent on federal funding and NPS faculty priorities.

To improve several high-quality field experimentation programs, such as those focused on surveillance technologies, sensor development, networks, biometrics and wireless communications that have been developed at NPS within the last five years, NPS will integrate social, economic and political science faculty with science and technology faculty to conduct a series of international scenarios focused on national and homeland-security issues, including surveillance, communications, detection and interdiction.

To maintain leading-edge positions in technological expertise, applications to industry and to management development, partnerships with federal agencies will be strengthened by the number the Cooperative Research and Development Agreements signed by NPS and its industry partners.

GOAL 4. NPS WILL SEEK OPERATIONAL EXCELLENCE IN FINANCIAL, BUSINESS, ADMINISTRATIVE AND SUPPORT AREAS.

NPS is committed to the recruitment and development of a talented workforce of faculty, staff and administrators who will ensure that NPS is functioning efficiently and that modern technology and business practices are employed in all facets of operations. Valuing diversity, NPS will recruit from other higher-education institutions and government organizations, and will recognize its staff as professionals and active participants in societies related to their fields of expertise. NPS will also aggressively seek to strengthen and to increase its financial base, pursue the resources necessary to achieve its vision and develop business modelsw that enhance its stakeholders' return on investments.

NPS is committed to operational excellence, which encompasses the people, tools, systems, resources, decision-making and shared governance structures of the School. NPS will aggressively seek to strengthen and increase its financial base, pursue the resources necessary to achieve its vision and develop business models that enhance its stakeholders' return on investment. Revenue from tuition and other non-government sources will be increased.

NPS will invest strategically in its classrooms, its laboratories, its library and in technology. Operational plans will support the School's strategic goals, and NPS will make investments and decisions consistent with the School's mission and vision. As an institution, NPS will monitor its performance and report to its community and to its stakeholders, which will allow those invested in NPS to capitalize on their investment.

Services will be web-based when possible, including remote access for faculty and students based in other sites. Buildings and the surrounding grounds will provide an environment conducive to learning, and reflect the standards held by the Navy and the Department of Defense.

III. CONCLUSION

Founded in 1909, NPS is one of the oldest and most prestigious institutions belonging to the United States Department of Defense. Since its inception almost a century ago, NPS has been found to be worthy of the investment that both the Navy and the nation has made in it. The School has educated some of the most brilliant and effective leaders of our nation and of the world. Countless numbers of NPS graduates have made significant contributions to global stability and national security, and some remarkable breakthroughs in research at NPS have saved the lives of the men and women who so bravely defend their nations daily.

Ready to embrace the title of "flagship institution" that the Navy has guaranteed it, and to support the success of the maritime initiative, the world-class campus of the Naval Postgraduate School, a bulwark of research and higher education, is prepared to grow even more in terms of its production, programs and influence. This Strategic Plan, *Vision for a New Century*, provides an achievable blueprint for NPS to map its future, one which is certain to add to the School's record of achievement, success and support.

Our mission of research and education is fueled by the intellectual vitality and contributions of our faculty. How we can turn our attention to the strengthening of our intellectual community should be a central and visible feature of our progress in our strategic plan.

Daniel Oliver
President, Naval Postgraduate School

In Review Magazine

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>> High Quality, 23MB PDF

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NAVAL
POSTGRADUATE
SCHOOL

Strategic Plan - 2008

Vision for a New Century

NAVAL POSTGRADUATE SCHOOL

STRATEGIC PLAN: *VISION FOR A NEW CENTURY*

INTRODUCTION

The Naval Postgraduate School (NPS) is a unique graduate school — an institution dedicated to providing education and research with a focus on relevance to the defense and security arenas and on recognizing and innovatively solving problems in support of our military forces, our country's global partners and our national security. While there are many civilian universities that provide graduate education, there are few that are dedicated to providing national security-related graduate educational programs for military officers, as well as federal, state and local government civilian employees and contractors. The Naval Postgraduate School is such a place.

MISSION STATEMENT

NPS provides high-quality, relevant and unique advanced education and research programs that increase the combat effectiveness of the Naval Services, other Armed Forces of the U.S. and our partners, to enhance our national security.

I. BACKGROUND

At NPS, four world-class Schools oversee fourteen academic departments that provide more than 42 master's and 18 doctoral degree programs and certificates to 1,800 resident students, including 300 international students, as well as approximately 900 distributed-learning students worldwide. Four Institutes, multiple secure research facilities and twenty-three Centers of Excellence add to the wealth of resources. Non-resident courses are delivered to students through online, web-enabled, video-tele-education systems and/or by visiting faculty. Continuous learning, refresher and transitional educational opportunities abound, and short-term executive education courses and a variety of short courses are also offered by NPS, both in Monterey and abroad.

Approximately 500 scholars and professionals, 10 percent of whom are military officers and half of whom are tenured or tenure-track, comprise the NPS faculty. To strengthen expertise and program relevance, and to expedite research successes at NPS, a robust mix of tenured faculty, lecturers and visiting professionals integrate teaching with research, demonstrating the immediate applicability of

"The Naval Postgraduate School is a national -- and international -- treasure. With its rigorous curriculum, talented faculty and a diverse student body that includes students from all the US armed forces, other federal agencies and more than 60 nations, NPS contributes greatly to enhanced joint, coalition and interagency effectiveness. Knowledge and imagination are the keys to dealing with the challenges of this new era, and here at NPS those keys are forged. The School rightly boasts an illustrious past, but I am convinced that its future burns even brighter."

Admiral Michael G. Mullen
Chairman of the Joint Chiefs of Staff
Former Chief of Naval Operations
NPS, Class of 1985
Operations Research

defense-related theories to defense-related solutions, many times resulting in patent-eligible technologies.

The NPS Board of Advisors functions as an eighteen-member federal advisory committee that provides guidance to NPS, and reports to the Secretary of the Navy, the Chief of Naval Operations and the Commandant of the Marine Corps on matters pertaining to the School and its graduate education and research programs.

Well-positioned to continue to develop as the nation's premier educational and research institution for defense and national security, *Vision for a New Century* details the School's strategic drivers and goals through 2012, and is designed to guide the university in making the critical choices necessary to maintain and enhance its leadership position and to increase its support of the U.S. military and of our nation's security.

"We strive to maintain an agile and flexible force that can not only contribute to winning our Nation's wars but also can assist in preventing future conflict to the extent possible—whether by dissuasion, deterrence, humanitarian action or disaster relief."

Honorable Donald C. Winter
Secretary of the Navy
Speech before House
Armed Services Committee
Feb. 28, 2008

II. STRATEGIC VISION AND GOALS

In October 2007, the U.S. Navy, the U.S. Marine Corps and the U.S. Coast Guard published an "historical first," an initiative titled *A Cooperative Strategy for 21st Century Seapower,* which outlines how these services will collaborate to assist the United States in preventing wars as well as winning them, and in protecting U.S. vital interests and global prosperity.

> "Guided by the objectives in the *National Security Strategy, National Defense Strategy, National Military Strategy and the National Strategy for Maritime Security,* the United States Navy, Marine Corps and Coast Guard will act across the full range of military operations to secure the United States from direct attack; secure strategic access and retain global freedom of action; strengthen existing and emerging partnerships and establish favorable security conditions."

At the heart of the success of this maritime strategy are adaptability and flexibility from the unified forces, and a blend of peacetime engagement and major combat operations capabilities. Mission-tailored force packages will require interoperability and integrated approaches, as well as enhanced cooperation with multinational partners that possess varying levels of technology; maritime domain awareness, and intelligence, surveillance and reconnaissance capacities must be increased; robust information-assurance measures must be secured to protect information from compromise; and a powerful fleet of ships, aircraft and joint forces that can project power ashore, selectively control the seas and protect both friendly forces and civilian populations from attack must be maintained.

Recognizing the challenges and opportunities proposed in the maritime strategy, particularly as mission-tailored joint forces are dispersed under a decentralized authority in multinational environments, NPS also recognizes the vital role it will play in supporting the ambitious vision of the Sea Services.

MAJOR CHALLENGES

- To provide graduate education to more Navy Unrestricted Line Officers and U.S. military officers, while the US military is engaged in wartime activities
- To enhance the quality and relevance of the NPS mission while urgent military needs compete for resources
- To engage other agencies of the U.S. government and other nation states in support of homeland, national and international stability and security

NPS VISION

As a naval/defense-oriented research university, the Naval Postgraduate School will operate as a geographically distributed educational system that provides a broad range of high-quality graduate education in support of national and international security.

Chartered originally to focus on science and technology, NPS has evolved from a single engineering department at the U.S. Naval Academy into an institution that serves naval, defense and national security related interests by providing current and future readiness, advances in technology, and educational and operational programs that directly support all facets of national defense and homeland security. In support of its mission and vision, NPS has identified four main goals in this strategic plan, *Vision for a New Century*, upon which the School will engage its primary efforts:

GOAL 1. NPS WILL SUSTAIN CONTINUOUS IMPROVEMENT IN THE QUALITY AND RELEVANCE OF OUR GRADUATE EDUCATION AND RESEARCH PROGRAMS.

NPS will continue to excel by offering a wide array of graduate and professional programs and research of national prominence; by recruiting, developing and maintaining a distinguished faculty; by producing exemplary graduates; by valuing the discovery, dissemination and application of new and significant

"NPS is the hidden jewel in the Federal crown of military and government education. Here is where you find cutting-edge technological research; advanced training in civil-military dynamics; the best and only master's program for government officials in Homeland Security operations; and critical real-time training exercises in peacekeeping and stabilization and reconstruction activities. Nowhere else does a single dollar of investment go so far in advancing America's agenda of peace through strength. I am proud of the work done by faculty, staff and students at this institution."

The Honorable Sam Farr
Congressman, 17th District of California

"We will build a Navy with appropriate force structure and develop the strategic lay down necessary to implement the Maritime Strategy, continue to be the dominant and most influential naval force, globally and across all maritime missions, and instill in our military and civilian force a focus on mission and individual readiness that is underpinned by a warrior ethos … We will prevent war, dominate any threat and decisively defeat any adversary, and to do this, we will remain a superbly trained and led team of diverse Sailors and civilians, who are grounded in our warrior ethos, core values and commitment to mission readiness and accomplishment. … We are indeed the fortunate few who have the privilege to serve in the United States Navy."

Admiral Gary Roughead
Chief of Naval Operations
2007-2008 CNO Guidance

knowledge; and by providing the educational and technological resources required for superior graduate-level education and research. NPS will improve its instructional programs and will achieve breakthroughs in its military and security-related research and applications of research, and rank among the most respected institutions of higher learning in the United States.

The quality of the NPS educational programs is only as good as the quality of its faculty. Cultivating and sustaining an intellectual community of scholars, scientists and engineers is a crucial institutional priority and will include opportunities for multi-disciplinary conversations, seminars and guest speakers, as well as funding for new program development and other academic community-building strategies.

NPS will make an institutional commitment to provide the infrastructure and resources required for the research-related support of the academic enterprise. Investment strategies will involve support for initiatives that exhibit excellence, maintain their centrality to the core mission of NPS, and are responsive to the emerging needs of the Navy and the Department of Defense. Partnerships with industries, peer institutions, research laboratories, Joint Service commands, and local and state governments will remain essential components of leveraging resources and ensuring access to the technology and intellectual capital required for the continued success of the School.

NPS must continue to assess its existing programs and determine their excellence through the Academic Review process, and by using benchmarking indicators. Quality indicators include not only those used at the local levels through comparisons with peer institutions, but also national-level metrics that include rankings, publications, citations, research dollars, postdoctoral appointments, doctoral degrees awarded, surveys of stakeholders, patents and licenses, honors and awards and endowed Chairs. Important indicators of performance include curricular reviews, faculty memberships on defense and homeland security boards, partnerships with other commands, continuing and executive education programs, distributed-learning programs, and recognition in national and international media.

GOAL 2. NPS WILL EXTEND EDUCATION TO THE TOTAL FORCE AND TO OUR GLOBAL PARTNERS.

NPS graduate educational and research programs will facilitate collaboration among all members of the Total Force, comprised of personnel from all military services, coalition allies and defense agencies, so that they may be able to quickly identify and address new defense and national security-related challenges. NPS will serve the Total Force at our campus in Monterey, through

our educational and research outreach activities, and by expanding distributed-learning programs to reach more Unrestricted Line Officers and other U.S. and international officers.

Because the Navy's operational tempo makes it difficult for URL officers to attend residential programs in Monterey, NPS — with its unique repository of scientific, technical, cultural, management and security expertise — has developed the ability to deliver programs to other operational units around the world. NPS will continue that practice, and will continue to serve the Total Force at its campus in Monterey, as well as its satellite campuses. Capitalizing on the faculty expertise at NPS and its partner universities, programs will be structured so that research will be conducted in collaboration with both university and laboratory personnel who are employed at federal laboratories, agencies or other institutions. Demand for these programs has already been identified in Dahlgren and Pax River, Va., and San Diego, Calif., therefore, NPS will focus its initial efforts in these two areas. To help fill graduate-level vacancies within the federal government, NPS will enroll U.S. civilians in Scholarship-for-Service educational programs that are focused on science, engineering, business, national security and technology of critical importance to the Department of Defense, its international partners and federal agencies. NPS will also increase the number of executive and non-degree educational opportunities, lending support to the National Capital Region by establishing an EMBA and related programs that are focused on government financial processes, including acquisition, procurement, accounting and regulations.

A leader in the nation's partnership-building programs, NPS has specialized in providing analytical decision-making and resources management for military officers from all services and civilian officials of the U.S. and 125 other countries. These programs assist foreign nations in resolving civil-military conflicts resulting from defense transformation, stability and support operations, counterterrorism and other security challenges; increase oversight and cohesion among Department of Defense international education providers; and promote efforts to advance U.S. State and Defense Department goals throughout the world. NPS will continue to provide new opportunities for U.S. military, civilian and international students and organizations such as those established with the National University of Singapore. Similar joint-degree program concepts will be extended to the Geneva Center for Security Policy, the Graduate Institute of International Studies and the University of Geneva in Switzerland, a world center for security and stability studies and humanitarian relief, and emerging opportunities for collaboration with Mexican, German and Canadian defense-related colleagues.

With its classified research capabilities, its diverse educational systems and its proven ability to apply interdisciplinary research to warfare development and operations, homeland security and defense, business practices and security policy issues, NPS can help the DoD and federal agencies by expanding its Scholarship-for-Service programs to all qualified U.S. citizens, and by offering career development opportunities in science, engineering, systems management and program management to national-security workers.

Dr. Leonard Ferrari
Provost, Naval Postgraduate School

"The battlefield of today and the battlefield of the future are going to continue to be uncertain, chaotic, plagued with fog and friction, and very dangerous. We need military leaders who can work and thrive in that particular environment. An NPS education, bolstered by student and faculty research, produces a graduate whose intellectual agility and flexibility will prove increasingly valuable to the Naval Services and the Joint Force in dealing with such uncertainty."

General Michael W. Hagee
Former Commandant of the Marine Corps
NPS, Class of 1969
Electrical Engineering

GOAL 3. NPS WILL BROADEN RESEARCH IN NATIONAL SECURITY.

A vigorous research program assures that students will be taught the most up-to-date and relevant information by NPS faculty, that the latest processes materials and technologies will be transferred to the Navy and Marine Corps to strengthen our nation's defense. Research also contributes to the School's national and international prominence, thereby facilitating recruitment of the best possible faculty and increasing the value of our degrees to NPS graduates. NPS will therefore broaden its research programs in national security by increasing the funding of basic research, expanding its interdisciplinary research and field experiments, and by developing strong partnerships with the Department of Homeland Security and other federal agencies, including the Department of Defense, the Department of Energy and the private sector. Specific areas of growth will be dependent on federal funding and NPS faculty priorities.

To improve several high-quality field experimentation programs, such as those focused on surveillance technologies, sensor development, networks, biometrics and wireless communications that have been developed at NPS within the last five years, NPS will integrate social, economic and political science faculty with science and technology faculty to conduct a series of international scenarios focused on national and homeland-security issues, including surveillance, communications, detection and interdiction.

To maintain leading-edge positions in technological expertise, applications to industry and to management development, partnerships with federal agencies will be strengthened by the number the Cooperative Research and Development Agreements signed by NPS and its industry partners.

GOAL 4. NPS WILL SEEK OPERATIONAL EXCELLENCE IN FINANCIAL, BUSINESS, ADMINISTRATIVE AND SUPPORT AREAS.

NPS is committed to the recruitment and development of a talented workforce of faculty, staff and administrators who will ensure that NPS is functioning efficiently and that modern technology and business practices are employed in all facets of operations. Valuing diversity, NPS will recruit from other higher-education institutions and government organizations, and will recognize its staff as professionals and active participants in societies related to their fields of expertise. NPS will also aggressively seek to strengthen and to increase its financial base, pursue the resources necessary to achieve its vision and develop business modelsw that enhance its stakeholders' return on investments.

NPS is committed to operational excellence, which encompasses the people, tools, systems, resources, decision-making and shared governance structures of the School. NPS will aggressively seek to strengthen and increase its financial base, pursue the resources necessary to achieve its vision and develop business models that enhance its stakeholders' return on investment. Revenue from tuition and other non-government sources will be increased.

NPS will invest strategically in its classrooms, its laboratories, its library and in technology. Operational plans will support the School's strategic goals, and NPS will make investments and decisions consistent with the School's mission and vision. As an institution, NPS will monitor its performance and report to its community and to its stakeholders, which will allow those invested in NPS to capitalize on their investment.

Services will be web-based when possible, including remote access for faculty and students based in other sites. Buildings and the surrounding grounds will provide an environment conducive to learning, and reflect the standards held by the Navy and the Department of Defense.

III. CONCLUSION

Founded in 1909, NPS is one of the oldest and most prestigious institutions belonging to the United States Department of Defense. Since its inception almost a century ago, NPS has been found to be worthy of the investment that both the Navy and the nation has made in it. The School has educated some of the most brilliant and effective leaders of our nation and of the world. Countless numbers of NPS graduates have made significant contributions to global stability and national security, and some remarkable breakthroughs in research at NPS have saved the lives of the men and women who so bravely defend their nations daily.

Ready to embrace the title of "flagship institution" that the Navy has guaranteed it, and to support the success of the maritime initiative, the world-class campus of the Naval Postgraduate School, a bulwark of research and higher education, is prepared to grow even more in terms of its production, programs and influence. This Strategic Plan, *Vision for a New Century*, provides an achievable blueprint for NPS to map its future, one which is certain to add to the School's record of achievement, success and support.

Our mission of research and education is fueled by the intellectual vitality and contributions of our faculty. How we can turn our attention to the strengthening of our intellectual community should be a central and visible feature of our progress in our strategic plan.

Daniel Oliver
President, Naval Postgraduate School

4 December 2002

MEMORANDUM OF AGREEMENT
FORMING AN EDUCATIONAL ALLIANCE
BETWEEN
THE DEPARTMENT OF THE NAVY
&
THE DEPARTMENT OF AIR FORCE

Introduction

On March 7, 2002 SECNAV and SECAF chartered a study to review graduate educational processes. As a result of that study, the Departments of Navy and Air Force hereby form an Alliance to ensure that the Naval Postgraduate School (NPS) and the Air Force Institute of Technology (AFIT) meet the advanced education requirements of the Armed Forces of the United States.

Goals:

This Alliance will ensure that NPS and AFIT are widely recognized, "world-class" institutions, focused to meet the advanced degree program requirements of the Department of Defense, owned and operated by the Department of the Navy and Department of the Air Force, respectively. NPS and AFIT will continue to reflect the heritage and character of their respective Services, meeting Joint and service-unique needs, minimizing redundancy, maintaining quality and realizing efficiencies and economies of scale.

The Alliance will leverage the complementarities of NPS and AFIT. For instance, NPS has strengths in space operations and AFIT has strengths in space science. The Alliance will leverage and strengthen such comparative advantages.

It will:

- ensure officers continue to receive high-quality, relevant and responsive graduate education aligned to defense needs
- prevent unnecessary duplication, while sustaining excellence at NPS and AFIT,
- ensure efficient operation of both institutions, while maintaining each as a "world-class" higher education

institution underpinned by its unique Service heritage and character

- in combination, provide a Joint educational environment in which officers from all of the Services will engage in education and research programs

Oversight of the Alliance.

The Alliance will be overseen by the NPS Board of Advisors (BOA) and the Air University's (AU) Board of Visitors (BoV). To implement the Joint Navy-Air Force Oversight of the Alliance, the BOA and BoV will interact with each other.

The NPS BOA will invite one or more members of the BoV to each of its meetings. The AU BoV will invite one or more members of the BOA to meetings at which AFIT or graduate education is to be discussed.

The Chairs of the BOA and BoV will hold a Joint meeting of the BOA and BoV whenever such a meeting will improve the Alliance.

Over time, and if appropriate, oversight of the Navy-Air Force Educational Alliance may transition to a single Board of Visitors, which will serve as the governing Board for both NPS and AFIT.

Initial Actions.

As a beginning, and to improve the quality of the education provided by the Alliance, the following actions are announced.

The Navy will:

- terminate Aeronautical Engineering curricula at NPS (curricula 610, 611 and 612); within the Alliance, only AFIT will offer an Aeronautical Engineering curriculum

The Air Force will:

- terminate the Meteorology curriculum at AFIT (curriculum GM); within the Alliance, only NPS will offer a Meteorology curriculum

- terminate Acquisition curricula at AFIT (curricula GAQ); within the Alliance, only NPS will offer an Acquisition curriculum

Both services will:

- establish Joint Oversight Boards for the Aeronautical Engineering, Meteorology, Acquisition, and Space curricula. The Chair of the Aeronautical Engineering Board will be a Navy Flag Officer. The Chair of the Boards for Meteorology and Acquisition will be an Air Force General Officer. The Chair of the Space Board will be a Flag/General Officer of the National Reconnaissance Office (NRO), Air Force, Army, Navy or U.S. Space Command. The Under Secretary of the Air Force/Director, NRO is the initial designee to Chair the Space Programs Joint Oversight Board. Each of these oversight bodies will make periodic reports to the BOA and the BoV. The Superintendent of NPS and the Commandant of AFIT will establish the Boards and ensure that the Boards have representative membership and hold periodic meetings.

- the Department of the Navy shall designate the Deputy Superintendent/Chief of Staff position at NPS to be filled by an Air Force Colonel, who will serve as the senior Air Force liaison officer at NPS. The Air Force shall designate the Vice Commandant/Director of Staff position at AFIT to be filled by a Navy Captain, who will serve as the senior Navy liaison officer at AFIT. Each service agrees to keep these billets filled by an O-6 Line Officer.

- the Department of the Navy and the Department of the Air Force should, after seats are filled at either NPS or AFIT in a particular field of study, give priority to sending their students to the other institution (NPS or AFIT), before sending those students to civilian universities. To implement this policy, NPS and AFIT will, in coordination with the staffs of the other services, to include the Marine Corps, Army and the Coast Guard, form a joint admissions and quota control process.

Follow-on Actions.

In order to further foster the Alliance, the Navy and the Air Force will:

- review current NPS/AFIT policies with the objective of establishing common policies, which represent the best practices at both institutions
- ensure the Assistant Secretaries for Financial Management program the resources needed to launch the alliance, annually review the resource issues of the alliance, and take all actions necessary to ensure t alliance has the resources required for success
- NPS/AFIT will develop a Memorandum of Understanding identify additional areas that support education and research collaboration

SECRETARY OF THE AIR FORCE

SECRETARY OF THE NAVY

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE NAVAL POSTGRADUATE SCHOOL
AND
THE AIR FORCE INSTITUTE OF TECHNOLOGY

Background

On 4 December 2002 SECNAV and SECAF signed a Memorandum of Agreement (MOA) forming an Educational Alliance between the services. The Alliance purpose is to ensure the Naval Postgraduate School (NPS) and the Air Force Institute of Technology (AFIT) meet the advanced education requirements of the Armed Forces of the United States. The MOA directed NPS and AFIT to develop this Memorandum of Understanding (MOU) "to identify additional areas that support education and research collaboration." A MOU was implemented in March 2004 that ~~completed~~ laid out 25 specific action items. This MOU supersedes the March 2004 MOU and all updates.

Purpose of the Educational Alliance

The Services should seek the most effective means to provide relevant, quality, and timely research and graduate education. Increasing and affirming collaboration and cooperation between NPS and AFIT will enable the best return on the investment of time and resources necessary to accomplish this task. In addition, the evolution of joint warfighting and combat support in warfare is a driver to maintaining our improved working relationship, and promoting further synergy among faculty, staff and students in the graduate education and research environment.
~~In addition, the evolution of joint warfighting and combat support in warfare can be cited as a driver to establishing a better working relationship and understanding among faculty, staff and students in the graduate education and research environment.~~ Finally, the ability to leverage the graduate and continuing education programs, both resident and through distance learning, and to capitalize on faculty expertise and existing research facilities will be beneficial to all services. The educational alliance, properly structured and supported, will increase the flexibility and utility of the existing institutions, while helping minimize unnecessary duplication and overlap among individual programs.

This Memorandum of Understanding will

1. Update the March 2004 NPS AFIT MOU
2. Document the commitment of the President of NPS and the Commandant of AFIT for the Alliance
3. Describe the working relationship of the currently existing oversight boards
4. Ensure continued improvement in education and research collaboration through the collaboration and teaming of faculty and staff members.

Implementation

1. Under this Memorandum of Understanding, both institutions have agreed and established by charter the following oversight boards. Each board has a separate charter that describes the membership and meeting policy. Each board is expected to meet at least every two years at the discretion of the board chair, and to provide feedback to the institutions as necessary.

   - Joint Oversight Board for Aeronautical Engineering Education (JOBAEE). Chaired by the Deputy Commander for Research and Engineering, Naval Air Systems Command. This board provides guidance to the Aeronautical Engineering curriculum.

   - Joint Oversight Board for Acquisition Curriculum (JOBAC). Chaired by the Vice Commander, Air Force Materiel Command. This board provides specific guidance to the acquisition curriculum.

   - Joint Space Oversight Board (JSOB). Chaired by Director, National Reconnaissance Organization. This board formulates opportunities and initiatives to provide focused timely, graduate education to the space cadre.

   - Joint Meteorology Oversight Board (JMOB). Chaired by the USAF Director of Weather, this board will discuss and recommend changes to the curriculum for the graduate weather program.

2. Since 2004, the staff functional leads of all departments at NPS and AFIT have interfaced and collaborated with one another to discover and share best practices and new technologies that enhance the effectiveness of both institutions. These functional areas include (but are not limited to) admissions, registrar, institutional assessment, accreditation, Distance Learning, continuing graduate education, and student management. The staff functional leads shall remain in contact with each other and notify each other of legislation, policies and regulations that may affect one or both schools.

3. Specific Working Level Teams (WLTs) have been established to provide input to the President and the Commandant on the administration and support of graduate education in the following areas that are critical to the sustainment of the graduate education mission and enhance academic collaboration between the schools:

   - Public Affairs and Resource Marketing
   - Financial Affairs and Tuition
   - Research and Faculty
   - Systems Engineering Education

   Enclosure (1) to this MOU identifies the current WLT Co-Chairs and describes the goals, objectives, and tasks for each team. Each institution will provide the communication tools for team members from that institution to effectively

participate. Enclosure (1) may be modified as events dictate without requiring this MOU to be re-approved.

Institutional Autonomy

Both institutions shall retain independent control over their own admission requirements, degree completion, and rules and regulations of the institution and policies with respect to student conduct and performance except as subsequently modified by agreement to comply with best practices identified by the alliance.

Duration

This MOU will become effective upon execution of the agreement by the parties. It will be reviewed biennially in anticipation of the anniversary of signature, and updated as necessary to ensure it remains a living and viable implementation of the Secretaries' direction in the 2002 MOA.

_____	_____
PAUL G. THORNHILL, Brig Gen, USAF Commandant Air Force Institute of Technology	DANIEL T. OLIVER President Naval Postgraduate School
_____	_____
Date	Date

Enclosure (1)

Educational Alliance Working Level Teams

- ~~Admissions and Registrar~~
  - ~~Co-Chairs: NPS (Mike Anderson); AFIT (Dr. Paschall)~~
  - ~~Report due: 1 Mar~~

~~Chairs will keep current on the admissions and registrar practices of both institutions and to determine where best practices can be shared and incorporated to include:~~
~~- Joint admissions criteria that can be developed to allow placement of an individual at either school~~
~~- Define the collection, validation, and internal distribution processes for transcripts of potential students~~
~~- Consider the opportunity for code sharing on transcripts to enable ease of transfer of academic credit between institutions~~
~~- Make recommendations regarding a common academic schedule between the schools to accommodate a collaborative distance learning environment~~
~~- Recommend scheduling of courses to allow for students to use the other institution's academic year schedule to meet individual student's academic flow needs.~~

- Public Affairs and Resource Marketing:
  - Co-Chairs: NPS (Dr. Horvath); AFIT (Mr. Hancock)
  - Report due: 1 Mar

Chairs will collaborate ways to provide broader knowledge among the services of the availability of the Alliance to educate personnel from all branches to include:
- Ensure the Secretaries' direction that the departments "…give priority to sending their students to the other institution (NPS or AFIT), before sending those students to civilian institutions."
- Consider ways to better inform the sister service of the opportunity for education at both institutions.
- Explore joint exhibition opportunities

- Financial Affairs and Tuition:
  - Co-Chairs: AFIT (Ms. Marburger); NPS (Mr. Little)
  - Report due: 1 Mar

The chairs will review tuition setting and payment to assure equitable reimbursement between the services.

- Research:
    - Co-Chairs: AFIT (Dr. Ries); NPS (Dr. Fouts)
    - Report due: 1 Mar

This team will maintain open communications to promote collaborative research opportunities and share best practices.

~~▪ Distance Learning (DL) and Continuing Graduate Education:~~
    - ~~Co-Chairs: NPS (Ms. Moule'); AFIT (Mr. Reisner)~~
    - ~~Report due: 1 Mar~~

~~This team will review existing DL capabilities, and provide recommendation on the way ahead to maximize opportunity and capability both in the near term, and in the future for real-time and asynchronous knowledge delivery. A key enabler in providing the opportunity to share existing material, to allow non-resident exchanges between the institutions, and to allow proliferation of state of the art education to the warfighter and DoD workforce through the use of continuing graduate education (including certificates and short-course updates) is the agreement on a common distance learning framework.~~

▪ Systems Engineering:
    - Co-Chairs: AFIT (Dr. Badiru); NPS (Dean Kays)
    - Report due: 1 Mar

The Services have identified a need to improve the quality of Systems Engineering in the workforce. NPS and AFIT have independently set up Centers for developing this capability, and have been cooperating to improve sharing of knowledge between the Services. This team will support review of case studies for use by AFIT and NPS in the Systems Engineering studies area. ~~This team will support review of case studies for use by AFIT and NPS in the Systems Engineering studies area.~~ The team should look at potential joint cases, as well as other research, and design issues that can benefit the DoD. Each academic year, the team will also make recommendations for development of one or more joint thesis projects for NPS and AFIT students to pursue together.

-CITE-
10 USC CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL 02/01/2010

-EXPCITE-
TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

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CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

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AMENDMENTS

2008 - Pub. L. 110-417, [div. A], title V, Sec. 543(e)(2), Oct. 14, 2008, 122 Stat. 4461, added item 7048 and struck out former item 7048 "Conferring of degrees on graduates".

2006 - Pub. L. 109-163, div. A, title V, Sec. 522(c)(2), Jan. 6, 2006, 119 Stat. 3242, added 7050.

2004 - Pub. L. 108-375, div. A, title V, Sec. 557(c), Oct. 28, 2004, 118 Stat. 1916, substituted "President; assistants" for "Superintendent; assistants" in item 7042 and "Provost and Academic Dean" for "Academic Dean" in item 7043.

2000 - Pub. L. 106-398, Sec. 1 [[div. A], title V, Sec. 535(a)(2)], Oct. 30, 2000, 114 Stat. 1654, 1654A-113, added item

7049.

1997 - Pub. L. 105-85, div. A, title V, Sec. 551(b)(2), Nov. 18, 1997, 111 Stat. 1748, substituted "Officers of the other armed forces; enlisted members:" for "Officers of Army, Air Force, and Coast Guard:" in item 7045.

1992 - Pub. L. 102-484, div. A, title X, Sec. 1073(b), Oct. 23, 1992, 106 Stat. 2511, added item 7047 and redesignated former item 7047 as 7048.

-End-

-CITE-

10 USC Sec. 7041 02/01/2010

-EXPCITE-

TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-

Sec. 7041. Function

-STATUTE-

There is a United States Naval Postgraduate School, the primary function of which is to provide advanced instruction and professional and technical education and research opportunities for commissioned officers of the naval service in -

(1) their practical and theoretical duties;

(2) the science, physics, and systems engineering of current and future naval warfare doctrine, operations, and systems; and

(3) the integration of naval operations and systems into joint, combined, and multinational operations.

-SOURCE-

(Aug. 10, 1956, ch. 1041, 70A Stat. 437; Pub. L. 109-163, div. A, title V, Sec. 523(a), Jan. 6, 2006, 119 Stat. 3244.)

-MISC1-

HISTORICAL AND REVISION NOTES

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7041	34 U.S.C. 1076.	July 31, 1947, ch. 420, Sec. 1, 61 Stat. 705.

The words "There is a" are substituted for the words "That the Secretary of the Navy is hereby authorized and directed to establish the", as the Postgraduate School is in operation. The words "technical education" are substituted for the word "training" to describe more aptly the higher level of instruction at the Postgraduate School. The words "naval service" are substituted for the words "Regular Navy and Marine Corps and the reserve components thereof". The word "their" is substituted for the words "of commissioned officers".

AMENDMENTS

2006 - Pub. L. 109-163 amended text generally. Prior to amendment, text read as follows: "There is a United States Naval Postgraduate School for the advanced instruction and technical education of commissioned officers of the naval service in their practical and theoretical duties."

-End-

-CITE-
10 USC Sec. 7042 02/01/2010

-EXPCITE-
TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-
Sec. 7042. President; assistants

-STATUTE-
(a)(1) The President of the Naval Postgraduate School shall be one of the following:
(A) An active-duty officer of the Navy or Marine Corps in a

grade not below the grade of captain, or colonel, respectively, who is assigned or detailed to such position.

(B) A civilian individual, including an individual who was retired from the Navy or Marine Corps in a grade not below captain, or colonel, respectively, who has the qualifications appropriate to the position of President and is selected by the Secretary of the Navy as the best qualified from among candidates for the position in accordance with -

(i) the criteria specified in paragraph (4);

(ii) a process determined by the Secretary; and

(iii) other factors the Secretary considers essential.

(2) Before making an assignment, detail, or selection of an individual for the position of President of the Naval Postgraduate School, the Secretary shall -

(A) consult with the Board of Advisors for the Naval Postgraduate School;

(B) consider any recommendation of the leadership and faculty of the Naval Postgraduate School regarding the assignment or selection to that position; and

(C) consider the recommendations of the Chief of Naval Operations and the Commandant of the Marine Corps.

(3) An individual selected for the position of President of the Naval Postgraduate School under paragraph (1)(B) shall serve in that position for a term of not more than five years and may be continued in that position for an additional term of up to five years.

(4) The qualifications appropriate for selection of an individual for detail or assignment to the position of President of the Naval Postgraduate School include the following:

(A) An academic degree that is either -

(i) a doctorate degree in a field of study relevant to the mission and function of the Naval Postgraduate School; or

(ii) a master's degree in a field of study relevant to the mission and function of the Naval Postgraduate School, but only if -

(I) the individual is an active-duty or retired officer of the Navy or Marine Corps in a grade not below the grade of captain or colonel, respectively; and

(II) at the time of the selection of that individual as President, the individual permanently appointed to the position of Provost and Academic Dean has a doctorate degree in such a field of study.

(B) A comprehensive understanding of the Department of the Navy, the Department of Defense, and joint and combined operations.

(C) Leadership experience at the senior level in a large and diverse organization.

(D) Demonstrated ability to foster and encourage a program of research in order to sustain academic excellence.

(E) Other qualifications, as determined by the Secretary of the Navy.

(b) The Secretary shall detail officers of the Navy and the Marine Corps of appropriate grades and qualifications to assist the President in -

(1) the advanced instruction and professional and technical education of students and the provision of research opportunities for students; and

(2) the administration of the Postgraduate School.

-SOURCE-

(Aug. 10, 1956, ch. 1041, 70A Stat. 437; Pub. L. 96-513, title V, Sec. 503(53), Dec. 12, 1980, 94 Stat. 2915; Pub. L. 108-375, div. A, title V, Sec. 557(a)(3), Oct. 28, 2004, 118 Stat. 1915; Pub. L. 109-163, div. A, title V, Secs. 523(b), 524, Jan. 6, 2006, 119 Stat. 3244, 3245; Pub. L. 109-364, div. A, title V, Sec. 508, Oct. 17, 2006, 120 Stat. 2180.)

-MISC1-

HISTORICAL AND REVISION NOTES

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7042	34 U.S.C. 1076a.	July 31, 1947, ch. 420, Sec. 2, 61 Stat. 705.

In subsection (a) the word "Regular" is omitted as covered by the term "active list".

In subsection (b) the words "line and staff" and "as may be necessary" are omitted as surplusage. The word "grades" is substituted for the word "ranks". The words "advanced instruction and technical education" are substituted for the words "training *

* * in the practical and theoretical duties of commissioned naval officers".

AMENDMENTS

2006 - Subsec. (a). Pub. L. 109-364 amended subsec. (a) generally. Prior to amendment, subsec. (a) related to assignment of an officer of the Navy in a grade not below the grade of captain or an appropriately qualified civilian individual to the position of President of the Naval Postgraduate School.

Pub. L. 109-163, Sec. 524, amended subsec. (a) generally. Prior to amendment, subsec. (a) read as follows: "The Secretary of the Navy shall detail as President of the Naval Postgraduate School an officer on the active-duty list in the line of the Navy eligible for command at sea not below the grade of captain. The President has military command of the Postgraduate School."

Subsec. (b)(1). Pub. L. 109-163, Sec. 523(b), substituted "and professional and technical education of students and the provision of research opportunities for students" for "and technical education of students".

2004 - Pub. L. 108-375 substituted "President" for "Superintendent" wherever appearing in section catchline and text.

1980 - Subsec. (a). Pub. L. 96-513 substituted "active-duty list" for "active list".

-CHANGE-

CHANGE OF NAME

Pub. L. 108-375, div. A, title V, Sec. 557(a)(1), (2), Oct. 28, 2004, 118 Stat. 1915, provided that:

"(1) The position of Superintendent of the Naval Postgraduate School is redesignated as President of the Naval Postgraduate School.

"(2) Any reference to the Superintendent of the Naval Postgraduate School in any law, rule, regulation, document, record, or other paper of the United States shall be deemed to be a reference to the President of the Naval Postgraduate School."

-MISC2-

EFFECTIVE DATE OF 1980 AMENDMENT

Amendment by Pub. L. 96-513 effective Sept. 15, 1981, see section 701 of Pub. L. 96-513, set out as a note under section 101 of this title.

-End-

-CITE-
10 USC Sec. 7043 02/01/2010

-EXPCITE-
TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-
Sec. 7043. Provost and Academic Dean

-STATUTE-
(a) There is at the Naval Postgraduate School the civilian position of Provost and Academic Dean. The Provost and Academic Dean shall be appointed, to serve for periods of not more than five years, by the Secretary of the Navy. Before making an appointment to the position of Provost and Academic Dean, the Secretary shall consult with the Board of Advisors for the Naval Postgraduate School and shall consider any recommendation of the leadership and faculty of the Naval Postgraduate School regarding an appointment to that position.

(b) The Provost and Academic Dean is entitled to such compensation for his services as the Secretary prescribes, but not more than the rate of compensation authorized for level IV of the Executive Schedule.

-SOURCE-
(Aug. 10, 1956, ch. 1041, 70A Stat. 437; Pub. L. 85-861, Sec. 1(148), Sept. 2, 1958, 72 Stat. 1513; Pub. L. 89-536, Aug. 11, 1966, 80 Stat. 346; Pub. L. 96-513, title V, Sec. 513(22), Dec. 12, 1980, 94 Stat. 2932; Pub. L. 105-85, div. A, title V, Sec. 551(c), Nov. 18, 1997, 111 Stat. 1748; Pub. L. 108-375, div. A, title V, Sec. 557(b)(3), (4), Oct. 28, 2004, 118 Stat. 1915, 1916.)

-MISC1-

HISTORICAL AND REVISION NOTES
1956 ACT

Revised	Source (U.S. Code)	Source (Statutes at

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7043	34 U.S.C. 1074 (1st 98 words).	June 10, 1946, ch. 298 (1st 98 words), 60 Stat. 236.
	34 U.S.C. 1076c.	July 31, 1947, ch. 420, Sec. 4, 61 Stat. 706.

The words "of the Naval Academy" following "Postgraduate School" are dropped as a result of Sec. 4 of the Act of July 31, 1947 (supra). This Act created the Postgraduate School and in effect transferred the position of Academic Dean of the Postgraduate School of the Naval Academy to the newly created Postgraduate School.

1958 ACT

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7043	34 App.:1076c (less last sentence).	Aug. 9, 1955, ch. 669, Sec. 1 (less last sentence), 69 Stat. 607.

-REFTEXT-

REFERENCES IN TEXT

Level IV of the Executive Schedule, referred to in subsec. (b), is set out in section 5315 of Title 5, Government Organization and Employees.

-MISC2-

AMENDMENTS

2004 - Pub. L. 108-375, Sec. 557(b)(3)(B), substituted "Provost and Academic Dean" for "Academic Dean" in section catchline.

Subsec. (a). Pub. L. 108-375, Sec. 557(b)(3)(A), amended subsec. (a) generally. Prior to amendment, subsec. (a) read as follows: "There is at the Naval Postgraduate School the civilian position of Academic Dean. The Academic Dean shall be appointed, to serve for periods of not more than five years, by the Secretary of the Navy

upon the recommendation of the Postgraduate School Council consisting of the Superintendent, the Deputy Superintendent, and the directors of the Technical, Administrative, and Professional Divisions of the school."

Subsec. (b). Pub. L. 108-375, Sec. 557(b)(4), substituted "Provost and Academic Dean" for "Academic Dean".

1997 - Subsec. (b). Pub. L. 105-85 substituted "level IV of the Executive Schedule" for "grade GS-18 of the General Schedule under section 5332 of title 5".

1980 - Subsec. (b). Pub. L. 96-513 substituted "authorized for grade GS-18 of the General Schedule under section 5332 of title 5" for "provided for grade 18 of the general schedule of the Classification Act of 1949, as amended".

1966 - Subsec. (b). Pub. L. 89-536 substituted for a limit of $13,500 per annum a rate of compensation comparable to grade 18 of the general schedule of the Classification Act of 1949, as amended.

1958 - Pub. L. 85-861, among other changes, increased the maximum compensation of the Academic Dean from $12,000 to $13,500 a year.

-CHANGE-

CHANGE OF NAME

Pub. L. 108-375, div. A, title V, Sec. 557(b)(1), (2), Oct. 28, 2004, 118 Stat. 1915, provided that:

"(1) The position of Academic Dean of the Naval Postgraduate School is redesignated as Provost and Academic Dean of the Naval Postgraduate School.

"(2) Any reference to the Academic Dean of the Naval Postgraduate School in any law, rule, regulation, document, record, or other paper of the United States shall be deemed to be a reference to the Provost and Academic Dean of the Naval Postgraduate School."

-MISC3-

EFFECTIVE DATE OF 1980 AMENDMENT

Amendment by Pub. L. 96-513 effective Dec. 12, 1980, see section 701(b)(3) of Pub. L. 96-513, set out as a note under section 101 of this title.

-End-

-CITE-

10 USC Sec. 7044 02/01/2010

-EXPCITE-
TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-
Sec. 7044. Civilian teachers: number; compensation

-STATUTE-
The Secretary of the Navy may employ as many civilians as he considers necessary to serve at the Naval Postgraduate School under the direction of the President of the school as senior professors, professors, associate professors, assistant professors, and instructors. The Secretary shall prescribe the compensation of those persons.

-SOURCE-
(Aug. 10, 1956, ch. 1041, 70A Stat. 437; Pub. L. 108-375, div. A, title V, Sec. 557(a)(4)(A), Oct. 28, 2004, 118 Stat. 1915.)

-MISC1-

HISTORICAL AND REVISION NOTES

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7044	34 U.S.C. 1076b (less last sentence).	July 31, 1947, ch. 420, Sec. 3 (less last sentence), 61 Stat. 706; Aug. 30, 1954, ch. 1076, Sec. 1(21), 68 Stat. 968.

The words "as many * * * as he considers necessary" are substituted for the words "such number * * * as in his opinion may be necessary for the proper instruction of students in the theoretical, academic, and scientific subjects pertaining to the technical and practical aspects of the naval profession" for brevity.

AMENDMENTS

2004 - Pub. L. 108-375 substituted "President of the school" for "Superintendent".

-End-

-CITE-
10 USC Sec. 7045 02/01/2010

-EXPCITE-
TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-
Sec. 7045. Officers of the other armed forces; enlisted members: admission

-STATUTE-
(a)(1) The Secretary of the Navy may permit officers of the Army, Air Force, and Coast Guard to receive instruction at the Naval Postgraduate School. The numbers and grades of such officers shall be as agreed upon by the Secretary of the Navy with the Secretary of the Army, the Secretary of the Air Force, and the Secretary of Homeland Security, respectively.

(2)(A) The Secretary may permit an enlisted member of the armed forces to receive instruction at the Naval Postgraduate School through attendance at an executive level seminar.

(B) The Secretary may permit an eligible enlisted member of the armed forces to receive instruction at the Postgraduate School in connection with pursuit of a program of education in information assurance as a participant in the Information Security Scholarship program under chapter 112 of this title. To be eligible for instruction under this subparagraph, the enlisted member must have been awarded a baccalaureate degree by an institution of higher education.

(C) The Secretary may permit an eligible enlisted member of the armed forces to receive instruction from the Postgraduate School in certificate programs and courses required for the performance of the member's duties.

(D)(i) The Secretary may permit an eligible enlisted member of the armed forces to receive graduate-level instruction at the Naval Postgraduate School in a program leading to a master's degree in a

technical, analytical, or engineering curriculum.

(ii) To be eligible to be provided instruction under this subparagraph, the enlisted member must have been awarded a baccalaureate degree by an institution of higher education.

(iii) Instruction under this subparagraph may be provided only on a space-available basis.

(iv) An enlisted member who successfully completes a course of instruction under this subparagraph may be awarded a master's degree under section 7048 of this title.

(v) Instruction under this subparagraph shall be provided pursuant to regulations prescribed by the Secretary. Such regulations may include criteria for eligibility of enlisted members for instruction under this subparagraph and specification of obligations for further service in the armed forces relating to receipt of such instruction.

(E) In addition to instruction authorized under subparagraphs (A), (B), (C), and (D), the Secretary may, on a space-available basis, permit an enlisted member of the armed forces who is assigned permanently to the staff of the Postgraduate School or to a nearby command to receive instruction at the Postgraduate School.

(b)(1) Except as provided under paragraph (3), the Department of the Army, the Department of the Air Force, and the Department of Homeland Security shall bear the cost of the instruction received by members detailed for that instruction by the Secretary of the Army, the Secretary of the Air Force, and the Secretary of Homeland Security, respectively.

(2) In the case of an enlisted member permitted under subsection (a)(2)(E) to receive instruction at the Postgraduate School on a space-available basis, the Secretary of the Navy shall charge that member only for such costs and fees as the Secretary considers appropriate.

(3) The requirements for payment of costs and fees under paragraph (1) shall be subject to such exceptions as the Secretary of Defense may prescribe for members of the armed forces who receive instruction at the Postgraduate School in connection with pursuit of a degree or certification as participants in the Information Security Scholarship program under chapter 112 of this title.

(c) While receiving instruction at the Postgraduate School, members of the Army, Air Force, and Coast Guard are subject to such regulations, as determined appropriate by the Secretary of the Navy, as apply to students who are members of the naval service.

(d) The Secretary may not award a baccalaureate, masters, or doctorate degree to an enlisted member based upon instruction received at the Postgraduate School under subsection (a)(2)(C).

-SOURCE-

(Aug. 10, 1956, ch. 1041, 70A Stat. 437; Pub. L. 96-513, title V, Sec. 513(23), Dec. 12, 1980, 94 Stat. 2932; Pub. L. 105-85, div. A, title V, Sec. 551(a), (b)(1), Nov. 18, 1997, 111 Stat. 1747; Pub. L. 105-261, div. A, title X, Sec. 1069(a)(6), Oct. 17, 1998, 112 Stat. 2136; Pub. L. 107-296, title XVII, Sec. 1704(b)(5), Nov. 25, 2002, 116 Stat. 2314; Pub. L. 108-136, div. A, title V, Sec. 532, Nov. 24, 2003, 117 Stat. 1472; Pub. L. 109-163, div. A, title V, Sec. 526(a), (b), Jan. 6, 2006, 119 Stat. 3245, 3246; Pub. L. 109-364, div. A, title V, Sec. 543(a)-(c), Oct. 17, 2006, 120 Stat. 2213.)

-MISC1-

HISTORICAL AND REVISION NOTES

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7045	34 U.S.C. 1076e.	July 31, 1947, ch. 420, Sec. 6, 61 Stat. 706.

The section is enlarged to cover officers of the Air Force under authority of Sec. 305(a) of the National Security Act of 1947, as amended (5 U.S.C. 171e).

In subsection (a) the words "at the request of the Secretary of the Army and the Secretary of the Treasury" are omitted as surplusage. The words "to receive instruction" are inserted after the listing of the services and the words "attendance and" are omitted. The word "grades" is substituted for the word "ranks".

In subsection (c) the words "rules and" are omitted. The words "who are officers of the naval service" are substituted for the words "of the United States Navy", since officers of the Marine Corps are occasionally ordered to attend the Postgraduate School on the same basis as officers of the Navy.

AMENDMENTS

2006 - Subsec. (a)(2)(C). Pub. L. 109-364, Sec. 543(a), substituted "armed forces" for "Navy or Marine Corps".

Pub. L. 109-163, Sec. 526(a)(1)(B), added subpar. (C). Former subpar.(C) redesignated (D).

Subsec. (a)(2)(D). Pub. L. 109-364, Sec. 543(b)(2), added subpar. (D). Former subpar. (D) redesignated (E).

Pub. L. 109-163, Sec. 526(a)(1)(A), (C), redesignated subpar. (C) as (D) and substituted "subparagraphs (A), (B), and (C)" for "subparagraphs (A) and (B)".

Subsec. (a)(2)(E). Pub. L. 109-364, Sec. 543(b)(1), (c)(1), redesignated subpar. (D) as (E) and substituted "(C), and (D)" for "and (C)".

Subsec. (b)(2). Pub. L. 109-364, Sec. 543(c)(2), substituted "(a)(2)(E)" for "(a)(2)(D)".

Pub. L. 109-163, Sec. 526(a)(2), substituted "subsection (a)(2)(D)" for "subsection (a)(2)(C)".

Subsec. (d). Pub. L. 109-163, Sec. 526(b), added subsec. (d).

2003 - Subsec. (a)(2). Pub. L. 108-136, Sec. 532(a), amended par. (2) generally. Prior to amendment, par. (2) read as follows: "The Secretary may permit an enlisted member of the armed forces who is assigned to the Naval Postgraduate School or to a nearby command to receive instruction at the Naval Postgraduate School. Admission of enlisted members for instruction under this paragraph shall be on a space-available basis."

Subsec. (b). Pub. L. 108-136, Sec. 532(b), designated first sentence as par. (1) and substituted "Except as provided under paragraph (3), the Department" for "The Department" and "members" for "officers", designated second sentence as par. (2) and inserted "under subsection (a)(2)(C)" after "permitted" and "on a space-available basis" after "instruction at the Postgraduate School" and struck out "(taking into consideration the admission of enlisted members on a space-available basis)" before period at end, and added par. (3).

2002 - Subsec. (a)(1). Pub. L. 107-296, Sec. 1704(b)(5)(A), substituted "Secretary of the Army, the Secretary of the Air Force, and the Secretary of Homeland Security" for "Secretaries of the Army, Air Force, and Transportation".

Subsec. (b). Pub. L. 107-296, Sec. 1704(b)(5), substituted "Department of Homeland Security" for "Department of Transportation" and "Secretary of the Army, the Secretary of the Air Force, and the Secretary of Homeland Security" for "Secretaries of the Army, Air Force, and Transportation".

1998 - Subsec. (c). Pub. L. 105-261 struck out "the" after "are subject to".

1997 - Pub. L. 105-85, Sec. 551(b)(1), substituted "Officers of the other armed forces; enlisted members:" for "Officers of Army, Air Force, and Coast Guard:" in section catchline.

Subsec. (a). Pub. L. 105-85, Sec. 551(a)(1), designated existing provisions as par. (1) and added par. (2).

Subsec. (b). Pub. L. 105-85, Sec. 551(a)(2), substituted "officers detailed" for "the students detailed" and inserted at end "In the case of an enlisted member permitted to receive instruction at the Postgraduate School, the Secretary of the Navy shall charge that member only for such costs and fees as the Secretary considers appropriate (taking into consideration the admission of enlisted members on a space-available basis)."

Subsec. (c). Pub. L. 105-85, Sec. 551(a)(3), substituted "members" for "officers" in two places and "such regulations, as determined appropriate by the Secretary of the Navy," for "same regulations".

1980 - Subsec. (a). Pub. L. 96-513, Sec. 513(23), substituted references to Transportation Department and Secretary for references to Treasury Department and Secretary, respectively.

Subsec. (b). Pub. L. 96-513, Sec. 513(23)(A), substituted reference to Transportation Secretary for reference to Treasury Secretary.

EFFECTIVE DATE OF 2002 AMENDMENT

Amendment by Pub. L. 107-296 effective on the date of transfer of the Coast Guard to the Department of Homeland Security, see section 1704(g) of Pub. L. 107-296, set out as a note under section 101 of this title.

EFFECTIVE DATE OF 1980 AMENDMENT

Amendment by Pub. L. 96-513 effective Dec. 12, 1980, see section 701(b)(3) of Pub. L. 96-513, set out as a note under section 101 of this title.

-End-

-CITE-
10 USC Sec. 7046 02/01/2010

-EXPCITE-
TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-
Sec. 7046. Officers of foreign countries: admission

-STATUTE-

(a) The Secretary of the Navy, upon authorization of the President, may permit commissioned officers of the military services of foreign countries to receive instruction at the Naval Postgraduate School.

(b) Officers receiving instruction under this section are subject to the same regulations governing attendance, discipline, discharge, and standards of study as apply to students who are officers of the United States naval service.

(c) No officer of a foreign country is entitled to an appointment in the Navy or the Marine Corps by reason of his completion of the prescribed course of study at the Postgraduate School.

-SOURCE-

(Aug. 10, 1956, ch. 1041, 70A Stat. 438.)

-MISC1-

HISTORICAL AND REVISION NOTES

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7046	34 U.S.C. 1076d.	July 31, 1947, ch. 420, Sec. 5, 61 Stat. 706.

In subsection (b) the words "rules and" are omitted. The words "United States naval service" are substituted for the words "United States Navy" for uniformity.

In subsection (c) the words "to any office or position" are omitted as surplusage. The words "or Marine Corps" are inserted, as the word "Navy" in this context has been interpreted to include officers of the Marine Corps.

-End-

-CITE-

10 USC Sec. 7047 02/01/2010

-EXPCITE-

TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-
Sec. 7047. Students at institutions of higher education: admission

-STATUTE-
(a) Admission Pursuant to Reciprocal Agreement. - The Secretary of the Navy may enter into an agreement with an accredited institution of higher education to permit a student described in subsection (b) enrolled at that institution to receive instruction at the Naval Postgraduate School on a tuition-free basis. In exchange for the admission of the student, the institution of higher education shall be required to permit an officer of the armed forces to attend on a tuition-free basis courses offered by that institution corresponding in length to the instruction provided to the student at the Naval Postgraduate School.

(b) Eligible Students. - A student enrolled at an institution of higher education that is party to an agreement under subsection (a) may be admitted to the Naval Postgraduate School pursuant to that agreement if -

(1) the student is a citizen of the United States or lawfully admitted for permanent residence in the United States; and

(2) the Secretary of the Navy determines that the student has a demonstrated ability in a field of study designated by the Secretary as related to naval warfare and national security.

-SOURCE-
(Added Pub. L. 102-484, div. A, title X, Sec. 1073(a)(2), Oct. 23, 1992, 106 Stat. 2510.)

-MISC1-
PRIOR PROVISIONS
A prior section 7047 was renumbered section 7048 of this title.

-End-

-CITE-
10 USC Sec. 7048 02/01/2010

-EXPCITE-
TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-
Sec. 7048. Degree granting authority for United States Naval Postgraduate School

-STATUTE-
(a) Authority. - Under regulations prescribed by the Secretary of the Navy, the President of the Naval Postgraduate School may, upon the recommendation of the faculty of the Naval Postgraduate School, confer appropriate degrees upon graduates who meet the degree requirements.

(b) Limitation. - A degree may not be conferred under this section unless -

(1) the Secretary of Education has recommended approval of the degree in accordance with the Federal Policy Governing Granting of Academic Degrees by Federal Agencies; and

(2) the Naval Postgraduate School is accredited by the appropriate civilian academic accrediting agency or organization to award the degree, as determined by the Secretary of Education.

(c) Congressional Notification Requirements. - (1) When seeking to establish degree granting authority under this section, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and House of Representatives -

(A) a copy of the self assessment questionnaire required by the Federal Policy Governing Granting of Academic Degrees by Federal Agencies, at the time the assessment is submitted to the Department of Education's National Advisory Committee on Institutional Quality and Integrity; and

(B) the subsequent recommendations and rationale of the Secretary of Education regarding the establishment of the degree granting authority.

(2) Upon any modification or redesignation of existing degree granting authority, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and House of Representatives a report containing the rationale for the proposed modification or redesignation and any subsequent recommendation of the Secretary of Education on the proposed modification or redesignation.

(3) The Secretary of Defense shall submit to the Committees on Armed Services of the Senate and House of Representatives a report containing an explanation of any action by the appropriate academic accrediting agency or organization not to accredit the Naval Postgraduate School to award any new or existing degree.

-SOURCE-

(Aug. 10, 1956, ch. 1041, 70A Stat. 438, Sec. 7047; renumbered Sec. 7048, Pub. L. 102-484, div. A, title X, Sec. 1073(a)(1), Oct. 23, 1992, 106 Stat. 2510; amended Pub. L. 108-375, div. A, title V, Sec. 557(a)(4)(B), Oct. 28, 2004, 118 Stat. 1915; Pub. L. 110-417, [div. A], title V, Sec. 543(e)(1), Oct. 14, 2008, 122 Stat. 4460.)

-MISC1-

HISTORICAL AND REVISION NOTES

Revised section	Source (U.S. Code)	Source (Statutes at Large)
7047	34 U.S.C. 1076f.	Dec. 7, 1945, ch. 559, 59 Stat. 603; July 31, 1947, ch. 420, Sec. 7, 61 Stat. 706.

In subsection (a) the words "of science" are omitted as surplusage since the curriculum is in engineering and related fields.

In subsection (b) the words "from time to time" are omitted as surplusage.

AMENDMENTS

2008 - Pub. L. 110-417 amended section generally. Prior to amendment, text read as follows:

"(a) The President of the Naval Postgraduate School, under regulations prescribed by the Secretary of the Navy, may confer on any qualified graduate a bachelor's, master's, or doctor's degree in engineering or a related field.

"(b) A degree may not be conferred under this section unless the curriculum leading to that degree is accredited by the appropriate professional authority."

2004 - Subsec. (a). Pub. L. 108-375 substituted "President" for

"Superintendent".

1992 - Pub. L. 102-484 renumbered section 7047 of this title as this section.

EFFECTIVE DATE OF 2008 AMENDMENT

Amendment by Pub. L. 110-417 applicable to any degree granting authority established, modified, or redesignated on or after Oct. 14, 2008, for an institution of professional military education referred to in such amendment, see section 543(j) of Pub. L. 110-417, set out as a note under section 2161 of this title.

-End-

-CITE-

10 USC Sec. 7049 02/01/2010

-EXPCITE-

TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-

Sec. 7049. Defense industry civilians: admission to defense product development program

-STATUTE-

(a) Authority for Admission. - The Secretary of the Navy may permit eligible defense industry employees to receive instruction at the Naval Postgraduate School in accordance with this section. Any such defense industry employee may only be enrolled in, and may only be provided instruction in, a program leading to a master's degree in a curriculum related to defense product development and systems engineering. No more than 125 such defense industry employees may be enrolled at any one time. Upon successful completion of the course of instruction in which enrolled, any such defense industry employee may be awarded an appropriate degree under section 7048 of this title.

(b) Eligible Defense Industry Employees. - For purposes of this section, an eligible defense industry employee is an individual employed by a private firm that is engaged in providing to the Department of Defense significant and substantial defense-related systems, products, or services. A defense industry employee

admitted for instruction at the school remains eligible for such instruction only so long as that person remains employed by the same firm.

(c) Annual Determination by the Secretary of the Navy. - Defense industry employees may receive instruction at the school during any academic year only if, before the start of that academic year, the Secretary of the Navy determines that providing instruction to defense industry employees under this section during that year -

(1) will further the military mission of the school;

(2) will enhance the ability of the Department of Defense and defense-oriented private sector contractors engaged in the design and development of defense systems to reduce the product and project lead times required to bring such systems to initial operational capability; and

(3) will be done on a space-available basis and not require an increase in the size of the faculty of the school, an increase in the course offerings of the school, or an increase in the laboratory facilities or other infrastructure of the school.

(d) Program Requirements. - The Secretary of the Navy shall ensure that -

(1) the curriculum for the defense product development program in which defense industry employees may be enrolled under this section is not readily available through other schools and concentrates on defense product development functions that are conducted by military organizations and defense contractors working in close cooperation; and

(2) the course offerings at the school continue to be determined solely by the needs of the Department of Defense.

(e) Tuition. - The President of the school shall charge tuition for students enrolled under this section at a rate not less than the rate charged for employees of the United States outside the Department of the Navy.

(f) Standards of Conduct. - While receiving instruction at the school, students enrolled under this section, to the extent practicable, are subject to the same regulations governing academic performance, attendance, norms of behavior, and enrollment as apply to Government civilian employees receiving instruction at the school.

(g) Use of Funds. - Amounts received by the school for instruction of students enrolled under this section shall be retained by the school to defray the costs of such instruction. The source, and the disposition, of such funds shall be specifically identified in records of the school.

-SOURCE-

(Added Pub. L. 106-398, Sec. 1 [[div. A], title V, Sec. 535(a)(1)], Oct. 30, 2000, 114 Stat. 1654, 1654A-112; amended Pub. L. 108-136, div. A, title X, Sec. 1031(a)(57), Nov. 24, 2003, 117 Stat. 1603; Pub. L. 108-375, div. A, title V, Sec. 557(a)(4)(B), Oct. 28, 2004, 118 Stat. 1915; Pub. L. 109-163, div. A, title V, Sec. 525, Jan. 6, 2006, 119 Stat. 3245; Pub. L. 110-417, [div. A], title V, Sec. 542, Oct. 14, 2008, 122 Stat. 4456.)

-MISC1-

AMENDMENTS

2008 - Subsec. (a). Pub. L. 110-417 substituted "125" for "25".

2006 - Subsec. (a). Pub. L. 109-163 inserted "and systems engineering" after "curriculum related to defense product development" and substituted "25" for "10".

2004 - Subsec. (e). Pub. L. 108-375 substituted "President" for "Superintendent".

2003 - Subsec. (c). Pub. L. 108-136 substituted "Determination" for "Certification" in heading and struck out ", and certifies to the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives," after "determines" in introductory provisions.

PROGRAM EVALUATION AND REPORT

Pub. L. 106-398, Sec. 1 [[div. A], title V, Sec. 535(b)], Oct. 30, 2000, 114 Stat. 1654, 1654A-113, provided that:

"(1) Before the start of the fourth year of instruction, but no earlier than the start of the third year of instruction, of defense industry employees at the Naval Postgraduate School under section 7049 of title 10, United States Code, as added by subsection (a), the Secretary of the Navy shall conduct an evaluation of the admission of such students under that section. The evaluation shall include the following:

"(A) An assessment of whether the authority for instruction of nongovernment civilians at the school has resulted in a discernible benefit for the Government.

"(B) Determination of whether the receipt and disposition of funds received by the school as tuition for instruction of such civilians at the school have been properly identified in records of the school.

"(C) A summary of the disposition and uses made of those funds.

"(D) An assessment of whether instruction of such civilians at the school is in the best interests of the Government.

"(2) Not later than 30 days after completing the evaluation referred to in paragraph (1), the Secretary of the Navy shall submit to the Secretary of Defense a report on the program under such section. The report shall include -

"(A) the results of the evaluation under paragraph (1);

"(B) the Secretary's conclusions and recommendation with respect to continuing to allow nongovernment civilians to receive instruction at the Naval Postgraduate School as part of a program related to defense product development; and

"(C) any proposals for legislative changes recommended by the Secretary.

"(3) Not later than 60 days after receiving the report of the Secretary of the Navy under paragraph (2), the Secretary of Defense shall submit the report, together with any comments that the Secretary considers appropriate, to the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives."

-End-

-CITE-

10 USC Sec. 7050 02/01/2010

-EXPCITE-

TITLE 10 - ARMED FORCES
Subtitle C - Navy and Marine Corps
PART III - EDUCATION AND TRAINING
CHAPTER 605 - UNITED STATES NAVAL POSTGRADUATE SCHOOL

-HEAD-

Sec. 7050. Grants for faculty research for scientific, literary, and educational purposes: acceptance; authorized grantees

-STATUTE-

(a) Acceptance of Research Grants. - The Secretary of the Navy may authorize the President of the Naval Postgraduate School to accept qualifying research grants. Any such grant may only be accepted if the work under the grant is to be carried out by a professor or instructor of the School for a scientific, literary, or educational purpose.

(b) Qualifying Grants. - A qualifying research grant under this section is a grant that is awarded on a competitive basis by an entity referred to in subsection (c) for a research project with a

scientific, literary, or educational purpose.

(c) Entities From Which Grants May Be Accepted. - A grant may be accepted under this section only from a corporation, fund, foundation, educational institution, or similar entity that is organized and operated primarily for scientific, literary, or educational purposes.

(d) Administration of Grant Funds. - The Secretary shall establish an account for administering funds received as research grants under this section. The President of the Naval Postgraduate School shall use the funds in the account in accordance with applicable provisions of the regulations and the terms and condition of the grants received.

(e) Related Expenses. - Subject to such limitations as may be provided in appropriations Acts, appropriations available for the Naval Postgraduate School may be used to pay expenses incurred by the School in applying for, and otherwise pursuing, the award of qualifying research grants.

(f) Regulations. - The Secretary shall prescribe regulations for the administration of this section.

-SOURCE-

(Added Pub. L. 109-163, div. A, title V, Sec. 522(c)(1), Jan. 6, 2006, 119 Stat. 3241.)

-End-

DEPARTMENT OF THE NAVY
CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON DC 20350-2000

IN REPLY REFER TO

1524
Ser N00/100105
31 Oct 08

MEMORANDUM FOR DIRECTOR NAVY STAFF
DEPUTY CHIEF OF NAVAL OPERATIONS
TOTAL FORCE (CNO N1)
DEPUTY CHIEF OF NAVAL OPERATIONS
FLEET READINESS AND LOGISTICS (CNO N4)

Subj: NAVY-WIDE EDUCATION GOVERNANCE

Encl: (1) Reporting Relationships and Policy Coordination

1. In response to feedback from the 16 April 2008 Graduate Education Review Board (GERB), I approve and direct the implementation of the following organization, funding, and policy framework outlined in enclosure (1).

a. Organization

(1) The Chief of Naval Operations (CNO) will serve as the reporting senior of the Superintendent, United States Naval Academy (USNA); the President, Naval War College (NWC); and the President, Naval Postgraduate School (NPS).

(2) The Vice Chief of Naval Operations (VCNO) will serve as Executive Agent for these institutions and serve on education governance boards established by the Secretary of the Navy (SECNAV) or higher authority. He will be responsible for ensuring policy is integrated across the Navy and ensuring education strategy is appropriately resourced.

(3) The Deputy Chief of Naval Operations (Total Force) (CNO (N1)) will be responsible for advanced education policy, requirements, and mission funding.

(4) The Deputy Chief of Naval Operations (Fleet Readiness and Logistics) (CNO N4) will be responsible for installation funding of all education institutions including Military Construction (MILCON), Special Projects, and Base Operating Support.

(5) Superintendent USNA, President NWC, and President NPS will address routine education matters through CNO N1 and CNO N4 as appropriate.

b. Funding

(1) Mission resource sponsorship for USNA will be realigned from the Director, Navy Staff (DNS) to CNO N1. USNA's Budget Submitting Office (BSO) will shift from Director, Field Support Activity (FSA) (BSO 11) to the Chief of Naval Personnel (CNP) (BSO 22).

(2) Base Operating Support (BOS) levels for NWC, NPS, and USNA will be programmed to equivalent service levels during the Program Review Fiscal Year 2011 process.

c. Policy and Oversight

(1) The GERB will be replaced by the Advanced Education Review Board (AERB) which will be charged with providing oversight of Navy's education strategy, policy, resources, and execution.

(2) VCNO will chair the AERB. CNO N1 will prepare a governing instruction and serve as the Executive Secretary of the Board.

(3) AERB membership will expand to include the Superintendent, USNA.

2. The VCNO is directed to implement the following:

a. Realign resources.

b. Develop a plan for appropriate education installation infrastructure and common service levels.

c. Replace the GERB with the AERB.

d. Publish an AERB instruction.

e. Direct annual programming guidance and priorities associated with mission funding, MILCON, Special Projects, and Base Operating Support for educational institutions.

Subj: NAVY-WIDE EDUCATION GOVERNANCE

3. Actions will be completed by 31 December 2008. Resource issues that require longer to complete will be addressed in execution plans due 30 November 2008. Such plans should ensure completion of resource realignments by 1 October 2009.

G. ROUGHEAD
Admiral U.S. Navy

Copy to:
CNO (N00D, N09F, N093, N095, N2, N3/N5, N6, N8)
VCNO
USNA
NPS
NWC
NETC
NSTC
NAVAIR
NAVSEA
NAVSUP
SPAWAR

PROVOST'S NEWSLETTER

Naval Postgraduate School / December 2006 / Volume 1 / Issue 1

Message from the Provost

NPS Provost Leonard Ferrari

Over the past few months, I have heard from faculty and staff about the issues they see as critical to the campus. During the Provost search and again through the WASC survey and the Ad Hoc Committee on Business Practices, one issue that comes up again and again is communications. Faculty, staff and students would like to be better informed about events, accomplishments and issues that affect their professional lives. This newsletter, which will be distributed on a monthly basis, will provide information about the important events and issues surrounding Academic Affairs. Here you will see updates on the WASC accreditation efforts, student data profiles, achievements within the schools and exciting new research involving campus personnel. I hope you will find this newsletter interesting and informative. I welcome comments and suggestions for content and improvement.

Did You Know?

Did you know that NPS is the first of our nation's military graduate institutions to receive accreditation?

What is WASC?

The Western Association of Schools and Colleges (WASC) is the regional organization that certifies the accreditation of NPS by verifying — through thorough inquiries — that NPS has a clear mission, can demonstrate fiscal stability, and maintains high levels of academic quality, institutional integrity and educational standards.

Accreditation: Timeline

The accreditation process involves three stages:

- Proposal
- Capacity Review
- Educational Effectiveness Review

The Proposal outlines what will be examined during both the Capacity and the Educational Effectiveness Reviews. The Capacity Review evaluates the ability of NPS to successfully carry out its mission, and involves a site visit by a WASC team in spring 2009, and the submission of a 30-page document to WASC. The Educational Effectiveness Review assesses student learning at NPS, and includes a 50-page submission to WASC in advance of the team's visit in fall 2010.

WASC UPDATE

The WASC website, found on the NPS Intranet at http://intranet.nps.edu/WASC was launched in June 2006. An announcement of the launch was sent campus-wide, and all NPS personnel were invited to visit the site, which highlights all aspects of accreditation at NPS, and hosts all documents related to the process, including the proposal and the WASC Handbook.

The Strengths, Weaknesses and Opportunities (SWOT) survey was distributed campus-wide in summer 2006. Data collected from the completed surveys were evaluated and analyzed by the WASC Steering Committee, and incorporated into the three major themes outlined in the WASC proposal.

(Continued on other side)

PROPOSAL SUBMISSION

On October 15, 2006, NPS submitted its proposal to WASC. The document is currently being reviewed; feedback is expected in mid-December.

Currently, the formation of task forces that will begin to expand upon each theme outlined in the proposal, and to collect and analyze data related to the accreditation process, is underway.

To participate in the WASC process, or to receive further information about WASC, please contact the Steering Committee Member representing your area noted below:

WASC STEERING COMMITTEE MEMBERS

- Julie Filizetti, Co-Chair
- Rob Dell, Co-Chair
- Andres Larraza, GSEAS
- Knox Millsaps, GSEAS
- Daniel Moran, SIGS
- Doug Moses, GSBPP
- John Mutty, Faculty Council
- Douglas Fouts, Research
- Daniel Dolk, GSOIS
- MAJ Glenn Woodson, Student
- Deborah Baity, Staff
- Christine Cermak, Information Resources
- CAPT Paula Jordanek, DOS/DOP
- Megan Reilly, Comptroller
- Eleanor Uhlinger, Library

Committee Staff:

- Fran Horvath, Institutional Research
- Alan Richmond, Institutional Advancement

Details on the WASC Survey

In July 2006, the WASC survey was distributed campus-wide, via email and the WASC website, to the faculty and the staff of NPS. The survey took the form of open-ended SWOT questions (Strengths, Weaknesses, Opportunities and Threats). As the major themes were developed for the WASC proposal, the survey results provided evidence and guidance as to the campus community's viewpoints.

Survey responses were highest in the following areas, organized by the WASC theme they support:

Theme One: Strategic planning for the next NPS centennial

Strengths: military relevance and problems of national importance that are tackled by NPS, the high-quality of faculty, students, staff and research at NPS, and the many opportunities and services offered by NPS to military students and their families.
Opportunities: partnerships with industry, universities, other federal, non-DoD, local and international agencies
Threats: long term planning difficult because of lack of Navy support, ignorance of NPS value, lack of students, and diminishing faculty quality.

Theme Two: Integrating a campus-wide program of continuous improvement

Strengths: knowledgeable, dedicated, talented and highly-motivated faculty coupled with adaptive, leading-edge research produced by NPS agility, responding to stakeholder needs
Opportunities: academic programs such as Distance Learning and Homeland Security, the capacity to expand in areas related to funding outside of the Navy, and growth in research grants.
Threats: a lack of students and weak admissions criteria.

Theme Three: Supporting an evolving academic enterprise

Strengths: high quality and dedicated staff and strong IT staff support.
Weaknesses: budgeting, contracting and hiring processes, problems with leadership, issues of governance, poor facilities, lack of communication and bureaucratic gridlock.
Opportunities: improved communications in the areas of alumni relations, branding, institutional advancement, and expansion of the NPS Foundation.
Threats: need for infrastructure support, continuing budget uncertainties.

For more details on the results of the survey, go to the WASC web site, http://intranet.nps.edu//WASC and go to the Preparation link.

PROVOST'S NEWSLETTER

Naval Postgraduate School / January 2007 / Volume 2 / Issue 1

Message from the Provost

On December 26, 2006, in addition to my duties as Provost, I was honored to be asked to serve as Acting President of the Naval Postgraduate School until a permanent President is appointed.

On behalf of the faculty, staff and students of NPS, I would like to extend our sincere gratitude to Colonel David Smarsh, who assumed the responsibility of Acting President following the departure of Rear Admiral Richard Wells in June 2006. Colonel Smarsh joins a list of distinguished officers who have brought both honor and leadership to the Naval Postgraduate School, and we all appreciate his efforts.

In the next year, NPS will develop a new vision as the campus moves forward on a new strategic plan. This includes a stronger focus on NPS as a research institution. Part of this effort will be an increase in the number of Ph.D. students. Progress will continue in the efforts to increase budget and financial transparency and to improve the efficiency of the administrative infrastructure. At the same time, we will continue to strive for academic excellence, remaining true to our core mission of providing relevant education and research to our country's defense forces.

More than ever, we need engagement from our entire campus to make these initiatives successful. We have established new committees and recharged standing committees and asked that they consult with the campus in their work and regularly report on progress.

METOC Teams Optimize Stealth for Sub-Launched Covert Operations

Did You Know…

That 34 graduates of NPS have become astronauts?

WASC Update

The Naval Postgraduate School completed the first stage of its reaccreditation review on October 15, 2006, when it submitted its proposal to WASC. In December, Colonel David Smarsh was notified via a telephone interview that the WASC Proposal Review Team had enthusiastically endorsed the proposal. As a result, the Steering Committee is now moving forward, developing the two-year self-study by determining themes and specific directions for investigation, data collection and analysis. For continuing updates, see http://intranet.nps.edu/WASC/index.html

Academic Strategic Vision Committee Formed

The Provost has established an Academic Strategic Vision Committee which is charged with recommending goals and priorities for strategic investments to ensure continuously improving academic quality. The framework is NPS as a research institution. The Committee, chaired by Tom Housel, Professor of Information Sciences, includes:

- Vali Nasr, Professor, National Security Affairs
- Douglas Fouts, Assoc. Dean of Research and Professor, Electrical Engineering
- Frank Barrett, Assoc. Professor, GSBPP
- Phil Durkee, Chair and Professor, Meteorology
- Chris Olsen, Chair, Faculty Council and Professor, Physics
- Jim Eagle, Chair and Professor, Operations Research

Faculty Development

The Instructional Design and Development and Faculty Development team successfully conducted the 14th session of the Interactive Distributed Learning (IDL) course, which has helped over 200 faculty members to design, develop, and deliver courses within the distributed learning environment. At the IDL Faculty Showcase on December 8, 2006, thirteen faculty presented a sample of their coursework, which illustrated the impressive quality of the Distributed Learning courses offered at NPS.

Academic Council News

- The **National Security Affairs (NSA)** Department has changed the name of the degree formerly offered as Regional Studies to a Master of Arts in Security Studies, also noting the parenthetical name of the region studied
- The names of the degrees for the Information Warfare (595) and Electronic Warfare (596) curricula have been changed to a Master of Science in Information Warfare Systems Engineering and in Electronic Warfare Systems Engineering, respectively
- Processes for requesting and granting thesis extensions has been changed substantially to provide more authority at the departmental level and more flexibility for students
- The NSA Department and the Center for Homeland Defense and Security received approval, subject to approval of new courses, for a Certificate Program in Homeland Defense and Security. Students will enroll in the new program in January 2007

Partnerships

On December 15, 2006, NPS and Old Dominion University (ODU) discussed research with MOVES and education as possible areas for collaboration.

NPS and the University of California at Santa Cruz (UCSC) held discussions on December 18, 2006 regarding future partnerships in the areas of research, education and infrastructure.

New Programs Funded

- Congress provided NPS funding for Ph.D.s in support of Homeland Defense. NPS will be working with the University of Colorado.
- Congress also funded NPS to increase Ph.D.s in science and technology in association with UC Santa Barbara.
- The Faculty Council has formed a Ph.D. committee to advise the Provost on the administration of both of these programs. Bill Colson, Distinguished Professor of Physics, chairs.
- Recent funding by OSD has been provided to define projects in Maritime Security and Awareness in locations such as Southeast Asia. The Provost attended meetings at the National University of Singapore on December 6-9, 2006 with members of NPS faculty and administration. The next workshop will be at NPS in June-July 2007.

New Graduating Student Survey

Feedback from students has been integral in helping to monitor and to evaluate the Naval Postgraduate School's effectiveness. In 2006, the Graduating Student Survey (formerly the Exit Survey) was redesigned to be more responsive to continuous improvement and accreditation data collection needs. The Graduating Student Survey was first conducted in September 2006, and will be administered to every graduating student each quarter.

Of 396 surveys distributed, there were 275 total respondents (69% response rate).

Students agree that:

- NPS successfully achieves its mission, supporting teaching and research to enhance the combat effectiveness of all forces
- Faculty are highly qualified, dedicated to teaching and student success, involved students in participatory learning experiences, and are available for assistance outside the classroom
- Services by the Dudley Knox Library provide strong support for both coursework and research needs.
- Support Services, such as registrar/scheduling, student services, program officer and the program office staff provide sufficient support to enable students to meet their educational goals
- They would recommend the university to other military officers or defense civilians

Students felt NPS should focus on:

- Parking and facilities, especially laboratories and maintenance
- Use of feedback mechanisms
- Communications, especially in explaining policies and procedures available to all students

School-specific reports will be provided to each of the Deans. More information about the results of the survey can be found on the NPS WASC Accreditation web site (http://intranet.nps.edu/WASC/index.html) or from the Office of Institutional Research at x2228.

For further information about the items in this newsletter, or to obtain hardcopies, please contact either Dr. Fran Horvath at rfhorvat@nps.edu, 831-656-2228 or Mr. Alan Richmond at abrichmo@nps.edu, 831-656-3649

PROVOST'S NEWSLETTER

Naval Postgraduate School / February 2007 / Volume 2 / Issue 2

Message from the Provost

As a result of many conversations I have had with faculty, students, and staff over the past year, it is clear that the campus is focused on improving and increasing its status as a research university. While there are many civilian universities which provide graduate education in business and technical fields, there are few which are dedicated to programs for military officers, DoD/federal government civilian employees, and defense contractors seeking a defense and national security relevant graduate education in both technical and non-technical fields. Even rarer is an institution dedicated to providing research-oriented curricula where the focus is on recognizing and solving new problems, innovation, and outside-the-box thinking, all in support of our military forces and national security. NPS is such a place.

A vital and growing applied and basic research program with expanded funding and an increased of Ph.D. students invigorates our academic programs with the intellectual excitement of scientific inquiry and experimentation.

Did You Know… Physics Prof. Chris Olsen's new book is becoming an academic best seller. "Remote Sensing from Air and Space" covers optical, thermal, radar and lidar applications that are not found in current remote sensing textbooks.

How does this help NPS? Expanding our research program:

- *Improves the quality of education for our military officers*
- *Benefits the Navy and other armed services through a commitment to leading edge research*
- *Broadens our base of support and increases our funding base*
- *Raises our national and international profile and visibility*
- *Builds closer relationships with other research universities*
- *Permits NPS to grow through strategic investments and partnerships*
- *Supports our teaching mission with the employment of teaching assistants for laboratory and discussion course sections*
- *Leverages our resources, employing economies of scale in academic programs and reduces costs per student*

What activities are moving NPS toward these goals?

- *The new Academic Strategic Vision Committee is refocusing our planning efforts*
- *Partnerships with UC Santa Barbara, Virginia Tech, University of Mary Washington, and other institutions are taking shape; NPS is pursuing new graduate education funding opportunities through these partnerships*
- *New Ph.D. programs are being planned which will include an increase in U.S. civilian enrollment in support of Navy and DoD workforce needs*

What can the NPS Community do to help?

- *Support the faculty working to achieve these goals*
- *Become involved in efforts to increase research quality which in turn results in more relevant and innovative educational programs for our students and better support for our military forces*

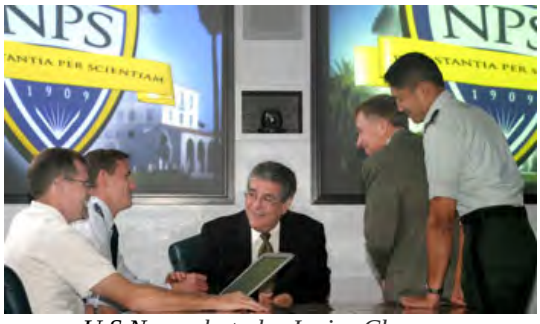
Improving Facilities: Public Works Projects

These last two years have been critical ones for NPS with the completion of several important facilities projects which are bringing the campus closer to accomplishing its Master Plan, the Regional Shore Infrastructure Plan (RSIP). Last year, the Glasgow Extension was completed after four years in the making, and is now home to the Computer Science Department and the Cebrowski Institute. A ribbon-cutting celebration will be scheduled in the near future to cap off this project which was coordinated by Public Works. A smaller Glasgow Extension, along with an addition of the perimeter road, and refurbishment of the Glasgow parking area is planned for later this year.

Last year, Public Works also completely rebuilt the steam distribution system. This critical project moves NPS towards the goal of a healthier environment in all academic and administrative buildings. To assist in this endeavor, a new Energy Management Control System will help better deliver heat to all spaces.

Finally, the total renovation of the Herrmann Hall Wings is nearing completion. The wings are anticipated to be open for business in the beginning of May 2007 complete with 140 new rooms and suites with landscaped gardens throughout the area. A model suite will soon be available for all to view. This year will also bring a lot of smaller renovation projects for lab areas within the academic buildings.

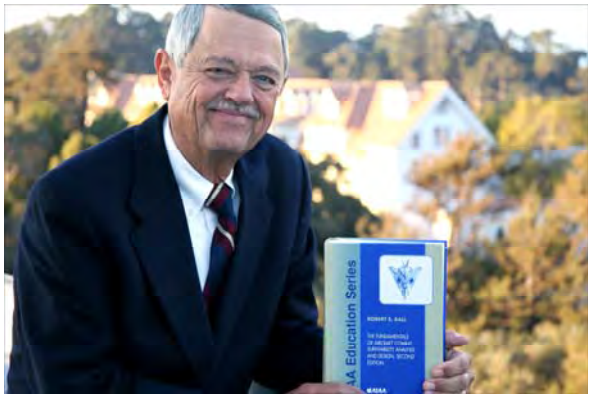
For more information, contact Pete Dausen at 656-3037.



U.S Navy photo by Javier Chagoya

Doctoral candidates discuss their dissertation projects with NPS Acting President Leonard Ferrari

Faculty Corner



U.S. Navy photo by Javier Chagoya

Robert E. Ball, distinguished Professor Emeritus of Mechanical and Astronautical Engineering, received the American Institute of Aeronautics and Astronautics Summerfield Book Award for his pioneering textbook titled *The Fundamentals of Aircraft Combat Survivability Analysis and Design, Second Edition.* Dr. Ball received the award at the 45th Annual Aerospace Sciences meeting in Reno, Nevada, on January 9, 2007.

Dr. Ball is described as "the father of aircraft combat survivability education," a field that addresses active and passive man-made threats to the successful operation of military and civil aircraft and missiles, and how to design air vehicles to minimize the effectiveness of such threats.

Dr. Rudolph Darken, Associate Professor of Computer Science, Associate Director of Research for the Center for Homeland Defense and Security, and the Director of the Defense Modeling & Simulation Institute, talked about the Institute's work in open-source development for gaming and simulation at the Marina Technology Cluster meeting on February 8, 2007.

Dr Darken discussed how some of the experts in gaming think open source impacts the industry and how small businesses can develop training applications for the government.

Dr. Darken's research has been focused on human factors and training using virtual environments and computer gaming media.

PROVOST'S NEWSLETTER

Naval Postgraduate School / March 2007 / Volume 2 / Issue 3

Campus News

The Navy's Graduate Education Quota Conference convened on March 8 to formulate the FY2008 Graduate Education Quota Plan. By March 28, N12 will forward quota conference results to PERS-440 (detailers) and Major Area Sponsors for comments.

Leonard Ferrari gave the keynote speech at the Higher Education and Research Leadership Summit on March 29. The summit was attended by high level administrators from UC Santa Cruz, CSUMB, MIIS, and many others. Dr. Ferrari's speech proposed a broad initiative in homeland security and research which could be a collaborative effort from all institutions.

MOVES faculty, students and staff demonstrated the latest developments in advanced visualization technology during the March 1 open house. The showcase included 20 thesis projects of use to the warfighter, including a tactile vibrator vest for pilots to counter optical and motion illusions, a helicopter cockpit simulator with surround-screen projection and 3D visual simulations of terrorist attack scenarios on Pearl Harbor. Several of the products developed at NPS are now being used in the fleet and field.

U.S. Navy Photo by Javier Chagoya

Chief of Naval Operations ADM Michael Mullen addressed senior officers and civilians on March 5 as part of the 10-day Navy Corporate Business Course, which focused on the latest business practices in strategic planning, goal setting, strategic communications, effects-based thinking, risk management, strategic financial management and business ethics.

Faculty News

Distinguished Professor **Brij Agrawal** of the Department of Mechanical and Astronautical Engineering has won the prestigious 2007 Naval Postgraduate School Richard W. Hamming Faculty Award for Achievement in Interdisciplinary Activities. The founder and director of the world class NPS Spacecraft Research and Design Center received the honor at the NPS Quarterly Awards Ceremony on March 13.

Distinguished Professor **Ed Thornton** of the Oceanography Department received a Sanctuary Reflection Award March 2 from the Monterey Bay National Marine Sanctuary and the Association of Monterey Bay Governments. Professor Thornton has conducted extensive field research of nearshore hydrodynamics and sediment transport. His studies in Monterey Bay have been widely acclaimed for their value to both the Navy and to environmentalists.

Lecturer and retired **Air Force Col Rene Rendon** of the Graduate School of Business and Public Policy is principal co-author of the only book on best practices and lessons learned in U.S. military program management, *U.S. Military Program Management: Lessons Learned and Best Practices.* More than half of the chapters are written by GSBPP faculty members, who are experienced military acquisition and contract management practitioners.

Professor of Mechanical and Astronautical Engineering **Michael Ross** and his NPS Guidance, Navigation and Control Laboratory team have won two National Reconnaissance Office Director's Innovation Initiative Awards, which includes $700,000 that will allow them to test applications of Ross' revolutionary theory that, to be effective, space robots must be smart and free.

Associate Research Professor of Information Sciences **Shelley Gallup, Jr.** received the DON Information Management/Information Technology Excellence Award for 2006 on behalf of NPS's FORCEnet Innovation and Research Enterprise (FIRE) team. A groundbreaking collaborative web portal, FIRE supports knowledge management and decision-making for real-time planning, execution, analysis and reporting of large-scale Navy and DoD experiments.

For photos and complete reports of these Faculty Highlight items, please view the link located at: ***http://www.nps.edu/PAO/PhotoGallery/index.asp***

Spotlight on…
Dudley Knox Library

2006 proved to be an exciting and eventful year for the Library.

A new web presence was launched by the Dudley Knox Library (DKL) in September [http://www.nps.edu/library], culminating a successful year-long collaboration between DKL and ITACS to implement a web content management system as a pilot project for the entire NPS campus. Under the new web content management system, librarians and library staff are able to utilize software tools to organize, manage, update, and publish content directly to the web.

This past year, the Library unveiled several new web services that improve the discovery of and access to information licensed for NPS use by the Library. These services include: A-Z browsing of e-journals; links to full-text articles directly from database searches; and patron-initiated interlibrary loan/document delivery services. A printer management system was implemented to more effectively distribute print jobs across Library printers and to report usage patterns. Reference librarians continued to build a cadre of services to reach out to patrons. "Ask a Librarian" and virtual reference services were popular with distance learners as well as with students and faculty on campus. New library instruction courses were offered and classes quickly filled to capacity. Many have been turned into online tutorial and demos to provide information in different formats for various learning styles.

The Library continued to provide 24/7 access to information from the patron's desktop—wherever that may be in the world — and supported a programmatic shift from print to online access to journals, books, and databases. As such, DKL revised its strategy for licensing e-content to assure that campus needs for instructional and distance education uses of materials were a consideration in licensing. Librarians also worked with faculty and students to select appropriate resources for the collection. Donors and Departments provided gifts and additional funds to extend the Library's budget for collection development. DKL also began an intensive project to provide better metadata for improved access to unique NPS publications such as student theses and NPS reports, additionally providing access to full-text wherever possible.

Patron uses of all library services continue to climb at a rate that is higher than national averages for other academic libraries.

PROVOST'S NEWSLETTER

Naval Postgraduate School / April 2007 / Volume 2 / Issue 4

Campus Events and Announcements

On behalf of the entire campus, I am pleased to extend a warm welcome to the new President of NPS, Vice Admiral (ret.) Daniel Oliver

Hermann Hall Dedication

History was made at a ribbon-cutting ceremony for Herrmann Hall's East wing on March 30. The next day, the first of thirty guests, all international students, began to occupy the new quarters in what was once the Hotel Del Monte.

(Left to right) ***SIGS Dean Robert Ord, honored guest retired Cmdr. Pat Grillo of Virginia Beach, Va., NPS Interim President and Provost Leonard Ferrari, Project Manager for Facilities Engineering and Acquisition Division (FEAD) Lt. j.g. Mark McWilliams, FEAD Contracting Officer Kim Cantrell and FEAD Director Lt. Shawn Pope.*** *U.S. Navy photo*

Announcements

During April, NPS hosted:

- Board of Advisors April 17-18
- President Bob Dynes of UC and Chancellor George Blumenthal of UCSC to discuss collaborative efforts

Dr. Bob Beck, Dr. Rudy Darken and Ms. Kari Miglaw will be spearheading efforts to celebrate the NPS centennial in 2009. Parties interested in supporting the event are urged to contact them!

Naval Research Science & Technology for America's Readiness (N-STAR) Conference

The Office of Naval Research with NPS sponsored a 3-day conference April 17 – 19 specifically for NPS students and faculty. This marked the first time in NPS history that a majority of the Naval Warfare Centers (9) reached out to NPS to strengthen the bond between faculty, students and the Naval Science & Technology (S&T) community to improve technology transition. Over 90 oral and 70 poster presentations were made by Warfare center personnel and NPS faculty and students.

Dedication of the Glasgow Annex

April 9 marked the dedication ceremony of the Glasgow Annex, a 32,000 square foot, 90-room, high-tech facility that is the new home of both the Cebrowski Institute for Innovation and Information Systems Superiority and Computer Science department located within GSOIS. The event marked the first official appearance by new NPS President Daniel Oliver.

(Left to right) Compute Science Dept. Chairman/Cebrowski Institute Director Dr. Peter Denning, GSOIS Dean Dr. Peter Purdue, Representative Sam Farr (California, 17th District), NPS President Dan Oliver and City of Monterey Mayor Chuck Della Sala. ***U.S. Navy photo***

New Distributed Learning Program

NPS has just introduced a brand new Distributed Learning Certificate and Masters Degree program for electronic warfare engineers stationed at the Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, CA. The program, titled Master of Science in Electronic Systems Engineering (MSESE), was developed at the request of NAWCWD. Students enrolled in the program will gain a solid theoretical foundation for electronic warfare systems engineering to include electronic attack, electronic protection and electronic support. Applications for enrollment in this new program will be accepted after April 20, 2007, and classes will begin in September.

WASC Update

The 2007 Learning Assessment Task Force will directly address theme two from the recently accepted NPS Institutional Proposal for the Western Association of Schools and Colleges (WASC) Accreditation. The proposal is available on the NPS intranet at: http://intranet.nps.edu/WASC/docs/WASC_Final_Proposal.pdf.

The task force, comprised of **Dr. Dave Olwell,** Chair, **Dr. Anne Clunnan, Dr. Brent Olde** and **Dr. Jim Suchan,** will participate in the NPS Office of Continuous Learning workshop on "Outcomes Based Faculty Development"; catalog assessments conducted by each departments; identify best assessment practices across departments; recommend a baseline set of assessments that should be required for each department; recommend how thesis quality should be addressed; and recommend how frequently similar learning assessment reviews should be conducted and a long-term strategy for their implementation.

The WASC Resource Committee, headed by **Dr. Fran Horvath**, will be starting the data collection efforts for the Capacity Study due in 2009.

Dr. Christine Cermak, Dr. Man Tak-Shing, Dr. Knox Millsaps, and **Dr. Julie Filizetti** gave presentations at the Annual WASC Conference held in San Jose in mid-April.

DLCC Hosts Its Spring Conference

From March 20-22, the Distance Learning Coordination Committee (DLCC) hosted its annual spring conference and follow-on Military Education Coordination Council (MECC) with the theme *Culture and Language at a Distance*. The agenda was designed to establish an understanding of the importance of language and cultural competency in the modern strategic environment, as well as distributed solutions for meeting language and culture training and education requirements. Attendees included deans and directors of DL programs for all U.S. intermediate and senior-level professional military education institutions -- the nation's war colleges, command and staff colleges, the Air University, the National Defense University, and the three colleges of the National War College (NWC). Distance learning practitioners and language and cultural competency experts also participated. NPS is not a voting DLCC member as the school does not teach JPME directly, but remains an active DLCC associate in partnership with the Naval War College, which teaches JPME at its NPS campus.

Dr. Ken Pisel, the committee's chair, opened the conference by stating that "the vast majority of service members can't take the time away from their operational duties to attend in-residence programs, so we have to use distance learning technologies to give them the cultural baseline they need before, and even as, they deploy. Eighty-five percent of NWC students, for example, now earn JPME via distance learning, versus only 15 percent from in-residence classes." **Capt. Tim Doorey**, senior intelligence officer at NPS, gave the opening address on the importance of cultural competency in the modern strategic environment.

The MECC is an advisory body to the Director, Joint Staff, on education issues, and its purpose is to address joint scholarship and key educational issues of interest to the joint education community, promote cooperation and collaboration among the MECC member institutions and coordinate joint education initiatives.

FYI

The Yellow Cab Company of Monterey is allowed on base for drop off and pick-up. Please call 394-1234 for a cab. Remember Cabs are required to be searched (passenger and trunk area) and the trusted agent policies remain in effect.

PROVOST'S NEWSLETTER

Naval Postgraduate School / May 2007 / Volume 2 / Issue 5

Campus Announcements

NPS joins the Department of Defense and the Department of the Navy in honoring the fallen…

On Monday, May 28th, our country recognizes Memorial Day, formerly known as Decoration Day, first celebrated on May 30, 1868, when flowers were placed on the graves of both Union and Confederate soldiers at Arlington National Cemetery. The day has grown to include and to honor not just Civil War soldiers, but all those who have died while serving our nation.

Inspired by the poem, *In Flanders Fields,* in 1915 Moina Michael wrote this stanza, which elevated the poppy to its status as the symbol of this somber day, and provided a timeless tribute to those remembered:

We cherish too, the poppy red
That grows on fields where valor fed,
It seems to signal to the skies
That the blood of heroes never dies.

A resolution was passed in December 2000 supporting a National Moment of Remembrance nested within Memorial Day, in which all Americans are encouraged "To voluntarily and informally observe in their own way a moment of remembrance and respect, pausing from whatever they are doing to listen to „Taps" or to observe a moment of silence. "

NPS joins the Department of Defense and the Department of the Navy in remembering and honoring the men and women who have given their lives in service to our nation.

NPS will once again present the "Memorial Day Concert on the Lawn: A Day of Remembrance" which over 7,000 people are expected to attend. This is our biggest Open House of the year, and possibly the only one that enables the community to have gate access and to learn more about the educational and research activities at NPS. All NPS Schools will be given high priority visibility and acknowledgement throughout the event.

The music performances and non-profit fair begin at 10 AM while historic tours and scientific demonstrations begin at 11 AM. Guests are encouraged to arrive by noon so they won't miss the tours or the main events.

New Digital Media Production and Photo Studio

NPS is creating a professional Digital Media Production and Photo Studio in Herrmann Hall. The Studio will be a dedicated space to conduct interviews with visiting dignitaries and to enable NPS to provide television quality video news releases and to produce a monthly thirty-minute television program, "NPS in Review." The program, which will air on the local PBS station and the Government Channel, not only will provide a new information venue into the local community, but also will be a program that will hopefully be added to the Pentagon Channel, thereby creating for NPS a new audience of 20 million viewers worldwide, and another opportunity to highlight the important work being conducted at NPS.

Faculty News

Assistant Professor **Jessica Piombo** was selected by the International Republican Institute (IRI) to be part of an international delegation to monitor Nigeria‟s April 21st presidential and parliamentary elections. The IRI is a non-profit, non-partisan organization committed to advancing freedom and democracy worldwide. The delegation was led by **Ambassador Pierre-Richard Prosper**, former U.S. Ambassador-at-Large for War Crimes; **The Honorable Andras Byurk,** of Hungary, Member of the European Parliament; and **Abbe Apollinaire Muholongu Malumalu,** President of the Independent Electoral Commission of Democratic Republic of Congo. The other delegates were comprised of ambassadors, high-level government officials, and scholars. Delegates were deployed throughout the country to monitor polling stations and to identify and evaluate strengths and weaknesses in Nigeria‟s elections system. Their observations will lead to a report providing an overall assessment of the electoral event. IRI has monitored more than 130 elections in more than 40 countries.

Internationally renowned aeronautical engineer **Dr. E. Roberts "Bob" Wood,** professor emeritus at NPS, has been named an honorary fellow of the American Helicopter Society (AHS) International. The prestigious induction took place at the AHS 63rd Annual Forum and Technology Display Grand Awards Banquet, May 2 in Virginia Beach, Va. The vertical flight society, which has over 6,000 members worldwide, grants honorary fellow status to two members a year whose career leadership and innovation have significantly advanced the interests of the vertical flight industry.

Campus Visitors

COS Col. Dave Smarsh (left) and **Assistant Dean of SIGS Gary Roser** (third from left) were among the NPS leaders and faculty who briefed Malaysian officials on May 2 during a fact-finding trip led by Ministry of Defense Deputy Secretary **General Dato Jesbil Singh** (second from left). Other officials in the delegation were **Gen. Ismail Samion (center), National Defense University of Malaysia (NDUM) vice chancellor, Prof. Wan Mahzom Shah (far right), NDUM deputy vice chancellor, and Abdul Razak Ahmad (right), deputy director in the Malaysian Ministry of Higher Education**.

Ms. Nancy Bennett, Governor Schwarzenegger‟s Deputy Director of the San Francisco office, visited with **Dr. Leonard Ferrari, Dr. Christine Cermak, Dr. Fran Horvath** and **Mr. Alan Richmond** at their invitation. The visit provided an opportunity to showcase NPS activities, including a visit to the Space Systems area with Professor Rudy Panholzer and to the MOVES Institute for a technology update. Dr. Ferrari also briefed Ms. Bennett on the National Security Institute that he is forming. **Ms. Janis Cortese** of the Corporation for Education Network Initiatives in California (CENIC), one of our key partners in high-bandwidth networking on a regional, national and international level, joined in the visit. The purpose of the visit was a prelude to a visit by the Governor at a future date.

Cisco Senior VP **Mr. Brad Boston** met with **Dr. Leonard Ferrari, Dr. Dan Boger.**, **Mr. Bill Warner** and **Admiral Merrill Ruck (ret.),** to discuss the quality of NPS research and to provide opportunities for ongoing partnership development.

Mr. Brad Boston and **Mr. Bobby Johnson,** CEO of Foundry Networks, joined the President‟s Circle of the NPS Foundation.

PROVOST'S NEWSLETTER

Naval Postgraduate School / June 2007 / Volume 2 / Issue 6

Provost's Message

Congratulations to CHDS, and special thanks to all who supported this significant achievement

I am pleased to announce the formation of the Monterey component of the National Security Institute (NSI). The NSI is a collaboration of the Lawrence Livermore National Laboratory (LLNL), the University of California Santa Barbara (UCSB), and the Naval Postgraduate School. Its focus is on research and graduate education supporting national defense and homeland security. By joining the respective strengths of the partners in research and education, we have a synergistic combination of personnel and facilities. Other national and international institutions may affiliate with the NSI on specific collaborative projects. By combining the exceptional talents of the personnel and outstanding facilities of these national institutions, we aim to leverage the existing expertise and experience as we seek to combine DoD–focused research and development for the national defense with Federal/State/Local-focused research and development for homeland security.

The Executive Board of the NSI consists of the NPS Provost, the UCSB Executive Vice-Chancellor (Dr. Gene Lucas), and the LLNL Director of Homeland Security Programs (Dr. T.R. Koncher). The Interim Executive Director of the NSI is Dr. Leonard Ferrari of NPS. The Technical Directors are Prof. Bill Colson of NPS, Dr. Craig Smith of LLNL, and Prof. Hua Lee of UCSB. At NPS Dr. Terry Pierce will coordinate the NSI education activities in support of Homeland Security, Ms. Paula Philbin will coordinate external relationships, and Ms. Wendy Walsh will coordinate other non-education Homeland Security programs. Distinguished Professor Emeritus John Powers will provide planning support. Some of the NPS researchers affiliating with the NSI at Monterey include:

- Distinguished Professor Dave Netzer – Technology insertion in field demonstration experiments
- Professor Alex Bordetsky (IS) – Innovative networks
- Distinguished Professor Bill Colson (PH) – Directed energy systems
- Professor Bret Michael (CS) – Software engineering in systems
- Professor Chris Olsen (PH) – Remote sensing
- Research Associate Jim Ehlert (IS) – Persistent surveillance
- Professor Phillip Pace (EC) – Innovative electronic defense

This listing is illustrative, not comprehensive. Other NPS and partner collaborators are invited to join the NSI's efforts.

I look forward to the accomplishments of this Institute as we move forward together with our partners to enhance the defense and security of the United States.

Campus Announcements

New Program

NPS has received preliminary approval from WASC for CHDS to offer the Master of Arts in Security Studies (Homeland Defense and Security) at a new site in West Virginia. A proposal was reviewed by a WASC Committee, which responded positively to CHDS work in educational effectiveness, use of technology, and program design. The committee also noted the collaborative nature of the program and the service to our nation in providing education in support of homeland security. Final approval by the WASC Executive Committee is expected in June. Congratulations to CHDS, and special thanks to **Julie Filizetti**, **Ted Lewis, Lauren Wollman**, **Bill Pelfrey**, **Fran Horvath** and **Megan Heath** for their support on this significant achievement.

Dedication of Herrmann Hall Wings

The opening of the visitors' quarters of Herrmann Hall's east and west wings was celebrated with a dedication and ribbon-cutting ceremony that was held on June 11. The new facilities, which include 142 total rooms, 68 suites and 15 VIP suites, are all equipped with kitchenettes, high-speed Wi-Fi internet access, televisions with premium cable channels, DVD players and free movies that can be checked out at the registration desk. The newly renovated rooms in both wings will be occupied by international students, foreign dignitaries as well as Department of Defense active duty and civilian personnel.

Congratulations to…..

…all of the 314 students who graduated from NPS on June 15. VCNO ADM Patrick Walsh was the keynote speaker at the ceremony.

..the NPS campus community, which hosted over 3,000 participants at the Memorial Day *Concert on the Lawn!*

… JD Fulp, the Schieffelin award winner!

…Professor **Thomas Bruneau,** who co-edited a book that was published in June. Titled *Reforming Intelligence: Obstacles to Democratic Control and Effectiveness*, the book is a collection of case studies written by intelligence experts that collectively outlines the best practices for intelligence services in the United States and other democratic states. Chapters in the book were also written by **NSA Chair Douglas Porch,** Visiting Professor **William Lahnehan**, Lecturer **Kenneth Dombroski,** Professor **Mikhail Tyspkin,** and faculty member **Cristiana Matei.**

…GSOIS Professor **Dan Nussbaum,** who is currently serving as president of the Society of Cost Estimating and Analysis. The professional society, which is dedicated to improving cost estimating and analysis in government and industry and enhancing the professional competence of its members, has over 1,400 members and 16 chapters nationwide.

…GSBPP sponsored its *4th Annual Acquisition Research Symposium: Creating Synergy for Informed Change*, which provided a forum for the presentation and promotion of acquisition research carried out under the NPS Acquisition Research Program.

PROVOST'S NEWSLETTER

Naval Postgraduate School / July 2007 / Volume 2 / Issue 7

Message from the Provost

Earlier this month, I was asked to give the graduation speech for the Temasek Defense Systems Institute, a joint NPS-National University of Singapore program. Here are excerpts from that speech…

As the Navy's university, NPS will continue to respond with our best efforts — for as long as the need persists

We have entered an amazingly complex era of technology expansion and globalization that many hope will raise the quality of life for all of humanity. There are also many others who believe, open market globalization will lead to catastrophic worldwide problems. You, the graduates, have arrived at this point in your lives and at a time in history where it is more important than ever, that you use your great skills and the knowledge that you have worked so hard to acquire to help guide the course of humankind. You live in a nation that has achieved remarkable success…economically, politically and socially in a very short period of time. A nation which used the tools of systems engineering to develop a society that ensures that its entire population participates in its successes.

What do I mean by the great issues of our time? Let me list a few:

- Global warming…unfortunately, the debate has become far too political…is this trend a natural earth cycle or is it being driven by human behavior? More importantly, do we have the ability to reverse this trend? How long do we have? We all have a stake in answering these questions correctly and we must work together to seek answers and solutions. These are scientific inquiries that need to be answered by a rigorous scientific and systems engineering analysis.
- Poverty…many believe we finally have the means to end worldwide, abject poverty. Yet, there are those, including the Nobel Prize winning American economist, Dr. Joseph Stiglitz, who believe that the open market form of globalization has increased the numbers of people on earth living in abject poverty and that this increase is particularly acute in the developing nations. If this is true, then how will this impact global stability?
- Terrorism…this movement takes many forms... a few days ago it was Glasgow, Scotland. We must work together to understand the root causes that turn men and women into suicide bombers and murderers. The link to poverty has been stated by former US Secretary of State Colin Powell who said, "The war against terror is bound up in the war against poverty."
- National and transnational conflicts…what can we say about Darfur, where at least 200,000 people are believed to have died, with more than 2.5 million more displaced from their homes across Sudan and eastern Chad? And what of the secular violence in Iraq?

I raise these issues because you, the graduates of two great universities from two great nations, are special and the directions you choose, will shape the future of both our nations and maybe the world. The recent, great explosion in technology gives us new powers to raise our own quality of life and to benefit all humanity, but it also gives us the power to inflict catastrophic damage to the environment and great human suffering...economically, politically and socially.

Let me end with a quote from Dr. Paul Farmer, a great American humanitarian and research physician who has dedicated his life to finding solutions to communicable diseases and providing healthcare for some of the world's most impoverished peoples. He simply states, "the only real nation is humanity."

Thank you for letting me share these few thoughts with you on this auspicious occasion. Good luck to all of you.

Learning Object Repository

(http://www.dtic.mil/whs/directives/corres/pdf/132226p.pdf): DoD Instruction 1322.26 states that training and distributed learning are to be shared as broadly as possible except where limited by law, policy, or security classification.. In support of this directive, as a new service for faculty, the Office of Continuous Learning (OCL) is building a Learning Object Repository (LOR), which will provide opportunities to easily reuse, repurpose or reengineer learning resources. The LOR system will be connected to the Advanced Distributed Learning DL registry which will render instructional materials and digital media available for search and reuse, and meta-tag the course materials to be placed in the repository, beginning with the interactive media elements (IMEs) that faculty have developed either in an IDL/online IDL course or through the course proposal process. Please contact Ernest Koh (Manager, Instructional Design & Development) at ekoh@nps.edu or at ext. 2175 if you have any questions.

Conferences

The Partnership for Peace Consortium held its first Educators Program at the NATO Defense College in Italy. The goal of this program was to create an open forum for dialogue and sharing among nations about learning and teaching. Best practices, methods for interactive instruction, and the use of technology to support education for reform were examined and applied to simulations, case studies, and action planning exercises. The initial Educators Program was well received by participants from nine partner countries. The consortium plans to offer the Educators Program and support to individual partner countries on an ongoing basis. NPS was instrumental in planning and implementing this event and was represented by: **Dr. Donald Abenheim, Ms. Maureen Bowman, Mr. Tom Hazard, Dr. Ben Roberts, Mr. Alan Richmond, and Ms. Ali Rodgers.**

The Remote Sensing Center will be hosting a Synthetic Aperture Radar (SAR) conference on August 9th at MBARI. Contact Richard Olsen at ext. 2019 for more information.

Faculty Spotlight

Peter Denning, chairman of the Naval Postgraduate School Department of Computer Science and director of the Cebrowski Institute, has been named one of two inaugural National Science Foundation Computer and Information Science and Engineering (CISE) Distinguished Education Fellows.

The new fellowships are part of the agency's Pathways to Revitalized Undergraduate Computing Education (CPATH) program to improve the quality of undergraduate computer science education nationwide. The awards are made to national leaders in computing science who have achieved distinction, are committed to transforming undergraduate computing education and have specific innovative ideas for how to do so.

CISE Assistant Director Jeanette Wing presented Denning with the prestigious award, accompanied by a two-year $250,000 grant, at a ceremony at NSF headquarters in Arlington, VA.

John Arquilla will participate in an important panel session for the Monterey Museum of Art in conjunction with a major exhibition called: Seeing Ourselves: Treasures from the George Eastman House. The panel will discuss the power of images to form public opinion and memories of war.

Glen Woodbury has been appointed Director of the Center of Homeland Defense and Security and began his position as of 1 July.

Richard Hoffmann has been re-appointed Director of the Center for Civil-Military Relations.

Books Published by Faculty

Terrorism Financing and State Responses
Edited by Jeanne Giraldo and Harold Trinkunas. Contributors include NSA professors: Jeanne Giraldo, Harold Trinkunas, Anne L. Clunan, Jessica Piombo.

Risk Management in Public Contracting
Author: Elisabeth Wright, Ph.D., CPCM (IDARM Program Director).

Valle, Bardomina (CIV)

From: Filizetti, Julie (CIV)
Sent: Thursday, August 16, 2007 9:31 AM
To: Cermak, Christine (CIV); Horvath, R (Fran) (CIV); Heath, Megan (CIV)
Subject: FW: WASC - Naval Post Grad proposal

All,
For the official files.

Julie

Julie Filizetti, EdD
Associate Provost for Academic Affairs
Naval Postgraduate School
(831) 656-3566
JFilizetti@nps.edu

From: Mueyfoo Saechao [mailto:MSaechao@wascsenior.org]
Sent: Thursday, August 16, 2007 9:29 AM
To: Filizetti, Julie (CIV)
Cc: Henry Hernandez
Subject: WASC - Naval Post Grad proposal

Dear Dr. Filizetti:

This is to inform you that effective August 16, 2007 your substantive change proposal for Master in Security Studies (Off-campus out of region) has been granted final approval by the WASC Accrediting Commission for Senior Colleges and Universities.

If you have any questions, please contact Teri Cannon at tcannon@wascsenior.org.

Muey Saechao
Administrative Assistant for Substantive Change

Mueyfoo Saechao
Administrative Assistant
Western Association of Schools and Colleges
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FACULTY HANDBOOK

Naval Postgraduate School
Monterey California

June 2006

NPS MISSION

The mission of the Naval Postgraduate School is to provide advanced professional studies at the graduate level for military officers and defense officials from all services and other nations. The school's focus is to increase the combat effectiveness of the armed forces of the United States through high-quality education and research programs that support the unique needs of the defense and national security establishment.

PREFACE

This handbook is a compilation of policies and practices affecting the faculty at the Naval Postgraduate School. While it attempts to accurately depict these policies and practices, it must be recognized that that these subject change over time and different administrators.

This handbook sets forth the school policies and procedures relating particularly to the faculty. Requirements for degrees or descriptions of curricula are found in the policy manual of the academic council and in the school catalogue. Other school instructions have been referenced, and are duplicated only when essential. The *Policy Regarding Appointment, Promotion, Salary and Tenure of Office of Civilian Members of the Faculty* is found in Appendix A.

Guiding the faculty at the Naval Postgraduate School is a continuous process. Faculty should be aware that, over time, this *Faculty Handbook* and its policies may be revised at any time as required.

It is noted that the Graduate School of Business and Public Policy (GSBPP) has no departments. The responsibilities and actions described in this Handbook for Chairs will be performed by the Dean of the GSBPP (or delegated representatives).

Richard Elster
Provost/Academic Dean

Table of Contents

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SECTION I. THE NAVAL POSTGRADUATE SCHOOL

The Naval Postgraduate School (NPS) was established in 1909 to meet the advanced educational needs of naval officers in marine engineering, wireless communications engineering, and weapons development. Since that time, the academic programs of the School have continued to meet the changing needs of the Navy, the Department of Defense, and the Department of Homeland Security. The student body includes U.S. military officers from each of the Services, U. S. government civilians, state and local government civilians, defense industry civilians, and international officers from many allied nations. The programs of study depend on the academic disciplines of the academic departments and Schools, as well as the interdisciplinary strengths from the NPS Research Institutes.

Through the years, the School has carefully nurtured quality educational standards to meet the needs of its select student body. Unlike most graduate schools, NPS has a well defined mission that allows it to tailor graduate programs to meet specific professional military demands in a quality educational experience. NPS offers graduate programs, both on and off campus, as well as a wide range of executive education and certificate programs.

The broad mission responsibility of the Naval Postgraduate School toward the advanced education of naval officers and for conducting relevant research is reflected in its chartered mission in SECNAV Instruction 1524.2A:

> The NPS exists for the sole purpose of increasing the combat effectiveness of the Navy and Marine Corps. It accomplishes this by providing post-baccalaureate degree and non-degree programs in a variety of subspecialty areas not available through other educational institutions. The NPS also supports the DoN through continuing programs of naval and maritime research and through the maintenance of an expert faculty capable of working in, or as advisors to, operational commands, laboratories, systems commands, and headquarters activities of the Navy and Marine Corps.
>
> Since the U.S. emphasizes joint and coalition warfare, carrying out the above mission means reaching out to all US services and defense and national security enterprises, their supporting industrial base, and our allies.
>
> The contributions of a degree-granting, research-oriented NPS to the Nation's overall combat effectiveness reflect:
>
> - Its ability to develop and offer unique curricula e.g., undersea warfare; electronic [information] warfare; weapons engineering; command, control, and communication; and naval intelligence.
> - The ability to conduct classified instruction and research.
> - Its flexibility in tailoring general educational subjects to the particular interest of the military, e.g., organization, space technology, and manpower management.
> - The ability to structure curriculum and course sequences to meet professional need and maintain officer warfare specialty with minimum time away from professional responsibilities.

- Its ability to meet DoN requirements rapidly and effectively, by creating and adapting relevant programs, and terminating obsolete programs.
- The benefits of bringing together officers from all services, our Allies, and key civilians from the national security community, increasing the professional dialogue among officers and civilians engaged in related efforts to solve significant defense and national security problems.
- The cultivation of a unique pool of specialized faculty whose teaching and research expertise is particularly relevant to the national defense infrastructure.

This mission of the Naval Postgraduate School establishes the continuing requirements for the combination of excellence of instructional and research programs and responsiveness to change and innovation in the technology and management of the Navy and the Department of Defense.

The unique mission of the NPS and the special character of the student body demand a premium on excellence of instruction. To be effective instructors, faculty must not only be fully up-to-date in their areas of expertise, but they must also be aware of current and future defense and national security applications. Most programs of study at the School have a Flag Officer, General Officer or senior official (called a “program sponsor”) who oversees the career and utilization assignments of NPS graduates. Both formal and informal dialogue between NPS and these program sponsors provide an invaluable constructive mechanism to determine evolving educational needs.

The primary instructional objective of the NPS graduate programs is to meet the “educational skill requirements” specified by the program sponsors. The awarding of degrees is a by-product of this effort, but an essential one. It is highly desirable to the Services and individual students that the scholarly achievements of the students be rewarded by conferring the appropriate academic degree. The courses of study, although tailored to meet the particular needs of the sponsors fulfill faculty-established standards for academic degrees.

For the purpose of awarding degrees, NPS is accredited by the Western Association of Schools and Colleges (WASC). Additionally, the Electrical Engineering, Mechanical Engineering, and Astronautics programs are accredited by the Accreditation Board for Engineering and Technology (ABET) and the management programs are accredited by the National Association of Schools of Public Affairs and Administration (NASPAA) and by the Association to Advance Collegiate Schools of Business (AACSB).

In keeping with its mission, the School fosters a research program to benefit the students' educational programs, to stimulate and encourage individual professional development, to attract and retain a talented faculty, and to examine frontiers of knowledge in response to the defense and nationals security needs of the Nation. The School enjoys a comparative advantage in its ready access to the entire Defense and National Security establishments including laboratories, offices, and operating forces.

The Naval Postgraduate School's excellent relations with the Office of Naval Research, naval laboratories, and sponsors of curricula benefit the research programs. In general, individual and group research projects, which may be interdisciplinary, are reimbursably supported by the Navy, by other Department of Defense agencies, and by other branches of the government, including the National Science Foundation, the Department of Energy, the Department of Homeland Security, and the National Aeronautics and Space Administration. Research support from private industry may also be sought through the establishment of a Cooperative Research and Development Agreement (CRADA)).

In addition, a NPS Institutionally Funded Research Program (NIFR), supported by Navy operating funds, encourages the development of new research ideas that can be proposed subsequently to potential sponsors for reimbursable support. A special benefit of the School's research program is the opportunity for all students

to gain research experience by performing supervised thesis or group project study, including classified work, in basic or applied areas of interest to the Navy and other Defense and national security organizations.

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SECTION II – STUDENTS

THE STUDENTS

The Naval Postgraduate School student body consists primarily of U.S. Naval Officers, but also includes other U.S. military officers, U.S. Government civilian employees, and international officers and civilians. Officers must have demonstrated both intellectual and leadership potential to warrant the government's investment in their higher education. They are mature, career-oriented individuals who realize that the graduate education programs provide the technical and managerial expertise needed in demanding billets to solve operational problems, and to employ modern weapons systems. Their goal is to qualify as a subspecialist and to complement their primary (warfare or staff) specialty.

In general, four or more years will have elapsed since the student's undergraduate education. These years will have been spent undergoing training and acquiring operational experience in a warfare specialty. In some cases, the return to an academic environment requires an extensive review to re-establish the student's academic proficiency. Further, officers may have developed new interests as a result of their career experience and may be pursuing advanced education in fields other than those of their undergraduate majors in order to meet Navy needs.

These unique characteristics of incoming students require that academic programs be adapted appropriately. Flexibility in academic course sequencing permits adjustments in the course selections offered individuals. Officers who validate sufficient courses may devote the time released to more advanced study, thesis or project work, or may complete the curriculum early. This academic tailoring is warranted due to the significant investment that the mature and experienced students represent. Each must be provided the opportunity for maximum personal development within a quality educational environment.

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EDUCATIONAL POLICY

On 24 May 1986 the Chief of Naval Operations issued a policy statement on graduate education. Because of its importance, the policy statement is reproduced here in its entirety.

Graduate Education Policy

> **General:** Because we face ever increasing complexities in technological, managerial, and political/economic fields which affect the Navy, we need officers with a solid intellectual capacity and the vision to capitalize on evolving technology and developments. This requires officers capable of original thought and the capacity to synthesize broad areas of knowledge to analyze complex issues, and appreciate the distinction between what is theoretically possible and actually achievable. Investment in graduate education must be pursued as a priority, even in the face of fiscal austerity and competing demands for our junior officers.

Subspecialty system: Subspecialty requirements are the primary means of defining Navy's needs for graduate education programs. Requirements will be validated every other year in a zero-based review that ensures: (1) requirements are not overstated, (2) each subspecialty has a pyramidal structure that fosters a healthy career progression, and (3) subspecialty billets are distributed throughout sea and shore activities to derive maximum benefit from the subspecialist inventory.

The number of unique subspecialty fields is to be held to a minimum, as is the number of supporting curricula. As a general rule, we will consider consolidating or eliminating other subspecialties to avoid proliferation and ensure efficiency of the system before a new subspecialty is added.

Officer participants: The fully funded graduate education programs are intended primarily for lieutenants and lieutenant commanders who have demonstrated superior professional performance and the intellectual capability to complete a rigorous academic program. These academic programs are designed to equip officers with enhanced intellectual and analytical capacity and make them more skillful warriors and specialists. Our goal is to increase the fraction of the officer corps with a graduate-level subspecialty.

Education: The intention of graduate education is to prepare an officer for a long career of contributions. Therefore, the tendency to train officers for their next assignment must be balanced by graduate education which furthers their ability to contribute. Program length will normally be two years or less to limit costs.

Officers selected for fully funded graduate education will usually be assigned to study at the Naval Postgraduate School (NPS). NPS programs will be maintained with a predominant emphasis on scientific and engineering subjects. NPS will also provide a program of continuing education so prospective students can improve their knowledge and graduates can maintain currency. For those curricula not offered at NPS, officers will be sent to quality civilian or DoD institutions approved by the appropriate program sponsor. This effort is also managed by NPS.

Other programs, either full time (such as the Advanced Education Program) or off duty, will be supported for officers who desire graduate education but are unavailable for fully funded education because of career patterns or personal desires.

Utilization: Officers with subspecialty codes will be assigned to a subspecialty billet as soon as practicable after their designation. URL officers will normally be assigned to an operational billet after graduation, but should be assigned subsequently to a subspecialty billet at their first shore tour following graduation. Officers should expect to serve multiple tours in their subspecialty fields during their careers.

Review: Several reviews are in place and will continue to ensure graduate education programs directly support the Navy's needs. These include a biennial review of each curriculum by the sponsor, a biennial flag level validation of all subspecialty billets, and an annual flag level review of Navy's graduate education chaired by the Vice Chief of Naval Operations. In addition, a Board of Advisors appointed by the Secre-

tary of the Navy will assess annually the effectiveness with which NPS is accomplishing its mission.

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SECTION III - SCHOOL STRUCTURE

The Naval Postgraduate School is a shore activity in an active operational status under a President under the command of the Chief of Naval Operations. The Naval Postgraduate School is subject to the area coordination authority of the Combatant Commander, US Pacific Fleet.

ORGANIZATION AND ADMINISTRATION

The organization of the School combines the administration of the traditional academic functions of a university with the functions of a military activity. A brief description of the positions of the academic officials follows. A complete assignment of duties of all officials of the School is set forth in the NPS Instruction 5400.2.

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The President. The President of NPS is a flag officer of the line (or a civilian with a PhD in an area represented in the NPS curricula) and is the Chief Executive of the Naval Postgraduate School. (The former title of this position was the “Superintendent”; this title may still be evident in some NPS documents.) The President is responsible to the Chief of Naval Operations for the fully-funded graduate education within the Navy conducted at both the Naval Postgraduate School and civilian universities. The determination of policy stems from the command authority of the NPS President, who is responsible for the accomplishment of the School's mission.

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The Provost/Academic Dean. The Provost/Academic Dean is the chief educational officer of the School and is responsible to the President for all academic matters. In the absence of the President, the Provost/Academic Dean acts in his/her behalf for those matters not related to the functions of the military chain of command. The Provost/Academic Dean's responsibilities include formulating and implementing academic policies consonant with accreditation standards and the needs of the Navy; maintaining high performance standards of the faculty; reviewing and planning for all education areas and their professional application; and liaison in educational affairs with appropriate agencies, activities, and societies.

The Provost/Academic Dean is appointed by the Secretary of the Navy for a term not to exceed five years upon recommendation of the NPS President, after consultation with a faculty committee appointed by the President for that purpose. Reappointments are possible.

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Dean of a Graduate School. There are four graduate Schools at NPS:

- The Graduate School of Engineering and Applied Science (GSEAS)

- The Graduate School of Business and Public Policy (GSBPP)
- The Graduate School of Operational and Information Sciences (GSOIS)
- The School of International Graduate Studies (SIGS)

Under the Provost, the Deans of the Graduate Schools (together with the Dean of Research, the Associate Provost for Academic Affairs, and the Dean of Students) administer the NPS academic programs by planning and overseeing the programs, the resources needed to support the programs, and the distribution of those resources. The Deans of the Graduate Schools are also responsible for insuring that policies and procedures are in place to carry out the academic programs efficiently. The Deans of the Graduate Schools:

- Work with the Department/Group Chairs (or the Associate Deans in the GSBPP) to plan, conduct, and administer educational programs.
- Supervise the Chairs of the Academic Departments and Groups.
- Recommend individuals to the Provost for appointment to the faculty, after receiving the recommendation of the Department/Group Chairs.
- Recommend individual faculty to the Provost for promotion, tenure, and merit pay raises where such a recommendation has been made by the Department/Group Chairs (or Dean of the GSBPP).
- Develop and administer programs for faculty orientation, development, and mentoring.
- Develop, in conjunction with the Chairs (or Dean of the GSBPP) and the Dean of Research, research plans and encourage the development of research programs.
- Prepare and submit budget, manpower, and facilities requirements in accordance with the Planning, Programming, and Budgeting System (PPBS) procedures.
- Manage all resources assigned, including budgets, manpower, and physical facilities.
- Coordinate the development of new curricula with the Director of Programs and the Associate Provost for Academic Affairs.
- Support Chairs or Dean of the GSBPP in developing and implementing personal development programs for staff members.

The Dean of a Graduate School is appointed by the President on the recommendation of the Provost for a specific term not to exceed three years. Reappointments are possible.

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Dean of Students. The Dean of Students is responsible for the administrative structure supporting the students as military officers and as residents. This includes such things as orientation, student services, military matters, and residences in military housing. The Dean of Students is a military officer assigned by the Navy.

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Director of Programs. The Director of Programs is responsible for the administration of the curricular operations of the School. The Director of Programs reports to the Provost/Academic Dean on academic matters and to the NPS President on military matters. His/her responsibilities include:

- The planning, development, and evaluation of curricular programs (including those conducted at civilian institutions) as specified by the Chief of Naval Operations, in coordination with the Deans.
- Exercising operational and supervisory authority over the Program Officers and students assigned thereto, including the establishment of common policies and procedures for the Curricular operation.
- Ensuring through periodic reviews that the stated objectives of each curriculum are current and that they reflect the educational skill requirements of the various sponsors.
- Ensuring continuing liaison with curriculum sponsors.
- Acting as Resource Manager for billets, personnel, and dollar assets assigned to the Programs Division.
- Maintaining Average-on-Board (AOB) statistics and current Prospective Rotation Dates (PRD) on students.
- Coordinating, as required, with the Chief of Naval Operations and the Commander, Bureau of Personnel (BuPERS), on student input procedures.

The Director of Programs is a military officer assigned by the Navy.

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Associate Provost for Academic Affairs. Under the Provost, the Associate Provost for Academic Affairs establishes policies and procedures to promote high quality instruction to meet the needs of various curricula and administers the instructional support functions. The Associate Provost for Academic Affairs:

- Insures an effective evaluation of instruction is carried out and that timely follow-up is taken on identified needs.
- Develops and conducts a program for instructional improvement.
- Recommends individuals to the Provost for appointment as Academic Associates and coordinates with the Director of Programs in the supervision of the Program Officer/Academic Associate teams.
- Coordinates with the Director of Programs and the School Deans in the development of new curricula.
- Supervises academic support activities including the Registrar functions, the Admissions office, course scheduling, and the preparation and distribution of the School catalog.
- Together with the Office of Institutional Research supervises the preparation of academic statistical data for internal and appropriate external distribution.
- Is the Secretary of the Academic Council and advises the Academic Council on curricular matters and academic standards, as requested.

- Serves as a position manager and a resource manager for all codes under the Associate Provost for Academic Affairs.
- Prepares and submits budget, manpower, and facilities requirements for assigned areas of responsibility in accordance with the Planning, Programming, and Budgeting Systems (PPBS) procedures.

The Associate Provost for Academic Affairs is appointed by the President on the recommendation of the Provost for a specific term not to exceed three years. Reappointments are possible.

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Associate Provost/Dean of Research. The Associate Provost/Dean of Research administers the NPS research program. In this capacity, the Associate Provost/Dean of Research is responsible for planning the research program, preparing budgets for the support of the program, maintaining contact with sponsors and potential sponsors to obtain this support, and proposing and administering policy and procedures to carry out the research program. Under the Provost, the Associate Provost/Dean of Research:

- Develops and implements policies governing research at NPS.
- Administers NPS research funds and oversees the proposal process, the expenditures of funds, and the reporting of results.
- Coordinates liaison with Department of Defense research and development facilities, the National Science Foundation, other government agencies which engage in research, and private contractors performing research.
- Supervises the Directors of the NPS Institutes.
- Supervises the Deputy Associate Provost for Research and the Director of Intelligence Research.
- Supervises Center Directors with a direct reporting relationship to the Dean of Research (e.g., the Center for Interdisciplinary Remotely Piloted Aircraft Studies, Center for Defense Technology and Education for the Military Services).
- Chairs the Research Board.
- Supervises the Director, Research and Sponsored Programs Office.
- Compiles and publishes an annual summary of the NPS research program; prepares other reports as required; and provides data, briefings, and other research-related support.
- Administers other research-related programs at the Naval Postgraduate School.
- Oversees coordination with the Comptroller's Office on budget displays and financial matters related to research funds at NPS.
- Identifies and develops additional research contacts and coordinates faculty research initiatives.
- Approves research proposals, encourages the development of research programs, and evaluates the results of research programs annually.
- Provides thesis processing for printing, posting, and distribution of theses.

- Prepares and submits budget, manpower, and facilities requirements for assigned areas of responsibility in accordance with the Planning, Programming, and Budgeting Systems (PPBS) procedures.

The Associate Provost/Dean of Research is appointed by the President on the recommendation of the Provost/Academic Dean for a specific term not to exceed three years. Reappointments are possible.

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Associate Deans. Associate Deans are generally military officers chosen to assist the Provost and Deans in the performance of their duties. (In the Graduate School of Business and Public Policy (GSBPP), civilian faculty members are also chosen as Associate Deans.)

Associate Deans are appointed by the Provost for a specific term not to exceed three years, upon recommendations from the appropriate Dean. Reappointments are possible.

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Directors of Research Institutes. Research Institutes exist at NPS for the purpose of studying high visibility problems of interest to the Department of Defense, other government agencies, and the services. The Institutes act as an administrative center, drawing upon the expertise of student-faculty teams to accomplish the research goals. There are currently three research institutes at NPS:

- The Wayne E. Myer Institute for Systems Engineering
- The Cebrowski Institute for Information Innovation and Superiority
- The MOVES (Modeling of Virtual Environments and Simulation) Institute.

Under the Associate Provost/Dean of Research, the Institute Directors administer the research programs of the Institute by planning and administering the programs, the resources needed to support the programs, and the distribution of those resources. The Institute Directors are also responsible for insuring that policies and procedures are in place to carry out the research programs efficiently. The Institute Directors:

- Plan, conduct, and administer the Institutes' research programs.
- Coordinate all research done by NPS faculty and students done for the Institute.
- Supervise the personnel assigned to the Institute.
- Recommend individuals for appointment to the Provost (via the Associate Provost/Dean of Research),
- Recommend to the Provost (via the Associate Provost/Dean of Research) individual Institute members for promotions and merit pay raises and augment the Faculty Promotion Council when their Institute's promotion cases are presented and discussed.
- Develop and administer programs for Institute employee orientation, development, and mentoring.

- Prepare and submit budget, manpower, and facilities requirements in accordance with the Planning, Programming, and Budgeting System (PPBS) procedures via the Associate Provost/Dean of Research.
- Manage all resources assigned to the Institute, including budgets, manpower, and physical facilities.

The Director of an Institute is appointed by the NPS President upon the recommendation of the Provost and Associate Provost/Dean of Research for a specific term, not to exceed three years. Reappointments are possible.

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Chair of Academic Departments and Interdisciplinary Groups. The Chair of an Academic Department or Group plans and administers the educational, personnel, and financial activities of his/her respective Department/Group. (In the GSBPP, the Chair's duties are done by the Dean or are delegated to Associate Deans.) The responsibilities of the Chair include:

- Organizing and supervising their Departments/Groups to carry out the educational policies of the School and to accomplish the objectives of the various curricula.
- Planning and supervising research programs in their Departments/Groups to support the mission of the School, and coordinating these with the appropriate Dean.
- Planning the academic program (in coordination with the appropriate dean) for their Departments/Groups.
- Representing their Departments/Groups in academic and administrative matters, including the annual Promotion and Tenure (P&T) activities.
- Recruiting qualified academic personnel for their Departments/Groups, within authorized allowances, and recommending their appointment to the appropriate Dean and the Provost.
- Recommending faculty for promotion, tenure, and merit pay raises to the Provost via the appropriate Dean in accordance with established procedures.
- Providing professional evaluation of academic personnel and performance ratings of Civil Service personnel assigned to their Departments/Groups. (In this sense, they are "supervisors" as the term is used in Civil Service matters.)
- Guiding course development and the preparation and maintenance of a journal for each Department/Group course that is taught, as well as coordinating and submitting textbook requirements for their Departments/Groups.
- Evaluating instruction of their Department/Group courses to insure that they are presented effectively and in accordance with the approved syllabi, coordinating Department/Group grading practices, and ensuring that grades for each student are submitted to the Registrar within prescribed time limits.
- Maintaining familiarity with related activities at civilian educational institutions and technical and industrial organizations, so that curricula and courses are kept abreast of educational and technical advances.

- Submitting budget estimates for their Departments/Groups to the appropriate Dean or the Provost/Academic Dean; developing plans to procure equipment for their Departments/Groups, including laboratories; and administering the maintenance and custody thereof.
- Controlling the safe operation, development, and security of the spaces of their Departments/-Groups and of all machinery, equipment, and materials therein.
- Developing and implementing personnel development programs for personnel in their Departments/Groups. Establishing and overseeing a mentoring program for faculty. Establishing and monitoring a program to ensure that their faculty remain current on Navy technology and procedures.
- Designating and supervising Associate Chairs to assist with Department/Group administrative duties.
- Working with the Program Officers in maintaining liaison with sponsors, developing new programs, and in the sponsor evaluation and modification of programs.

The Chairs of Academic Departments and Groups are appointed by the President upon the recommendation of the Dean of the appropriate Graduate School and the Provost for specific terms not to exceed three years. Reappointments are possible. The Chairs are under the operational and supervisory authority of the Dean of the appropriate School.

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The Faculty. The Faculty are members of the staff, military and civilian, engaged in teaching, the supervision of laboratory periods, research, supervision of theses, and other academic duties. They are assigned to specific academic Departments/Groups or Institutes and their responsibilities, under the cognizant Department/Group Chair (or Dean of the GSBPP) or Institute Director, include:

- Teaching effectively the courses assigned to them in accordance with the approved syllabus for the course.
- Maintaining a course journal in the Department/Group files for each course taught.
- Directing and supervising student research activities, including theses and group projects.
- Performing research in support of educational objectives
- Performing assigned administrative tasks.
- Recommending beneficial changes to curricula and courses and to laboratory development.
- Submitting grades to the Registrar at the end of each quarter, as specified by procedures promulgated by the Dean of Instruction.
- Keeping their Department Chair (or Dean of the GSBPP) informed of their professional activities.
- Maintaining professional proficiency by a program of personal scholarly activity, by participation in professional societies and meetings, and by outside contacts.
- Keeping themselves cognizant of the special needs of the Navy in advanced education and in the areas of their professional specialties.

- Training staff assigned to them so that the staff can most effectively aid the School's education program.
- Attending official functions, as required.

Some faculty members hold dual appointments. In such cases, one of the Department/Group Chairs (or Dean of the GSBPP) is assigned the primary responsibility for supervisory tasks such as mentoring and making recommendations for pay raises and promotion. The Department/Group/GSBPP is called the "home" Department/Group of the faculty member.

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Support Faculty Support faculty are non-tenure track faculty who provide a professional-level service function that supports the teaching and research mission of NPS and the administrative duties central to these functions. Support faculty can perform a wide range of activities such as distance learning instruction, research, public service, academic support duties in such areas as student services, student recordkeeping, library functions, and administrative oversight of the business and academic operations of NPS.

Support Faculty positions generally require a Master's degree in an appropriate field, relevant experience, and personal skills specific to the particular appointment. Support faculty appointments are made by the Provost after a written application from the appropriate Dean, Institute Director, or Associate Provost, containing a position description (including the proposed position title); a description of the duties of the position; a clear description of why the duties cannot be done by a Federal civilian staff member, a contractor, or a term employee. Terms for Support Faculty shall not exceed three years, with reappointment possible with satisfactory performance. (Formal evaluation must be done before requesting a reappointment.) Only the Provost can approve the establishment or filling of a Support Faculty position. Positions must be approved in writing by the Provost *before* recruiting can begin.

There are two types of support faculty:

- Academic Support Faculty. Academic support faculty provide professional support in the instructional or research activities of NPS.
- Administrative Support Faculty. The administrative support faculty provide professional support to students and faculty , and perform administrative duties that relate directly to management policies and procedures, or the general business and administrative operations of NPS. Administrative Support Faculty report directly to a Dean, an Institute Director, Associate Provost or the Provost. They are not members of a specific Department/Group.

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Program Officers/Academic Associates. The Program Officer/Academic Associate team is an organizational entity unique to the Postgraduate School. The team is responsible for developing, maintaining, and updating curricula to accommodate the needs and academic requirements of the Navy and the Department of Defense and for monitoring the planning and progress of individual students through a program of study.

A military officer of suitable experience and rank is assigned as the Program Officer, serving as the executive director of the office. One or more assistant program officers may also be assigned to a Program Office and responsibility for a curriculum may be delegated to an assistant.

The part-time duty as the Academic Associate is assigned to a civilian member of the faculty thoroughly familiar with the Naval Postgraduate School, the Navy, DoD, and other sponsoring agencies. Where the Program Office supports multiple curricula, more than one Academic Associate may be appointed and assigned responsibility for specific curricula. (On occasion, the Academic Associate may be a military officer.)

The Program Officers are responsible to the Director of Programs for the overall operation of their respective Program Offices. The Academic Associates are responsible to the Associate Provost for Academic Affairs, through their Department or Group Chair, for the integrity of the academic features of the Program Office operation. As a consequence of this parallel arrangement, the Program Officers and Academic Associates are close professional associates and their relationship should develop accordingly.

Academic Associates are appointed to this duty by the Provost, on the recommendation of the Associate Provost for Academic Affairs and the Director of Programs, for specific terms not in excess of three years. (Reappointments are possible.) The budgeted time allotted to perform the duties of Academic Associate are determined by the Associate Provost for Academic Affairs.

General responsibilities associated with the Program Offices are described below. Specific responsibilities of the individuals are covered in either Naval Postgraduate School Instructions or policy directives. Their general responsibilities are:

- Curriculum Sponsor Liaison. The Program Officer/Academic Associate team works with program sponsors and consultants to define pertinent sponsor needs, including professional objectives; to delineate projected utilization of program graduates; and to consult with Department/Group Chairs (or Dean of the GSBPP) and faculty to propose useful courses and curricula. These plans and projections consider the impact of developing technology, evolving bodies of knowledge, and changing mission of the Navy and other sponsors. They are prepared, reviewed, and updated during sponsor reviews of curricula.
- Curriculum Development and Management.
    - The Program Officer/Academic Associate team, working with the NPS faculty and staff, develops and maintains a statement of professional objectives for each curricular program under their purview. Consistent with these objectives, they establish and keep current appropriate standard curricula.
    - Ensuring that the curriculum meets the professional needs of the Navy or other sponsors rests primarily with the Program Officer. Ensuring that each student's curriculum meets curriculum degree requirements and that the selection and sequence of courses are in accordance with Department/Group or degree requirements rests primarily with the Academic Associate.
    - The Program Officer/Academic Associate team develops and maintains procedures for effectively monitoring programs for their continuing adherence to professional and academic requirements. These procedures may be partially standardized for all programs. The Program Officer holds primary responsibility for collaborating with the Naval Postgraduate School staff, sponsors, and OPNAV and for adopting general procedures to meet the particular needs of individual programs. The Academic Associate is responsible for maintaining liaison with academic Departments/Groups, sustaining the relevance of current course content, and fostering faculty participation in the development of useful new courses and programs.

- In the development of new curricula or major revision of existing ones, the Program Officer/Academic Associate team includes each concerned academic Department or Group in the deliberations leading to formulating each proposal.
- Both the Program Officer and Academic Associate are knowledgeable with respect to "transfer field" programs, i.e., other graduate programs appropriately related to those under their purview. They should also be familiar with Navy-related programs offered at civilian educational institutions which might be effectively utilized by sponsors.

- Supervision and Counseling of Students. The Program Officer/Academic Team reviews the records of all students assigned to their curricula and, in consultation with each student – and based on his/her academic background – develops a program of study within the framework of the established curricula. Student academic progress is monitored and program changes or intercurricular transfers made, when deemed necessary, within the limitations of curricular quotas, Navy policies, and academic feasibility. Both members of this team are responsible for the overall quality of a student's program.

  Both members of the team counsel all students in the curricula under their purview. The Academic Associate is responsible for academic counseling of the students.

  The Program Officer, in accordance with prescribed policies and procedures, exercises supervision and direction of students assigned to his/her office. He/she performs requisite administrative duties pertaining to these students, evaluates their performance, and counsels them on pertinent military matters, as necessary.

- Resource Management. The Program Officer is responsible for managing the resources which directly support his/her office and for the preparation and submission of budget requirements.

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Executive Director for Information Resources and Chief Information Officer. The Executive Director for Information Resources and CIO plans and manages the computing and information services at the School and is responsible for the coordination of strategic information resources at NPS including Information Technology and Communication Services (ITACS) and Institutional Research.

The Executive Director is appointed by the President on the recommendation of the Provost for a specific term not to exceed three years. Reappointments are possible. The Executive Director and CIO reports to the NPS President and is a member of the Superintendent's Executive Council.

Information Technology and Communication Services (ITACS). The Executive Director is responsible for the development and implementation of the IT Strategic Plan and for advising NPS leadership on all matters relating to IT policy, direction, and operations, including

- IT services (academic and administrative),
- network operations and services,
- administrative systems,

- vendor relations, including procurement of IT equipment and services, as well as IT policies (e.g., wireless technology)
- communications about ITCS within NPS and external communications,
- voice and video services,
- IT security,
- IT budgeting and planning, and
- Software acquisition, licensure and support

The Executive Director and CIO oversees a number of consortium memberships that involve inter-institutional collaboration on IT priorities and interests, and serves as the NPS liaison to those organizations. For example:

- Navy/Marine Corps Internet (NMCI)
- Internet2
- Local Department of Defense consortium
- Monterey Peninsula I-Net participation (high-speed, local access network)
- CENIC participation (high-speed, statewide backbone)
- DREN (Defense Research and Engineering Network)

The Executive Director is also responsible for ensuring NPS compliance with Navy, Department of Defense, and General Services Administration policies regarding IT.

Institutional Research. The Executive Director and CIO oversees the Office of Institutional Research, the single point of contact for all internal and external requests for official information about the institution. As such, the Executive Director is responsible for collecting, organizing, and verifying institutional data, and reporting those data to the university community and to external audiences. The Executive Director is also responsible for developing a program of research about the institution, including student surveys, assessment projects, strategic planning, and special studies, as needed.

The Executive Director serves as an institutional liaison on accreditation matters, and assists with academic program evaluation and new program applications. The Executive Director also assists in supporting strategic planning in a variety of ways that includes preparation of common data templates for discussion and decision regarding goal-setting and performance evaluation.

The Executive Director and CIO is appointed by the NPS President to a term not exceeding three years upon the recommendation of the Provost. Renewals are possible.

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Executive Director for Facilities and Support Services. The Executive Director for Facilities and Support Services (F&SS) is responsible for the coordination of all installation management and support services at NPS to include

- facilities management, campus planning, and environmental management,
- retail services (NEX) and banking services (NFCU),
- e-business,
- police services and fire protection and prevention,
- housing management,
- morale, welfare and recreation support, including golf course, food and beverage, sailing club, etc.,
- safety management,
- contracting services,
- personal property and transportation services,
- mail services,
- BQ operation,
- logistics and warehousing operations
- legal services
- chaplaincy, and
- human resources.

Most of these support services are administered from the Commander, Navy Region Southwest. The Executive Director interfaces with this organization on these areas of operation.

The Executive Director is also the liaison for NPS and acts on behalf of the NPS President with the City of Monterey, Monterey County, the State of California, and other outside agencies.

The Executive Director also serves as the Chair of the Facilities Subcommittee that acts as an information and advisory body for the SSPG in all areas of installation management.

The Executive Director for F&SS is appointed by the NPS President to a term not exceeding three years upon the recommendation of the Provost. Renewals are possible. The Executive Director of F&SS reports jointly to the NPS President and the Provost in the performance of duties.

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APPOINTMENTS AND REAPPOINTMENTS OF PROVOST, DEANS, AND CHAIRS

Appointment and Reappointment of the Provost. If possible, the process leading to the appointment or reappointment of a Provost should begin approximately eighteen months prior to the end of the incumbent's term to allow for the lengthy search, screening, review, and approval phases that may be required.

If a new Provost is to be appointed, the President should appoint a committee to assist in the search and screening processes. The Faculty Council should be asked to provide a list of nominees to be included on this committee. The committee should establish a mechanism to provide an opportunity for the faculty to evaluate and comment on those candidates who are to be considered seriously for the appointment.

If the reappointment of the incumbent Provost is to be considered, the President should establish a mechanism to obtain a broad sampling of faculty input to the decision.

Appointment and Reappointment of Deans. The process of selecting a new Dean or of reappointing an incumbent shall begin as early as possible, preferably one year prior to the expiration of the incumbent's term. A faculty committee shall be constituted to facilitate input to the decision process, to communicate that input in writing and in oral discussions to the President and the Provost, and to provide such other assistance as the President and the Provost may request. This committee shall consist of at least five faculty members, of whom at most one is a Department/Group Chair, appointed by the Provost in consultation with the Executive Board of the Faculty Council. Any faculty member shall be free to discuss candidates with any member of the committee.

If a new Dean is to be selected, the committee shall assist in the search for and in the evaluation of candidates. Input from the faculty shall be solicited and reported to the President and the Provost. If the reappointment of the incumbent Dean is to be considered, the committee shall solicit and report input from the faculty.

This process shall be used in connection with the appointment of anyone other than the Academic Dean, whether full-time or part-time, who has the title of Dean and who exercises responsibility and authority for such academic matters as instruction, research, and faculty personnel decisions. It need not be used in appointments of administrative leaders who have no such decision-making authority. (The Director of Programs and Dean of Students, as military officers, are selected by the NPS President through a separate nomination process conducted by the Navy Bureau of Personnel.)

Appointment and Reappointment of Chairs. Whenever possible, appointment and reappointment decisions should be made on the recommendation of a consensus of the tenured and tenure-track members of the Department or Group. The process should begin, not later than one year prior to the termination of the current appointment, with a meeting between the current Chair and the appropriate Dean to assess the Chair's and the Administration's desires on reappointment. The Department/Group faculty should be advised beforehand of this meeting and invited to submit comments to the Dean of the appropriate graduate school. During this meeting, it would be appropriate for the Dean to review the goals of the Department or Group with the Chair, to assess the performance of the Chair in achieving those goals, and to establish a dialogue on emerging directions for the Department/Group.

If the current Chair desires reappointment, the Dean should then gather information from all of the Department/Group faculty. The Department/Group faculty will determine the most appropriate procedure to insure frank and candid input. For example, some faculty may prefer to supply their comments to fellow faculty members, while others may prefer to interact directly with the Dean. The Dean may wish to appoint a committee to collect and summarize faculty comments. The Chair should have ample opportunity to discuss the general findings of his/her evaluation by the faculty with the Dean prior to a final reappointment decision by the Administration.

If a new Chair is to be appointed, the search should begin sufficiently early to provide ample time to review candidates. At the beginning of the process, appropriate administrative officials should meet with the Department/Group faculty to discuss desired qualifications in the candidates and elements of the search and ap-

pointment process. The search process should be clearly understood by all. The primary responsibility for the search process should reside with the tenured and tenure-track faculty of the Department/Group. They should have an opportunity to hold individual or group discussions with the candidates, to review the candidates' resumes and submit evaluations, and to discuss the candidates as a group to establish a Department/Group consensus if possible. Recommendations by a Department/Group for a Chair appointment should include a statement about the faculty's consensus, if one exists. If a Department/Group Search Committee is appointed to facilitate the search process, its recommendations should follow those stated by the Department/Group as a whole. Recommendations by a Department/Group for a Chair appointment which are not acceptable to the administration should be discussed with both parties present before an alternative appointment is made.

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NAVAL POSTGRADUATE SCHOOL
BOARDS AND COUNCILS

A description of some of the boards and councils of the Naval Postgraduate School that affect the Faculty follows (in alphabetical order):

Academic Council. The quality and rigor of any academic program is set forth by the faculty of the institution. The functions of the Academic Council include establishing scholastic standards (as detailed in the *Policy Manual of the Academic* Council), considering all new curricula and major revisions to existing curricula, considering for approval all new courses and significant changes in course descriptions or unit value, and evaluating all candidates submitted for award of degrees. New degree programs must be submitted for approval by the Council well *in advance* of the enrollment of students in the program. Certificate programs must be approved by the Council in order to appear on the transcript. New courses will not be scheduled unless approved in advance by the Council. Courses with significant change in description or units will not be scheduled unless approved in advance by the Council. No curriculum shall be given degree credit nor any degree candidate awarded a degree unless recommended by the Council.

The Academic Council is composed of the Provost (as Chair), the Dean of Students, the Director of Programs, the Chair of the Faculty Scholarship Committee, a representative from each of the academic Departments and Groups, and the Associate Provost for Academic Affairs (as Executive Secretary). The representative from each academic Department/Group will be a member (not the Chair) of the Department/Group, elected by the Department/Group members, subject to approval by the Chair of the Department/Group. The Department/Group also elects an alternate representative, subject to the approval of the Chair. Both representatives and alternates serve concurrent three-year terms. An elected representative is *not* eligible to serve two successive terms. Terms of the Council members are staggered so that approximately one-third of the elected membership rotate each year. One member is a student representative chosen as prescribed by the Officer Student Advisory Committee.

The requirements for the various degrees offered and all written academic policies are described in the *Policy Manual of the Academic Counci*l.

Board of Advisors The NPS Board of Advisors is a panel of eminent civilians and distinguished retired military officers who advise the Secretary of the Navy and the Chief of Naval Operations on the strategy and operations of NPS. The Board members are appointed by the Secretary of the Navy and the Board meets twice annually.

Deans Promotion Council (DPC). This body evaluates and recommends candidates for promotion and award of tenure. It consists of the Provost as Chair, the Deans of the Graduate Schools, the Dean of Research, the Associate Provost for Academic Affairs, the Dean of Students, and the Faculty Chair (as an observer).

Department/Group Evaluation Committee (DEC) . This faculty committee (appointed by the Department/Group Chair, Dean of the GSBPP, or Institute Director) makes an objective evaluation of the credentials of a given candidate for promotion and/or tenure to the respective Department, Group, GSBPP, or Institute faculty and Chair (or GSBPP Dean). The DEC must be composed of at least three faculty, one of whom must be a representative from a Department, Group, GSBPP, or Institute not containing the candidate (i.e., an "outside" member), and all of whom must be of rank higher than that of a candidate for promotion (or all of whom must be tenured for a candidate for tenure). In the case of candidates with joint appointments, it may be appropriate to have a jointly constituted DEC, or, alternatively, independent DECs may be formed to represent the separate viewpoints.

Department/Group Faculty Promotion Council (DFPC). This Council participates in the promotion and tenure cases at the Department/Group level. It consists of all members of the faculty of the respective Department or Group considering a candidate for promotion or tenure who have rank higher than that of a candidate for promotion (or who are tenured in the case of a candidate for tenure). The DFPC will have access to the full confidential dossier on the candidate as considered by the DEC, including all external appraisal letters. The DFPC meets as a body to discuss the case and makes a vote on the case. (The Chair does not vote at this point, but records and reports the results of this vote to the Faculty Promotion Council.)

Faculty Council and Committees. The Faculty Council and its Committees function in an advisory capacity to the Provost, the Dean of Students, Director of Programs, and the Deans in administrative or academic matters involving policy, regulations, procedures, or other concerns deemed worthy of attention by the Faculty Council or the cognizant committee. The composition of the Faculty Council and Committees is prescribed by the *Faculty By-Laws*. Matters meriting attention are normally submitted to these officials by the cognizant representative.

Faculty Executive Board. This board (consisting of the Faculty Chair, the Faculty Chair-elect, the past Faculty Chair, the Faculty Secretary, and four elected members from the Faculty Council) establishes the agenda for Faculty Council meetings, is cognizant of the activities of all Faculty committees, deals with matters relating to the professional status of the Faculty as a group, and meets regularly with the Provost and other members of the administration. The Faculty Executive Board may, on occasion, approach the President and/or the Provost directly.

Faculty Promotion Council (FPC) Before a faculty member is recommended for promotion or tenure, this council performs a review of the candidate's professional qualifications. This council consists of the members of the Deans Promotion Council augmented by the Chairs of the Departments and Groups, the Director of DRMI, the Faculty Chair, and the Chair of the Faculty Professional Practices Committee (as an observer). If a promotion is desired for a member of an Institute, the Institute Director will augment this Council for discussions of the case and may vote on the case.

IT Task Force The Information Technology Task Force is an advisory body for all information technology and communications policies and plans. The task force is chaired by the Executive Director of Information Resources and CIO, and is comprised of faculty representing each of the major academic areas, as well as student council, and administrative areas.

Professional Practices Committee The Professional Practices Committee is a standing committee of the faculty. It exists to ameliorate professional disputes between individual faculty (or groups of faculty) and the administration or disputes between faculty. In unusual circumstances, it also may represent faculty members in promotion and tenure procedures. It consists of three tenured faculty members, elected for staggered three-year terms at the annual Faculty election in November.

Research Board. The Research Board serves as an advisory arm to the Associate Provost/Dean of Research. Board members represent their respective academic departments/groups/school. The Board reviews research policies and procedures and provides recommendations and guidance regarding the School's overall research programs to the Associate Provost/ Dean of Research. The Research Board consists of the Dean of Research (who serves as Chair); the Associate Dean of Research; Director, Research and Sponsored Programs Office; two Faculty Council Representatives; and faculty representatives from each academic unit (i.e., the Departments, Groups, and Institutes). Board members are appointed by the Provost, normally for three-year terms.

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SECTION IV – FACULTY POLICIES

The Faculty of the Naval Postgraduate School operate under a personnel management policy established by the Secretary of the Navy, *Policy Regarding Appointment, Promotion, Salary and Tenure of Office of the Civilian Members of the Faculty*. Those matters covered by the policy will not be duplicated in this section. Amplification of subjects will occur as necessary.

The current faculty salary schedule is found at the NPS Human Resources site.

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FACULTY APPOINTMENTS

Faculty appointments for untenured faculty are made for a specified term. (Tenured faculty members serve without term limits.) The "total length of service" is the cumulative length of terms spent in a particular rank at NPS plus any accepted periods before coming to NPS. Each Faculty member receives an appointment letter from the Provost's Office specifying the position title and the expiration date of the term of the appointment.

No NPS employee may claim to be a faculty member who has not received an appointment letter. Also, it is important that faculty represent themselves with the proper title to students, colleagues, and people outside NPS.

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EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE EMPLOYMENT

It is the policy of the Naval Postgraduate School that all persons are afforded equal employment opportunity for employment, advancement, retention, benefits, and treatment regardless of race, color, sex, religion, national origin, age, or handicapping condition. EEO is promoted through a continuing Affirmative Employment Program in all situations where minorities, women, and handicapped individuals are under-represented or underutilized. As a model employer, the Naval Postgraduate School ensures a work environment free of discrimination and harassment of any kind. Treatment of all individuals with dignity and respect regardless of their rank or grade is essential at the Naval Postgraduate School. It is a work environment free from sexual harassment, fraternization, and discrimination in both policy and practice, equal opportunity for advancement to an individual's maximum potential, and fair and impartial review of complaints of discrimination.

Faculty and Chairs are the key to an effective program. Faculty members must be cautious regarding social relationships with students. Personal relations between NPS faculty and students that are unduly familiar may not respect the differences in status and may call into question the objectivity of the faculty member. Active participation in meeting established EEO goals and objectives will ensure Equal Employment Opportunity at NPS to ultimately achieve a balanced workforce.

EEO responsibility is one of the factors considered in annual performance ratings for administrators and in consideration for awards. Criteria for advancement within management and supervisory positions include demonstrated performance in meeting EEO objectives. NPSINST 12713.4 provides additional guidance.

The NPS President is the Equal Employment Officer of the School. Further information about the program is available from the Human Resources Office/Command Equal Employment Opportunity Office.

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CIVIL SERVICE STATUS OF CIVILIAN FACULTY

A brief statement of the Civil Service status of the faculty is given in *Policy Regarding Appointment, Promotion, Salary and Tenure of Office of the Civilian Members of the Faculty*. The phrase "Excepted Employee" or "Excepted Civil Service" is sometimes used when referring to the Civil-Service status of faculty members. This phrase means that, under authorities granted by the Office of Personnel Management, appointments may be made in the interest of good Civil Service administration whenever the duties or compensation of the position are such, or qualified persons are so rare, that the position cannot be filled through open competitive examination.

The Code of Federal Regulations, 5 CFR 213, provides the rules and regulations establishing the Excepted Service. Section 5 CFR 213.3108 (b) specifically assigns the Faculty of the Naval Postgraduate School to Schedule A of the Excepted Service. Schedule A is defined as positions other than those of a confidential or policy-determining character for which it is impracticable to examine. NPS Faculty appointments are designated as AD ("administratively determined"). Civil Service provisions which pertain to such matters as veteran preference, performance ratings, annual and sick leave, health benefits, retirement and insurance benefits apply to permanent civilian members of the faculty.

In summary, the civilian members of the faculty are employed as civilian employees of the Department of the Navy in the "Excepted Service" and they are subject to the Civil Service laws, regulations, and directives applicable to all Navy Civilian Personnel, unless specifically exempted.

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TENURE-TRACK FACULTY

Tenure-track faculty are those faculty appointed as Assistant Professor, Associate Professor, or Professor. Faculty appointments for tenure-track faculty are normally for a ten-month academic year. The two-month intersession period can be used for a variety of activities including reimbursable activities such as research or presenting short courses, classroom instruction when requested by the Department/Group Chair/GSBPP Dean, NPS administrative activities, or leave without pay.

Initial appointments of tenure-track faculty will be in an Academic rank and step determined by the President upon recommendation by the Provost and appropriate Dean. The offer letter for each new faculty member provides this information. The initial appointment for Assistant Professors and Associate Professors is usually for a period of three years. (The initial year is a probationary period for all Federal employees.) At the end of the second year of the initial period, and annually thereafter until a tenure decision is made, an assessment of the faculty member's work is performed by colleagues of the ranks higher than the rank of the individual reviewed, a verbal review is given to the faculty member by the Chair (or Dean of GSBPP), and a statement and explanation of the Chair's (or GSBPP Dean's) decision on whether or not to renew the individual's ap-

pointment is provided to the Dean and Provost. In the event that a Chair recommends notification of intent not to reappoint for a tenure-track faculty member, written notice of the intention is given to the faculty member and a final one-year appointment is made. (Occasionally the initial appointment of a tenure-track faculty member may be at the Instructor level, pending receipt of the PhD degree [or equivalent].)

New faculty appointed at the rank of Professor may be considered for tenure at the time of initial appointment or at a subsequent period as mutually agreed by the candidate, the Department/Group Chair, the appropriate Dean, and the Provost. If tenure at appointment is desired, the recruiting committee of the Department compiles documentation demonstrating the candidate's productivity and letters of reference. The Department Promotion Council considers the case and votes on its approval. The Chair reports the results of the vote in his/her recommendation to the Dean and the Provost. (In the GSBPP, the Dean makes a recommendation to the Provost.) The Chair or GSBPP Dean (or his/her designee) presents the case for award of tenure to the Faculty Promotion Council. Following successful consideration of the case, the offer letter may indicate that the candidate will be awarded tenure after completion of the mandatory one-year government probationary period, pending certification of continued productivity at NPS during that initial period by the Department/Group Chair (or GSBPP Dean).

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PROMOTIONS AND AWARD OF TENURE

Note: For the Promotion and Tenure of Faculty (both tenure-track and non-tenure-track faculty) in the Graduate School of Business and Public Policy (GSBPP), the Dean assumes the same role as the Department/Group Chairs in the other Graduate Schools. In promotions of nontenure-track faculty in the Institutes, the Institute Director has the responsibilities of the Chair and augments the Faculty Promotion Council (Deans and Chairs) for the presentation and discussion of the case.

A. **Regular Procedures**

Prior Teaching Service: Normally award of tenure is considered after six years of postdoctoral teaching experience. Up to three years of prior postdoctoral teaching experience may be transferred to NPS. Newly hired Faculty need to consult with their Chair upon arrival at NPS to request a transfer of prior service. All new faculty members need to send a memo to the Provost (via the Department/Group Chair and the School Dean) making a request for prior credit (if any) and identifying the latest date for consideration of their tenure at NPS. This memo must be sent within three months of arrival at NPS.

Tenure considerations normally occur after six years of teaching experience. It is the practice at NPS to "start the tenure clock" on the first July 1 on or after the faculty member's NPS starting date. Notification of the tenure decision is not later than July 1 six years from this date. The tenure decision and notification will be earlier if prior teaching credit is requested and approved (as described in the prior paragraph) or an earlier date is agreed upon by the faculty member, the appropriate Chair (or GSBPP Dean), the appropriate Dean, and the Provost.

On rare occasions, a faculty member may be considered for tenure earlier than the sixth year of accepted prior service plus tenure-track service at NPS ("early tenure"). Such consideration for early tenure may be brought forward to the Faculty Promotion Council only with the specific prior written approval of the Provost.

An individual may be considered for tenure by the Faculty Promotion Council only once. A negative conclusion of a tenure case will result in notification of non-reappointment without any possibility of a repeat review process. (This also applies to “early tenure” cases.)

The Provost publishes two documents for the upcoming promotion cycle, Promotion Guidelines and Promotion Procedures. These documents guide the Promotion and Tenure process for the year.

The Chair of the Department/Groups or Institute Director indicate the names of candidates being considered in the review.

Next, there is a review of professional qualifications by a Department Evaluation Committee (DEC), appointed by the Chair for this purpose. The DEC consists of at least three faculty members who are senior to the candidate's current position; one member must be from outside the candidate's Department/Group. The DEC submits its report to the Department Faculty Promotion Council (DFPC). The specific procedure for this colleague-review is at the discretion of the individual Department/Group, within policy guidelines provided annually by the Provost to ensure equitable treatment of all faculty.

The Department Faculty Promotion Council (DFPC) convenes to consider the case of each candidate within their purview and makes a recommendation on each case by secret ballot. The Chair of the Department/Group (or GSBPP Dean) does *not* vote in this secret ballot; he/she votes later in the process as a member of the Faculty Promotion Council. The results of the secret ballot are advisory to the Chair/GSBPP Dean and must be included (along with any comments from the DFPC discussion) in the Chair’s (or GSBPP Dean's) recommendation for each individual case.

The Department/Group Chair makes a recommendation to the Provost via the Division Dean. (The Dean of the GSBPP makes a recommendation to the Provost.) This recommendation is supported by appropriate documentation specified by the Provost and must include the written report of the candidate's DEC and all reference letters received.

Annually during the winter quarter, there is a series of meetings of the Faculty Promotion Council (FPC) to consider all recommendations. The participants in the meetings shall have reviewed electronic copies of the Department/Group DEC and Chair's recommendations, as well as access to the documentation for all candidates. At these meetings, a representative of the individual's DEC or the Department/Group Chair/GSBPP Dean answers questions about the candidate's qualifications. After full discussion, the participants in the meetings (with the exception of the Chair of the Professional Practices Committee) individually make their recommendations regarding all candidates to the Provost.

The Provost considers the recommendations and then meets with the Deans Promotion Council (DPC) for further considerations. (The NPS President is invited to attend these DPC meetings.)

Finally, the recommendations of the Provost are presented to the President in the presence of the Deans Promotion Council (DPC).

There may be cases in which faculty members are denied promotion or tenure after having been positively recommended by the faculty of the Department/Group/School, by the Chair (or Dean of the GSBPP), and/or by the Faculty Promotion Council. In that case, the Provost and the appropriate Dean will meet with the Faculty Promotion Council of that Department or Group to discuss the reasons for denial. If they feel that the decision process was flawed, the candidate, colleagues, and/or Chair (Dean of the GSBPP) may request the assistance of the Professional Practices Committee in appealing the adverse decision,. The Professional Prac-

tices Committee shall determine whether such an appeal is justified and, if so, shall make recommendations to the Provost as to how resolution could be pursued.

B. **Alternative Tenure Procedure**

There may be cases in which faculty members have not been recommended or have been recommended negatively by their DEC or their Department/Group for promotion and/or tenure. In most cases, the case is withdrawn from further consideration.

In some cases, the Chair (or Dean of the GSBPP) may forward the case with a description of the recommendation according to the regular procedure or the individual faculty member (or colleagues, with the member's consent) may request that the Faculty Professional Practices Committee consider the member's qualifications and determine whether to recommend promotion or tenure. If the Committee decides to recommend a candidate in such a case, it pursues the following procedures.

The Professional Practices Committee prepares a recommendation and supporting documentation similar to those developed by the Department Chair/GSBPP Dean in the regular procedures.

At the meetings where other candidates are considered, the Chair of the Professional Practices Committee presents the candidate for consideration and discussion. Thereafter, the alternate procedures are the same as the regular procedures.

C. **Alternative Promotion Procedure.** Associate Professors who have served more than 10 years in that rank at NPS and who have not been formally considered for promotion by their academic unit (Department/Group or GSBPP), or who have been turned down for promotion by their academic unit, may apply for a special promotion review for advancement to Professor. The special promotion review will follow these guidelines: a DEC will be formed to perform the usual DEC functions of data gathering, review and recommendation; the Department Faculty Promotion Council will meet to discuss the case and to vote; the Chair/Dean of GSBPP will make a recommendation; the case will come to the Faculty Promotion Council and the Deans' Council, and to the Provost and then the President for final decision. Note that under the special promotion review process, a special promotion case *must* go forward to the President for decision.

If the promotion is not granted, the faculty member must wait a minimum of five years to reapply for promotion to Professor via the special process; however, the faculty member's department/school may initiate a regular promotion review at any time.

D. **Evaluation Criteria for Promotion and Tenure**

Faculty at NPS are judged in two general categories for Pay, Promotion and Tenure: 1) internal service to NPS and 2) external visibility which demonstrably enhances NPS's reputation in either the academic community or DoD (or both). Tenure-track faculty at NPS are expected to be strong contributors to high quality, relevant instruction and to be active in their profession and service to DoD. Adequate performance in these areas does not automatically qualify an individual for merit increases, promotion, or tenure. For example, doing an adequate, even exemplary, job of teaching 1000-3000 level courses, but making only a minimal impact on the world outside NPS, should not qualify a faculty member for advancement. Impact on the outside world can be achieved in any area of faculty performance, including instruction. The quality and quantity of performance above acceptable will determine the rate at which an individual progresses through the academic ranks. Promotion to Professor additionally requires that the person demonstrates consistent leadership in at least one area of faculty activity and has meritorious performance in both internal and external service. Fur-

ther guidance on the evaluation of the scholarly products of faculty is found in the *"Marto" Report* and the *Report of the Committee on Nontraditional Productivity***.** Judging an individual's qualifications for advancement should be on the basis of his/her meritorious performance. By this is meant performance in both internal and external service that are worthy of note. Listed below are some *typical* examples of internal and external activities that indicate such meritorious performance. The implication is not that a person should pick "one from column A and two from column B" and get promoted, but that the successful faculty member should be engaged in a significant amount of meritorious work.

Representative Internal Activities

- Demonstration of quality and flexibility in instructing graduate-level and applications-oriented courses
- Introduction of new material in curricula and development of new courses, particularly special topics courses with DoD relevance
- Development or implementation of creative teaching methods (such as computer-aided instructional materials) to improve upon student learning efficiency
- Development of extensive instructional material
- Leadership in developing and/or refining curricula
- Development of instructional laboratories, including specifying equipment and designing experiments
- Service as academic associate, associate Chair, Institute Director, Chair of a school-wide committee, etc.
- Contributions to interdisciplinary research projects
- Direction of high-quality research efforts by thesis or project students
- Direction of DoN-relevant theses or group projects
- Tutoring students who need remedial work
- Teaching capstone courses in applied areas
- Teaching in operations oriented curricula

Representative External Activities

- Creation of products of direct use to Navy operations, both shore and sea-based
- Publication of research results in refereed archival journals and conference proceedings at a regular rate
- Service in a professional society through elected offices, committee work, conference planning, editorial work, peer/proposal review, etc.
- Participation in fleet exercises
- Participation in a Navy, multi-laboratory research project
- Publication of a textbook that receives acceptance external to NPS
- Offering on-campus and off-campus short courses to DoD personnel

- Creation of instructional material that receives significant use outside NPS, (e.g., textbooks, course notes, teaching methodologies, etc.)
- Acting as a consultant for operational commands and other DoD organizations
- Service in high-level position in DoD
- Publication of technical reports, either unclassified or classified, from a DoD or non- DoD research program (For this work to be a significant factor in promotion and tenure actions, timely external peer review is essential.)
- Contribution of chapters in research monographs
- Presentation of research results to operational commands and other DoN, DoD or Homeland Security organizations
- Participation in research with operational units, laboratories, systems commands, and headquarters of the Navy and Marine Corps (or other services)
- Service to DoD or Homeland Security by participation in workshops, on panels, advisory boards, and liaison with laboratories.

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NONTENURE-TRACK FACULTY

As a complement to the tenure-track faculty, the nontenure-track faculty increases institution flexibility and provides a means for responding to a number of program needs that may be difficult to satisfy in the short term within the administrative parameters of the regular faculty.

All nontenure-track appointments are temporary and offers of employment and renewal letters (if any) explicitly state this fact. Such appointments may or may not be renewable depending upon conditions set forth below.

Terms of Appointment. All nontenure-track appointments are normally for one year, renewable for additional one-year periods up to the maximum allowed length of service. All appointments are contingent on the availability of funds, with a salary dependent on the work performed and the qualifications of the incumbent.

Academic Support Faculty. . Academic faculty are nontenure-track faculty members performing predominantly administrative duties in support of the instruction and research mission of NPS. Academic Support Faculty are appointed by the Provost for fixed terms, not exceeding three years with the possibility of renewal, pending satisfactory performance and continued need for the position.

Administrative Support Faculty. Administrative faculty are nontenure-track faculty members performing predominantly administrative duties with little instruction or research responsibilities. Administrative faculty are appointed by the Provost for fixed terms, not exceeding three years with the possibility of renewal, pending satisfactory performance and continued need for the position.

Research Faculty. Research faculty devote their activities primarily to sponsored research and advising thesis or project students. Generally, research faculty should not teach more than two courses (or sections of a course) in an academic year.

Titles for Nontenure-track Faculty. The following titles apply to nontenure-track faculty.

- **Lecturer**. A Lecturer is a non-tenure track appointment. The Lecturer title applies to faculty whose primary duty is instruction in a specific field that is more limited than that generally covered by a Tenure Track faculty member. (Occasionally Lecturers may be appointed to administrative positions, when appropriate.) This is a temporary position and appointments are usually of one to three years duration, with the possibility of renewal. Appointments generally expire at the end of the Summer quarter.

  Lecturers should have a relevant terminal degree, or a Master's degree, and outstanding instructional capability, and/or significant practitioner experience.

  Departments and Schools are expected to conduct a search before filling Lecturer positions. The search range should be appropriate to the position and need not be national in every instance. The Department/Group Chair (or Dean of the GSBPP) forwards an appointment request package consisting of the position announcement, locations of the position announcement, a listing of applicants, the justification for the choice made, the applicant's resume, and any other pertinent materials. The appropriate Dean must review all appointment requests and forward their recommendations to the Provost for action.

  Because Lecturers are faculty who focus on teaching, their performance expectations differ from those of tenure-track faculty. Instructional excellence, in a classroom or administrative role, must be paramount in their evaluations. Disciplinary research may certainly contribute to the excellence of their teaching and thesis advising, but it should be evaluated in that context rather than as a contribution to the discipline. Similarly, service either within NPS or externally to professional societies, should be evaluated with respect to its contribution to teaching effectiveness.

  The performance expectations for Lecturers are:

  - Effective performance of instructional activities (teaching, advising)
  - Maintenance of currency of academic and/or professional knowledge and qualifications

  Lecturers may be reappointed for terms not to exceed 3 years. There is no limitation on the number of times a Lecturer may be reappointed. Reappointment depends primarily on the continuing need for the explicit teaching duties being performed and on the competency of the faculty member. Reappointment requests are to be approved by the appropriate Dean before being forwarded to the Provost.

  Before the sixth-year of service is completed, the recommendation for reappointment as Lecturer must be accompanied by a written report of a Faculty Review Committee (at least two of whose members are tenured faculty from that School), appointed by the Chair, that has completed an in-depth review of the candidate's performance. The Committee should also certify the continuing need for the position.

  A Lecturer may be promoted to a Senior Lecturer position. The promotion process is the same as that for all other faculty, but focuses on the achievements of the candidate in the area of instruction. Since there is no limitation on how long a Lecturer may occupy a position (other than a continuing need for the position and adequate performance of duties), there is no re-

quirement that a Lecturer be promoted to a Senior Lecturer position in order to continue to hold a position at NPS.

- **Senior Lecturer**. A Senior Lecturer is a non-tenure track appointment. The title is reserved for senior faculty with superb instructional capabilities and who possess specialized knowledge relevant to NPS. (Occasionally Senior Lecturers may be appointed to administrative positions, when appropriate.) This is a temporary position and appointments generally do not exceed a 3-year term, with the possibility of renewal. A senior lecturer should have a terminal or master's degree, and appropriate specialized operational, industrial, government, or application skills and experiences.

  Departments and schools are expected to conduct a search before filling Senior Lecturer positions. The search range should be appropriate to the position and need not be national in every instance. The Department/Group Chair (or GSBPP Dean) forwards an appointment request package consisting of the position announcement, locations of the position announcements, a listing of applicants, the justification for the choice made, the applicant's resume, and any other pertinent materials. The appropriate Dean must review all appointment requests and forward their recommendations to the Provost for action.

  The performance expectations for Senior Lecturers include:

  - Effective performance of instructional activities (e.g., teaching, advising, laboratory development)
  - Maintenance of currency of academic and/or professional knowledge and qualifications
  - Participation in the NPS/Department/School communities
  - Intellectual contributions, including contributions to learning and pedagogy, to practice, or to an academic discipline.

  Senior Lecturers may be reappointed for terms not to exceed 3 years. There is no limitation on the number of times a Senior Lecturer may be reappointed. Reappointment depends primarily on the continuing need for the explicit teaching duties being performed and on the competency of the faculty member. Reappointment requests are to be approved by the appropriate Dean before being forwarded to the Provost.

  Before the sixth-year of service anniversary is reached (during year five), the recommendation for reappointment as Senior Lecturer must be accompanied by a written report of a Faculty Review Committee (at least two of whose members are tenured faculty from that School), appointed by the Chair, that has completed an in-depth review of the candidate's performance. The Committee should also certify the continuing need for the position.

- **Research Assistant Professor**, **Research Associate Professor**, **Research Professor**. These positions are nontenure-track appointments reserved for research faculty with a PhD or equivalent degree, or equivalent experience. Other than the fact that these are nontenure-track appointments, the ranks are equivalent to the tenure-track professorial ranks. The maximum length of service for a Research Assistant Professor is seven years (with a one-year notification of non-reappointment at the end of the sixth year); the other two ranks do not have length-of-service limitations. All Research Faculty positions are explicitly dependent on the availability of research funds.

- **Administrative Associate** An Administrative Associate is a faculty member predominantly engaged in administrative duties in support of the education and research mission of NPS. A Research Associate typically has a Masters degree or a PhD in a field applicable to NPS. Administrative Associates are appointed by the Provost to terms not exceeding three years. Renewals are possible, pending satisfactory completion of duties and availability of funding.

- **Research Associate**. A Research Associate works under the direction of a faculty member to support the reimbursable research activities at NPS. A Research Associate typically has a Masters degree or a PhD in a field applicable to the research. Research Associates are appointed by the Provost to terms not exceeding three years (pending availability of reimbursable funding) upon the recommendations of the Principal Investigator(s), the Department/Group Chair (or GSBPP Dean) or Institute Director and the appropriate Dean. Renewals are possible, pending satisfactory completion of duties and availability of reimbursable funding.

- **Research Assistant**. A Research Assistant is a nontenure-track faculty member with a Bachelors degree who assists in the performance of research duties under the direction of the Principal Investigator. (It is noted that there is also a GS-series of positions with the same title as "Research Assistant". Employees in this GS series are *not* faculty members.)

- **Visiting Instructor**, **Visiting Assistant Professor**, **Visiting Associate Professor**, **Visiting Professor**. These are short-term, nontenure-track positions. The maximum length of service for Visiting Instructor is three years unless the incumbent is pursuing a PhD degree at NPS. In the latter case, this length of service for a Visiting Instructor may be extended to a maximum length of service of seven years. The Visiting Professorial ranks have a maximum length of service of seven years (with a one-year notification of non-reappointment at the end of the sixth year). Due to their short-term nature, promotions are not done for the Visiting ranks.

- **Sponsored Chair**. The Sponsored Chair nontenure-track faculty positions are reimbursably funded by outside government agencies or corporate sponsors (through the NPS Foundation). The Chair positions bring eminent visitors to the NPS campus for the purpose of interacting with NPS students and faculty. A Sponsored Chair appointment is typically one year in duration with renewals possible subject to the mutual agreement of the incumbent, NPS, and the sponsor. Initial appointments are made through a search process established by the sponsor and NPS (usually through a Memorandum of Agreement).

- **Visiting Scholar**. The tile of Visiting Scholar is used at NPS for some international scholars at NPS working under a J-1 visa. Applications for this designation should be initiated by the visitor in consultation with the Chair or Director of the entity being visited for transmittal to the Provost via the Chair/Director and appropriate Dean.

- **Courtesy Appointments**. Occasionally it may benefit both a visitor and NPS if the visitor has an NPS faculty title. In such cases, the visitor may request a courtesy appointment from the Provost via the appropriate Chair/Director and Dean. The request should specify the appointment title, term and present the reasoning for the benefit of title to the appointee and to NPS. If approved, an appointment letter will be returned from the Provost. Visitors without such an appointment letter must not describe themselves as NPS faculty members.

Recruitment. All faculty hiring at NPS is by selection of the best qualified person from a pool of available applicants generated by an open recruitment process. Research Associates may be recruited through recruiting activities carried out by the principal investigator of the research project (in consultation with the Department/Group Chair, GSBPP Dean, or Institute Director). Recruiting for all other positions requires the

involvement of the Department's/Group's, GSBPP's, or Institute's Recruiting Committee. In addition, all recruiting requires the approval of the Department/Group Chair, GSBPP Dean, or Institute Director and must meet EEO policies and procedures. (The NPS EEO Office is ready to help.) This recruitment process also applies to the movement of a faculty member from one nontenure-track category to another, or to the tenure track. See NPSINS 12713.4A for more information.

Nontenure-track Faculty Promotions. . Faculty in no-tenure track positions can be promoted to higher nontenure-track ranks if their contributions qualify them for such advancement. The procedures for promotion of nontenure-track faculty are similar to that for tenure-track faculty described elsewhere. The Department, Group, GSBPP, or Institute forms a Department Evaluation Committee (DEC) to objectively evaluate the candidate's documentation package. The evaluation is done to match the candidate's work profile (i.e., with appropriate emphasis on the contribution to match the expectations of the position). Nontenure-track instruction faculty are evaluated on their internal and external instruction contributions, as well as their service contributions to the School and, where appropriate, external agencies. Research faculty are evaluated primarily on the basis of their research contributions.

Reappointment. At the end of each appointment, renewals of nontenure-track faculty are accomplished by a request from the Chair (or GSBPP Dean) to the Provost (via the appropriate Dean) including a statement on the quality of performance, Department/Group/GSBPP needs, and availability of funding.

Performance Reviews. In addition to renewal requests, performance reviews by Department/Group/GSBPP committees are required every three years. If the Chair (or GSBPP Dean) decides to recommend termination of employment based on the quality of a faculty member's performance, a six-month terminal appointment will be made. Shorter appointments, if any, may be made if the termination of employment is based on Department/Group/GSBPP needs or the unavailability of funding.

Salary Schedule and Equivalent Rank. NPS faculty are on a Salary Schedule established by Department of the Navy and approved by Congress. This schedule is set up around ranks with the various titles of Professor or Instructor. To avoid disrupting the linkage of nontenure-track faculty to this schedule, NPS qualifies the position title with the statement, "with the equivalent rank of _____ Professor," for the purpose of salary determination where needed. The rank equivalence is shown in the following table. This equivalence is for pay purposes only.

Title	**Equivalence for Pay Purposes**
Lecturer Research Associate Administrative Associate Visiting Instructor Visiting Scholar	Instructor
Lecturer Research Associate Administrative Associate Research Assistant Professor Visiting Assistant Professor Visiting Scholar	Assistant Professor
Senior Lecturer Research Associate Research Associate Professor	Associate Professor

Visiting Associate Professor Visiting Scholar	
Senior Lecturer Research Associate Research Professor Visiting Professor Visiting Distinguished Professor Visiting Scholar	Professor
Courtesy Appointment	Not Applicable (paid by "home" institution)

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MILITARY FACULTY

Active-duty military members are often appointed as faculty members at the Naval Postgraduate School. Military members with an earned doctorate in the discipline are eligible for the titles of Assistant Professor, Associate Professor, or Professor with the possibility of promotion by the same procedures used for civilian tenure-track faculty. Individuals without the earned doctorate are eligible for the following titles, as appropriate,

- **Military Lecturer.** This title is used for military faculty typically holding a masters degree.
- **Military Assistant Professor**. To be considered for this rank, the individual must be a proven subspecialist, serving in the area of his/her masters degree.
- **Military Associate Professor**. The title of Military Associate Professor is reserved for officers with extensive academic or academically-relevant experience.
- **Military Professor**. The title of Military Professor is reserved for officers with more extensive academic or academically-relevant experience.

All military faculty members need to be appointed by the Provost, upon the application by the Department/Group Chair and the recommendation of the appropriate Dean. (The application should specify the individual, a short summary of qualifications, the appropriate title, and the term of the appointment.)

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MILITARY FACULTY PROMOTIONS

Military faculty holding the PhD degree (or equivalent experience) may receive professorial rank when assigned to NPS and may be promoted by the same procedures applied to civilian tenure-track faculty. Military faculty without the doctorate (or equivalent experience) are assigned to the Military Lecturer, Military Assis-

tant Professor, Military Associate Professor, or Military Professor rank, depending on qualifications. Since military assignments to NPS are typically for periods of only three years, it is unlikely that an individual can make sufficient contributions to warrant promotion in that short period. In the exceptional case where a person's contribution to the NPS instruction program is sufficient to warrant such promotion, the procedure is the same as for civilian non-tenure-track faculty.

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NOTIFICATION OF PROMOTION RESULTS TO FACULTY CANDIDATE

The Department/Group Chair (or GSBPP Dean) shall advise each faculty candidate of the recommendations that the Chair (or GSBPP Dean) proposes to make to the Provost regarding promotion and/or tenure for that person before the Chair (or GSBPP Dean) submits such recommendations to the Provost. Notification of final decisions by the NPS President will be made in writing by the Provost to all faculty members who are promoted, granted tenure, or awarded step increases in salary. Further, if tenure is not awarded, written notification of an intention of non-reappointment will be provided to the affected faculty member. If a Chair's (or GSBPP Dean's) recommendation for promotion and/or award tenure is not approved in an individual case, the reasons for such non-approval will be communicated to the Chair (or GSBPP Dean) by the Provost and discussed by the Chair (or GSBPP Dean) with the faculty member concerned.

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PAY-STEP INCREASES

Annually, the appropriate Dean allocates available pay steps to each Department/Group (or to the GSBPP). The Chair (or GSBPP Dean) assigns these pay steps to faculty members in recognition of especially meritorious performance during the preceding year. The Chair (or GSBPP Dean) may also request additional consideration for individual faculty members from the Provost (via the appropriate Dean). The Provost makes final recommendations to the President.

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MENTORING

A mentoring program has been established as part of the faculty development effort at NPS. Each faculty member who has not reached the highest rank of their respective tenure-track or nontenure-track ladder is to be mentored by a Faculty Mentoring committee. This committee is appointed by the Department/Group Chair (or GSBPP Dean) in consultation with the faculty member. This mentoring committee is charged with performing an annual review of all aspects of the faculty member's performance (including instruction, scholarly activity, service activities, etc.) The committee is expected to evaluate the quality of the faculty member's products and to compare the faculty member's productivity with that expected from a successful faculty member of the same rank. Annually, the Mentoring committee provides the candidate with a written evaluation (with a copy provided to the Department/Group Chair and the Dean of the appropriate Graduate School). Informal feedback should also be provided to the candidate at other times, as appropriate.

NON-CITIZEN FACULTY MEMBERS

Use of non-citizen faculty members provides opportunities for the employment of high quality professionals, often in areas of national shortage. It is prudent, however, to establish policy to control the overall levels of non-citizen faculty members. The following guidelines apply:

- Tenured Faculty. Non-citizens of the United States may not be granted tenure at the Naval Postgraduate School. Non-citizen faculty who reach the tenure decision point will be judged for tenure at the normal time. If the decision is positive to grant tenure, the individual will continue on a year-to-year appointment until either a) citizenship is granted, upon which occurrence tenure will be granted, or b) citizenship is denied or the individual decides not to apply for citizenship, upon which occurrence the individual will not be reappointed (with one year's notice).
- Tenure-Track Faculty. The individual is expected to pursue citizenship diligently and to acquire it at the earliest opportunity. Failure to do so is grounds for non-reappointment after the usual notification period.
- Nontenure-Track Teaching Faculty. Within each Department/Group, the number of non-citizen teaching faculty who are not on the tenure-track will be controlled so that no more than approximately 10% of the teaching budget is allocated for their services.
- Nontenure-Track Research Faculty. Department/Group Chairs will ensure that no more than approximately 30% of their Department/Group research labor is used on employment of non-citizens.
- Chairs. Non-citizen percentage controls do not apply.

To avoid problems, before recruiting or recommending employing non-citizens, the Chair should consult with the Office of Academic Administration, the NPS Security manager and the HRO Director.

It should be noted that dual citizenship is not allowed for faculty holding security clearances. Removal of a security clearance makes a faculty member ineligible for further employment.

Visa Requirements. Non-citizen faculty members are required to have a visa to cover their period(s) of employment at the School. An important consideration in applying for a visa is the time requirement. For example, a minimum of one year is required to receive an H-1 visa. Briefly, the types of visas used at NPS are:

- H-1 visa: for aliens of distinguished merit and ability coming to the U.S. to perform work requiring that level of ability:
  - For temporary stays, issued for one year at a time.
  - Extensions may be possible for as long as 6 years.
  - Holder may apply for admission as a permanent resident while in the U.S. in H status. No intervening residency in the home country is required.
  - Visa-holder's pay is subject to Social Security tax withholdings.

- J-1 visa: for temporary admittance as a participant in the NPS visitor exchange program designated by the Department of State. Holders of a J-1 visa should apply to the Provost (via the appropriate Chair/Director and Dean) for a title of "Visiting Professor" (or "Visiting Assistant Professor", "Visiting Associate Professor"), "Research Scholar", or "Short-term Scholar" as authorized by the Department of State. The Director of Academic Planning coordinates all requests for J-1 visa status.
    - Issued for one year (with renewals possible for a total of three years) or for up to three years. (Note: At the time of writing [June 2006], indications are that the time limits will be increased from three years to five years.)
    - Two-year residency in home country is required after a J-1 stay in the U.S. before applying for immigration.
    - Visa-holder's pay is not subject to Social Security tax withholdings.

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CHAIR PROFESSORSHIPS

A limited number of Chair Professorships have been established at NPS for the purpose of attracting high-quality academicians or practitioners with the ability to contribute significantly to the academic programs at NPS. Such Chairs are faculty positions and, as such, exist only within an academic unit (Departments, Groups, Schools or Institutes). Incumbents are assigned the rank of Visiting Associate Professor or Visiting Professor, as appropriate, since the appointments are of fixed duration. As with any faculty position, appointment as a Chair Professor requires approval by the appropriate Dean, Provost, and President, with a signed appointment letter being sent by the Provost.

Establishment of a Chair requires a formal agreement between NPS and an external sponsor. These agreements are Memoranda of Understanding (MOU) between NPS and the sponsor outlining the purposes of the Chair, the duties of both parties, and the duties of the chairholder. NAVPGSCOLINST 3900.3F describes the policies and procedures associated with Chair professorships. The Associate Provost and Dean of Research provides oversight of the Chair Professorships at NPS. The Research and Sponsored Programs Office can provide information on the preparation of an MOU to support the establishment of a Chair position.

There are several different funding arrangements possible for chairholders, but a common arrangement for civilian faculty is the Intergovernmental Personnel Act (IPA) agreement (see NPSINST 12334.1B.pdf for details). The Research and Sponsored Programs Office handles preparation and routing of all MOU and IPA agreements for Chair Professorships.

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EMERITUS FACULTY

Retired tenured faculty members can receive emeritus faculty status. The proper title will be as a suffix following the highest rank achieved as an active faculty member (e.g., Professor emeritus, Associate Professor emeritus). The conferring of emeritus status is in recognition of service to the Naval Postgraduate School and to its students.

Eligibility. All tenured faculty members may receive emeritus status upon application to the Provost after retirement.

Administrative Policies. The following administrative policies apply:

- Facilities. Emeritus faculty members are eligible to use the recreation facilities (gym, etc.), the library, computing facilities, and the facilities of the Commissioned Officers and Faculty Club.
- Identification Cards. Upon retirement, emeritus faculty will receive an identification card to assure use of the NPS facilities.
- Security Clearance. Emeritus faculty actively engaged in teaching or sponsored research at NPS may be able to retain their security clearances at NPS. Check with the NPS Security Manager.
- Faculty Membership. Emeritus faculty are "Associate members" of the faculty with all of the privileges of regular members (primarily privileges of the floor and service on committees) but not the right to vote or to hold office.
- Research Proposals. Emeritus faculty may file research proposals that support the School's mission. These proposals will follow the usual procedures including obtaining the required approval signatures.
- Office Space, Secretarial Support, and Other Resources. When available, office space and resource support will be assigned to those emeritus faculty desiring it. The allocation of resources to emeritus faculty members will be done by the Chair of the Department/Group (or the GSBPP Dean). Priority will be given to emeritus faculty engaged in teaching, with secondary priority to those engaged in sponsored research.
- Benefits. Benefits (health insurance, life insurance, retirement annuities, etc.) for retired faculty members are governed by Civil Service regulations and policies. Retired faculty should consult the Office of Personnel Management for more information.
- Mail. Emeritus faculty may receive official professional mail at their Department/Group.
- Computer Accounts. Emeritus faculty are able to keep their NPS computer and email accounts, if desired.
- Parking. Emeritus faculty in a teaching status are eligible for a faculty parking sticker (The Office of Academic Planning provides the approval.).

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FACULTY PROFESSIONAL RESPONSIBILITIES

The faculty member is guided by the deep conviction of the worth and dignity of the advancement of knowledge. This mandates a personal responsibility to live up to full intellectual potential and to develop a solid base of professional activities. He/she recognizes that an academic career is a full-time job.

As a teacher, the professor has responsibilities to students to encourage their free pursuit of learning, emphasizing a role as intellectual guide and counselor. The best scholarly standards must be maintained, bearing in

mind the School's educational mission and the officers' future requirements. The professor earns the respect of students and of colleagues as regards his/her teaching activities, both in and out of the classroom.

As a scholar, the faculty member develops and maintains a reputation among professional peers outside the School through such activities as publication; consulting; active participation in learned societies; interaction with other Navy, DoD, or Federal activities; etc. The scholar recognizes a responsibility to contribute actively to the body of knowledge encompassed by his/her field.

As a member of the faculty, the professor has the obligation to exercise good academic citizenship by full participation in the governance of the faculty, including the acceptance of committee duties, etc. The faculty member also recognizes personal responsibilities to the administrative operation of the School by direct participation and by adherence to stated regulations.

Finally, as a member of the Naval Postgraduate School and of the Navy community, the faculty member has a special responsibility to insure that all professional activities are consistent with the mission of the Navy. The faculty member is aware of the importance of graduate education to the Naval and military officers and other students of NPS and is thus committed to achieving educational objectives useful to the student throughout his/her career.

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SECTION V – SCHOOL POLICIES AND PROCEDURES

ACADEMIC WORKLOAD

The full-time academic workload encompasses many activities and is a different mix for each faculty member. These activities may include classroom instruction, distance learning instruction, laboratory instruction, preparation of course or laboratory materials, preparation of web-based learning materials, thesis or group project supervision, performance of research, curriculum design, student advising, NPS administration, advising Navy and other government activities, and myriad other tasks. Each quarter, faculty members are required to inform their Chair (or the GSBPP Dean) in writing of the activities that they will be performing during that quarter in the form of a "Workload Agreement". The Chair (or GSBPP) signs the form if the stipulated workload is appropriate and approved. The appropriate Dean arbitrates any disputes regarding appropriate workloads.

Quarters containing the two-month faculty intersession can be spent in diverse ways. The intersession period can be used for a variety of activities including reimbursable research, classroom instruction (when requested by the Department/Group Chair), reimbursable short-course instruction, NPS administrative activities, or leave without pay. The third month of the intersession quarter can be used for annual leave, reimbursable research, or for academic duties determined in cooperation with your Chair (or GSBPP Dean). The Workload Agreement is used to delineate the expected duties (if any) during any quarters with intersession periods.

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ACADEMIC COUNSELING

Academic counseling of students is the responsibility of the Program Officers, Academic Associates, and the individual members of the faculty. The counseling program is designed to encourage students to seek assistance when advice is desired or when the first indications of academic difficulties develop. At the beginning of each quarter, each faculty member should post office hours, notify their classes of the schedule, and encourage students to arrange appointments in cases of schedule conflicts. Office hours should be maintained conscientiously and should be distributed over the week to accommodate the students.

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ASSESSMENT AND ACCREDITATION

In order to promote high quality graduate education, NPS is an institution committed to continuous evaluation and improvement. This commitment begins at the course level with faculty receiving informal feedback from students and using this information for course and program improvement. It continues in a more formalized manner through the various faculty and student surveys, thesis and project evaluations, and student portfolios collected by some departments. Programmatic and school level evaluation by external reviewers is carried out through three main processes: the Curricular Review, the Academic Program Review, and Accreditation Reviews.

- **Curriculum Review**: Each curriculum is structured around a set of Educational Skill Requirements (ESRs) which are developed by an external program sponsor at the flag- or general-officer level to meet specific sponsor educational needs. Every two years, each curriculum is reviewed by the sponsor for currency of the program. In addition, there is a biennial flag-level validation of all Navy subspecialty billets. Specific guidelines for conducting curricular reviews can be found in the NPS Instruction 1550.1C.
- **Academic Department Review.** On a 6-year cycle, each department/group/academic curriculum committee will examine the state of its department and degree program(s) with a self-study and create a strategic plan that will provide the foundation for further evaluation from an external review board. This external review board will be invited to NPS by the appropriate Dean and Chair, after nominations are received by the appropriate Dean from the Chair. The purpose of this review is directed not to the curricular program and defense relevancy but to the quality of the academic and degree program, to improve quality of every department, and to provide guidance for administrative decisions in support of continual improvement. The recommendations from the external review board form the foundation for improvement.
- **Accreditation Review**. The culmination of the assessment efforts, which started at the course level and progressed through the curricular, departmental and school levels, is programmatic and institutional accreditation. NPS maintains accreditation by the Western Association of Schools and Colleges (WASC). Additionally, the Electrical Engineering, Mechanical Engineering, and Astronautics programs are accredited by the Accreditation Board for Engineering and Technology (ABET) and the management programs are accredited by the National Association of Schools of Public Affairs and Administration (NASPAA) and by the Association to Advance Collegiate Schools of Business (AACSB). These reviews ensure that NPS and the accredited programs meet the requirements of the accrediting agency.

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COMMENCEMENT EXERCISES

All faculty members who are not on leave or travel are expected to attend the commencement exercises in academic regalia or military uniform, as appropriate. Military faculty members who hold a PhD degree are authorized to wear academic robes. The detailed instructions for commencements are published a week before each event. Consult your Department's Administrative Support Assistant or your Chair if you have questions.

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CONFERENCES

The school hosts classified and unclassified conferences on a wide variety of topics related to the school's mission. All conferences must have prior approval of the Dean of Research, acting on behalf of the President.

Conferences are scheduled and coordinated through the NPS Conference Coordinator. Conference sponsors are required to permit NPS students and faculty to attend conference sessions, free of charge, on a space-available basis. Advance programs are often available from the Conference Coordinator. All faculty are encouraged to take advantage of the conference program and to make appropriate opportunities known to their students. Faculty wishing to hold a conference or workshop at NPS can obtain guidelines from the Conference Coordinator. See the Conference Coordinator web site for more information.

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CONSULTING AND OTHER OUTSIDE EMPLOYMENT

NPS, recognizing that outside consultation in the field of a faculty member's expertise has the potential for enhancing the professional competence of a faculty member, allows consulting activity which does not interfere with the performance of all duties at NPS. Consulting activities not in excess of an average of one day per work week (in aggregate) are considered in conformity with this rule. The faculty member, in accepting a consulting agreement does so as an addition to his/her full-time employment by the School and not as a substitute for a portion of it.

The NPS policy on consulting should be reviewed. A faculty member is required to obtain approval from the Provost (or the President, for military faculty) *in advance* of any proposed engagement in extra-School employment for remuneration. This is done by completing a request for advance approval of outside employment or professional activity in accordance with NAVPGSCOLINST 5370.3E**.** The completed application is to be submitted to the Provost via the Department/Group Chair (or GSBPP Dean), the appropriate Dean, and the Staff Judge Advocate. (Military faculty follow the same procedure.) Approval (or non-approval) will be indicated in writing in a memo to the faculty member from the Provost. Approval encompasses the fiscal year of the submission and the following fiscal year. Any continuing consulting beyond that period must be resubmitted for review and approval.

Faculty must review the provisions of the Secretary of the Navy instruction 5370.2 (series) on "Standards of Conduct and Government Ethics" and NAVPGSCOLINST 5370.3E for their own legal protection. Some of the basic principles set forth in the "Standards of Conduct" instruction have been listed in the section on "Ethics and Standards of Conduct".

Faculty members who propose to do consulting which entails travel should make proposed travel requirements known to the Provost at the time that the notice is given of the consulting agreement and should inform the Provost of subsequent changes in travel requirements. A faculty member's primary responsibility is to the Naval Postgraduate School and this commitment must not be compromised. With proper approval of the basic consulting relationship, permission need not be sought for each journey outside the immediate area. Any problems which may arise as a result of this outside-of-area consulting should be treated in the same manner as one would handle a delay in his/her return from annual leave (i.e., notification of the Chair [or the GSBPP Dean] and arrangements to contact any students affected by the late return).

The ultimate responsibility for adhering to the provisions of the DoD directives cited above rests with the individual faculty member. Sanctioning of consulting activity does not imply immunity from the conditions of these directives. There is a continuing obligation for the faculty member engaged in consulting to review the nature of the employment to ensure his/her continued compliance with applicable directives.

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COOPERATIVE RESEARCH TOURS AT NAVAL LABORATORIES

Cooperative tours at Navy research facilities during the intersession period provide many civilian faculty members the opportunity to do research at Navy/Government laboratories and to keep abreast of current Navy research problems in their fields of interest. Arrangements for a cooperative tour may be initiated by the individual faculty member through his/her Department Chair (or the GSBPP Dean) and the Dean of the appropriate graduate school.

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COPYRIGHTS

The literary property rights of government officers and employees are not affected by their government employment, providing their literary product has *not* been produced as part of their official duties. (For clarification, see Digest of Opinions, Judge Advocate General of the Armed Forces, Volume 9, page 163, 1959-1960). All publications not required of a faculty member specifically as a part of his/her teaching or research assignment (as recorded in the quarterly workload agreement) will be recognized as having been prepared on his/her own time and not as part of official duties. The referenced JAG opinion is directed solely to the question of copyright entitlement. It does not alter the policy of the Naval Postgraduate School that use of NPS support labor to prepare manuscripts to be commercially marketed is not authorized.

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COURT LEAVE

California law does not exempt teachers from jury duty and most NPS faculty can expect to be called to serve. When that happens, the faculty member should notify his/her Department/Group Chair. Further, he/she should, as quickly as possible, communicate with the jury commissioner to request special consideration, if required (e.g., if the proposed service time conflicts with administering final exams). While experiences vary from court to court and from time to time, most faculty members who have been called feel that the local court officials have been helpful in adjusting periods of service to coincide with intersession periods, to fall on particular days of the week on which the professor was free, and to avoid previously planned travel.

Individuals called for jury duty are placed in a “court leave” status. (Please provide your Department’s faculty timekeeper with a copy of the summons to jury duty.) This court leave does *not* count against annual leave because the individual has been administratively authorized to perform the duty. A Federal employee who receives regular compensation and benefits while performing jury service, may not be paid a fee for attendance as a juror. Federal employees are entitled to be reimbursed for mileage for each mile actually traveled in attending court as a juror after the first day, in-going only. Requests for this reimbursement should be completed at the appropriate Court. Individuals called for court duty while on annual leave should inform the Director of Academic Planning's Office (through their Department Administrative Support Assistant) so that they can be placed in court leave status instead. The change of status will not occur unless notice is given. (Faculty members on unpaid leave will not be recalled to duty and placed on court leave.) For complete information, see NAVPGSCOLINST 7410.3**.**

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DISTINGUISHED VISITORS AT CONFERENCES

Faculty who are coordinating conferences or symposia should report any distinguished conference visitors (who are not coming to do any business with NPS) to the Conference Coordinator. The Conference Coordinator reports such visitors to the Protocol Office in case the NPS President wishes to meet with such visitors.

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ETHICS AND STANDARDS OF CONDUCT

In addition to the expected ethical standards of all faculty in academia, NPS faculty members, as government employees, are held to high federal standards of ethics and conduct. The goal is to avoid even the appearance of impropriety.

The faculty member must, for his/her own legal protection, review the provisions of the Secretary of the Navy Instruction 5370.2 (series) on "Standards of Conduct and Government Ethics" and NAVPGSCOLINST 5370.3E**.** Some of the basic principles set forth in the "Standards of Conduct" instruction include:

- Government facilities, property, and employee labor may not be used for other than officially approved purposes or for private gain (i.e., they cannot be used for consulting activities).
- A government employee may not engage in any activity, with or without compensation, which might result in a conflict of interest or the appearance of conflict of interest.
- With the exception of military reserve pay, government employees may not receive basic pay from more than one position in the government for more than an aggregate of 40 hours of work in one calendar week (Sunday through Saturday). (This is considered "dual compensation" and is forbidden by law.)
- Government employees may not receive any salary or supplementation of salary from a private source as compensation for their government service.
- A government employee may not use, directly or indirectly, "inside information" to further a private gain for his- or herself or for others.
- A government employee is prohibited from using his/her grade, rank, title or position in connection with any commercial enterprise or in endorsing any commercial product. This does not preclude author identification for materials published in accordance with DoD procedures.
- A government employee may not engage in outside employment or other outside activity, with or without compensation, that may reasonably be expected to bring discredit on the government or the Department of the Navy.

Carelessness in the formulation of agreements or thoughtless actions by either the faculty member or his/her employer can lead to the embarrassment of the School and the possible assessment of civil penalties against or criminal prosecution of the individual faculty member.

The conflict of interest statutes have been interpreted as applying not only to the individual government employee but also to members of the individual's immediate family. Officers on active duty and retired officers who are members of the faculty, are additionally constrained by laws and regulations related to their military service. Further information on ethics and standards of conduct are available from the NPS Legal Counsel in the Judge Advocate General's office or from the NPS Human Resources Office.

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FACULTY AWARDS

Faculty are eligible for consideration for the following awards.

- **Rear Admiral John Jay Schieffelin Award for Excellence in Teaching**. The award is made annually to recognize permanent faculty members who, through wide consensus, excel as teachers. The phrase, "excellence in teaching," refers to that complex of personal and professional qualities and actions on the part of the teacher which make themselves felt primarily at the interface of personal contact between student and teacher; help transmute the student's encounters with the subject matter into insight, enlightenment, and love of learning; elicit from the student responses in thought, feeling, and action which enhance his/her capacity for self education, and manifest themselves in an effective individual style which authentically reflects the teacher's own unique personality, experience, character, and convictions.

  A committee appointed by the Provost conducts a ballot polling of students and graduates to determine the recipient of the award. Usually, the polling begins in January so as to be completed by early June.

  Normally, the award is presented at the June graduation ceremony. The award consists of a certificate and a monetary emolument based on moneys from the Rear Admiral John Jay Schieffelin Award fund and the civil service award system.

- **Honorary Title of Distinguished Professor or Distinguished Senior Lecturer**. The criteria for the honorary title of Distinguished Professor or Distinguished Senior Lecturer are:

  - In general, a candidate should be recognized as a "Senior Statesman" among his/her colleagues.
  - The recipient's career should be distinguished by a combination of the following factors: (1) continued effective service to NPS and the faculty who have aided the growth or enhanced the stature of the Naval Postgraduate School *and* (2) research or scholarly contributions while at NPS which have had significant impact on the candidate's field.

The Provost annually seeks applications from the faculty. Candidates are prioritized by the Dean's Council and the Provost recommends the recipients to the President, who makes the final selection.

In recognition of this honor, the recipient receives a silver medallion on a neck ribbon to be worn with academic regalia. The recipient is also entitled to the honorary address, "Distinguished Professor" or "Distinguished Senior Lecturer" in appropriate circumstances.

- **Carl E. and Jessie W. Menneken Faculty Award for Excellence in Scientific Research**. This award is presented annually to an NPS faculty member who has demonstrated outstanding effort and achievement in research in science or engineering. The award recognizes meritorious research having identifiable impact on Navy or other Department of Defense technology. The award is especially for the encouragement and benefit of younger or junior faculty members. Selection is made annually from nominations received by a committee appointed by the Dean of Research.
- **Richard Hamming Teaching Award.** Mrs. Wanda Hamming, widow of Professor Richard Hamming, has provided resources to establish the Richard W. Hamming Teaching Award. The purpose of the Award is to recognize a current or recently retired faculty member:
  - Who does an excellent job in classroom teaching as evidenced by the students' mastery of the course material,
  - Whose thesis or group project supervision is recognized to be excellent,
  - Whose contribution to the NPS student's education extends beyond the classroom

  The Hamming Teaching Award is administered by the Faculty Council of the Naval Postgraduate School. A committee formed by the Faculty Council Executive Board considers all nominees and make a recommendation. The President of the Naval Postgraduate School makes the final selection of the winner.

  The award consists of a plaque and a cash award.

- **Hamming Interdisciplinary Achievement Award**. Mrs. Wanda Hamming, widow of Professor Richard Hamming, has provided the NPS Foundation with the means to fund an annual award for achievement in interdisciplinary activities. Members and Friends of the NPS Foundation have also contributed to this award.

  This award recognizes innovative accomplishments that support and enhance interdisciplinary activities at NPS. Such contributions might include creative course materials in interdisciplinary courses or particularly effective mentoring of students in interdisciplinary courses or curricula. Research that advances interdisciplinary solutions to contemporary military problems and issues will enhance the nomination. Favorable consideration is given to efforts that involve NPS students in a collaborative manner and to efforts that show evidence of having been particularly stimulated and nurtured by the NPS environment.

  The award is open to all faculty instructor positions, both tenure track and non-tenure track.

  A faculty committee, constituted annually by the Provost and the Chair of the Faculty, collaborates with the Foundation in selecting the award recipient. Under suitable conditions, the award

may be shared between two (or more) recipients, particularly if there is collaborative work. The award need not be made every year.

The award is an engraved plaque and a substantial monetary award.

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FACULTY LABOR PLAN

At the beginning of the fiscal year (or academic year), each Department/Group Chair develops and submits a Faculty Labor Plan for the Department/Group. This plan identifies the number of days in each quarter that each faculty member will spend supported by NPS funds and reimbursable funds. It is important for each faculty member to understand and discuss this plan with the Chair in order to identify the expectations for teaching and other instructional activities and the amount of reimbursable activity expected. Major changes and updates to the plan need to be discussed with and agreed to by the Chair.

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FACULTY PERFORMANCE APPRAISAL

Besides the Promotion and Tenure (P&T) process, all NPS Faculty are subject to an annual performance appraisal. This Appraisal system meets the government standards for annual appraisals. NAVPGSCOLINST 12430.2F establishes the basic framework for the civilian faculty performance appraisal program in accordance with Title II, Civil Service Reform Act, Public Law 94-454. This program is intended to supplement, but not replace, the pay, promotion, and tenure procedures.

Each year faculty members receive a copy of the appraisal standards for the forthcoming year. All faculty members are appraised against these established performance standards annually. The appraisal period is from 1 May to 30 April of the following year. Faculty members receive appraisals of “Meritorious” or “Not Successful” in elements applicable to their position, as well as a summary rating. A first-time rating of “Not Successful” in any element initiates a remedial process that allows a Faculty member to improve his/her performance. Faculty members may grieve performance appraisals and other matters relating to the appraisal program in accordance with .NAVPGSCOLINST 12430.2F.

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HALL OF FAME/ DISTINGUISHED ALUMNI PROGRAM

Through the NPS Hall of Fame and Distinguished Alumni programs, NPS recognizes graduates and other individuals who have reflected great credit upon NPS and its academic mission. NAVPGSCOLINST 1650.2 contains detailed information on these award programs, along with nomination forms.

- **Hall of Fame**. Membership in the NPS Hall of Fame recognizes the accomplishments of distinguished alumni and friends who have made significant contributions to society, their nation, and to NPS. This honor generally requires far-reaching contributions of national or interna-

tional service at the very highest levels, coupled with significant advocacy of NPS. The award may be granted posthumously. Alumni status is *not* required for this award.

Nominations are collected by the NPS Alumni Relations Office (ARO) using a form found in . NAVPGSCOLINST 1650.2. A selection board (described in the NPS Instruction) reviews the candidates and makes a recommendation to the NPS President and Provost. (The President and Provost may also designate awardees without the selection board's review.) Induction into the NPS Hall of Fame preferably takes place at an appropriate ceremony at NPS.

Hall of Fame inductees receive a NPS Hall of Fame medal and have their portrait placed in the Hall of Fame display.

- **Distinguished Alumni Program**. This program recognizes alumni who have made distinguished contributions to a branch of learning associated with national security, have rendered distinguished service to the national security, or have made a distinguished professional achievement that reflects credit on the recipient and NPS. Alumni automatically eligible for the award include those who have attained Flag or General rank or who have been appointed at a Senior Executive Service level (or equivalent in their nation). The award may be granted posthumously.

  Nominations are collected by the NPS Alumni Relations Office (ARO) using a form found in . NAVPGSCOLINST 1650.2. A selection board (described in the NPS Instruction) reviews the candidates and makes a recommendation to the NPS President for final approval and selection. Induction of Distinguished Alumni preferably takes place at an appropriate ceremony at NPS.

  Distinguished Alumni receive a framed certificate signed by the President and Provost. Their names are added to a wall plaque displayed on campus in a position of honor that is accessible to students, faculty, and staff.

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HUMAN SUBJECTS IN RESEARCH

Due to past abuses nationally and internationally, the use of human subjects in research is tightly controlled. At NPS the use of human subjects in research (or laboratory) experiments is not allowed without permission from the NPS Institution Review Board (IRB). If you or students plan to use human subjects in your class or your research, see NAVPGSCOLINST 3900.4 and consult the Research and Sponsored Programs Office for processes to receive approval *before* beginning the experiments.

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IDENTIFICATION CARDS

The Common Access Card (CAC) is a DoD-wide identification card issued to DoD employees. The NPS Human Resources Office (HRO) is the approving authority to authorize the issuance of a CAC for faculty and staff Federal civilian employees. (Military Faculty are authorized by the PSD Monterey ID office.) Federal civilian personnel fill out Parts 1 and 2 of DD Form 1172-2 and obtain verification and approval from the

HRO. (Citizenship will need to be verified with birth certificate, passport or naturalization certificate.) With the completed approved form, the PSD ID Office issues the CAC.

Some contractors are eligible for a CAC (Common Access Card). The same procedures are followed, but the approving authority for most contractors is the Dean of Research.

NPS has established the Biometric Identification System (BIDS) card to control base access and to provide identification cards for personnel associated with NPS who are not eligible for a CAC. The following fall into this system (with the approving authority noted in parentheses):

- Emeritus Faculty (Director, Academic Planning)
- Visiting civilian faculty (Director, Academic Planning)
- Postdoctoral researchers (Director, Research and Sponsored Programs Office)
- Contract researchers (Director, Research and Sponsored Programs Office)
- Exchange Scientists and Engineers (Director, Research and Sponsored Programs Office)
- Visitors under the Intergovernmental Personnel Act (IPA) (Director, Research and Sponsored Programs Office)
- Visitors on sabbatical at NPS (Director, Academic Planning)
- Civilian employees from other US government agencies detailed to NPS (Director, Academic Planning)

Personnel initiate the request on NPS PD Form 001 (Application for BIDS Card Enrollment) in Parts I and II. The approval authority (noted above) verifies and approves the application. The office that issues the card for faculty is the Police Vehicle Registration office just outside the Del Monte Avenue entrance to NPS.

Note that internationals in these categories must also have a visit request made before their arrival.

Detailed information can be found in NAVPGSCOLINST 5512.2

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INTEGRITY OF RESEARCH

Reports in the national press of scientific misconduct remind us that the maintenance of high standards in the conduct of research is the shared responsibility of all participants: the investigators, the institutions, our professional organizations, and the government. NPS strives to ensure that good research practices are adhered to and that our reward system appropriately recognizes research quality, integrity, and mentoring. All faculty must work with vigor to reduce the occurrence of practices that undermine the integrity of the research process and its results. Misconduct in research (such as fabrication, falsification, and plagiarism) and questionable research practices (such as inappropriate authorship, misuse of student talents, or faulty data handling) are not tolerated at NPS. We insist on truthful reporting of results with enough thoroughness that others are able to reproduce and build on experiments and that significant errors are corrected when recognized. Individual researchers at NPS share a collective responsibility for ensuring integrity in NPS research. They are expected to

take action when they become aware of inappropriate research conduct and to support and protect those individuals who, in good conscience, report suspected misconduct in research

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LONG-TERM TRAINING AND EDUCATION PROGRAM

Section 16 of the *Policy Regarding Appointment, Promotion, Salary and Tenure Of Office Of Civilian Members of the Faculty* provides the basic policy of this program. It is the policy of the Navy Department to provide long-term training essential to the accomplishment of its mission. “Long-term” training refers to training consisting of 120 consecutive training days or more, in either Government or non-Government training facilities and in management or within specialization subject matter categories. This training and education must have high potential value to the Navy Department and must be related to specific functions and responsibilities, either current or those of the future. The training must relate to the employee's performance in the present assignment or in planned future assignments. The employee must have demonstrated aptitude for the training and have reached a point in career development where the training opportunity is appropriate.

This program comes under the purview of the Office of Personnel Management and specifics may be found in the Civilian Personnel Instruction (CPI410). A long lead time between application and implementation is required since the requests for training must be centrally approved. Training for the sole purpose of obtaining a degree or for personal benefit is not authorized under this program. Faculty members interested in exploring the full aspects of this program should contact their Department Chair (or the GSBPP Dean).

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MEMORANDA OF AGREEMENT or UNDERSTANDING

Occasionally faculty members will want NPS to enter into a formalized agreement with an Instruction or Research Sponsor. Usually such agreements are done with a joint Memorandum of Agreement (MOA) or a Memorandum of Understanding (MOU). Only the NPS President is authorized to enter into such agreements; faculty are *not* authorized to sign or enter any such agreement. (The Associate Provost/Dean of Research can sign MOAs which serve the purpose as substituting for a research proposal.) Information on the purpose and preparation of such agreements is within the purview of the NPS Research and Sponsored Programs Office. See NPSINST 5760.2A.pdf for detailed information and contact the Research and Sponsored Programs Office for guidance and help when you are ready to begin the process of formulating a MOU or MOA.

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NEPOTISM

In accordance with federal law, federal government officials (including the NPS faculty) may not grant improper preference, assistance, or advancement to an individual related by blood or marriage. Among the prohibited practices are

- Participating in or advocating any personnel action (including hiring, promoting, etc.)
- Supervising work activities or job performance of a relative (including temporary workers, student workers, etc.)
- Making any Institutional decision of direct benefit to a relative (officials must recuse themselves from participating in such a decision)
- Conflicts are best resolved by management, using reassignments or transfers. NPSINST 12310.1 describes a reassignment/termination procedure if a conflict cannot be resolved.
- Conflicts of interest based on nepotism need to identified to the Human Resources Office by the Chair/Director via the appropriate Dean when the a personnel action is proposed. The HR Director reviews any proposed operational changes proposed by the managers to eliminate the possibility of improper influence. The Provost or NPS Chief of Staff has the final review and approval authority.

It is important to avoid the appearance of nepotism. Non-supervisory faculty need to be especially aware of possible conflicts of interest when they are the principal investigators (PI) of a reimbursable project.

See NPSINST 12310.1 for more information.

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ON-CAMPUS ATTENDANCE

It is recognized that faculty can perform many of their duties either on or off campus; for this reason work hours are flexible. In order to allow interaction with our students, however, faculty members are normally expected to be available on campus to students for discussions and advising. In addition, they are expected to attend most Department/Group/GSBPP meetings, meetings of assigned committees, and graduation ceremonies. They must inform their Department/Group Chair (or GSBPP Dean) of any significant amounts of time spent off-campus during normal working hours. If off-campus time is determined to be 25% or more, a “telework agreement” must be established and approved by the Provost upon request with recommendation of the Department/Group Chair (or GSBPP Dean) and the appropriate Dean. The Human Resources Office is available to provide information on establishing a telework agreement.

Because of student interactions, committee work, and other professional responsibilities, faculty members are expected to be resident at NPS while in pay status, except for sabbatical periods or periods of leave. If work is to be performed off-campus, it must be directly supportive of the faculty member's NPS responsibilities. There must be no detrimental effect on the faculty member's colleagues or students and the work must be documented in the faculty workload and evaluation process in the same manner as work performed on-campus. If reimbursable funding is involved, the sponsor must know of the plan to perform work elsewhere and must approve it.

Meeting these conditions does not guarantee that off-campus work will be approved. There must be a strong justification, such as the availability of special facilities or the opportunity to work with professional col-

leagues. Extended periods of off-campus work must be approved by the Chair (or GSBPP Dean) and the appropriate Dean. If any research funds are involved, approval must also be obtained from the Dean of Research. This approval policy does not apply to off-campus work periods of thirty days or less that have been included in an approved research proposal; nor does it apply to occasional work performed at home. The policy is directed toward those unique situations, either planned or unanticipated, where a faculty member wishes to perform work off-campus over an extended period while in pay status.

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ORIENTATION AND INDOCTRINATION

All new NPS employees are required to undertake an online orientation to government and NPS employment. This material is available from a link on the NPS Human Resources web site. (Users must enter from an NPS computer.)

All new faculty members should participate in the NPS faculty orientation program. This program consists of familiarization briefings on various activities at the School, the structure and operation of DoD and the Navy, and potentially useful information for the new faculty member. These orientation programs are held every six months.

The Naval Postgraduate School occasionally arranges for indoctrination visits aboard Navy ships for faculty members. All civilian and military faculty are encouraged to participate in this program, especially those who have never been aboard a Navy ship. The purpose of these visits is to introduce faculty members to technical, tactical, and managerial problems associated with operating forces. This is expected to result in more relevant application in the academic environment at the Naval Postgraduate School.

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POLITICAL ACTIVITIES

In 1939, Congress approved landmark legislation known as the Hatch Act which limits the political activities of federal employees. In passing the Hatch Act, Congress determined that partisan political activity by these employees must be limited for public institutions to function fairly and effectively. Through the years, various challenges to the Hatch Act have served to reaffirm this basic premise. In 1993, however, Congress made significant changes to the activities that can be engaged in by government employees. Detailed information on the provisions of the Hatch Act and its revisions are available in the Human Resources Office or in the Legal Office.

The following list contains examples of permissible political activities for covered employees.

- ☺ May register and vote as they choose
- ☺ May be candidates for public office in nonpartisan elections
- ☺ May assist in voter registration drives
- ☺ May express opinions about candidates and issues
- ☺ May make campaign speeches for candidates in partisan elections

- ☺ May contribute money to political organization or attend political fund raising functions
- ☺ May attend and be active at political rallies and meetings
- ☺ May join and be an active member of political clubs or parties
- ☺ May sign nominating petitions
- ☺ May campaign for or against referendum questions, constitutional amendments, municipal ordinances
- ☺ May campaign for or against candidates in partisan elections
- ☺ May distribute campaign literature in partisans elections
- ☺ May hold office in political clubs or parties and be delegates to party conventions

Among the *prohibited* activities are...

- ☹ May *not* be a candidate for public office in partisan elections
- ☹ May *not* use their official authority or influence to interfere with an election
- ☹ May *not* collect political contributions from government employees unless both the donor and the solicitor are members of the same federal labor organization or employee group and the one solicited is not a subordinate employee
- ☹ May *not* knowingly solicit or discourage the political activity of any person who has business with the agency
- ☹ May *not* engage in political activity while on duty, in any government office, while wearing an official uniform, or while using a government vehicle

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REMOVING GOVERNMENT PROPERTY FROM NPS

From time to time faculty may wish to remove government-owned property from the NPS campus. This could be, for example, a computer to perform NPS duties at home or equipment for an off-campus experiment. Removal of such property requires that the faculty member have a “property pass”. These “property passes” are available from a member of your department’s staff. (Check with your Department Chair [or GSBPP Dean’s Office] or Administrative Support Assistant to see who issues the property passes in your department or the GSBPP.) Property passes may be issued for up to one year in duration. Also, Faculty may be required to return any equipment on short notice during an equipment inventory. Faculty are also responsible for the return of equipment upon separating from NPS. Campus Police are empowered to do spot checks of vehicles on or leaving the NPS campus. Property passes are required to be shown in government equipment is found in the vehicle. NAVPGSCOLINST 4340.1 contains the details and requirements of the NPS property pass system.

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RESEARCH AT NPS

General. The basic goals of the Naval Postgraduate School's research are:

- To create opportunities for individual faculty members to engage in original research directed toward advancing the frontiers of knowledge and application, thereby maintaining the currency of knowledge which is essential to the conduct of graduate education and the guidance of graduate thesis work;
- To enrich the instructional program by encouraging faculty members and associated students, through personal involvement, to become acquainted with the scientific and technological problems facing the national security community and with the key personnel responsible for the programs attacking these problems; and
- To perform research on defense-related problems that support the mission of the Department of the Navy, the Department of Defense, the Department of Homeland Security, and other national agencies. Working on these problems provides mutual benefit to the faculty member, to the students, to NPS, and to the research sponsor.

A strong faculty research program is a necessary and integral part of graduate education. As an institution whose prime mission is advanced education, it is essential that NPS should have a research program "to sustain academic excellence" by having faculty personally involved in the advancement of knowledge. (For the approved policy, see Section 11 of the document, *Policy Regarding Appointment, Promotion, Salary and Tenure of Office of Civilian Members of the Faculty*.

The individual faculty member, in initiating and prosecuting a research project, accepts not only a personal responsibility to the sponsor and NPS to conduct the agreed-upon research as effectively as possible, but also to strive for a project that is true research in the context of the stated goals and is not solely routine data-taking or testing. The probability that results will either be published in the professional journals or contribute to a significant improvement in DoN/DoD or other agency capabilities should be reasonably high.

To achieve appropriate momentum and progress in a research project, faculty members may be released from teaching during any academic year up to one-half time, during which their salaries are paid out of research funds. (Thesis or group project supervision is construed as teaching in this connection). Professionals of academic stature may be employed as non-tenure-track research faculty to assist the principal investigator.

Sponsored Research Program Proposals. NPS policies on Sponsored Program activities at NPS can be found at the NPS Research and Sponsored Programs Office web site.

To solicit external support for a sponsored project, a faculty investigator submits an official proposal to a potential sponsor over the signature of the Dean of Research (acting "by direction" for the President). More information on the proposal format and budget page formats are available from the NPS Research and Sponsored Programs Office web site.

The head of the academic unit (i.e., the Department, Group, GSBPP, or Institute) first reviews the proposal and determines if the content of the program is compatible with the goals of the academic unit, if the scheduled faculty release time is acceptable, and if the necessary academic-unit services and facilities are available to the program. After resolving any issues, the head of the academic unit endorses the proposal, if it is ac-

ceptable, and forwards it to the appropriate Dean and the Research Program Supervisor who review the proposal. The proposal is then sent to the Dean of Research for final approval and mailing to the sponsor.

If the proposal is accepted by the sponsor, all project funds are accepted by the Comptroller in the name of the NPS President. Final approval for any obligation against the funds of a sponsored research project is dependent upon the nature of the obligation, but, consistent with the individual responsibility assumed by the faculty member in proposing and accepting the project, no one other than that faculty member, as principal investigator (or a designated individual [or individuals]), may initiate any obligations against the project funds. Obligations cannot occur on a project unless an "Approved Expenditure Control Page" has been approved by the Director, Research and Sponsored Programs Office, and returned to the Principal Investigator. The Comptroller, the Research and Sponsored Programs Office, the Sponsored Project Financial Analysts (SPFAs), and the Deans provide assistance to the faculty investigator in the management of project funds within the framework of Naval Postgraduate School policies.

Faculty members may be retained during their intersession period to work on approved sponsored research projects, if their salaries are paid out of project funds. Other supporting personnel may be employed as necessary to assist faculty and any thesis students associated with the project. Arrangements for scheduling and executing supporting labor activities must be made through the Department Chair and the appropriate Dean.

NPS Institutionally Funded Research (NIFR) Program funds for meritorious work are available. These funds are used to help new faculty initiate research projects (described in the next section) or to provide support for post-doctoral programs, technology transfer activities, and research infrastructure. A limited amount of funds are also available for new research initiatives by established faculty members. The Associate Provost/Dean of Research annually issues guidelines describing the investment strategy that will be followed in allocating each year's NIFR funds. The minimum expected output from a NIFR project is a technical report describing the results of the research.

The Research Initiation Program. The Research Initiation Program (RIP program) is that part of the NPS Institutionally Funded Research (NIFR) program used to provide support for new tenure-track faculty who are initiating research programs at NPS. This support is to enable them to conduct their research to a stage which would establish the merits of the program and to demonstrate its potential in a manner that could attract the support of a potential sponsor. The minimum expected output from a RIP project is a technical report describing the results of the research.

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SABBATICALS

The basic policy regarding sabbaticals is found in Section 15 of the *Policy Regarding Appointment, Promotion, Salary and Tenure Of Office Of Civilian Members of the Faculty*. (Note that sabbaticals are not considered "leave", but are a flexible assignment away from the NPS campus.) The following policies and procedures are an amplification and implementation of the basic policy.

The purpose of a sabbatical is for a faculty member to have a period of professional rejuvenation. Experience shows that the sabbatical is most effective if the person is physically away from the home institution and the local area, and NPS encourages this type of sabbatical.

Only *tenured faculty* are eligible for sabbaticals. There is no fixed period before a faculty member is eligible for a sabbatical or that must occur between sabbaticals. In general, the minimum time interval may be expected to approximate the traditional six years; but it may be shorter. The anticipated professional benefit from the sabbatical is more important than timing.

To integrate sabbaticals into the fiscal-year planning cycle at both the Departmental and School levels, applications for the next fiscal year will be considered once a year, with applications due on 1 April (nominally). Applicants will be informed of approval or disapproval by 15 May. Any faculty member wishing to be considered for a sabbatical should make written application on a form available from the Office of the Provost.

The application should describe fully the professional benefit to be derived from the sabbatical, activities planned during any annual leave periods, any anticipated financial arrangements, and an itinerary. The cognizant Department/Group Chair (or GSBPP Dean) and Dean append comments and recommendations to the application.

Applications are evaluated by a Sabbatical Leave Advisory Committee composed of faculty members appointed by the Provost. This Committee prepares a written appraisal of the professional benefit that may be expected from the proposed sabbatical leave and ranks the proposals. These are forwarded to the Provost (via the appropriate Dean) along with a priority ranking of all applications which are favorably recommended by the Committee.

The primary criterion for granting sabbatical leave is the demonstrated potential for the enhancement of the value of the faculty member to the educational program of the Naval Postgraduate School through advancement of his/her capabilities as a scholar. Representative plans for a sabbatical leave might include such things as preparation to teach in a new academic area, scholarly research and investigation, the writing of scholarly materials, formal study of new developments in one's area of specialization, familiarization with DoD activities, or study and research in the company of scholars at other institutions. In all cases, the period is to be a means of broadening one's intellectual horizons rather than a continuation of current activities.

Sabbaticals must be scheduled to minimize the disruption to the faculty schedule. Sabbatical periods should match, as closely as possible, the quarterly academic calendar at NPS. This is so that the faculty member will be available for a full quarter of work at NPS before beginning a sabbatical and after ending a sabbatical. Once a sabbatical is approved, faculty members must meet their Chair (or GSBPP Dean) to schedule the year’s activities and to identify the Intersession period and sources of funding.

Sabbaticals include five months at full pay (i.e., one-half of an academic year); NPS does not provide any other funding for sabbaticals. A faculty member on sabbatical is expected to devote time and efforts primarily to the planned purpose of that sabbatical. No additional compensation from any source may be received during the paid portion of the sabbatical leave. (This would constitute a salary or supplementation of salary as compensation for the performance of the member's government service [18 U.S. Code 209].) Faculty members are encouraged to take full-year sabbaticals; shorter sabbaticals should be in integer multiples of one quarter. Funding for any remaining time beyond the five-months supplied by NPS is the individual's responsibility. Combinations of annual leave, research support, or other reimbursable support can be used to extend the sabbatical period (e.g., annual leave could extend a five-month sabbatical to six months). NPS direct support cannot be used to extend a sabbatical. Any use of research funds requires the consent of the sponsor. The Dean of Research approves any requests to use Direct-Funded Research (DFR) funds; the project sponsor approves the use of reimbursable-research funds either when expressly stated in the approved proposal or in a separate communication to the Dean of Research. Funding arrangements with non-NPS entities requires noti-

fication to your Department/Group Chair (or GSBPP Dean) via the forms used for Outside Employment and Consulting.

It is NPS policy that faculty are personally responsible for travel undertaken while receiving sabbatical pay, including travel to and from the sabbatical location. If, while at a sabbatical location, a faculty member must undertake travel related to a sponsored research project, then the travel may be taken using research funds, but the travel must occur during a period when the faculty member's salary is being paid by the same research project. Scheduling of such periods is accomplished by a cooperative effort of the faculty member, the faculty member's Department/Group Chair (or Dean of the GSBPP), and the Research Office. Such periods of off-campus research will not be counted as part of the five-month, full-pay sabbatical periods (but faculty on sabbatical still need to return shortly before the start of an NPS academic quarter.).

Faculty members completing a sabbatical leave submit a written report describing sabbatical activities to the appropriate Dean (via the Department/Group Chair). After acceptance of the report, faculty members completing a sabbatical leave receive one merit pay step in the following annual merit pay considerations. Otherwise, Faculty members on sabbatical are considered for pay increments, promotions, and tenure in the usual way.

During the academic quarter after return from sabbatical leave, a faculty member should report to colleagues on scholarly activities during that period. In this way, the diverse benefits of many sabbaticals may help enrich the scholarship of the entire faculty.

A faculty member who accepts sabbatical leave assumes a moral obligation to continue their service at the Naval Postgraduate School for a two-year period following return from such leave.

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SECURITY

Security of information (including computer security) and its physical control are the direct and personal responsibility of every person in the Department of Defense. The *Naval Postgraduate School Security Guide* and the NPS Information Assurance policy describe the responsibilities and procedures for the School's Information Security Program. They are considered part of the required reading for all faculty members. Faculty members with an SCI (Secure Compartmented Information) clearance have more requirements imposed on them. Check with the Special Security Officer (SSO) for details.

Publishing Unclassified Material. The School and the Navy recognize the need for academic freedom to publish and encourages faculty members to disseminate the results of their work, subject to compliance with applicable directives. It is the policy of NPS that individual faculty members be responsible for certifying that all unclassified material prepared for dissemination is in compliance with applicable directives. SECNAVINST 5720.44A requires that material relating to a number of subjects be submitted through the Office of the Chief of Naval Operations to the Assistant Secretary of Defense (Public Affairs) for security review and approval for release. Prior to disseminating unclassified material, faculty are responsible for obtaining information on currently applicable directives and certifying compliance therewith. Instructions on current procedures are available from the Security Manager’s Office.

Clearances. Faculty are eligible for security clearance when actively engaged in:

- Teaching a classified course
- Conducting classified research
- Advising classified theses
- Performing mission-essential duties that require access to classified material

Non-U.S. citizens are not eligible for a security clearance. Questions regarding security clearance procedures should be referred to the NPS Security Manager (Code 043).

Classified Materials. The regulations governing access to and custody of classified information, papers and materials are prescribed in OPNAVINST 5510.1 (series). Those provisions having the most common applications to the faculty, together with local instructions, are set forth in the *Naval Postgraduate School Security Guide*.

Visitors. Visits to NPS by professional colleagues to speak and lecture are encouraged. However, there are certain restrictions that apply.

- Visits to NPS by citizens of hostile countries, for any reason, require prior approval from higher authority. Informal invitation is not authorized. Consult with your Department Chair (or your GSBPP Dean) and the Security Manager before issuing any invitation to visit NPS.
- Visits to NPS by other foreign nationals are authorized *after* notifying the Security Manager.
- Discussions with visitors must be conducted at an unclassified level and may contain only information that is in the public domain.

Reporting International Contacts. Faculty at NPS are required to report all contacts that meet the following specifications to Security Manager or the Naval Criminal Investigative Service by memo or phone:

- Any unofficial contact with a member of any foreign diplomatic establishment.
- Any recurring contact with any non-U.S. citizen in which financial ties are established.
- Any contacts that try to obtain access to classified or sensitive material or involving subversive activities or terrorism.

Faculty with access to classified material are required to report all foreign travel. Faculty with access to sensitive (SCI) information are covered by separate reporting requirements. The Special Security Officer provides guidance for these individuals.

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STANDARDS OF ATTIRE

Faculty are encouraged to maintain a neat, professional appearance, especially when in class or instructional laboratories or when meeting with outside visitors.

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STUDENT/FACULTY RELATIONS

A hallmark of the NPS experience is the close professional relationships that develop between students and faculty. There are no graduate teaching assistants at NPS; faculty work directly with students in the classroom, the laboratories, and on thesis and project work. Interactions between students and faculty outside of the classroom are encouraged. However, faculty have the power to affect the future careers of their students favorably or adversely. Because of the need to avoid the appearance of favoritism and to avoid exploitation and harassment of students, it is necessary to avoid unduly familiar relationships, such as:

- Dating, cohabitation, and intimate or sexual relations between faculty and student, or
- Private business partnerships.

Penalties for civilian faculty can range from counseling, letters of caution or reprimand, suspensions, and maybe dismissal. Depending on the severity of the situation, penalties for military faculty members are administered under the Uniform Code of Military Justice (UCMJ). More information may be found in NPSINST 5730.2A

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TRAFFIC REGULATIONS

Parking and traffic regulation are given in NPSINST 55605C. They are summarized below.

- Persons operating motor vehicles on NPS property must register their vehicles with the Security Police and have a current vehicle Station Pass affixed. To receive the Station Pass, all vehicles must carry a minimum of $15,000/$30,000 public liability insurance and $5,000 property damage insurance.
- The maximum speed on NPS property is 20 mph unless otherwise posted. Speed limits are radar enforced.
- The operation of vehicles on NPS property is in conformance with the regulations of the California Motor Vehicle Code. Special restrictions regarding operation of motorcycles and scooters are contained in NPS Instruction 1020.1 (series), including completion of a motorcycle driving safety course offered periodically. All bicycle riders are required to wear safety helmets.
- Cell phone use while driving on campus or in housing areas is prohibited.
- Faculty are eligible for parking permits. Questions of eligibility are handled by the Office of Academic Planning in the Provost's Office. Parking assignments and regulations are explained to all personnel when they register their vehicles with the Security Police. Carpooling is strongly encouraged. In addition to conserving energy, it allows NPS to provide preferential parking spots to members of carpools.
- All vehicular and pedestrian traffic, whether military or civilian, comes to a complete stop for the duration of Morning Colors (0800) and Evening Colors (Sunset).

Questions on traffic and parking may be addressed to the NPS Security Police.

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TRAVEL

The Naval Postgraduate School encourages faculty professional travel which has clear potential value to the School and has been duly approved by the Department Chair (or the GSBPP Dean). Reasons may include:

- improvement of curricula and courses
- conducting research
- recruiting of faculty or staff
- familiarization visits to Navy installations and discussion of Navy problems
- advancement of professional proficiency and reputation of the faculty.

The last purpose is served, for example, by presentation of a scholarly paper at a professional society meeting or conference and by participation in the affairs of a professional society via officership or membership on an official committee of the Society.

The NPS Travel Office web site provides information about official travel. It should be consulted for more explicit details associated with travel. Further information about travel can be found in NPSINST4650.4F.

Payment for travel services is usually through the government credit card held by the traveler. (See the Travel card link for more detailed information about the government credit card.) Gifts of travel (e.g., plane tickets for officers in a professional society to attend meetings) are covered by special reporting rules. See the NPS Travel Office web site for information.

Travel arrangements at NPS are done through the web-based Defense Travel System (DTS). Training sessions for users are held periodically. (See the NPS Travel Office web site for information and schedule.) The NPS Travel web site, your Administrative Support Assistant (ASA), or Department/Group Chair (or your GSBPP Dean) can answer many of your questions.

When making travel arrangements that includes government lodging, the traveler needs to specify a "GS equivalence" for his/her academic rank. The following table lists equivalences. (This table is for travel purposes only!)

Academic Rank	**GS Equivalence for travel**
Non-tenure track faculty (all ranks)	GS-12
Assistant Professor	GS-13
Associate professor	GS-14
Professor	GS-15

It is the Department of the Navy and NPS policy that official travel shall be limited to that necessary to carry out the mission of this command effectively and efficiently. Travel meeting these criteria must be performed by the most economical means available by the minimum number of personnel for the minimum time consistent with the requirement of the mission.

Travel funds are public monies and are limited. Their judicious utilization and conservation is a responsibility of each faculty member and each Department/Group Chair (or the GSBPP Dean). To maximize the total professional benefits from the funds available for travel, the following precepts govern faculty travel:

- commercial air travel must be by tourist class (First-class travel is specifically prohibited except in very rare cases. Prior approval is required.)
- utilization of military aircraft is recommended where practicable
- limitation of a trip to the sensible minimum time required to accomplish the purposes of the trip
- consolidation of trips, where feasible
- use of BOQ facilities whenever available and practicably located
- where there exists a choice of meetings at which to present a paper or to serve some other appropriate purpose, favoring the geographically closer meeting (if no appreciable loss of benefit to the Naval Postgraduate School is incurred).

As a general rule, annual leave taken while on official travel should not exceed the number of work days associated with the travel.

Travel arrangements for faculty candidates and new-hired faculty coming to NPS are handled through the Office of the Provost.

Foreign Travel. Since NPS Faculty are representatives of the US government when they travel and since foreign governments need to be aware of US government representatives within their borders, foreign travel of NPS Faculty has special requirements. These requirements also apply to contractor personnel traveling under DoD sponsorship. The following is a summary of the requirements. The *DoD Foreign Clearance Guide* is the governing document for entry requirements for each country. Foreign travel for the government can be complicated; seek guidance from your Department office staff or the NPS Travel Office as early as possible for your foreign travel!!

Entry Clearance. The NPS Travel Office will assist the traveler to obtain entry clearance, based on information provided by the traveler. Early notification is required in order to meet deadlines. There are three types of entry clearances:

- Country Clearance. Country clearances are the most common type of clearances for faculty. A country clearance may be required for either official travel or unofficial travel (e.g., entering a country while on a leave portion of an official trip).
- Special Area Clearance. Certain countries have been identified as “special areas”. Special clearance approvals are required for entry into these countries.
- Theater Clearance. Visits to overseas military activities require clearance from the applicable military unified Commander (e.g., PACOM, CENTCOM, etc.)

Contractor Personnel. While the NPS is responsible for ensuring the individuals have the necessary travel clearance, the individuals are responsible for obtaining passports and visas.

Individual Force Protection Plan (IFFP). An IFFP is *required for civilian personnel on official foreign travel* and for all military personnel for both official and unofficial travel. Requirements for the IFFP vary by country and area being visited (e.g., some areas require a "buddy" [or two-person] rule). Help is available from the NPS Security Manager's office. Note that the entry clearance must be received *before* applying for approval of the IFFP, so allow adequate lead time. NAVPGSCOLINST 4650.1 includes the IFFP form as enclosure (1).

Security Manager. Travelers need to notify the NPS Security Manager of any foreign travel *not less than 30 days before travel*. Information on foreign travel is available at the NPS Security Manager (Code 043) web site.

Start working on the process as soon as you think the travel might be a possibility.

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URINALYSIS SCREENING/TESTING

Faculty holding security clearances of "Top Secret" or above are subject to random, mandatory urinalysis testing. Selected faculty will be called by an HRO representative on the day of the testing with guidance on where to report and when. Strict procedures are followed to ensure fair sampling and to maintain a chain of custody throughout the collection and evaluation process. More information is available from the Human Resources Office (HRO).

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WORKING WITH NON-GOVERNMENT ORGANIZATIONS (NGOs)

NPS has the statutory authority to work with activities outside of the federal government. The two mechanisms for doing so are through a Cooperative Research and Development Agreement (CRADA) or a Technical Service Agreement (TSA). If NGO funding is to be provided to NPS, the appropriate agreement must be executed *prior* to the commencement of the activity. The CRADA delineates the responsibilities of the partners and address the intellectual property issues relating to patents, copyrights, and licenses. The TSA is used for certain services provided to a NGO and in cases where there is no discovery (research) being performed.

NPS can also loan equipment to a NGO or receive equipment on a loan basis from a NGO. This activity is covered by a Limited Purpose CRADA.

All of these agreements are drafted by the Research and Sponsored Programs Office, in consultation with the faculty member. Further information is available from the Research and Sponsored Programs Office.

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VISITS BY DISTINGUISHED PERSONS

Each year many distinguished individuals visit the NPS campus. The office of the NPS President needs to be informed of such visits to ensure maximum impact from such visits and to coordinate schedules. Examples of distinguished persons include:

- Flag or general officers
- Senior Executive Service (SES) employees
- Titled positions (e.g., Service Secretary, Assistant Service Secretary, Deputy Assistant Secretary)
- High-ranking military officers or civilian employees holding major command or project/program sponsor positions
- US Senators, members of Congress, and principal staff members to a member of Congress or a congressional Committee
- Influential non-US government officials, such as state and local government officials, community leaders, high-ranking corporate officials
- Senior, prestigious academicians
- Foreign officials of similar positions, and
- Others as designated by the NPS President.

Generally, if you have any questions about eligibility of a visitor, you should consult the NPS Protocol Office, Code 003.

Notification of visits by distinguished visitors need to be emailed to the Protocol Office (Code 003) with copies to the Flag Lieutenant (Code 001) and the Security manager (Code 261). The Protocol Officer will coordinate the schedule for distinguished visitors to NPS.

Faculty may be asked to serve as the "Action Officer" for the visit in order to develop the itinerary, to arrange transportation and accommodations, and to propose scheduled events, as well as

- act as the principal point of contact with the visitor or their office staff
- obtain and provide a biography of the visitor for posting in the NPS events calendar
- arrange for reserved parking
- meet and brief the visitor on the visit arrangements and itinerary and to escort the visitor during the visit
- handle other details of the visit (e.g., arranging for the handling of classified material through the Security Manager's office).

Visitor Information Sheet. The Action Officer needs to provide a Visitor Information Sheet to the Protocol Officer at least 5 days in advance of the visit. The format of this sheet is provided in NAVPGCOLINST 5050.2F as enclosure (3).

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SECTION VI - SCHOOL PROCEDURES

ACADEMIC CERTIFICATE PROGRAMS

An “Academic Certificate” program is a coherent sequence of courses that is sufficient to master a well-defined body of knowledge or technical expertise at a level beyond the baccalaureate. An Academic Certificate may be issued only by the Registrar and shall be recorded on the NPS transcript. Academic Certificates are the only certificates to be recorded on the NPS transcript.

An Academic Certificate program must include at least 12 credit hours of work, 9 of which must be at the graduate level, and all of which must be NPS courses. Courses in an Academic Certificate may be applied to a degree at NPS; there is no bar on “double counting” for degree purposes. Courses may *not* be double counted for multiple certificates.

Students admitted to an Academic Certificate program must meet the general admissions requirements for NPS and any prerequisites for the courses in the certificate program. An Academic Certificate program must be completed within 3 years of admission to the program. A student must maintain a 3.0 GQPR in the certificate courses to be awarded a certificate.

All Academic Certificate programs must be approved by the Academic Council.

Proposals for new Academic Certificate programs must include a list of required courses and rationale for offering the certificate. Proposals must be submitted to the Academic Council six months *in advance* of the anticipated date of first student's completion of the new certificate program. Proposals for new Academic Certificate programs shall describe how the program accords with recognized standards and best practices (for example, the “Good Practices for Electronically Offered Degree and Certificate Program” promulgated by the Regional Accreditation Commissions). In particular, a proposed Academic Certificate program shall describe the learning outcomes for the certificate, and the manner in which the outcomes constitute a coherent and self contained body of knowledge.

A proposal for an electronically offered Academic Certificate shall include an evaluation strategy for sustained, evidence-based and participatory inquiry to assess whether the program is achieving its objectives and for continual improvement. The strategy shall include provisions for:

- Documented assessment of student achievement by comparing student performance to intended learning outcomes,
- Measures to determine overall program effectiveness,
- Evaluation in the context of the regular evaluation of all academic programs.

Proposals for an Academic Certificate must be endorsed by the appropriate department chairs (or Chairs of an interdisciplinary Curriculum Committee appointed by the Provost) and Deans for appropriate content and for supportability, especially with respect to funds, space and facilities, and faculty availability.

CLASS SCHEDULES

The Naval Postgraduate School operates under a quarter system, with each term of instruction lasting 12 weeks. The last week of each quarter is set aside for examinations. In addition, there are two two-week recesses during the academic year, one over Christmas and one during June-July.

Classes are scheduled from 0700 through 1750. The Class Scheduler, under the Director of Academic Administration., is responsible for developing the schedule for each quarter from the student programs, within the limitations imposed by facilities. The responsibilities of the Class Scheduler, the Department and Group Chairs (or the GSBPP Dean), and the Program Officers in the scheduling process are set forth in NPSINST 5010.3.

Because of the complexity of composing workable schedules, requests for special scheduling consideration in the development of class schedules are entertained only in circumstances justifiable on the basis of direct benefits to NPS. Requests are entered in the Python scheduling system by the faculty. (The requests should state the basis for the requested exceptions.) The Department/Group Chair (or GSBPP Dean) reviews the requests and submits a list of approved requests to the Scheduler in the Office of the Associate Provost for Academic Affairs. The requests should state the basis for the requested exceptions. While the Scheduler will make every effort to meet special scheduling requests, they cannot be guaranteed.

Once the class schedule for a quarter is published, changes in the published schedule will be considered only for specific and pertinent reasons which include: resolution of hour or room conflict, provision of a more adequate classroom or laboratory, correction of radical imbalances in class sizes, or change of instructor assignment to scheduled courses to provide better instruction or to consolidate faculty schedules. Other alterations in published schedules for faculty and/or student convenience are discouraged.

All requested changes in the published schedule are to be communicated directly in writing to the Class Scheduler by the Department/Group Chair concerned (or the GSBPP Dean). When time is of the essence, the change requests may be made by the Chair/Dean by phone with subsequent confirmation in writing. Requests justified on basis other than those specifically mentioned above will be referred by the Scheduler to the Associate Provost for Academic Affairs for approval.

DEGREES

While the NPS President is empowered by Congress to grant degrees, the Academic Council makes the degree recommendations to the President. The membership of the Academic Council is described elsewhere. The *Policy Manual for the Academic Council* describes the policies and procedures of the Council.

Nominations for degrees are initiated by the Program Officer and reviewed and endorsed by the Academic Associate, the Department/Group Chair, and the Academic Council.

In some cases a program may be interdisciplinary in nature and result in an interdisciplinary degree. In that case the Provost may appoint an Academic Curriculum Committee to oversee the development and health of the program. The Chair of the Academic Curriculum Committee reviews and endorses the nomination for degrees instead of a Department/Group Chair (or GSBPP Dean).

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DISTANCE-LEARNING PROGRAM

NPS supports a variety of delivery methods that expand learning beyond the traditional classroom: online web-based technologies, outreach programs, and video tele-education.

Online web-based technologies. The Office of Continuous Learning (OCL) assists faculty to coordinate and administer innovative and cost-effective efforts to identify, package and deliver the intellectual capital of NPS to the Navy and DoD decision-makers and other component personnel who are not able to attend NPS on a full-time residential basis. OCL supports the various NPS academic schools, research and education centers in their efforts to expand their outreach well beyond the population of residential graduate students. OCL assists the academic departments at NPS to design web-based online course content. This varies from supplementing residential courses to fully online courses accessible via the Internet. Further information about this program is available from the Office of Continuous Learning.

Outreach Programs. As a part of its overall distance learning strategy, NPS, through the Office of Continuous Learning, established outreach offices in San Diego, Norfolk, and the National Capitol Region. These offices help facilitate the distribution of graduate education to the fleet and assist with delivering accredited graduate education to the vast number of Navy personnel in fleet concentration areas who will not be able to attend NPS in residence. The Outreach offices maintain liaisons with all Navy commands in the area, ensuring feedback on the programs being offered, as well as identifying future trends. The offices establish relations with other universities in the area, seeking synergy and economy in the delivery of graduate education.

Video tele-education. NPS currently supports seven MS degree programs and one PhD program through Video Tele-Education (two-way videoconferencing). Officers and civilians from the Navy, other services, and other DoD agencies eligible for one of these programs can take some or all of their coursework in facilities located at their place of work (as well as performing their thesis work there).

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FINAL EXAMINATIONS

Final examinations may be given *only* during the twelfth week of each quarter**.** Final examinations are not to be given at any other time, as this disrupts learning in other courses that the officer-student is taking. Examination Schedules are prepared and distributed by the Class Scheduler. To facilitate common examinations for students in different segments of the same course, the Examination Schedule provides a common examination period, or contiguous examination periods, for all segments of the same course. If a final exam will not be given in a course, the Instructor needs to enter that information into PYTHON as a special scheduling request for the Scheduler.

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GRADING SYSTEM

Students' performances are evaluated on the basis of a quality point number assigned to each letter grade achieved in a course. Faculty are required to submit grades via Python during the grading period after each quarter. Late grades must be submitted to the Registrar's Office by hand.

The Academic Council has established the following grading system at NPS:

Performance	Grade	Quality point value
Excellent	A	4.0
	A–	3.7
	B+	3.3
	B	3.0
	B–	2.7
	C+	2.3
	C	2.0
	C–	1.7
	D+	1.3
	D	1.0
Failing	X	0.0
Incomplete	I	
Withdrew, passing	W	
Nongraded	N	
Passed	P	
Failed	F	
Thesis	T	

Courses may be designated for Pass/Fail grading when requested by the academic Department/Group and approved by the Academic Council. This designation has been applied to seminar courses, etc. Additionally, a student may elect to take a course in the P/F mode if approval is granted by both his/her Program Officer and the appropriate Department/Group Chair (or the GSBPP Dean). The P/F option is allowed only for courses which are not required to satisfy degree or curriculum requirements. However, hours earned by the grade "P" are counted toward fulfilling course hours specified by the degree requirements.

A grade of Incomplete (I), if not removed within twelve weeks following the end of quarter for which it was received, will be replaced by the Failing grade (X). Exceptions must be individually approved by the Academic Council.

When the quarter hour value of a course is multiplied by the quality point number of the student's grade, a quality point value for the student's works in that course is obtained. The sum of the quality points for all courses divided by the quarter hour value of all courses gives a weighted numerical evaluation of the student's performance, termed the Quality Point Rating (QPR). Quality point ratings may be computed for all courses taken at NPS or for just the graduate-level courses ("graduate QPR" or GQPR).

A student may repeat a course for the purpose of improving the student's grade when the grade received originally was either "D" or "X", provided such course repetition is taken at the Naval Postgraduate School. Approval must be granted by both the Program Officer and the Department Chair (or GSBPP Dean) of the student's curriculum. For record purposes, both the original and the repeated course are shown on the transcript. For QPR computation the credit hours of the course are counted once, and the quality points earned are the average of the two.

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INDEPENDENCE OF STUDENT WORK

Student work (and faculty guidance) is subject to an Academic Honor Code.

All work submitted by a student for a grade in any course shall be the work of that student alone, unless prior *explicit* permission has been given by the instructor to do otherwise. It is the instructor's responsibility to establish and clarify the ground rules that apply to all graded exercises, including homework, projects, lab reports, papers and examinations. If any doubt exists concerning the degree of independence of student work that is expected, it should be assumed that the work is to be independent and it is the responsibility of the student to resolve the question prior to undertaking the work. The primary objective of this shared responsibility between instructor and student is to prevent misunderstandings.

If an instructor suspects that a violation has occurred, the instructor may wish to discuss this with the student(s) involved, require reexamination, or take other appropriate measures designed to prevent any future violations. If the instructor feels there is substantive evidence that a violation has occurred, the instructor is advised to discuss the circumstances and evidence with the Department/Group Chair (or GSBPP Dean). In cases where the evidence seems conclusive to the instructor and Chair/GSBPP Dean, the matter will be brought to the attention of the appropriate Program Officer for further investigation and possible action. The grade assigned in the course is the prerogative of the instructor; however, the instructor should apply grade penalties only for confirmed violations.

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PYTHON ONLINE REGISTRATION SYSTEM

NPS uses the PYTHON online registration system to administer course offerings, class scheduling, faculty teaching assignments, textbook requirements, special scheduling requests, grading, and recordkeeping. Fac-

ulty can go online (using their NPS login name and password from any NPS computer) to interact with the PYTHON system. The Administrative Support Assistant in your Department/Group/GSBPP/Institute office can answer most questions about the PYTHON system.

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QUESTIONNAIRES AND SURVEYS

Any surveys or testing of groups, other than that associated directly with concurrent courses in the educational program of the students, must be approved jointly by the Associate Provost for Academic Affairs, the Dean of Students, and the NPS Institution Review Board (contact through the Dean of Research).

Requests for approval of such group testing should be accompanied by:

- sample copies of the tests or questionnaires;
- statement of the purpose of the testing;
- description of the proposed uses of the testing data, a statement of the proposed schedule of the tests, identification of the student and/or faculty group affected, and responsibility for administration of the test; and
- proposed custodianship of the testing data, together with description of measures to protect privileged or sensitive information.

All other group-testing, either newly proposed or proposed for continuation, must be submitted for approval in accordance with the above procedure.

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REPORTING OF REGISTRATION AND GRADES

The procedure for faculty reporting of registration, changes in registration, grades, and changes in grades, are described in NPSINST 1520. Everything but a change of grade is handled within the NPS PYTHON online course administration tool.

Although no school guidelines have been stated for grading practices, some criteria for valid grade changes have been set forth in NPSINST 1520 to provide consistent practices by all instructors and fair and equal treatment for all students. The procedures for, and time devoted to, preparation and submission of course grades should allow opportunity for impartial judgment of the marks assigned. The judgment completed before the submission of the grades should be done with sufficient care so as to be defensible and not subject to later appeal on grounds of misjudgment. Consequently, reasons for changes in grades should be submitted only for reasons from the following categories:

- Arithmetic errors in calculating grades. The discovery of a computation error in determining grades should lead to recomputation of all grades in the class to double-check the grade calculations and grade assignments.
- Clerical errors. Typically this may be an error in transcribing grades from one list to another.

- Make-up of Incomplete. The grade of Incomplete (“I”) may be assigned if a significant, identifiable part of the course has not been completed. The make-up work should be judged with the same standards as used for the regular quarter's work. This request must be submitted to the Registrar's Office within twelve weeks following the end of the quarter for which the grades were given.

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SHORT-COURSE PROGRAM

In addition to curricular programs, the Naval Postgraduate School conducts short-course programs for offering graduate-level material to Navy officers and DoD employees. These short courses are for information only; they are not graded and do not carry any academic credit.

Short Courses can be funded either with NPS funding, tuition payments, or reimbursable funding.

Short courses can be supported with funds from a sponsor (or multiple sponsors) or by tuition (registration fee) payment. A proposal must be submitted for each short course delivered. Instructions for preparing proposals for development and delivery of short courses are available from the NPS Research and Sponsored Programs Office.

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SMOKING AND BEVERAGES IN CLASSROOMS AND LABORATORIES

Navy Regulations prohibit smoking at any time in any of the School buildings or laboratories.

Smoking is not permitted, of course, in any area where flammable materials are being used, or in the vicinity of stored flammable materials.

Beverages in classrooms and laboratories are prohibited by School Regulations. Many classrooms are carpeted and have upholstered furniture. The limited janitorial services are unable to cope with overturned coffee cups, sticky soft drinks, etc.

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STUDENT COMMENT ON INSTRUCTION

Student comment on the effectiveness of each faculty member's instruction is obtained in part by means of the Student Opinion Form (SOF), which is uniformly administered at the end of each regular course.

SOFs are accomplished toward the end of the quarter through the NPS PYTHON online course management system and in a manner designed to ensure a response from each of the students and to preserve the anonymity of each student.

Responsibility for the content of the questionnaires rests with the Faculty Scholarship Committee. Administrative control is exercised through the Associate Provost for Academic Affairs' Office.

For each class, only numerical data summaries are forwarded to the Department/Group Chair (or GSBPP Dean), who uses them to evaluate the instructional competence of the Department, Group, or GSBPP faculty, respectively. Original forms with comments are available (only) to the instructor in PYTHON. The Department/Group Chair (or GSBPP Dean) utilizes the summary information to assist in discharging the Chair's/GSBPP Dean's responsibilities for improvement of instruction. The Chair/Dean consider the summary data, or any part thereof, as privileged information. In addition, the Associate Provost for Academic Affairs can provide to the Group Chairs numerical summaries of SOF data of faculty members who are members of academic departments when those faculty have taught courses that are the responsibility of the Group. The Department/Group Chair (or GSBPP Dean) adds numerical summaries of SOF data for every course taught by a faculty member to that faculty member's documentation when he/she is a candidate for promotion and/or tenure. These summaries are made available to the members of the candidate's Department Evaluation Committee (DEC), the Department Faculty Promotion Council (DFPC), the Faculty Promotion Council (FPC), the Deans Promotion Council (DPC), and the President. Release of SOF data to other parties will not be made without the consent of the faculty member concerned.

Student comment-on-instruction questionnaires – properly structured, properly solicited, and properly used – have proven to be a substantial contribution toward the general improvement of instruction at the Naval Postgraduate School.

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WEB PAGES

Faculty are allowed to initiate and maintain web pages for official purposes, directly related to the NPS mission of graduate education (including research). However, web pages serving as official NPS pages are required to follow guidelines and requirements published in NPSINST 5230.1D. This instruction identifies the roles of various functionaries and the requirements for NPS web sites (e.g., the Public Affairs Officer [PAO] needs to approve all material available to the public on NPS web sites).

Some of the features of NPS web sites include:

- Disclaimers and official warning notices regarding access to government computers must be incorporated into the web site.
- Security requires that all web servers need to be identified to the NPS IT organization and accredited and approved for hosting.
- NPS has approved templates (webhelp) for high-level web pages officially representing NPS,
- Sensitive information, such as privacy-protected information or limited distribution published materials, requires password protection and encrypted transmission.

- Classified postings require special approval and access; check with the NPS Security Manager for information and approval.

In all cases it is recommended that the faculty member contact ITACS before going public with his/her web site. Faculty are also eligible to serve on the NPS Web Committee that recommends web policy and format.

All IT services are provided free of charge to faculty members and students engaged in official School work. The computers cannot be used for private consulting work.

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SECTION VII. FACULTY BENEFIT PROGRAMS

The specific provisions of the following Federal employee benefit programs can be found on the Department of Navy "Employee Benefits Information System (EBIS)" website at www.donhr.navy.mil. The following summaries are for general information only. Faculty members should contact the "Benefits Line" at 1-800-320-2917 or go the EBIS website if they need updated and specific information. In addition, the Faculty Retirement, Insurance, and Special Functions Committee continually reviews programs which affect the faculty.

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FEDERAL EMPLOYEES' GROUP LIFE INSURANCE

Faculty members, except under temporary appointment, may participate in the Federal Employees' Group Life Insurance (FEGLI) Program. The program provides term insurance in a basic amount, roughly equivalent to a faculty member's salary, and additional optional insurance in varying amounts, which may be an additional $10,000 and/or some multiple of one through five of the basic salary, and/or optional family coverage, whichever is elected. Basic life insurance and the $10,000 additional option include double indemnity for accidental death and payment for accidental loss of one or more limbs or eyesight. The cost of the optional additional insurance is based on the employee's current age. The employing agency contributes one-third of the cost of basic insurance; employees pay the whole cost of optional insurance. Contact the Benefits Line (1-800-320-2917) about the current costs of the basic and optional insurance. Faculty who are on Leave Without Pay status (e.g., an unpaid intersession) are responsible for making payments during this period. Deductions will be automatically made after returning to Pay status or, alternatively, the faculty member may make alternative arrangements with the Timekeeping Division of the Comptroller's Office before going on Leave Without Pay.

After retirement, and upon the retiree's sixty-fifth birthday, members may retain at least one- quarter of the value of their basic life insurance without cost. Other options for retaining insurance amounts through the continued payment of premiums after retirement are also available. In order to continue life insurance options after retirement, the employee must have carried the same type of insurance for at least five years prior to retirement.

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HOSPITALIZATION AND MEDICAL EXPENSE INSURANCE

Provision is made for the participation of members and their families in the Federal Employee's Health Benefits Program. Two types of plans are available: Government-wide plans, under contract between the Office of Personnel Management and several insurance providers, and employee organization plans, available to members who have signed contracts for coverage with various health insurance providers. Payment is by payroll deduction, with the employee paying part of the cost and the agency paying a varying amount depending on the plan selected (with the Government contributions not to exceed 75 percent of the total enrollment costs). Faculty who are on Leave Without Pay status (e.g., an unpaid intersession) are responsible for making pay-

ments during this period. Deductions will be automatically made after returning to Pay status or, alternatively, the faculty member may make alternative arrangements with the Timekeeping Division of the Comptroller's Office before going on Leave Without Pay.

The provisions of the different insurance carriers vary in detail and the plan which best fits the needs of the individual and his family should be selected. Enrollment is optional and can be canceled at any time since coverage is voluntary. Applications for group coverage are received by the carriers only on first employment or during the "open season" periods set by OPM (usually once a year, starting about the middle of November). Members with temporary appointments of a year or less are not eligible for participation. Health insurance may be continued into retirement, provided the retiree has been covered under the Federal Program (not necessarily the same plan) for the five years immediately preceding retirement. This is an important consideration when planning for retirement.

Insurance terminates after 365 days in a non-pay status.

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INJURY COMPENSATION AND MEDICAL CARE

The Federal Employees' Compensation Act is administered by the Office of Workers' Compensation of the U.S. Department of Labor. The Act provides benefits to Federal employees for continuation of pay for traumatic injuries, compensation for wage loss, medical care, and other assistance for job-related injury or death. An employee is entitled to first aid and medical care for an injury sustained while in the performance of official duty. The medical care is to be provided by any duly qualified local physician or hospital of the employee's choice. Federal Employees' Health Benefits Program plans will not pay medical expenses resulting from a work-related injury or disease. An employee is required to give his or her official superior (supervisor) written notice of the injury within two working days after the injury in the performance of duty. Compensation may be denied if notice of injury is not given within 30 days, or if the supervisor does not have actual knowledge of the injury. Forms CA-1 (traumatic injury) and CA-2 (occupational disease) are provided for giving written notice. These provisions do not apply to dependents of Federal civilian employees. and are available at http://www.cnrsw.navy.mil/hrocnrsw/injury.htm.

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LEAVE

Members of the civilian faculty earn annual leave while they are in a pay status, the number of days depending upon their years of service. In addition, they earn 13 days of sick leave each year. The amounts earned are reduced proportionately for any part of the year a member is in a non-pay status. The law granting these types of leave is administered by the Office of Personnel Management (OPM) and members of the civilian faculty are governed by the OPM's regulations applying to the associated benefits. Consult the Human Resources Office for information.

The Federal Civil Service status of the civilian faculty of the Postgraduate School causes less flexibility in the faculty member's use of the Christmas and June recess period and of the "tenth month" intersessional period of his/her academic year than that existing in civilian universities. Civil Service Regulations recognize only

two possible types of employee status: (a) work status or (b) leave status (annual, sick, holiday, military, administrative, court, or leave without pay). This means that a faculty member must be in one or the other status during the periods such as the Christmas or June recess or the intersessional period. During time in periods of this sort, when faculty members are not in leave status, they are therefore required to be engaged in, or available for, work for the School. Some faculty members customarily spend such non-leave time on research, professional writing, course writing, or similar scholarly activities with the concurrence of their Department/Group Chair (or GSBPP Dean). Other faculty members may be designated by their Department/Group Chair (or GSBPP Dean) to undertake other necessary tasks for the Department/Group or the School, such as preparation of laboratories and apparatus for the quarter, teaching of refresher courses, Department/Group/School administrative work, etc. Faculty members who do not expect to be available for non-teaching duties during these periods must submit leave requests for the days of nonavailability.

Civil Service Regulations require that each faculty member must be provided an opportunity during any calendar year to take the annual leave earned during that year. Such leave may not be taken only during an unpaid intersessional period, and the period when it is taken is subject to the approval of the Department/Group Chair (or GSBPP Dean) or Institute Director. There are two-week breaks in June/July and December. Faculty members may take annual leave during these periods; otherwise, normal work attendance is expected.

Civilian faculty members may be granted annual leave for emergency reasons at any time. Faculty members should notify their Chair (or GSBPP Dean) as soon as possible about the circumstances requiring emergency annual leave. Except in cases of emergency, civilian faculty members may not be granted extended leave during the academic session when such leave would interfere with the academic schedule.

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MEDICARE

Medicare, the program to provide medical insurance to the elderly, consists of two parts: Part A, which provides hospitalization, and Part B, medical benefits. Part A is funded by Social Security taxes and is available to anyone receiving Social Security benefits without additional payment of premiums; Part B requires individual election and payment of a premium. Social Security withholdings include a l.3% contribution to the hospitalization insurance. Although Federal employees making regular contributions to the Civil Service Retirement System CSRS) are exempt from paying Social Security retirement tax, the exemption does not extend to the hospitalization insurance. A withholding of l.3% of basic pay up to the maximum taxable base set by Congress is made from the salaries of these employees.

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MILITARY LEAVE

Civilian faculty members participating in a reserve program of the Armed Forces are expected to arrange to take their annual training duty during their intersessional period, if possible. In those cases where training can be performed only during the academic session, the faculty member should secure approval for military leave in advance of entering into a training duty commitment. The leave application should be forwarded to the appropriate Dean via the cognizant Department/Group Chair. (GSBPP faculty submit their request directly to the GSBPP Dean.) All reservists of the Armed Forces or members of the National Guard except temporary,

intermittent, and part-time employees, are entitled to leave of absence from duties, without loss of pay for not more than 15 days in any calendar year, for active duty or for training.

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RETIREMENT PROGRAM

Faculty members employed under appointments of more than one year beginning prior to 1 January 1984 participate in the Civil Service Retirement Systems (CSRS). Faculty members first hired to appointments of more than one year on or after 1 January 1984 are covered under the newer retirement system, the Federal Employees' Retirement System (FERS). The Thrift Savings Plan (TSP), a Federal 401K, is available for employees participating in both CSRS and FERS. Both systems provide retirement and disability benefits for the member and survivor benefits for the member's family. Active duty military time is creditable toward eligibility for retirement under certain circumstances. Specific details on an individual's retirement can be obtained from the Benefits Line (1-800-320-2917) and EBIS.

Under both the CSRS and FERS retirement systems, the annuity is reduced if (a) the member's civilian service includes service for which no retirement deductions were deposited, (b) the member withdrew his/her contributions to the retirement fund after terminating a past period of federal service and has not made a redeposit, or (c) the member elects a survivor annuity. A member may withdraw his/her contributions to the fund if employment in the Civil Service is terminated for a period of at least 31 days and if he/she is not eligible for retirement at the time of separation. A member of the Retirement Fund is guaranteed a return from the fund which is at least equal to his/her contributions. However, no interest is paid on these refunded contributions.

Faculty planning retirement should contact the Benefits Line (1-800-320-2917) to request to be assigned a Retirement counselor no later than six months before retirement to establish completeness of records of Federal service (including military service) and an estimate of retirement benefits. This six-month lead time allows for obtaining needed records, documentation of previous pay (if relevant), and arrangement for payment of any deposits necessary to allow full credit. The NPS Human Resources Offices sponsors occasional on-campus retirement seminars. Early attendance is strongly suggested for any faculty member considering retirement.

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SOCIAL SECURITY

Faculty members covered by the Federal Employees' Retirement Systems (FERS) or serving in certain types of Federal appointments (i.e., limited to one year or less, intermittent employees) pay the full cost of Social Security. Those members covered by the Civil Service Retirement Systems (CSRS) pay the l.3% Medicare tax **(**see earlier section on Medicare) in addition to contributions to the CSRS.

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SECTION VIII – SCHOOL FACILITIES

ACADEMIC FACILITIES

Library. The Dudley Knox Library's collections and services are maintained by the following organizational units: Reader Services, Research Reports, Acquisitions, Bibliographic Control, and Systems. The functions and scope of each are briefly described below:

- **Reader Services (Open Literature).** The Reader Services Division is the public-service unit within the Library which supports students and faculty by providing access to unclassified library resources in hard copy, electronic databases, and microfilm. These resources include books, journals, abstract literature, newspapers, electronic databases, and U.S. Government Printing Office publications, the latter received by virtue of the Library's depository status. It also provides reference assistance including online literature searches and bibliographic instruction, manages circulation of library materials including course reserve items, maintains current and bound journals, processes interlibrary loans, and controls microfiche and microfilm files and equipment. Readers Services also conducts library tours, manages student photocopiers, and the Library's group study rooms.
- **Research Reports and Classified Materials (Classified and Unclassified Research Documents). T**his unit is the Library's repository for classified (Secret, Confidential) and unclassified documents received in hard copy and microform. It provides bibliographic access to all hard copy reports held by the division. It also provides access to the technical reports database of the Defense Technical Information Center (DTIC) and various products on CD-ROM, and it houses a classified word processing facility.
- **Acquisitions. (Collection Acquisitions).** This unit orders and receives Library materials in all formats, working closely with Library staff and Library Liaison Officers from the Library Council.
- **Bibliographic Control..** This unit supports instructional and research programs of NPS by cataloging, classifying, and processing all types of informational materials, in a variety of formats, to be entered into BOSUN, the Library's online catalog, and to be made available to Library users. Materials include NPS theses and reports a well as a wide range of materials from other sources.
- **Systems (Library Automation)..** The Systems Office manages new technology for automating the Library's collections and services. BOSUN (Bibliographic Online System Utilis Nautis), the Library's online catalog for open literature, is one major responsibility of this unit. Another system, STILAS (Science and Technology Information Library Automated System), is soon to be introduced for online access to the Library's classified documents collection.

Library cards are issued to faculty members at the Library circulation desk once they have received their identification cards. Questions regarding Library usage should be referred to the Reference Librarian.

Computing Services. The Computing Service organization supports a broad range of computing and information services on a variety of server systems attached to the campus backbone network. The organization maintains clusters of network-connected workstations in the other academic buildings. Some are arranged as electronic classrooms with 25 to 35 identical computers, either PCs, Macintoshes or HP workstations. Others contain SUN workstations and IBM graphics terminals which are intended for individual use by students and faculty. The organization also provides high-speed gateways to global networks.

All of the services and facilities are described in a handout, *Introduction to Computing Services* available in Ingersoll 146, Consulting Office. This room also contains copies of all of the Computing Services publications, newsletters, etc., and reference sets of manuals and other documentation of available operating systems and major software packages.

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OTHER ACADEMIC FACILITIES.

The evolution of the instruction and research programs of the Naval Postgraduate School has resulted in a number of special facilities, most of which are used in support of both instruction and research programs. Some of these facilities are listed below.

Anechoic Acoustic Chambers
CAD/CAE Facility
Flash X-Ray Facility
Human Factors Engineering Laboratory
Hybrid Computer and Simulation Laboratory
Laser, Electro-optic, and Fiber Optic Laboratories
Learning Resource Centers (instructional computer facilities)
Metals Creep Laboratory
Microprocessor Laboratories
Ocean Acoustic Wave Facilities
Radar and EW Laboratory
Secure Computing Facility
Cryptologic Research Laboratory
Ship Electric Power Laboratory.
VLSI Design Facility
Wargaming Facility

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PERSONAL SERVICE FACILITIES

Commissioned Officers and Faculty Club. The use of all of the social and recreational facilities of the Commissioned Officers and Faculty Club is extended to civilian members of the faculty. There is no club membership fee. The Club's facilities include the main dining room, cocktail lounges, and several rooms available for private parties on a reservation basis.

Bookstore. The Navy Exchange Bookstore (located in the main Exchange building) offers a complete range of textbooks, magazines/periodicals, computer software, and personal office supplies (e.g., pens, pencils, etc.). Faculty civilians are eligible to use *only* this portion of the Navy Exchange.

Food Services. The Commissioned Officers' and Faculty Club provides cafeteria service for breakfast and lunch from on Monday through Friday. A coffee and light-meal facility is located near the Library parking lot, and in the Navy Exchange complex.

Post Office. A branch of the U. S. Post Office is located just inside the Del Monte Avenue gate. It is open from 0930 to 1530 Monday through Friday.

Navy Exchange Facilities. Civilian faculty members and their dependents are not allowed to use Navy Exchange facilities unless this privilege is based on prior or present military service or family members in the service. Exceptions to this rule are for the Bookstore and eating facilities operated by the Navy Exchange.

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RECREATION FACILITIES

The Naval Postgraduate School's Monterey Pines18-hole golf course is available to faculty members upon payment of greens fees or a monthly membership fee. A driving range and putting green are also located on the golf course site.

Other physical recreation facilities include a gymnasium (requiring a nominal membership fee) with exercise equipment, basketball court, racquetball, a softball field, tennis courts, and picnic grounds.

The Recreation Office, located near the Quarterdeck of Herrmann Hall, has current folders and maps for the many camping areas, motels, and recreational and entertainment facilities in California. Civilian faculty members may obtain recreation passes for the use of all recreation facilities for themselves and their immediate dependents from this Office.

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APPENDIX A

POLICY REGARDING APPOINTMENT,
PROMOTION, SALARY, AND TENURE OF OFFICE
OF THE CIVILIAN MEMBERS
OF THE FACULTY

(Approved by Secretary of Navy - 1989)

(Often called the “Pink Book” at NPS)

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NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA

<<NPS Navy Seal>>

POLICY
REGARDING APPOINTMENT, PROMOTION, SALARY, and TENURE of OFFICE of the CIVILIAN MEMBERS of the FACULTY

NAVAL POSTGRADUATE SCHOOL
Monterey, California - 93943-5000

24 October 1989

This revised Policy Regarding Appointment, Promotion, Salary and Tenure of Office of the Civilian Members of the Faculty at the Naval Postgraduate School has been approved by the Secretary of the Navy. The effective date of the revised Policy regarding Civilian Members of the Faculty is 1 November 1989.

The Faculty Salary Schedule is published separately and revised as changes occur.

s/

HARRISON SHULL
Provost and
Academic Dean

s/

R.W. WEST, JR.
RADM, U.S. Navy
Superintendent

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POLICY REGARDING

APPOINTMENT, PROMOTION, SALARY, AND TENURE OF OFFICE

of the

CIVILIAN MEMBERS OF THE FACULTY

at the

NAVAL POSTGRADUATE SCHOOL

1. Scope. This policy statement applies to all civilian members of the faculty of the Naval Postgraduate School, Monterey, California.

2. Status of Civilian Members of the faculty. Civilian members of the faculty are appointed by the Superintendent, Naval Postgraduate School in the excepted service, which is authorized by Title 5, Section 213.3108 B and Title 10, Section 7044 of the U. S. Code. Under Schedule A excepted appointment, members of the faculty are covered by the Office of Personnel Management Regulations, which apply to veterans' preference, performance ratings, annual and sick leave, health, retirement, and insurance benefits.

3. Faculty Salary Schedule. The salary for the civilian members of the faculty is determined by the Secretary of the Navy as authorized by Section 7044, Title 10, U. S. Code, and is promulgated by the Office of Civilian Personnel Management (SECNAVINST 12534.1A, 11 May 1988). The faculty salary schedule is modified on a comparative basis with changes authorized by the Congress for federal employees paid under the Classification Act. The term “Academic Rank” refers to the academic grade (Professor, Associate Professor, etc.) of an individual; and the term “Step” refers to the salary level within the category (Step 27, 28, etc.).

4. Academic Session. Faculty of the Naval Postgraduate School have a year-round responsibility to maintain professional proficiency, cognizance of the needs of the Navy with regard to postgraduate education, and a maximum usefulness in fulfilling the mission of the School. The academic session is, however, of ten months' duration, in accord with usual academic practice. The Superintendent shall specify the ten-months academic session for each faculty member. During this period the faculty member is in a duty status, employed in tasks assigned by the Superintendent, except when absent on approved earned annual or sick leave, leave without pay, sabbatical leave, or approved consulting activity. A portion of the faculty, as determined by the Superintendent to be essential, may be employed in teaching classes or other

occupations related to the instruction of students during the remaining two months of each calendar year (Intersessional Period). Other faculty members who are to be employed in the next academic session will be retained during these two months on the rolls in a nonpay status. They will be free during that time to pursue study, research, other professional developments, or other occupations compatible with their status as faculty members of the Naval Postgraduate School.

5. Appointment. Initial appointment to the faculty will be made upon recommendation of the Academic Dean after discussion with the Department Chairman or other appropriate administrative officer. and approval by the Superintendent.

a. Primary Criteria. In evaluating the record and potential of candidates for appointment, the following criteria will receive primary consideration:

(1) Professional Competence, as evidenced by the candidate's educational record, by scholarly activities such as publications, research, and papers presented at professional meetings, and by reputation among peers in the field of specialization.

(2) Teaching Ability, as evidenced by recommendations from former supervisors.

(3) Personal Attributes, such as initiative, cooperation, and breadth of intellectual interests.

b. Special Criteria. Appointments to the several ranks will be based on the following specific qualifications:

(1) Instructor. Appointment to the rank of Instructor will require a master's degree, or other appropriate preparation for the performance of assigned responsibilities.

(2) Assistant Professor. Possession of a doctor's degree or the equivalent professional experience; high standards of scholarship; promise of growth and development in the candidate's professional field.

(3) Associate Professor. Possession of the doctor's degree or the equivalent professional experience; definite record of scholarship and growth; superior personal traits; and at least five years of significant teaching and research experience at the college level, or equivalent professional service.

(4) Professor. Possession of a doctor's degree or the equivalent professional experience; superior teaching ability; unquestioned evidence of high professional qualifications including professional publications; superior personal traits; and at least six years experience in the rank of Associate Professor in accredited institutions of higher learning or equivalent professional service.

(5) Chair, Associate or Assistant Dean. The Superintendent is authorized to designate, with the advice and recommendation of the Academic Dean, members of the civilian faculty to serve as representatives of the Superintendent and the Academic Dean in the administrative positions of Chair, Associate Dean, or Assistant Dean.

(6) Academic Dean. Section 7043 of 10 U. S. Code, as amended by Public Law 89-536 of 11 August 1966 and Public Law 96-513 of 12 December 1980, authorizes the civilian position of Academic Dean. Appointments to this position are made by the Secretary of the Navy on the basis of recommendation by the Postgraduate School Council. The Academic Dean is selected from candidates whose previous association with educational institutions or programs has demonstrated a high caliber of prestige on a national scale.

(7) Distinguished Visiting Professor. The Superintendent is authorized to employ Distinguished Visiting Professors who shall be eminent scholars on a national or international scale selected because of prominence in their fields of academic specialization. The function of a Distinguished Visiting Professor is essentially one of bringing to the Postgraduate School advice and expertise, through consultation, lectures and/or teaching assignments, from the highest academic levels in specific fields of learning. Accordingly, Distinguished Visiting Professors are appointed for a period not to exceed one year. A subsequent appointment of one year may be granted if the Superintendent believes such an appointment will be of advantage to the Postgraduate School. The number of Distinguished Visiting Professors shall not exceed two at any one time.

(8) Adjunct Professor. The Superintendent is authorized to employ faculty members on a temporary appointment. Such appointees must possess the necessary qualifications for appointment as instructor, assistant, associate, or full professor. They will be appointed for definite periods and will be differentiated from the regular faculty appointments by the title Adjunct Professor. Adjunct Professors are paid using the same pay scales as an instructor, assistant, associate, or full professor, as appropriate.

c. Exceptions. Criteria for appointment or promotion may be waived in unusual circumstances when, in the opinion of the Superintendent, doing so would operate to the distinct advantage of the Naval Postgraduate School.

6. Salary. The salary of a civilian member of the faculty is determined by the Superintendent in accordance with the faculty salary schedule cited in Section 3. Recommendations for salary increase are submitted at the same time and in the same manner as recommendations for promotion cited in Section 7a.

a. Appointment. Initial appointments of faculty members will be in an academic rank at a step as determined by the Superintendent.

b. Promotion. With every promotion to another pay category on the Faculty Schedule, a civilian member of the faculty shall receive a salary increase equivalent to at least one pay step.

c. Merit Step Increases. Step increases for each civilian member of the faculty within a salary category will be based on the criteria in paragraph 7a together with the length of service in academic rank and the guidelines in NAVPGSCOLINST 12534.1 and 12430.3. Civilian members of the faculty may receive none, one, or two steps at the discretion of the Superintendent. Faculty members whose performance has been rated as outstanding by their Department Chairman and approved by the Provost may, at the discretion of the Superintendent, be granted salary increases of three or four steps. The number of three or four step increases shall not exceed, in any one year, 5% of the total of the civilian members of the faculty.

d. Intersessional Pay. Those civilian members of the faculty required by the Superintendent to perform academic duties during all or part of the two-months intersessional period will be paid additional compensation based on their ten-month salary rate.

e. Chair, Associate or Assistant Dean. Civilian members of the faculty who are appointed to positions of Chair, Associate or Assistant Dean will be paid at a salary step in the Administrative Faculty Salary category, as determined by the Superintendent. The step selected shall not exceed by more than three steps the salary step at which the faculty member was paid in the Professor or lower academic rank. When the appointment as Chair, Associate or Assistant Dean is terminated the faculty member will revert to the salary step that would have been reached had there not been service in an administrative capacity.

7. Reappointment, Promotion and Tenure. The initial appointment of all Federal Civil Service employees encompasses a one-year probationary period. This is applicable to the civilian members of the faculty at the Naval Postgraduate School. The Postgraduate School will accept a maximum of three years of prior experience as

a full-time teaching faculty member in an accredited collegiate institution in the consideration of individual tenure-track faculty members for promotion and tenure. The Postgraduate School may consider other significant professional experience in lieu of teaching experience in making promotions and in granting tenure. Additional limitations on appointment and reappointment of civilian members of the faculty are outlined below.

a. Promotion. The term "promotion" refers to a change in academic rank. In addition to the criteria below, promotion requires that a faculty member have a performance rating of record of "Fully Successful" or above. Promotion proceedings will occur annually. Promotions are made upon recommendation of the Academic Dean after consideration of the candidates by the Department, Faculty Promotion Council, and the Dean's Council, and approval by the Superintendent. The Promotion proceedings consider two general categories of performance:

Internal Service -that faculty activity which contributes to supporting the high quality of the School's academic environment, and

External Service - that faculty activity which enhances the School's contributions especially to the DON, but also to the DOD and/or the Academic Community.

In evaluating the record and potential of candidates for promotion in the above categories, emphasis will be placed on the following criteria:

Instructional Activity and Teaching Effectiveness as evidenced by: the vitality of classroom presentation, the thoroughness of preparation, demonstrated interest in students, capacity to impart knowledge and understanding and to stimulate the intellectual curiosity and growth of the student, developing and teaching courses (including short courses) with significant Navy content, development of other new course materials, direction of student thesis research, and by producing instructional material for use outside of the Naval Postgraduate School, and conducting off campus courses and instructional seminars.

Scholarly Activity as evidenced by: research directed toward the development of new knowledge, including efforts in areas related to DON/DOD, the application of knowledge to the solution of problems, including those of DON/DOD, by publication of significant new research results in peer-reviewed scholarly journals, and by the preparation, editing or revision of text books and monographs which represent major and significant new contributions in their areas or disciplines.

In addition, the following criteria will also be considered in judging a candidate's potential for promotion:

DON/DOD Service, as evidenced by: serving on DON/DOD boards and panels, providing consulting support to headquarters organizations and operational commands, and assistance to the Naval Postgraduate School organizations.

Professional Service Activity, as evidenced by: professional activities external to the Naval Postgraduate School such as: conference planning, committee work, offices in professional organizations, editorial work, refereeing or reviewing papers, book reviewing, lecturing and consulting work.

Administrative Activity, as evidenced by: service on faculty or administrative committees, on departmental committees and assignments, and by service in an administrative appointment such as academic associate, associate chair, or chair.

Personal Attributes, such as integrity, sense of public trust, industry, cooperation, initiative and breadth of intellectual interests.

In applying these criteria the determining factor for promotion to Associate Professor shall be possession of the qualifications necessary to achieve effective leadership in carrying out the mission of the Naval Postgraduate School. Promotion to Professor requires that the person demonstrate consistent leadership in at least one area of faculty activity, and have meritorious performance in both internal and external service in carrying out the mission of the Postgraduate School.

b. Tenure. The term “tenure” refers to appointment without a definite term of office. Except for possible termination due to a reduction-in-force or separation for cause (see section 8), a civilian faculty member with tenure may serve until retirement. The primary criteria for the granting of tenure are the same as those stated above for consideration for promotion. However, tenure is conferred in expectation of continuing significant contributions to future requirements of the Naval Postgraduate School. The award of tenure will be based on a continuing expected need for the particular capabilities of the faculty member and also the need to insure continued ability of the Naval Postgraduate School to recruit new faculty who can have a reasonable expectation of achieving tenure. Tenure will not be granted at any rank below that of Associate Professor. The granting of salary increases or promotions in rank shall not be interpreted to imply the intention of the Naval Postgraduate School to grant tenure to any faculty member. Note: Tenure as used in this policy statement refers to academic tenure; it does not encompass “status” as used in the competitive civil service.

c. Terms of Appointment. A new appointee to the faculty of the Naval Postgraduate School will normally be given a three-year appointment, the first year being a probationary period as referred to at the beginning of this section. At the end of the second year, the appointee will be considered for an extension of the term of appointment for an additional year. This will, thereafter, be repeated annually until the sum of his or her accepted prior experience and the length of the appointments at the Postgraduate School reaches seven years. If any appointment is not extended, then it will be understood to terminate upon completion of the stipulated term. Consideration for award of tenure will be given not later than the end of the sixth year of total experience (accepted prior experience plus experience at the Naval Postgraduate School. Final award of tenure occurs after seven years of total experience. A partial year's appointment does not count in the total years' service referred to in this paragraph. (See paragraph 8a.)

(1) Instructor. An Instructor may be considered for promotion to Assistant Professor at any time the requirements for appointment to that rank have been met.

(2) Assistant Professor. An Assistant Professor will be given first consideration for promotion to Associate Professor not later than the end of five years of total experience (accepted prior experience plus experience at the Naval Postgraduate School). An Assistant Professor promoted to Associate Professor may be considered for permanent tenure at that time.

(3) Associate Professor. An Associate Professor appointed from outside the School will be considered for tenure not later than the end of the sixth year of total experience (accepted prior experience plus experience at the Naval Postgraduate School). An Associate Professor will be given first consideration for promotion to Professor between the seventh and the tenth years of experience as Associate Professor (accepted prior experience plus experience at the Naval Postgraduate School). No time constraints apply for any subsequent consideration for promotion from Associate Professor. In exceptional cases warranted by unique and significant outstanding performance, an Associate Professor may be considered for promotion earlier at the discretion of the Academic Dean.

(4) Professor. A Professor appointed from outside the School will be considered for tenure not later than the end of the sixth year of total experience (accepted prior experience plus experience at the Naval Postgraduate School).

(5) Chair, Associate or Assistant Dean. A Chair, Associate Dean, or Assistant Dean is appointed for an initial term of not more than three years. At the expiration of his or her term, the individual may be reappointed for an additional term, or terms, of not more than five years or revert to faculty status.

(6) Academic Dean. The initial and subsequent appointments of the Academic Dean shall be for five years or less, as prescribed by law.

d. Military Service.

(1) Service of a faculty member on active duty in the Armed Forces of the United States subsequent to appointment at the Naval Postgraduate School will be counted year for year as service on the civilian faculty for the purpose of determining eligibility for advancement.

(2) A faculty member on active duty with the Armed Forces will, when eligible, be considered with other eligible candidates and may be selected for promotion. Promotion in absentia will be effective as of the date it would have been made notwithstanding the absence for military duty.

8. Termination.

a. Nonreappointment. If reappointment is not to be made, faculty members with more than two years of service at the Naval Postgraduate School will be given notice at least one year prior to the termination of the appointment; faculty members with less service will be given notice at least six months prior to the termination of the appointment. Notice of non-continuation beyond the probationary year will be given at least three months prior to the end of the year. Non reappointments of faculty members who are eligible for veterans' preference and have completed one year of continuous employment, including non reappointment to positions of Department Chair, Associate Dean, and Assistant Dean, will be made in compliance with the applicable procedures of Chapter 752 of the Federal Personnel Manual and appropriate sections of Navy Civilian Personnel Instruction 752.

b.Reduction in Force. A reduction in the instructional staff may be required by such reasons as a lack of federal funds, or change in mission, organization or workload. In such event, and where possible, every effort will be made to honor the conditions of non-reappointment as in (a) above.

c. Separation for Cause. Any member of the faculty may be separated for such cause as will promote the efficiency of the service. Such separation will be effected in accordance with the applicable civil service and Navy regulations.

d. Resignation. Civilian members of the faculty are expected to furnish the Superintendent at least six months notice of intention to resign.

9. Effective Date of Promotions and Other Personnel Actions. Tenure-track faculty promotions, reappointments, and salary increases will normally become effective on the first pay period after 1 July.

10. Physical Examination. Applicants for a position as a civilian member of the faculty may be asked to undergo a physical examination prior to acceptance for employment. Such an examination, if requested, would be for the purpose of ascertaining as nearly as possible that no health conditions exist which would prevent the proper discharge of the duties which are expected in employment or which would be a hazard to the applicant or others.

11. Research and Professional Advancement. Faculty members are encouraged to conduct research, write educational and professional articles and textbooks, and to attend and participate in conferences of learned societies. The primary objective, as well as the governing factor of such research and professional activity, must be the resulting enrichment and improvement of education at the Naval Postgraduate School. Valuable accomplishments of this nature shall be taken into account in recommendation for promotion.

12. Leave, Health Benefits, Incentive Awards and Life Insurance. Civilian members of the faculty are entitled to such benefits on the same basis as employees in the competitive civil service.

13. Retirement. Civilian members of the faculty hired after 1 January 1984 are covered by the Federal Employees Retirement System (except that those appointed for one year or less are covered only by the Social Security Act). Permanent faculty hired before that date are covered by either the Civil Service Retirement Act or the Federal Employees Retirement System depending on the member's chosen option. Standard Form 105, “Certificate of Membership”, outlines the coverage and specific provisions of the retirement system and is issued to each member of the faculty at the time of appointment. More complete details concerning retirement are contained in Chapter 831 of the Federal Personnel Manual.

14. Absence for Study and Research. Special leave without pay for study and research may be granted at the discretion of the Superintendent to civilian members of the faculty when such leave would result in the improvement of education at the Naval Postgraduate School. The number of members of the professional staff to be granted special leave at any one time shall be so limited as to avoid interference with the regular work at the Naval Postgraduate School.

15. Sabbatical Leave. In recognition of the scholarly work accomplished by the Naval Postgraduate School, sabbatical leave for study and research may be granted to civilian members of the faculty by the Superintendent when such leave would result in the improvement of education at the Naval Postgraduate School. Unless otherwise specifically provided, such leave shall be granted at full pay for one-half the academic session. The number of members of the professional staff to be granted sabbaticals at any one time shall be so limited as to avoid interference with the regular work at the Naval Postgraduate School. A civilian member of the faculty who accepts such leave assumes an obligation to continue service at the Naval Postgraduate School for a two-year period following return from the sabbatical.

16. Long-Term Training and Education Program for Civilian Employees. Civilian members of the faculty are eligible for participation in the Navy Department program designed to provide Navy employees with opportunity for comprehensive training or education consistent with significant changes in their responsibilities. This long-term program provides tuition, travel, per diem, transportation of family and household effects and salary. Acceptance of this opportunity for training or education obligates the civilian member of the faculty to remain an employee for a period three times the length of the period of training or education.

17. Consulting. Faculty members of the Naval Postgraduate School may be permitted to engage in outside employment or professional activity that enhances their professional competence. Any outside activity must be limited in scope so as not to interfere with the full and energetic execution of the member's primary responsibility in meeting all assigned professorial duties. A faculty member, in accepting an agreement for extramural professional activity, does so as an addition to full-time employment by the School and not as a substitute for a portion of it. The outside work must not interfere with the efficient performance of the members' duties as employees of the Naval Postgraduate School. Applicable regulations governing outside employment of government employees apply, in particular, SECNAVINST 5370.2 (series) on "Standards of Conduct and Government Ethics". Local procedures will provide for the reporting and approval of such activity by the faculty member and limit the amount of outside employment a faculty member may engage in to no more than an average of one day per week when not in a leave status.

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NAVAL POSTGRADUATE SCHOOL
Monterey, California - 93943-5000

July 2006

This revised Policy Regarding Appointment, Promotion, Salary and Tenure of Office of the Civilian Members of the Faculty at the Naval Postgraduate School has been approved by the Secretary of the Navy. The effective date of the revised Policy regarding Civilian Members of the Faculty is July 2006.

The Faculty Salary Schedule is published separately and revised as changes occur.

Policy Regarding

APPOINTMENT, PROMOTION,
SALARY, AND TENURE OF OFFICE

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APPOINTMENT, PROMOTION, SALARY, AND TENURE OF OFFICE

Of the

CIVILIAN MEMBERS OF THE FACULTY

At the

NAVAL POSTGRADUATE SCHOOL

1. Scope. This policy statement applies to all civilian members of the faculty of the Naval Postgraduate School, Monterey, California.

2. Academic Dean/Provost. Section 7043 of Title 10 U. S. Code, authorizes the civilian position of Academic Dean/Provost. Appointments to this position are made by the Secretary of the Navy. Before making an appointment to the position of Provost and Academic Dean, the Secretary consults with the Board of Advisors for the Naval Postgraduate School and must consider any recommendation of the leadership and faculty of the Naval Postgraduate School. The Academic Dean/Provost is selected from candidates whose previous association with educational institutions or programs has demonstrated a high caliber of prestige on a national scale. The title Provost will be used in this document to refer to the Academic Dean/Provost. The Provost is the Chief Academic Officer of the Naval Postgraduate School.

3. Civilian Faculty. Civilian members of the faculty are appointed by the President, Naval Postgraduate School, in the excepted service, as authorized by Title 10, U.S. Code, Section 7044, and Title 5, Code of Federal Regulations, Section 213.3108 (b) .Under Schedule A Excepted Appointments, members of the faculty are covered by the Office of Personnel Management Regulations.

4. Faculty Appointments. Initial appointment to the faculty will be made by the President upon recommendation of the Provost after discussion with the appropriate faculty, Chair, and Dean. There are two appointment series for faculty: Tenure-track and Non-tenure-track. Tenure-track faculty appointments are those appointments which have or may lead to appointment with no definite term of office; non-tenure-track appointments are those with definite terms of office with no promise of renewal of appointment. The initial appointment of all Federal civil service employees encompasses a one-year probationary period; this is applicable to the civilian members of the faculty.

a. Primary Criteria. In evaluating the record and potential of candidates for appointment, the following criteria will receive primary consideration:

(1) Professional Competence, as evidenced by the candidate's educational record; by scholarly activities such as publications, research, papers presented at professional meetings, and contributions to the DOD; and by reputation among peers in the field of specialization.

(2) Teaching/Research Ability, as evidenced by recommendations from former supervisors, peers, students, or other appropriate evidence.

(3) Personal Attributes, such as initiative, cooperation, and breadth of intellectual interests.

b. Tenure-track Appointments. Appointments to the several tenure-track academic ranks will be based on the following specific qualifications:

(1) Assistant Professor. Appointment to the rank of Assistant Professor will require possession of the Doctorate degree, high standards of scholarship, promise of growth and development in the candidate's professional field.

(2) Associate Professor. Appointment to the rank of Associate Professor will require possession of the Doctorate degree, a definite record of scholarship and growth, superior personal traits, and at least five years of significant teaching and research experience at the college level, or equivalent professional service.

(3) Professor. Appointment to the rank of Professor will require possession of the Doctorate degree, superior teaching ability, unquestioned evidence of high professional qualifications including professional publications, superior personal traits, and at least six years experience in the rank of Associate Professor in accredited institutions of higher learning, or equivalent professional service.

c. Non-tenure-track Appointments. The President is authorized to employ non-tenure-track (adjunct) faculty members on temporary appointments to support the teaching, research, or academic administrative needs of the School. Adjunct faculty must possess appropriate academic and experiential qualifications for the positions to which they are appointed. Titles for adjunct faculty include: Lecturer, Senior Lecturer, Research Assistant, Research Associate, Research Assistant Professor, Research Associate Professor, Research Professor, Adjunct Assistant Professor, Adjunct Associate Professor, Adjunct Professor, Professor-of-the-Practice-of-(specified area). Specific title used depends upon the appointee’s qualifications and position. Adjunct faculty appointments are term limited and are not tenure accruing positions. Qualifications required of adjunct faculty are similar to those for tenure track faculty but may be weighted more towards practical experience than is the case for tenure track appointments; this is particularly so for Professor-of-the-Practice appointments. Administrative faculty appointees, Lecturers and Senior Lecturers must possess at least a Master’s degree in an appropriate area of study. Research Assistants will usually be part-time appointees who are also enrolled in a masters or doctoral program at NPS.

The President is also authorized to employ as Distinguished Visiting Professors faculty who are nationally or internationally recognized eminent scholars or experts in areas of DOD interest. The function of a Distinguished Visiting Professor is essentially one of bringing to NPS advice and expertise, through consultation, lectures and/or teaching assignments, from the highest academic and professional levels. Accordingly, Distinguished Visiting Professors are normally appointed for a period not to exceed one year. Subsequent appointments may be granted if the President believes such appointments will be of advantage to the Naval Postgraduate School.

Nontenure-track faculty are paid using the same pay scales as an instructor, assistant, associate, or full professor, as appropriate.

d. Exceptions. Criteria for appointments may be waived in exceptional circumstances when doing so would operate to the distinct advantage of the Naval Postgraduate School. Waivers may be granted only by the President upon the recommendation of the Provost.

5. Executive Faculty Appointments. The President is authorized to designate, with the advice and recommendation of the Provost, members of the civilian faculty to serve in the executive positions of Dean and Associate Provost. These positions report directly to the Provost.

6. Promotion and Tenure, Tenure-track faculty. Tenure-track faculty are subject to both promotion and tenure review processes.

a. Promotion. The term "promotion" refers to a change in academic rank from Assistant Professor to Associate Professor or from Associate Professor to Professor. In addition to the criteria below, promotion requires that a faculty member have a performance rating of record of "Meritorious". Promotion proceedings will occur annually. Promotions are made by the President upon recommendation of the Provost, after consideration of the candidates by the Department or School, the Faculty Promotion Council (as defined in the Faculty Handbook), and the Deans' Council (as defined in the Faculty Handbook). The Promotion proceedings consider two general categories of performance:

Internal Service -those faculty activities which contribute to supporting the high quality of the School's academic environment, and

External Service - those faculty activities that enhance the School's contributions especially to the DON, the DOD, National Security and Homeland Defense, and/or the Academic Community.

In evaluating the record and potential of candidates for promotion in the above categories, emphasis will be placed on the following criteria:

Instructional Activity and Teaching Effectiveness: Evidenced by the vitality of classroom presentation; the thoroughness of preparation; a demonstrated interest in students; the capacity to impart knowledge and understanding and to stimulate the intellectual curiosity and growth of the student; developing and teaching courses (including short courses) with significant Navy/DOD content; development of other new course materials; direction of student thesis research; production of instructional material for use both inside and outside of the Naval Postgraduate School; and conducting off-campus courses and instructional seminars.

Scholarly Activity: Evidenced by research directed toward the development of new knowledge, including efforts in areas related to national security; the application of knowledge to the solution of problems, including those of DOD and other national

security organizations; by publication of significant new research results in peer-reviewed scholarly journals; and by the preparation, editing or revision of text books and monographs which represent major and significant new contributions in their areas or disciplines. Scholarly activity includes the Scholarship of Discovery, the Scholarship of Integration, the Scholarship of Application, and the Scholarship of Teaching.

In addition, the following criteria will also be considered in judging a candidate's potential for promotion:

DON/DOD Service: Evidenced by serving on DON/DOD or other national security organizations boards and panels, providing consulting support to headquarters organizations and operational commands, and assisting Naval Postgraduate School organizations.

Professional Service Activity: Evidenced by professional activities external to the Naval Postgraduate School such as: conference planning, committee work and offices in professional organizations, editorial work, refereeing or reviewing papers, book reviewing, lecturing and consulting work.

Administrative Activity: Evidenced by service on faculty or administrative committees; service on departmental committees, and service in an administrative appointment such as academic associate, associate chair, chair, dean etc.

Personal Attributes: To include integrity, sense of public trust, industry, cooperation, initiative and breadth of intellectual interests.

In applying these criteria the determining factor for promotion to Associate Professor shall be possession of the qualifications necessary to achieve effective leadership in carrying out the mission of the Naval Postgraduate School. Promotion to Professor requires that the person demonstrate consistent leadership in at least one area of faculty activity, and have meritorious performance in both internal and external service in carrying out the mission of the Postgraduate School.

b. Tenure. The term "tenure" refers to appointment without a definite term of office to the academic unit to which the faculty member is assigned. Except for possible termination due to a reduction-in-force or separation for cause (see section 10), a civilian faculty member with tenure may serve until retirement. The primary criteria for the granting of tenure are the same as those stated above for consideration for promotion. However, tenure is conferred in expectation of continuing significant contributions to future requirements of the Naval Postgraduate School. The award of tenure will be based on a continuing expected need for the particular capabilities of the faculty member and also the need to insure continued ability of the Naval Postgraduate School to recruit new faculty who can have a reasonable expectation of achieving tenure. Tenure will not be granted at any rank below that of Associate Professor. The granting of salary increases or promotions in rank shall not be interpreted to imply the intention of the Naval Postgraduate School to grant tenure to any faculty member. (Note: Tenure as used in this policy statement

refers to academic tenure; it does not encompass "status" as used in the competitive civil service.)

7. Terms of Appointment. A new tenure-track appointee to the faculty of the Naval Postgraduate School will normally be given a three-year appointment, the first year being a probationary period as referred to at the beginning of this section. At the end of the second year, the appointee will be considered for an extension of the term of appointment for an additional year. This will, thereafter, be repeated annually until the sum of his or her accepted prior experience (a faculty member may be granted up to three years of in-rank credit for service as a tenure track or tenured faculty member at another major, research university) and the length of the appointments at the Postgraduate School reaches seven years. Each extension decision will be based upon a formal performance review using the criteria of section (a). If any appointment is not extended, then it will be understood to terminate upon completion of the stipulated term.

a. Assistant Professor. An Assistant Professor will be given first consideration for promotion to Associate Professor not later than the end of six years of total experience. An Assistant Professor promoted to Associate Professor must be considered for permanent tenure at that time. If tenure is not granted then the faculty member may not be promoted to Associate Professor

b. Associate Professor. An Associate Professor appointed from outside the School will be considered for tenure not later than the end of the sixth year of total experience (accepted prior experience plus experience at the Naval Postgraduate School). An Associate Professor will be given first consideration for promotion to Professor between the seventh and the tenth years of experience as Associate Professor (accepted prior experience plus experience at the Naval Postgraduate School). No time constraints apply for any subsequent consideration for promotion from Associate Professor. In exceptional cases warranted by unique and significant outstanding performance at NPS, an Associate Professor may be considered for promotion earlier at the discretion of the Provost.

d. Professor. A Professor appointed from outside the School will be considered for tenure not later than the end of the sixth year of total experience (accepted prior experience plus experience at the Naval Postgraduate School). Under exceptional circumstances, as determined by the Provost, a Professor may be appointed with tenure. Such an appointment will be made only after the candidate has been reviewed and approved by the appropriate tenured faculty, the full Faculty Promotion Council, and the Deans' Council.

Consideration for award of tenure will be given not later than the end of the sixth year of total experience (accepted prior experience plus experience at the Naval Postgraduate School). A partial year's appointment, that is an appointment that begins after the first of July in any academic year, does not count in the total years' service referred to in this paragraph. Tenure is awarded by the President upon the recommendation of the Provost after consideration of the candidate by the department/school, the Faculty Promotion Council, and the Deans' Council. A faculty member who fails to receive tenure will be given a one-year terminal appointment.

8. Military Service. It is the policy of the Naval Postgraduate School that civilian faculty who are recalled to active duty will not be disadvantaged by virtue of such service.

a. Service of a civilian, tenure-track faculty member called to active duty in the Armed Forces of the United States subsequent to appointment at the Naval Postgraduate School may be counted year for year as service on the civilian faculty for the purpose of determining eligibility for advancement.

b. A civilian, tenure-track faculty member on active duty with the Armed Forces will, when eligible, be considered with other eligible candidates and may be selected for promotion. Promotion in absentia will be effective as of the date it would have been made notwithstanding the absence for military duty.

9. Non-reappointment, Termination. Tenure-track faculty are subject to non-reappointment or termination actions as follows.

a. Non-reappointment. If reappointment is not to be made, tenure-track faculty members with more than two years of service at the Naval Postgraduate School will be given notice at least one year prior to the termination of the appointment; faculty members with one to two years of service will be given notice at least six months prior to the termination of the appointment; and faculty members with less than one year of service will be given notice at least three months prior to the termination of the appointment. Notice of non-continuation beyond the probationary year will be given at least three months prior to the end of the year. Non-reappointment of faculty members who are eligible for veterans' preference and have completed one year of continuous employment, including non-reappointment to administrative positions, will be made in compliance with applicable Civilian Personnel Instructions.

b. Non-award of promotion and/or tenure. Promotion and tenure decisions rest upon the professional judgments of each of the many individuals involved in the process. The process is designed so that the individual professional judgments can be exercised in a fair and equitable manner. At each stage of the deliberations, there is provision for the presence of an objective observer to assure that the process is indeed fair and equitable. Appeals of the final decision may be entertained only if there is demonstrable evidence that there has been an error in process.

A faculty member whose promotion or tenure has initially been denied at the department or school level may file a written appeal with the Provost. The Provost, after making a preliminary review of the matter, may grant the appeal, remand the matter back to the originating academic unit for further consideration, or deny the appeal. If the appeal is granted, the case is considered along with all other promotion and/or tenure cases for action during the appropriate tenure/promotion cycle. If the Provost denies the appeal, the faculty member, colleagues, and/or Department, Chair or School Dean may request the assistance of the Faculty Professional Practices Committee (see Faculty Handbook) in appealing on the

basis of process errors. The Professional Practices Committee shall determine whether, in its view, such process errors are significant and recommend to the Provost how such process errors may be remedied. The Provost makes the final decision on the appeal, and may choose to follow the recommendations of the Professional Practices Committee or may decide not to do so in whole or in part. The Provost will inform the appellant of the decision. Upon receipt of the Provost's final decision, the appellant may request a further review by the President. The President may decline the request. If the President chooses to consider the appeal, he or she may make any inquiries he or she deems appropriate. Following the examination of the case the President may grant or deny the appeal. The President's decision is final.
A faculty member whose promotion or tenure has been supported by his or her department or school but which is then denied by the Provost may file a written appeal with the President who will then perform the functions assigned to the Provost in the previous paragraph. At the end of the process the President's decision will be conveyed to the appellant and is final.

A faculty member whose promotion or tenure is denied by the President after a positive recommendation by the Provost may file a written appeal with the President. The President may take any action he or she deems appropriate. The President's decision will be conveyed to the appellant and is final.

c. Reduction in Force. A reduction in the number of faculty may be required by such reasons as a lack of federal funds, or by a change in mission, organization or workload. In such event, and where possible, every effort will be made to honor the conditions of non-reappointment as in (a) above.

d. Separation for Cause. Any member of the faculty may be separated for such cause as will promote the efficiency of the service. Such separation will be effected in accordance with the applicable civil service and Navy regulations.

10. Resignation. Civilian members of the faculty are expected to furnish the President at least six months notice of intention to resign.

11. Faculty Salary Schedule. The salary for the civilian members of the faculty is determined by the Secretary of the Navy as authorized by Title 10, U.S. Code, Section 7044, and is promulgated by the Deputy Assistant Secretary of the Navy (Civilian Human Resources) (SECNAVINST 12534.1C, 18 October 2005, and appropriate updates). The faculty salary schedule is modified on a comparative basis with changes authorized by the Congress for federal employees paid under the General Schedule. The term "Academic Rank" refers to the academic grade (Professor, Associate Professor, etc.) of an individual; and the term "Step" refers to the salary level within the category (Step 27, 28, etc.). In addition, locality-based comparability payments have been extended to the Naval Postgraduate School Faculty Schedule.

a. Academic Session. Faculty of the Naval Postgraduate School have a year-round responsibility to maintain professional proficiency, remain cognizance of the needs of the Navy with regard to postgraduate education, and to contribute strongly to fulfilling the mission of the School. The academic session is, however, of ten months' duration, in

accordance with usual academic practice. The President shall specify the ten-month's academic session for each faculty member. During this period the faculty member is in a duty status, employed in tasks assigned by the President, except when absent on approved earned annual or sick leave, leave without pay, sabbatical leave, or engaged in an approved consulting activity. A portion of the faculty, as determined by the President to be essential, may be employed to perform academic duties during the remaining two months of each calendar year (the Intersessional Period,). Other faculty members who are to be employed in the next academic session will be retained during these two months on the rolls in a non-pay status. They will be free during that time to pursue study, research, other professional developments, or other occupations compatible with their status as faculty members of the Naval Postgraduate School.

b. Intersessional Period Those civilian members of the faculty required by the President to perform academic duties during all or part of the Two-Month Intersessional period will be paid at the same rate as during their Academic Session.

12. Salary determination. The salary of a civilian member of the faculty is determined by the President in accordance with the faculty salary schedule cited in Section (11). The Faculty Schedules have been capped at a level equal to that of Level IV of the Executive Schedule .The Department of Navy may approve rates above those listed on the schedule.

a. Appointment. Initial appointments of faculty members will be in an academic rank at a step as determined by the President.

b. Promotion. With every promotion to another academic rank a civilian member of the faculty shall receive a salary increase equivalent to at least one pay step.

c. Merit Pay Step Increases. Upon the recommendation of the Provost the President may authorize within-rank step increases for civilian faculty on an annual basis, subject to budgetary constraints. Such step increases will recognize excellence in faculty performance and will be based upon recommendations from the appropriate chairs and deans and the approval of the Provost.

d. Executive/Administrative Appointments. Civilian members of the faculty who are appointed to the various executive administrative positions will be paid at a salary step in the Administrative Faculty Salary category, as determined by the President. The Faculty member will retain all merit pay step increases and performance ratings earned while on the Administrative Faculty Schedule.

13. Effective Date of Promotions and Other Personnel Actions. Tenure-track faculty promotions, reappointments, and salary increases will normally become effective on the first pay period after 1 July.

14. Research and Professional Advancement. Faculty members are encouraged to conduct research, write educational and professional articles and textbooks, and to attend and participate in conferences of learned societies. The primary objective, as well as the governing factor of such research and professional

activity, must be the resulting enrichment and improvement of education at the Naval Postgraduate School, and contributions to the improvement of the national security of the United States. Valuable accomplishments of this nature shall be taken into account in recommendation for promotion and tenure.

15. Leave, Health Benefits, Incentive Awards and Life Insurance. Civilian members of the faculty are entitled to such benefits on the same basis as employees in the competitive civil service.

16. Retirement. Civilian members of the faculty hired after 1 January 1984 are covered by the Federal Employees Retirement System (except that those appointed for one year or less are covered only by the Social Security Act). Either the Civil Service Retirement Act or the Federal Employees Retirement System, depending on the member's chosen option covers permanent faculty hired before that date. Standard Form 105, Certificate of Membership, outlines the coverage and specific provisions of the retirement system and is issued to each member of the faculty at the time of appointment. More complete details concerning retirement are contained in the Federal Personnel Manual.

17. Absence for Service, Study and Research. Special leave without pay for study, research, or service may be granted at the discretion of the President to civilian members of the faculty when such leave would result in the improvement of education at the Naval Postgraduate School.

18. Sabbaticals. In recognition of the scholarly work accomplished by the Naval Postgraduate School, sabbaticals for study and research may be granted to civilian members of the faculty by the President when such a sabbatical would result in the improvement of education at the Naval Postgraduate School. Unless otherwise specifically provided, such a sabbatical shall be granted at full pay for one-half the academic session. The number of members of the professional staff to be granted sabbaticals at any one time shall be so limited as to avoid interference with the regular work at the Naval Postgraduate School. A civilian member of the faculty who accepts a sabbatical assumes an obligation to continue service at the Naval Postgraduate School for a two-year period following return from the sabbatical.

19. Long-term Training and Education Program for Civilian Employees. Civilian members of the faculty are eligible for participation in Navy Department programs designed to provide Navy employees with opportunity for comprehensive training or education consistent with significant changes in their responsibilities. This long-term program provides tuition, travel, per diem, transportation of family and household effects, and salary. Acceptance of this opportunity for training or education obligates the civilian member of the faculty to remain an employee for a period three times the length of the period of training or education.
Individuals who are employed as Research Assistants (RA) in a part-time capacity may enroll in NPS degree programs and receive a degree from NPS. RAs will be required to pay a tuition to offset a portion of the programmatic costs, at a level determined by the President, and will be required to remain an employee of the DOD for a period equal to the of the education period. Tuition fees may be paid by appropriate research sponsors.

20. Consulting. Faculty members of the Naval Postgraduate School may be permitted to engage in outside employment or professional activity that enhances their professional competence. Any outside activity must be limited in scope so as not to interfere with the full and energetic execution of the member's primary responsibility in meeting all assigned professorial duties. Applicable regulations governing

outside employment of government employees apply, in particular, DOD 5500.7-R – The Joint Ethics Regulations (JER) on Standards of Conduct and Government Ethics. Local procedures will provide for the reporting and approval of such activity by the faculty member and limit the amount of outside employment a faculty member may engage in to no more than two days in any two-week pay period when not in a leave status. A faculty member, in accepting an agreement for extramural professional activity, does so as an addition to full-time employment by the School and not as a substitute for a portion of it.

NPS Curricula: An Overview

Author: Kamil Marcinka, eDataTech
Date: November 8, 2007

Purpose

This document contains an overview of the relationships between Schools, Departments, Curricula and Subspecialty Codes, Tracks and Degrees. The research was conducted as part of development of the *Curriculum Management System* project, SOW item #3.1.

Acknowledgements

Thanks to all of the NPS staff members who contributed information during the effort of preparing this document: Mike Andersen, CDR Mary Blankenship, Tracy Hammond, Daphne Kapolka, Alan Pires, and Minerva Scheffel.

Special thanks to Daphne for her critical role in providing valuable insights and editorial suggestions throughout the process of writing this document.

Background

The mission of NPS is to provide graduate-level education for US Navy officers as well as to support the unique educational needs of other US service components, DoD civilians, and allied nations.

The educational goals for the US Navy students at NPS are defined in terms of the *subspecialty codes* (a.k.a. *p-codes*). A p-code is a four-digit designator that the US Navy uses to identify curricula and tracks. The first two digits of a p-code identify a curriculum and the last two digits identify a track. Appended to a p-code can be a one-letter designator that identifies the degree type earned (MS, PhD, etc.).

The subspecialty codes and their associated curricula are typically sponsored by high-ranking Navy officers who understand the needs of the US Navy. Subspecialty codes are defined in terms of Educational Skill Requirements (ESRs) and, in cooperation with NPS staff, translated into curricula that satisfy those requirements. Curricula sponsors participate in curriculum reviews as well as provide support and financial backing for their programs.

In this respect, there is a fundamental difference in the education model between civilian institutions and NPS. The education goal at a civilian institution is an academic degree, and a curriculum defines the requirements for obtaining a degree. At NPS, the goal is to obtain a subspecialty code, and an NPS curriculum defines the requirements for a given subspecialty code. In order to earn a subspecialty code, the student must also earn an academic degree, but that is only one component. The other component involves fulfilling the core set of subspecialty requirements that reflect the needs of the military.

In summary, to fulfill subspecialty code requirements, a student at NPS is required to complete a *curriculum*. An NPS curriculum has two components:

1) A core set of courses and other objectives that directly reflect the ESRs for the given *subspecialty code*. They bear no direct relationship to the academic degree requirements, although some of the subspecialty code requirements may also happen to satisfy some of the degree requirements. This set of requirements serves the needs of the US Navy.

2) A set of courses and other requirements for a *graduate academic degree* that the student must also earn in order to be granted a subspecialty code. This set of requirements is governed by the civilian education accreditation criteria.

A curriculum has one or more tracks, each of which defines a different specialization and, possibly, a different degree. For a given curriculum, the first two digits of the subspecialty code will be the same regardless of the chosen track; the last two digits may be different depending on the track.

Thus, different students may satisfy a curriculum and obtain the same subspecialty code while earning different degrees. Conversely, students completing different curricula or tracks may be earning the same academic degree while obtaining different subspecialty codes.

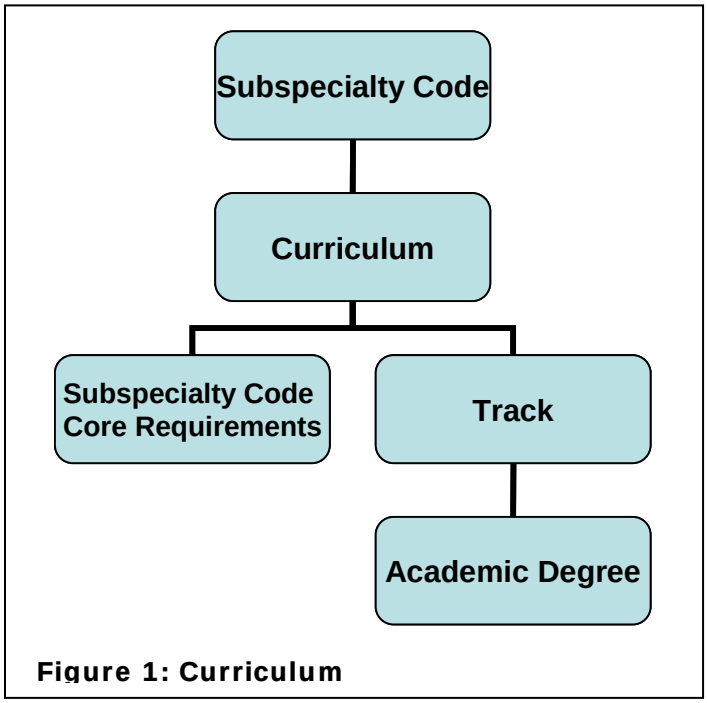

Figure 1: Curriculum

Program Offices and Academic Departments

The function of Program Offices is to work with the curricula sponsors to define the ESRs, review and maintain the curricula, add and delete courses, etc. Program Offices also work with the academic departments to ensure that the coursework meets the subspecialty code requirements. The Program Offices also assign tracks based on students' needs and interests, and oversee the students' education progress. Upon completion of all subspecialty code requirements, the Program Offices have the authority to grant p-codes.

Academic Departments closely correspond to their counterparts in the civilian institutions. They are education providers and they have the authority to set degree requirements and to nominate students for academic degrees. Additionally, they must ensure they offer all of the courses required for obtaining the different p-codes.

Hierarchy Summary

A *school* has two types of *departments*:

- Program Offices
- Academic Departments, Academic Groups, Committees

A *Program Office* is a non-academic department within a school that manages the curricula.

A *curriculum* is a set of requirements for obtaining a *subspecialty code*. Each curriculum has one or more *tracks*.

A *track* reflects an area of specialization and determines the academic degree that the student will earn while obtaining a *subspecialty code*.

An *academic department/group/committee* is an education provider and/or degree nominating authority.

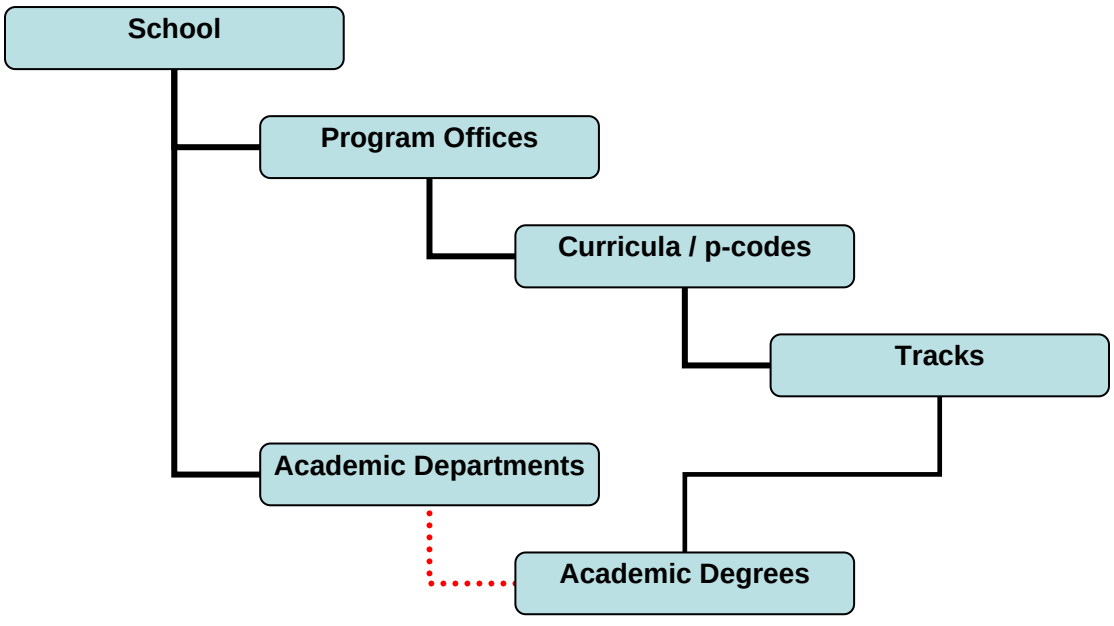

Figure 2: Hierarchy

Examples

The curriculum titled *Undersea Warfare*, under the School of Engineering and Applied Sciences, defines the requirements for earning a subspecialty code 6301. Within this curriculum there are fourteen tracks altogether; ten of the tracks involve earning a

Master's Degree with various specializations, and four of the tracks involve earning a PhD.

The curriculum titled *Computer Science*, under the Graduate School of Operations and Information Sciences, defines the requirements for earning a subspecialty code 6203. Within this curriculum there are two tracks; one track involves a Master's Degree in Computer Science, and the other involves earning a PhD in Computer Science.

Exceptions

NPS operates under the business model based on the needs of the US Navy. Other US military branches and International students at NPS work within the same framework, but they do not earn subspecialty codes, as these are not used outside the US Navy. These students typically take one of the existing NPS curricula which can be adjusted based on the students' needs and interests. Also, some of the NPS curricula have been developed to specifically serve the needs of the military branches other than the US Navy.

Curriculum Management System project

The Registrar's Office relies heavily on a spreadsheet titled *Master Curricula Chart*. Currently, this document is maintained manually by making changes directly to the spreadsheet.

The objective of CMS SOW item #3.1 is to automate the process of generating the Master Curricula Chart. In order to do so, it is necessary to complete the following steps:

1. Identify the information in the spreadsheet that is currently not tracked within the PYTHON database. So far, the only relationship that has been identified as missing is the link between Academic Departments and Academic Degrees (shown in red in Figure 2)
2. Modify the PYTHON database and implement the additional relationships
3. Develop a tool that will allow the Registrar's Office to maintain data relevant to the spreadsheet
4. Develop a tool to generate the Master Curricula Chart from the data in the database

NPS Master Curriculum Chart

School / Curriculum / Degree	Length	Convenes	PO	Refresher	APC	JPME	Dept	Department Chair	Academic Associate	Program Officer	Ph D. Committee Chair
System Engineering and Analysis Curriculum Committee - Dean Wayne P. Hughes											
308 - Systems Engineering & Analysis											
MS Systems Engineering Analysis	24	Winter / Summer	40	12	334	JPME	SE	Charles N. Calvano	Mark Stevens	Douglas R. Burton	
School of International Graduate Studies - Dean James J. Wirtz											
251 - Homeland Security and Defense Certificate (Res)											
CERT OF COMPL Homeland Security and Defense	15	Fall / Winter / Spring / Summer	38		265		NS	Harold A. Trinkunas	Daniel J. Moran	Troy A. Johnson	
252 - Homeland Defense and Security Certificate (DL)											
CERT OF COMPL Homeland Defense and Security	12	Winter	38		0		NS	Harold A. Trinkunas	Theodore G. Lewis	Stanley B. Supinski	
681 - Middle East, South Asia, Sub-Saharan Africa											
MA Sec Studies (Mid East, S Asia, Sub-Saharan Africa)	18	Fall / Winter / Spring / Summer	38		265	JPME	NS	Harold A. Trinkunas	Michael S. Malley	Troy A. Johnson	
682 - Far East, Southeast Asia, Pacific											
MA Security Studies (Far East, SE Asia, the Pacific)	18	Fall / Winter / Spring / Summer	38		265	JPME	NS	Harold A. Trinkunas	Michael S. Malley	Troy A. Johnson	
683 - Western Hemisphere											
MA Security Studies (Western Hemisphere)	18	Fall / Winter / Spring / Summer	38		265	JPME	NS	Harold A. Trinkunas	Michael S. Malley	Troy A. Johnson	
684 - Europe and Eurasia											
MA Security Studies (Europe and Eurasia)	18	Fall / Winter / Spring / Summer	38		265	JPME	NS	Harold A. Trinkunas	Michael S. Malley	Troy A. Johnson	
685 - Civil-Military Relations											
MA Security Studies (Civil-Military Relations)	15	Winter	38		265		NS	Harold A. Trinkunas	Jeffrey W. Knopf	Troy A. Johnson	
686 - Stabilization and Reconstruction											
MA Security Studies (Stabilization & Reconstruction)	15	Summer	38		265		NS	Harold A. Trinkunas	Jeffrey W. Knopf	Troy A. Johnson	
687 - Defense Decision-Making and Planning											
MA Security Studies (Defense Decision-Making and Planning)	18	Fall / Winter / Spring / Summer	38		265	JPME	NS	Harold A. Trinkunas	Jeffrey W. Knopf	Troy A. Johnson	
691 - Homeland Security and Defense											
MA Security Studies (Homeland Security and Defense)	15	Fall	38		265		NS	Harold A. Trinkunas	Daniel J. Moran	Troy A. Johnson	
692 - Homeland Defense and Security											
MA Security Studies (Homeland Security and Defense)	18	Fall / Spring	38		0		NS	Harold A. Trinkunas	Theodore G. Lewis	Theodore G. Lewis	
693 - Combating Terrorism: Policy and Strategy											
MA Sec Studies (Counter-Terrorism Policy & Strategy)	15	Winter	38		265		NS	Harold A. Trinkunas	Jeffrey W. Knopf	Troy A. Johnson	
694 - Security Studies											
PHD Security Studies	36	Fall / Winter / Spring / Summer	38		0		NS	Harold A. Trinkunas	Daniel J. Moran	Troy A. Johnson	Daniel J. Moran
Graduate School of Operational and Information Sciences - Dean Peter Purdue											
271 - Information Systems & Operations Certificate (DL)											
CERT OF COMPL Information Systems and Operations	12	Fall / Winter / Spring / Summer	32		0		IS	Dan C. Boger	Steven J. Iatrou	Steven J. Iatrou	
272 - Information Systems Technology Certificate (DL)											
CERT OF COMPL Information Systems Technology	12	Fall / Winter / Spring / Summer	32		0		IS	Dan C. Boger	Steven J. Iatrou	Steven J. Iatrou	
275 - Software Engineering Certificate (DL)											
NONE Not Applicable	12	Fall / Winter / Spring / Summer	32		0		CS	Peter J. Denning	Man-Tak Shing	Man-Tak Shing	
276 - eFIST Fundamentals in Info Systems Tech Cert (DL)											
NONE Not Applicable	9	Fall / Winter / Spring / Summer	32		0		CS	Peter J. Denning	Steven J. Iatrou	Steven J. Iatrou	
277 - Knowledge Superiority (KS) Certificate (DL)											
CERT OF COMPL Knowledge Superiority	12	Fall / Winter / Spring / Summer	32		325		IS	Dan C. Boger	Mark E. Nissen	Mark E. Nissen	
278 - Federal/DoD Identity Management Certificate											
CERT OF COMPL Federal/DoD Idenity Management	6	Fall / Winter / Spring / Summer	32		325		CS	Peter J. Denning	Glenn R. Cook	Chris E. Taylor	
281 - Systems Analysis Certificate (DL)											
CERT OF COMPL Systems Analysis	12	Fall / Spring	61		335		OR	James N. Eagle	Steven E. Pilnick	Kevin J. Maher	
356 - Information Systems & Operations											
MS Information Systems and Operations	18	Fall	37		334	JPME	IS	Dan C. Boger	Steven J. Iatrou	Karl D. Pfeiffer	
357 - Computing Technology (DL)											
MS Computer Technology	48	Winter / Summer	32	12	325		CS	Peter J. Denning	Loren E. Peitso	Loren E. Peitso	
360 - Operations Analysis											
PHD Operations Research	24	Fall / Spring	61	12 / 24	325	JPME	OR	James N. Eagle	Robert A. Koyak	Kevin J. Maher	W M. Carlyle
MS Applied Science (Operations Research)		Fall / Spring		12 / 24			OR	James N. Eagle	Robert A. Koyak	Kevin J. Maher	
MS Operations Research		Fall / Spring		12 / 24			OR	James N. Eagle	Robert A. Koyak	Kevin J. Maher	
361 - Joint Operational Logistics											
MS Operations Research	24	Fall / Spring	61	12 / 24	325	JPME	OR	James N. Eagle	Steven E. Pilnick	Kevin J. Maher	
PHD Operations Research		Fall / Spring		12 / 24			OR	James N. Eagle	Steven E. Pilnick	Kevin J. Maher	W M. Carlyle
362 - Human Systems Integration											
MS Human Systems Integration	24	Winter	61	12	335	JPME	OR	James N. Eagle	Lawrence G. Shattuck	Kevin J. Maher	
363 - Systems Analysis (DL)											
M Systems Analysis	24	Fall / Spring	61		335		OR	James N. Eagle	Steven E. Pilnick	Kevin J. Maher	
365 - Joint Cmd, Cntrl, Comm, Comp/Intel (C4I) Sys											
MS Systems Technology (Command, Control, & Communications - C3)	21	Fall	39	12	334	JPME	IS	Dan C. Boger	Ray A. Elliott	Karl D. Pfeiffer	
368 - Computer Science											
PHD Computer Science	24	Fall / Spring	32	12	325	JPME	CS	Peter J. Denning	Thomas W. Otani	David L. Schiffman	Dennis M. Volpano
BS Computer Science		Fall / Spring		12			CS	Peter J. Denning	Thomas W. Otani	David L. Schiffman	
MS Computer Science		Fall / Spring		12			CS	Peter J. Denning	Thomas W. Otani	David L. Schiffman	
369 - Software Engineering (Resident & DL)											
MS Software Engineering	18	Fall / Spring	32	12	325		CS	Peter J. Denning	James B. Michael	David L. Schiffman	
PHD Software Engineering		Fall / Spring		12			CS	Peter J. Denning	James B. Michael	David L. Schiffman	Mikhail Auguston
370 - Information Systems & Technology											
MS Information Technology Management	24	Fall / Spring	32		325	JPME	IS	Dan C. Boger	Glenn R. Cook	Chris E. Taylor	
399 - Modeling, Virtual Environments & Simulation											
MS Modeling Virtual Environments and Simulation	24	Fall / Spring	32	12	325	JPME	CS	Peter J. Denning	Mathias N. Kolsch	David L. Schiffman	
PHD Modeling Virtual Environments and Simulation		Fall / Spring		12			CS	Peter J. Denning	Mathias N. Kolsch	David L. Schiffman	Donald P. Brutzman
474 - Information Sciences											
PHD Information Sciences	36	Fall	32		0		IS	Dan C. Boger	Mark E. Nissen	Dan C. Boger	Mark E. Nissen
595 - Information Warfare											
MS Information Warfare Systems Engineering	24	Fall	37	12	324	JPME	IS	Dan C. Boger	Ray A. Elliott	Terry E. Smith	
596 - Electronic Warfare Systems International											
MS Electronic Warfare Systems Engineering	24	Fall	37	12	324		IS	Dan C. Boger	David C. Jenn	Terry E. Smith	
698 - Joint Information Operations											
MS Information Operations	18	Winter / Summer	37		365		DA	Gordon H. McCormick	Hy S. Rothstein	Jennifer J. Duncan	
699 - Special Operations											
MS Defense Analysis	18	Winter / Summer	37		365	JPME	DA	Gordon H. McCormick	Gordon H. McCormick	Jennifer J. Duncan	
Graduate School of Engineering and Applied Sciences - Dean Sivaguru S. Sritharan											
111 - Math Refresher (Online)											
NONE Not Applicable	3	Fall / Winter / Spring / Summer	73		0		MA	Carlos F. Borges	[Unassigned]	[Unassigned]	
222 - Naval Nuclear Power School											
CERT OF COMPL Naval Nuclear Power School	6	Fall / Winter / Spring / Summer	74		0		MAE	Knox T. Millsaps	Joshua H. Gordis	[Unassigned]	
273 - Space Systems Certificate (DL)											
CERT OF COMPL Space Systems Certificate	12	Fall / Spring	71		0		SP	Rudolf Panholzer	William J. Welch	Stephen H. Tackett	
274 - ASW Certificate (DL)											
NONE Not Applicable	12	Spring	75		0		UW	Donald P. Brutzman	Daphne Kapolka	Victoria L. Taber	
280 - Mathematics of Secure Communication Cert (Resident)											
CERT OF COMPL Mathematics of Secure Communication	12	Fall	73		0		MA	Carlos F. Borges	Bard K. Mansager	Kendrick R. Macklin	
282 - Systems Engineering Certificate (DL)											
CERT OF COMPL Systems Engineering	12	Fall / Spring	76		0		SE	Charles N. Calvano	Clifford A. Whitcomb	James E. Melvin	
290 - Signal Processing Certificate (Res & DL)											
CERT OF COMPL Signal Processing	12	Fall / Winter / Spring / Summer	73		323		EC	Jeffrey B. Knorr	Monique P. Fargues	Kendrick R. Macklin	
291 - Electric Ship Power Systems Certificate (Res & DL)											
CERT OF COMPL Electric Ship Power Systems	12	Fall / Winter / Spring / Summer	73		323		EC	Jeffrey B. Knorr	Monique P. Fargues	Kendrick R. Macklin	
292 - EW Engineer Certificate (Res & DL)											
CERT OF COMPL Electronic Warfare	12	Fall / Winter / Spring / Summer	73		323		EC	Jeffrey B. Knorr	David C. Jenn	Kendrick R. Macklin	
293 - Journeyman EW Engineer Certificate (Res & DL)											
CERT OF COMPL Electronic Warfare	12	Fall / Winter / Spring / Summer	73		323		EC	Jeffrey B. Knorr	David C. Jenn	Kendrick R. Macklin	
294 - Senior EW Engineer Certificate (Res & DL)											
CERT OF COMPL Electronic Warfare	12	Fall / Winter / Spring / Summer	73		323		EC	Jeffrey B. Knorr	David C. Jenn	Kendrick R. Macklin	
311 - Systems Engineering (DL)											
MS Systems Engineering	24	Fall / Winter / Spring / Summer	76		0		SE	Charles N. Calvano	Clifford A. Whitcomb	Mark M. Rhoades	
MS Engineering Systems		Fall / Winter / Spring / Summer					SE	Charles N. Calvano	Clifford A. Whitcomb	Mark M. Rhoades	
316 - Space Systems Operations (DL)											
MS Space Systems Operations	24	Fall	70		324		SP	Rudolf Panholzer	Mark M. Rhoades	Stephen H. Tackett	
364 - Space Systems Operations (International)											
MS Space Systems Operations	24	Fall	70	12	324		SP	Rudolf Panholzer	Donald v. Wadsworth	Stephen H. Tackett	
366 - Space Systems Operations											
MS Space Systems Operations	24	Fall	70	12	324	JPME	SP	Rudolf Panholzer	Donald v. Wadsworth	Stephen H. Tackett	
372 - Meteorology											
MS Meteorology	18	Fall / Spring	75	6 / 12	323		MR	Philip A. Durkee	Wendell A. Nuss	Victoria L. Taber	
PHD Meteorology		Fall / Spring		6 / 12			MR	Philip A. Durkee	Wendell A. Nuss	Victoria L. Taber	Wendell A. Nuss
373 - Meteorology and Oceanography (METOC)											
MS Meteorology and Physical Oceanography	30	Fall / Spring	75		323		MR	Philip A. Durkee	Wendell A. Nuss	Victoria L. Taber	
374 - Operational Oceanography											
MS Physical Oceanography	24	Winter / Summer	75	12	323	JPME	OC	Mary L. Batteen	John A. Colosi	Victoria L. Taber	
380 - Applied Mathematics											
PHD Applied Mathematics	24	Summer	73	12 / 24	324		MA	Carlos F. Borges	Bard K. Mansager	Kendrick R. Macklin	Wei Kang
MS Applied Mathematics		Summer		12 / 24			MA	Carlos F. Borges	Bard K. Mansager	Kendrick R. Macklin	
440 - Oceanography											
PHD Physical Oceanography	24	Winter / Summer	75	12	323		OC	Mary L. Batteen	Mary L. Batteen	Victoria L. Taber	Thomas H. Herbers
MS Physical Oceanography		Winter / Summer		12			OC	Mary L. Batteen	Mary L. Batteen	Victoria L. Taber	
525 - Undersea Warfare											
MS Operations Research	24	Fall / Spring	75	12 / 24	323	JPME	OR	James N. Eagle	Daphne Kapolka	Victoria L. Taber	
MS Physical Oceanography		Fall / Spring		12 / 24			OC	Mary L. Batteen	Daphne Kapolka	Victoria L. Taber	
MS Electrical Engineering		Fall / Spring		12 / 24			EC	Jeffrey B. Knorr	Daphne Kapolka	Victoria L. Taber	
MS Engineering Acoustics		Fall / Spring		12 / 24			PH	James H. Luscombe	Daphne Kapolka	Victoria L. Taber	
PHD Engineering Acoustics		Fall / Spring		12 / 24			PH	James H. Luscombe	Daphne Kapolka	Victoria L. Taber	Kevin B. Smith
MS Engineering Science		Fall / Spring		12 / 24			MAE	Knox T. Millsaps	Daphne Kapolka	Victoria L. Taber	
MS Mechanical Engineering		Fall / Spring		12 / 24			MAE	Knox T. Millsaps	Daphne Kapolka	Victoria L. Taber	
MS Applied Science (Acoustics)		Fall / Spring		12 / 24			UW	Donald P. Brutzman	Daphne Kapolka	Victoria L. Taber	
MS Applied Science (Physical Oceanography)		Fall / Spring		12 / 24			UW	Donald P. Brutzman	Daphne Kapolka	Victoria L. Taber	
MS Applied Science (Operations Research)		Fall / Spring		12 / 24			UW	Donald P. Brutzman	Daphne Kapolka	Victoria L. Taber	
MS Applied Science (Signal Processing)		Fall / Spring		12 / 24			UW	Donald P. Brutzman	Daphne Kapolka	Victoria L. Taber	
526 - Undersea Warfare (International)											
MS Applied Science	24	Fall / Spring	75	12 / 24	323		UW	Donald P. Brutzman	Daphne Kapolka	Victoria L. Taber	
MS Operations Research		Fall / Spring		12 / 24			OR	James N. Eagle	Daphne Kapolka	Victoria L. Taber	
MS Physical Oceanography		Fall / Spring		12 / 24			OC	Mary L. Batteen	Daphne Kapolka	Victoria L. Taber	
MS Electrical Engineering		Fall / Spring		12 / 24			EC	Jeffrey B. Knorr	Daphne Kapolka	Victoria L. Taber	
MS Engineering Acoustics		Fall / Spring		12 / 24			PH	James H. Luscombe	Daphne Kapolka	Victoria L. Taber	
MS Engineering Science (Electrical Engineering)		Fall / Spring		12 / 24			EC	Jeffrey B. Knorr	Daphne Kapolka	Victoria L. Taber	
533 - Combat Systems Sciences & Technology											
MS Electrical Engineering	24	Winter / Summer	72	12 / 24	334	JPME	EC	Jeffrey B. Knorr	Andres Larraza	James E. Melvin	
MS Mechanical Engineering		Winter / Summer		12 / 24			MAE	Knox T. Millsaps	Andres Larraza	James E. Melvin	
MS Software Engineering		Winter / Summer		12 / 24			CS	Peter J. Denning	Andres Larraza	James E. Melvin	
PHD Physics		Winter / Summer		12 / 24			PH	James H. Luscombe	Andres Larraza	James E. Melvin	Robert L. Armstead
PHD Applied Physics		Winter / Summer		12 / 24			PH	James H. Luscombe	Andres Larraza	James E. Melvin	Robert L. Armstead
PHD Engineering Acoustics		Winter / Summer		12 / 24			PH	James H. Luscombe	Andres Larraza	James E. Melvin	Kevin B. Smith
MSME Mechanical Engineering		Winter / Summer		12 / 24			MAE	Knox T. Millsaps	Andres Larraza	James E. Melvin	
MS Combat Systems Technology		Winter / Summer		12 / 24			PH	James H. Luscombe	Andres Larraza	James E. Melvin	
MS Applied Physics		Winter / Summer		12 / 24			PH	James H. Luscombe	Andres Larraza	James E. Melvin	
MS Engineering Acoustics		Winter / Summer		12 / 24			PH	James H. Luscombe	Andres Larraza	James E. Melvin	
MS Physics		Winter / Summer		12 / 24			PH	James H. Luscombe	Andres Larraza	James E. Melvin	
535 - Underwater Acoustic Systems (DL)											
MS Engineering Acoustics	36	Spring	75		334		PH	James H. Luscombe	Daphne Kapolka	Victoria L. Taber	
570 - Naval/Mechanical Engineering											
ME Mechanical Engineering	24	Fall / Winter / Spring / Summer	74	12	323	JPME	MAE	Knox T. Millsaps	Joshua H. Gordis	James E. Melvin	
PHD Mechanical Engineering		Fall / Winter / Spring / Summer		12			MAE	Knox T. Millsaps	Joshua H. Gordis	James E. Melvin	Garth V. Hobson
MSME Materials Science and Engineering		Fall / Winter / Spring / Summer		12			MAE	Knox T. Millsaps	Joshua H. Gordis	James E. Melvin	
MS Engineering Science		Fall / Winter / Spring / Summer		12			MAE	Knox T. Millsaps	Joshua H. Gordis	James E. Melvin	
MSME Mechanical Engineering		Fall / Winter / Spring / Summer		12			MAE	Knox T. Millsaps	Joshua H. Gordis	James E. Melvin	
571 - Reactors - Mechanical/Electrical Engineering (DL)											
MS Engineering Science (Mechanical Engineering)	15	Fall / Spring	74		121		MAE	Knox T. Millsaps	Joshua H. Gordis	James E. Melvin	
572 - Mechanical Engrg for Nuclear Trained Officers (DL)											
MS Engineering Science (Mechanical Engineering)	24	Fall / Winter / Spring / Summer	74		323		MAE	Knox T. Millsaps	Joshua H. Gordis	James E. Melvin	
580 - Systems Engineering											
MS Systems Engineering	21	Fall / Summer	76	12	323		SE	Charles N. Calvano	Clifford A. Whitcomb	James E. Melvin	
MS Engineering Systems		Fall / Summer		12			SE	Charles N. Calvano	Clifford A. Whitcomb	James E. Melvin	
590 - Electronic Systems Engineering											
PHD Electrical Engineering	24	Fall / Winter / Spring / Summer	73	12 / 24	323	JPME	EC	Jeffrey B. Knorr	Monique P. Fargues	Kendrick R. Macklin	Murali Tummala
EE Electrical Engineering		Fall / Winter / Spring / Summer		12 / 24			EC	Jeffrey B. Knorr	Monique P. Fargues	Kendrick R. Macklin	
MS Electrical Engineering		Fall / Winter / Spring / Summer		12 / 24			EC	Jeffrey B. Knorr	Monique P. Fargues	Kendrick R. Macklin	
MS Engineering Science (Electrical Engineering)		Fall / Winter / Spring / Summer		12 / 24			EC	Jeffrey B. Knorr	Monique P. Fargues	Kendrick R. Macklin	
591 - Space Systems Engineering											

School / Curriculum / Degree	Length	Convenes	PO	Refresher	APC	JPME	Dept	Department Chair	Academic Associate	Program Officer	Ph D. Committee Chair
MS Physics	27	Fall	71	12	323	JPME	PH	James H. Luscombe	Christopher M. Brophy	Stephen H. Tackett	
MS Astronautical Engineering		Fall		12			MAE	Knox T. Millsaps	Christopher M. Brophy	Stephen H. Tackett	
MS Computer Science		Fall		12			CS	Peter J. Denning	Christopher M. Brophy	Stephen H. Tackett	
MS Mechanical Engineering		Fall		12			MAE	Knox T. Millsaps	Christopher M. Brophy	Stephen H. Tackett	
PHD Electrical Engineering		Fall		12			EC	Jeffrey B. Knorr	Christopher M. Brophy	Stephen H. Tackett	Murali Tummala
PHD Physics		Fall		12			PH	James H. Luscombe	Christopher M. Brophy	Stephen H. Tackett	Robert L. Armstead
MS Engineering Science		Fall		12			MAE	Knox T. Millsaps	Christopher M. Brophy	Stephen H. Tackett	
ASTE Astronautical Engineer		Fall		12			MAE	Knox T. Millsaps	Christopher M. Brophy	Stephen H. Tackett	
PHD Astronautical Engineering		Fall		12			MAE	Knox T. Millsaps	Christopher M. Brophy	Stephen H. Tackett	Garth V. Hobson
592 - Electronic Systems Engineering (DL)											
MS Electrical Engineering	48	Fall / Winter / Spring / Summer	73		323		EC	Jeffrey B. Knorr	David C. Jenn	Kendrick R. Macklin	
MS Engineering Science (Electrical Engineering)		Fall / Winter / Spring / Summer					EC	Jeffrey B. Knorr	David C. Jenn	Kendrick R. Macklin	
721 - Systems Engineering Management-PD21 (DL)											
MS Product Development	24	Fall	76		0		SE	Charles N. Calvano	Tom Huynh	Mark M. Rhoades	
MS Systems Engineering Management		Fall					SE	Charles N. Calvano	Tom Huynh	Mark M. Rhoades	
MS Systems Engineering		Fall					SE	Charles N. Calvano	Tom Huynh	Mark M. Rhoades	
Graduate School of Business and Public Policy - Dean Robert N. Beck											
211 - Advanced Acquisition Program Certificate (DL)											
NONE Not Applicable	12	Fall / Winter / Spring / Summer	36		0		GB	Raymond E. Franck	John T. Dillard	John T. Dillard	
212 - Acquisition Management DL Program Certificate (DL)											
NONE Not Applicable	3	Fall / Winter / Spring / Summer	36		0		GB	Raymond E. Franck	Walter E. Owen	Walter E. Owen	
805 - Executive Master of Business Administration (DL)											
EMBA Master of Business Administration	24	Fall / Spring	36		245		GB	Raymond E. Franck	John E. Mutty	Philip A. Gonda	
808 - Executive Management											
M Executive Management	12	Winter / Summer	36		245		GB	Raymond E. Franck	Bryan J. Hudgens	Philip A. Gonda	
809 - Defense Business Management											
MBA Master of Business Administration	24	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	James E. Suchan	Philip A. Gonda	
814 - Transportation Management											
MBA Master of Business Administration	18	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	Keebom Kang	Philip A. Gonda	
815 - Acquisitions & Contract Management											
MBA Master of Business Administration	18	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	Rene G. Rendon	Philip A. Gonda	
816 - Systems Acquisition Management											
MBA Master of Business Administration	21	Winter / Summer	36		345		GB	Raymond E. Franck	Keith F. Snider	Philip A. Gonda	
817 - Defense Systems Analysis											
MS Management	18	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	Don E. Summers	Philip A. Gonda	
818 - Defense Systems Management (International)											
MBA Master of Business Administration	18	Winter / Summer	36		345		GB	Raymond E. Franck	Alice M. Crawford	Philip A. Gonda	
819 - Supply Chain Management											
MBA Master of Business Administration	18	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	Keebom Kang	Philip A. Gonda	
820 - Resource Planning/Mgmt for International Defense											
MBA Master of Business Administration	18	Winter	36		345		GB	Raymond E. Franck	Alice M. Crawford	Philip A. Gonda	
827 - Material Logistics Support Management											
MBA Master of Business Administration	18	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	Keebom Kang	Philip A. Gonda	
835 - Contract Management (DL)											
MS Contract Management	24	Fall / Winter / Spring / Summer	36		345		GB	Raymond E. Franck	Elliott C. Yoder	Philip A. Gonda	
836 - Program Management (DL)											
MS Program Management	24	Fall / Winter / Spring / Summer	36		335		GB	Raymond E. Franck	Brad R. Naegle	Philip A. Gonda	
837 - Financial Management											
MBA Master of Business Administration	18	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	Lawrence R. Jones	Philip A. Gonda	
847 - Manpower Systems Analysis											
MS Management	21	Summer	36		345	JPME	GB	Raymond E. Franck	Stephen Mehay	Philip A. Gonda	
870 - Information Systems Management MBA											
MBA Master of Business Administration	21	Winter / Summer	36		345	JPME	GB	Raymond E. Franck	Glenn R. Cook	Philip A. Gonda	
Continuing Education - Registar Office Per M. Andersen											
555 - Memorandum of Understanding											
NONE Not Applicable	3	Fall / Winter / Spring / Summer	99		0		ContEd	Registar			
666 - Professional Development (non-degree -- Web)											
NONE Not Applicable	3	Fall / Winter / Spring / Summer	99		0		ContEd	Registar			
777 - Professional Development (non-degree -- VTE)											
NONE Not Applicable	3	Fall / Winter / Spring / Summer	99		0		ContEd	Registar			
999 - Staff (Non-Degree)											
NONE Not Applicable	24	Fall / Winter / Spring / Summer	99		0		ContEd	Registar			

NPS Graduating Students Survey

Introduction

Information for Graduating Students

1. Introduction. Answering these questions will provide you the opportunity to evaluate and comment on your educational experiences at NPS. These results will be used to improve the experience for future students. Please read the statements below and indicate if you agree to participate in the survey.

2. Background Information. The NPS Office of Academic Affairs and the Office of Institutional Research are conducting this study.

3. Procedures. Please click on the most appropriate answer for each survey question. Mandatory questions are marked with an asterisk. These questions MUST be answered for the survey to be submitted correctly.

4. Compensation. No tangible reward will be given. A copy of the results will be available upon request.

5. Points of Contact. If you have any further questions or comments after the completion of the study, you may contact the research supervisor, Dr. Fran Horvath (831)656-2228, rfhorvat@nps.edu

NAVAL POSTGRADUATE SCHOOL, MONTEREY, CA PRIVACY ACT STATEMENT

1. Purpose: Survey data will be collected to evaluate the benefits and effectiveness of the education programs at the Naval Postgraduate School.

2. Use: This data will be used for statistical analysis by the Naval Postgraduate School and potentially by the Departments of the Navy and Defense, and other U.S. Government agencies, provided this use is compatible with the purpose for which the information was collected. Use of the information may be granted to legitimate non-government agencies or individuals by the Naval Postgraduate School in accordance with the provisions of the Freedom of Information Act.

3. Disclosure/Confidentiality:
a. I have been assured that my privacy will be safeguarded. The database created from the survey data will not contain individual identification information. In all cases, the provisions of the Privacy Act Statement will be honored.
b. I understand that a record of the information contained in this Consent Statement or derived from the experiment described herein will be retained permanently at the Naval Postgraduate School or by higher authority. I voluntarily agree to its disclosure to agencies or individuals indicated in paragraph 2 and I have been informed that failure to agree to such disclosure may negate the purpose for which the experiment was conducted.
c. I also understand that disclosure of the requested information is voluntary.

PARTICIPANT - VOLUNTARY CONSENT TO BE A RESEARCH PARTICIPANT IN: NPS Alumni Survey

1. I have read and understand "Information for Participants" above.
2. An explanation of the purposes of the research and a description of procedures to be used have been provided to me.
3. I understand that this project does not involve more than minimal risk. I have been informed of any reasonably foreseeable risks or discomforts to me.
4. I have been informed of any benefits to me or to others that may reasonably be expected from the research.
5. I understand the data will be kept confidential and reported only on a summary level. I have read and understood the “Privacy Act Statement.”
6. I understand that my participation in this project is voluntary, refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled. I also understand that I may discontinue participation at any time without penalty or loss of benefits to which I am otherwise entitled.

NPS Graduating Students Survey

* 1. By clicking on the "yes" button below, I am agreeing to participate in this survey.

- ◯ Yes
- ◯ No

Begin the Survey!

* 1. Instruction and research at NPS had the ultimate goal of enhancing combat effectiveness of the US and Allied armed forces.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 2. The University administration is committed to supporting teaching and research for the purpose of enhancing combat effectiveness of the US and Allied armed forces.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 3. The unique defense-oriented environment made my graduate education at NPS more relevant than it would have been at a civilian university.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 4. My curriculum was related to national security or defense needs.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 5. My education at NPS is relevant to my future assignments and responsibilities.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 6. Completing a thesis, group project or capstone project was a valuable component of my NPS education.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 7. My thesis or capstone research project at NPS made a useful contribution to combat effectiveness or another national security need.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 8. My coursework and research at NPS were closely integrated.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 9. NPS is always working to improve instruction and research.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 10. I understood the body of knowledge and skills I was expected to master for my degree program.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 11. My academic background was adequate preparation for successful completion of my program.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 12. The tests that I took at NPS were fair and relevant.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 13. The grades I received at NPS accurately reflected the level of my performance.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 14. Refresher courses at NPS were sufficient to prepare me for subsequent course work.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 15. My NPS program provided me with sufficient electives to pursue my special military career interests.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

16. NPS provided opportunities for learning outside the regular curricular program.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 17. Diversity in service, culture, ethnicity, and gender enriched my NPS education.

	Strongly disagree	Disagree	Agree	Strongly agree	n/a or don't know
Service	◯	◯	◯	◯	◯
Culture	◯	◯	◯	◯	◯
Ethnicity	◯	◯	◯	◯	◯
Gender	◯	◯	◯	◯	◯

* 18. NPS represented itself accurately in promotional materials and representations about the school.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 19. I was aware that NPS had an appeals process for student academic complaints.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 20. NPS faculty in my program were dedicated to teaching.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 21. NPS faculty members involved me in active and participative learning experiences.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 22. NPS faculty in my program were dedicated to my success as a student.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 23. NPS faculty in my program were generally available to provide additional assistance outside the classroom when I needed it.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 24. NPS faculty in my program utilized student feedback to improve the educational program.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 25. My faculty appeared to be well qualified for the defense-related teaching and research done in my curriculum or program.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 26. I received the faculty advice and guidance that I needed to successfully complete my thesis, group project or capstone research project.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 27. NPS personnel facilitated my transition to student life.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 28. NPS staff provided sufficient support to enable me to meet my educational goals.

	Strongly disagree	Disagree	Agree	Strongly agree	n/a or don't know
Registrar	◯	◯	◯	◯	◯
Scheduling	◯	◯	◯	◯	◯
Student Services	◯	◯	◯	◯	◯
Program Officer	◯	◯	◯	◯	◯
Program Office Staff	◯	◯	◯	◯	◯
Thesis Processing	◯	◯	◯	◯	◯
Lab Techs	◯	◯	◯	◯	◯

* 29. NPS library resources met all my course work and research needs.

	Strongly disagree	Disagree	Agree	Strongly agree	n/a or don't know
Books	◯	◯	◯	◯	◯
Databases	◯	◯	◯	◯	◯
Journals	◯	◯	◯	◯	◯
Facilities (computers, study rooms, carrels)	◯	◯	◯	◯	◯
Reference Assistance & Instruction	◯	◯	◯	◯	◯
Restricted Resources and Services	◯	◯	◯	◯	◯
Services (circulation, interlibrary loan, course reserve, printing, etc)	◯	◯	◯	◯	◯

* 30. NPS computer services met all my course work and research needs

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

31. I would recommend NPS to other military officers or defense civilians for their graduate education

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 32. Commuting and parking were not a problem at NPS.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 33. The CLASSROOM and other NON-LABORATORY facilities for my program had the following characteristics:

	Strongly disagree	Disagree	Agree	Strongly agree	n/a or don't know
Accessible	◯	◯	◯	◯	◯
Adequate in number	◯	◯	◯	◯	◯
Good Working Condition	◯	◯	◯	◯	◯
Equipped w/ Current Technologies	◯	◯	◯	◯	◯
Well Maintained	◯	◯	◯	◯	◯
Responsive to Course & Research Needs	◯	◯	◯	◯	◯

NPS Graduating Students Survey

* 34. The overall quality, appearance and currency of the NON-LABORATORY facilities in my program left me with a favorable, positive impression.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

* 35. The LABORATORY facilities for my program had the following characteristics:

	Strongly disagree	Disagree	Agree	Strongly agree	n/a or don't know
Accessible	◯	◯	◯	◯	◯
Good Working Condition	◯	◯	◯	◯	◯
Equipped w/ Current Technologies	◯	◯	◯	◯	◯
Focused on Combat Capabillities	◯	◯	◯	◯	◯
Well Maintained	◯	◯	◯	◯	◯
Responsive to Course & Research Needs	◯	◯	◯	◯	◯

36. The overall quality, appearance and currency of the LABORATORIES in my program left me with a favorable, positive impression.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly Agree ◯ n/a or don't know

* 37. Adequate health services were available for my family and me while at NPS.

◯ Strongly disagree ◯ Disagree ◯ Agree ◯ Strongly agree ◯ n/a or don't know

38. Please use this space to comment on anything you experienced during your enrollment at NPS, including topics not covered in this survey.

The End.

Thank you and congratulations! We wish you a very bright future.

NPS Student Survey

Introduction

You have been selected to participate in a survey of new Naval Postgraduate School (NPS) students. The purpose of this survey is to assess various aspects of academic life at NPS, including your quality of life, the physical environment and support services, and policies and requirements set forth by NPS. The results of the survey will be used by the NPS Dean of Students, the Director of Institutional Research, and other members of the NPS administration to improve NPS. This is your opportunity to provide NPS with frank feedback on what works well and what does not.

No tangible compensation will be given for participation in the survey. If you agree to participate, you are free to withdraw at any time without prejudice. Upon completion of the research, a copy of the final report will be available from Dr. Fran Horvath, Director of Institutional Research. Your participation in this survey is voluntary, although your input is extremely valuable for the improvement of NPS.

Please note that all survey records and data will be kept strictly confidential. Your participation in the survey and your responses to the survey will not be disclosed outside of the research team. Survey results will only be reported in the aggregate so that individual responses cannot be determined. Upon completion of the survey, all records identifying your participation in the survey will be destroyed.

If you have any questions or comments regarding this survey, please contact Professor Ron Fricker, 831-656-3048 (rdfricker@nps.edu) or LT Brent Olde (NPS IRB chair), 831-656-3807 (baolde@nps.edu).

Quality of Life

We begin with some questions about your experience in-processing (i.e., enrolling) at NPS. Please consider how these services provided by NPS contribute to both your learning experience and your activites outside of academics.

1. In general, how do you rate your satisfaction or dissatisfaction with the IN-PROCESSING procedures at NPS?

- ◯ Very Satisfied
- ◯ Satisfied
- ◯ Neutral
- ◯ Dissatisfied
- ◯ Very Dissatisfied

NPS Student Survey

2. How do you rate the IN-PROCESSING provided by each of the following support services (briefings, orientation, materials, service, etc.):

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A*
Registrar	◯	◯	◯	◯	◯	◯
Program Office	◯	◯	◯	◯	◯	◯
Student Services	◯	◯	◯	◯	◯	◯
Sponsor Program	◯	◯	◯	◯	◯	◯
Information Technology (ITACS)	◯	◯	◯	◯	◯	◯
Chaplain Services	◯	◯	◯	◯	◯	◯
Medical Services	◯	◯	◯	◯	◯	◯
Morale, Welfare and Recreation (MWR)	◯	◯	◯	◯	◯	◯
Military Housing	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

Quality of Life

In the previous question we asked you about the in-processing support you received. Now we would like to know about the service you have received AFTER in-processing.

3. Following in-processing, how do you rate the SERVICE provided by the following organizations at NPS:

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A*
Registrar	◯	◯	◯	◯	◯	◯
Program Office	◯	◯	◯	◯	◯	◯
Student Services	◯	◯	◯	◯	◯	◯
Sponsor Program	◯	◯	◯	◯	◯	◯
Information Technology (ITACS)	◯	◯	◯	◯	◯	◯
Chaplain Services	◯	◯	◯	◯	◯	◯
Medical Services	◯	◯	◯	◯	◯	◯
Morale, Welfare and Recreation (MWR)	◯	◯	◯	◯	◯	◯
Military Housing	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

NPS Student Survey

Quality of Life - Work Load

4. To what level do you agree or disagree with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A*
I am able to pursue interests outside of my studies.	◯	◯	◯	◯	◯	◯
I have sufficient time to spend with my family and/or friends.	◯	◯	◯	◯	◯	◯
My academic workload is high.	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

Physical Resources

In this section we would like your opinions on physical resources that support your academic studies. We will ask you about the NPS library, laboratories, classrooms, and other facilities.

5. Please rate your satisfaction or dissatisfaction with the campus workspace(s) available to you (e.g., cubicle, office, library study room, etc.)

- ◯ Very Satisfied
- ◯ Satisfied
- ◯ Neutral
- ◯ Dissatisfied
- ◯ Very Dissatisfied
- ◯ N/A*

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" if this item is not applicable or you do not know.

Physical Resources - Library

NPS Student Survey

6. Please rate your level of satisfaction or dissatisfaction with the following LIBRARY resources:

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A*
Books	◯	◯	◯	◯	◯	◯
Databases/Searches engines	◯	◯	◯	◯	◯	◯
Journals	◯	◯	◯	◯	◯	◯
Facilities (computers, study rooms, carrels)	◯	◯	◯	◯	◯	◯
Reference assistance and instruction	◯	◯	◯	◯	◯	◯
Restricted resources and services	◯	◯	◯	◯	◯	◯
Services (circulation, interlibrary loan, course reserve, printing, etc)	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

Support Services - Laboratory

7. Do you personally use a laboratory for any reason in your curriculum (e.g., computer laboratory, research laboratory, etc.)?

◯ Yes
◯ No

Physical Resources - Laboratory Facilities

NPS Student Survey

8. The LABORATORY facilities for my program are...

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A*
... conveniently located.	◯	◯	◯	◯	◯	◯
... in good working condition.	◯	◯	◯	◯	◯	◯
... equipped with current technologies.	◯	◯	◯	◯	◯	◯
... appropriate for military research.	◯	◯	◯	◯	◯	◯
... well maintained.	◯	◯	◯	◯	◯	◯
... equipped with sufficient resources.	◯	◯	◯	◯	◯	◯
... responsive to course and research needs.	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

Physical Resources - Classrooms

9. The CLASSROOMS for my program are...

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A*
... conveniently located.	◯	◯	◯	◯	◯	◯
... in good working condition.	◯	◯	◯	◯	◯	◯
... equipped with current technologies.	◯	◯	◯	◯	◯	◯
... clean.	◯	◯	◯	◯	◯	◯
... comfortable.	◯	◯	◯	◯	◯	◯
... large enough.	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

Support Services - Wireless Usage

10. While on the NPS campus, do you use wireless access?

◯ Yes
◯ No

Support Services - Wireless Access

NPS Student Survey

11. While on the NPS campus, is the wireless access sufficient everywhere you need it?

- ◯ Yes
- ◯ No

Support Services - Wireless Locations Needed

12. If you could add or improve wireless capability to one location on campus where it is currently insufficient, where would it be?

Building

Please Select:

Other (please specify)

Support Services - Warfighting Community

During the course of their time here at NPS, many students feel it is important to maintain links to their warfighting or professional community either through E-mail connectivity or research. These communities are typically your sponsoring agency, research organizations you are collaborating with, end-users of your NPS research/coursework, etc.

13. How important do you feel it is to maintain contact with your warfighting or professional community while here at NPS?

- ◯ Very Important
- ◯ Important
- ◯ Neutral
- ◯ Unimportant
- ◯ Very Unimportant
- ◯ N/A*

14. Please rate your satisfaction or dissatisfaction with NPS' resources for maintaining contact with your warfighting or professional community?

- ◯ Very Satisfied
- ◯ Satisfied
- ◯ Neutral
- ◯ Dissatisfied
- ◯ Very Dissatisfied
- ◯ N/A*

OPTIONAL: We appreciate any specific feedback you have on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

Teaching and Learning

You are almost finished. Just a few questions below about academics at NPS.

NPS Student Survey

15. As you think about the INSTRUCTORS you have had thus far at NPS, please indicate your level of agreement or disagreement with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A*
My instructors expectations are consistent with what a graduate education should entail.	◯	◯	◯	◯	◯	◯
My instructors actively engage me in the learning process.	◯	◯	◯	◯	◯	◯
My instructors provide useful feedback about my performance.	◯	◯	◯	◯	◯	◯
My instructors provide real world examples during class.	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

Teaching and Learning - Academic Program

16. Now, thinking about your academic program in general, please indicate your level of agreement or disagreement with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A*
My academic program is challenging.	◯	◯	◯	◯	◯	◯
My academic program actively engages me in the learning process.	◯	◯	◯	◯	◯	◯
The NPS faculty in my academic program encourage me to participate in defense-related research.	◯	◯	◯	◯	◯	◯
My academic program challenges me to meet high expectations.	◯	◯	◯	◯	◯	◯
The expectations of the faculty in my academic program are consistent with the program's graduation requirements.	◯	◯	◯	◯	◯	◯

OPTIONAL: We appreciate any specific feedback on the above items.

NPS Student Survey

*Please respond "N/A" for any items which are not applicable or you do not know.

Policies and Requirements

17. Please indicate the degree to which you agree or disagree with the following statements below about NPS POLICIES and academic REQUIREMENTS.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A*
I was made aware of NPS' policy on student conduct and behavior (Student Information Handbook).	○	○	○	○	○	○
I was made aware of NPS' grievance procedures for students.	○	○	○	○	○	○
The academic advising I receive at NPS provides useful information.	○	○	○	○	○	○
My academic advisor provides relevant information about academic requirements.	○	○	○	○	○	○
I am clear about the graduation requirements for my program.	○	○	○	○	○	○

OPTIONAL: We appreciate any specific feedback on the above items.

*Please respond "N/A" for any items which are not applicable or you do not know.

End of Survey

18. Is there anything else you would like to tell us about your experiences at NPS?

Thank you

Thank you for taking the time to complete this survey. Your input will help NPS continue to improve the academic environment and student support services for both current and future students.

If you have any questions or comments regarding this survey, please contact Professor Ron Fricker, 831-656-3048 (rdfricker@nps.edu).

NPS Mid-Term Resident Student Survey

Introduction

You are invited to participate in a survey of students at approximately the mid-point of their academic program at the Naval Postgraduate School (NPS). The purpose of this survey is to assess various aspects of academic life at NPS, including your quality of life, the physical environment and support services, and policies and requirements set forth by NPS. The results of the survey will be used by the NPS Dean of Students, the Director of Institutional Planning and Communication, and other members of the NPS administration to improve NPS. This is your opportunity to provide NPS with frank feedback on what is working well and what is not.

Your participation in this survey is strictly voluntary. No tangible compensation will be given for participation in the survey. If you agree to participate, you are free to withdraw at any time without prejudice. Upon completion of the research, a copy of the final report will be available from Dr. Fran Horvath, Director of Institutional Planning and Communication.

Please note that all survey records and data will be kept strictly confidential. Your participation in the survey and your responses to the survey will not be disclosed outside of the research team. Your survey responses will be merged with demographic data provided by the NPS Registrar for purposes of analysis. However, survey results will only be reported in the aggregate so that individual responses cannot be determined. Upon completion of the survey, a complete copy of the data will be maintained by Dr. Horvath, but all other records identifying your participation in the survey will be destroyed.

If you have any questions or comments regarding this survey, please contact Professor Ron Fricker, 831-656-3048 (rdfricker@nps.edu) or LT Brent Olde (NPS IRB chair), 831-656-3807 (baolde@nps.edu).

Quality of Life

We begin with some questions about your non-academic experience so far at NPS.

1. Please indicate your opinion of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am able to pursue interests outside of my studies.	◯	◯	◯	◯	◯
I have sufficient time to spend with my family and/or friends.	◯	◯	◯	◯	◯
My academic workload is high.	◯	◯	◯	◯	◯

Quality of Life

2. Please indicate your level of satisfaction or dissatisfaction with the service provided by the following organizations:

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A
NPS Dental	◯	◯	◯	◯	◯	◯
Presidio of Monterey Medical	◯	◯	◯	◯	◯	◯
TRICARE Prime Local Providers	◯	◯	◯	◯	◯	◯
TRIWEST Administration	◯	◯	◯	◯	◯	◯
Morale, Welfare, and Recreation (MWR)	◯	◯	◯	◯	◯	◯
Chaplain Services	◯	◯	◯	◯	◯	◯

Teaching and Learning

NPS Mid-Term Resident Student Survey

This section deals with your academic experience at NPS.

3. The unique defense-oriented environment at NPS makes my graduate education more relevant to my career than it would be at a civilian university.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

4. My NPS program provides me with enough electives to pursue my special military career interests.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

5. The grades I receive at NPS accurately reflect the level of my performance.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

6. SGLs provide beneficial educational opportunities, expanding on what I learn in my academic program.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

Teaching and Learning

7. I believe diversity in each of the following categories enriches my NPS education:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Service	◯	◯	◯	◯	◯
Culture	◯	◯	◯	◯	◯
Ethnicity	◯	◯	◯	◯	◯
Gender	◯	◯	◯	◯	◯

Teaching and Learning

The next few questions deal with refresher courses at NPS.

8. My academic background was adequate preparation for my program.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

9. Did you take a refresher course (or quarter)?

◯ Yes ◯ No

Teaching and Learning (Refresher Courses)

Please indicate your opinion on the following statements regarding the refresher class (or quarter) you have taken at NPS.

NPS Mid-Term Resident Student Survey

10. The refresher course (or quarter) was necessary for success in my academic program.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

11. The refresher course (or quarter) at NPS was sufficient to prepare me for my course work.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

Teaching and Learning (Refresher Courses)

If you DID NOT take a refresher course, please indicate your opinion on the following statement:

12. A refresher course (or courses) would have helped me in my academic program.

◯ Strongly Disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly Agree

Teaching and Learning

13. As you think about the INSTRUCTORS you have had thus far at NPS, please indicate your opinion of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My instructors expect me to produce graduate level work.	◯	◯	◯	◯	◯
My instructors actively engage me in the learning process.	◯	◯	◯	◯	◯
My instructors provide useful feedback about my performance.	◯	◯	◯	◯	◯
My instructors relate material to national security and defense topics.	◯	◯	◯	◯	◯
Instruction and research at NPS has the ultimate goal of enhancing US and Allied combat effectiveness.	◯	◯	◯	◯	◯

Teaching and Learning

NPS Mid-Term Resident Student Survey

14. Now, thinking about your ACADEMIC PROGRAM in general, please indicate your opinion of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My academic program is challenging.	◯	◯	◯	◯	◯
My academic program actively engages me in the learning process.	◯	◯	◯	◯	◯
The expectations of the faculty in my academic program are consistent with the program's graduation requirements.	◯	◯	◯	◯	◯

Policies and Requirements

This section contains questions regarding your familiarity with NPS policies and requirements.

15. Are you aware of NPS policies on student conduct and behavior as listed in the Student Information Handbook?

◯ Yes ◯ No

16. Do you understand the graduation requirements for your curriculum?

◯ Yes ◯ No

17. Do you find the academic advising you receive to be useful?

◯ Yes ◯ No ◯ Have not received academic advising

18. Are you aware that there is a student grievance procedure at NPS?

◯ Yes ◯ No

Physical Resources

In this section we would like your opinions on physical resources that impact your academic studies. We will ask you about the NPS library, laboratories, classrooms, and other facilities.

NPS Mid-Term Resident Student Survey

19. The following LIBRARY resources meet my academic needs:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A or don't know
Books	◯	◯	◯	◯	◯	◯
Databases/Search Engines	◯	◯	◯	◯	◯	◯
Journals	◯	◯	◯	◯	◯	◯
Visual/Audio Media	◯	◯	◯	◯	◯	◯
Facilities (computers, study rooms, carrels)	◯	◯	◯	◯	◯	◯
Reference Assistance & Instruction	◯	◯	◯	◯	◯	◯
Restricted Resources and Services	◯	◯	◯	◯	◯	◯
Services (circulation, interlibrary loan, course reserve, printing, etc)	◯	◯	◯	◯	◯	◯

Physical Resources

We would now like to ask about the condition of classrooms and laboratories at NPS.

20. Have you had class in Ingersoll Hall?

◯ Yes

◯ No

Physical Resources

21. The CLASSROOMS in Ingersoll Hall are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies	◯	◯	◯	◯	◯	◯
Clean	◯	◯	◯	◯	◯	◯
Comfortable	◯	◯	◯	◯	◯	◯
Large enough	◯	◯	◯	◯	◯	◯
At a comfortable temperature	◯	◯	◯	◯	◯	◯

Physical Resources

22. Have you had class in Spanagel Hall?

◯ Yes

◯ No

Physical Resources

NPS Mid-Term Resident Student Survey

23. The CLASSROOMS in Spanagel Hall are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies	◯	◯	◯	◯	◯	◯
Clean	◯	◯	◯	◯	◯	◯
Comfortable	◯	◯	◯	◯	◯	◯
Large enough	◯	◯	◯	◯	◯	◯
At a comfortable temperature	◯	◯	◯	◯	◯	◯

Physical Resources

24. Have you had class in Root Hall?

◯ Yes

◯ No

Physical Resources

25. The CLASSROOMS in Root Hall are:

	Strongly Disagree	Disagree	Neutral	Agree	Stronly Agree	N/A
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies	◯	◯	◯	◯	◯	◯
Clean	◯	◯	◯	◯	◯	◯
Comfortable	◯	◯	◯	◯	◯	◯
Large enough	◯	◯	◯	◯	◯	◯
At a comfortable temperature	◯	◯	◯	◯	◯	◯

Physical Resources

26. Have you had class in Halligan Hall?

◯ Yes

◯ No

Physical Resources

NPS Mid-Term Resident Student Survey

27. The CLASSROOMS in Halligan Hall are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies	◯	◯	◯	◯	◯	◯
Clean	◯	◯	◯	◯	◯	◯
Comfortable	◯	◯	◯	◯	◯	◯
Large enough	◯	◯	◯	◯	◯	◯
At a comfortable temperature	◯	◯	◯	◯	◯	◯

Physical Resources

28. Have you had class in Watkins Hall?

◯ Yes

◯ No

Physical Resources

29. The CLASSROOMS in Watkins Hall are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies	◯	◯	◯	◯	◯	◯
Clean	◯	◯	◯	◯	◯	◯
Comfortable	◯	◯	◯	◯	◯	◯
Large enough	◯	◯	◯	◯	◯	◯
At a comfortable temperature	◯	◯	◯	◯	◯	◯

Physical Resources

30. Have you had class in Glasgow Hall?

◯ Yes

◯ No

Physical Resources

NPS Mid-Term Resident Student Survey

31. The CLASSROOMS in Glasgow Hall are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies	◯	◯	◯	◯	◯	◯
Clean	◯	◯	◯	◯	◯	◯
Comfortable	◯	◯	◯	◯	◯	◯
Large enough	◯	◯	◯	◯	◯	◯
At a comfortable temperature	◯	◯	◯	◯	◯	◯

Physical Resources

32. Have you had class in Bullard Hall?

- ◯ Yes
- ◯ No

Physical Resources

33. The CLASSROOMS in Bullard Hall are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies	◯	◯	◯	◯	◯	◯
Clean	◯	◯	◯	◯	◯	◯
Comfortable	◯	◯	◯	◯	◯	◯
Large enough	◯	◯	◯	◯	◯	◯
At a comfortable temperature	◯	◯	◯	◯	◯	◯

Physical Resources

34. The LABORATORY facilities (science/engineering or computer laboratories) I use most often are located in:

- ◯ Spanagel Hall
- ◯ Bullard Hall
- ◯ Watkins Hall
- ◯ Halligan Hall
- ◯ Ingersoll Hall
- ◯ Root Hall
- ◯ Glasgow Hall
- ◯ I do not use science/engineering or computer laboratories.

Other (please specify)

NPS Mid-Term Resident Student Survey

35. The LABORATORY facilities (science/engineering or computer laboratories) in the building indicated above are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A or don't know
Conveniently located	◯	◯	◯	◯	◯	◯
In good working condition	◯	◯	◯	◯	◯	◯
Equipped with current technologies/software	◯	◯	◯	◯	◯	◯
Appropriate for military research	◯	◯	◯	◯	◯	◯
Clean & well maintained	◯	◯	◯	◯	◯	◯
Sufficient for my course & research needs	◯	◯	◯	◯	◯	◯

Physical Resources

36. Please rate your level of satisfaction or dissatisfaction with the CAMPUS WORKSPACES available to you:

	Very Dissatisfied	Disatisfied	Neutral	Satisfied	Very Satisfied	N/A
Departmental cubicles/carrels	◯	◯	◯	◯	◯	◯
Departmental offices/workspace	◯	◯	◯	◯	◯	◯
Departmental laboratories	◯	◯	◯	◯	◯	◯
Copier facilities	◯	◯	◯	◯	◯	◯
Library Individual Study Spaces	◯	◯	◯	◯	◯	◯
Library Group Study Rooms	◯	◯	◯	◯	◯	◯
Library Collaborative Use Rooms	◯	◯	◯	◯	◯	◯
Library Open Areas	◯	◯	◯	◯	◯	◯
Lockers	◯	◯	◯	◯	◯	◯

Physical Resources

37. Would you regularly use a shuttle bus service to commute between La Mesa or Fort Ord housing communities and NPS?

◯ Yes

◯ No

38. Rate your level of satisfaction or dissatisfaction with parking at NPS:

◯ Very Dissatisfied ◯ Dissatisfied ◯ Neutral ◯ Satisfied ◯ Very Satisfied ◯ N/A

Support Services

In the last section of this survey, we will ask your opinion on support services, organizations, and personnel at NPS.

NPS Mid-Term Resident Student Survey

39. Please indicate your level of satisfaction or dissatisfaction with the following:

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A
Python	◯	◯	◯	◯	◯	◯
Quarterly Class Offerings	◯	◯	◯	◯	◯	◯
Class Scheduling (time/day)	◯	◯	◯	◯	◯	◯
Student Services Office	◯	◯	◯	◯	◯	◯
Dean of Students Office	◯	◯	◯	◯	◯	◯
Program Officer	◯	◯	◯	◯	◯	◯
Education Technician (Ed Tech)	◯	◯	◯	◯	◯	◯
Information Technology and Communications Services(ITACS)	◯	◯	◯	◯	◯	◯
Travel Office	◯	◯	◯	◯	◯	◯
Lab Technicians	◯	◯	◯	◯	◯	◯
International Graduate Programs Office	◯	◯	◯	◯	◯	◯

Support Services

40. Please indicate the building at NPS where you spend the most time using a computer:

- ◯ Spanagel Hall
- ◯ Root Hall
- ◯ Watkins Hall
- ◯ Ingersoll Hall
- ◯ Glasgow Hall
- ◯ Bullard Hall
- ◯ Herrmann Hall
- ◯ Library
- ◯ Other

41. Please indicate your level of satisfaction or dissatisfaction with the following COMPUTER SERVICES in the building indicated above:

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A
On-campus computers	◯	◯	◯	◯	◯	◯
Appropriate software is available on campus computers	◯	◯	◯	◯	◯	◯
Wireless access	◯	◯	◯	◯	◯	◯
Electrical outlet access for laptops	◯	◯	◯	◯	◯	◯
Printing capability	◯	◯	◯	◯	◯	◯

NPS Mid-Term Resident Student Survey

Top Three

42. Select the TOP THREE issues you would most like to see addressed by NPS staff

	First	Second	Third
Bookstore	◯	◯	◯
Classrooms	◯	◯	◯
Computer Support	◯	◯	◯
Course Scheduling	◯	◯	◯
Gym	◯	◯	◯
Laboratories	◯	◯	◯
Library	◯	◯	◯
Medical Care	◯	◯	◯
Military Administrative Support	◯	◯	◯
Military Housing	◯	◯	◯
MWR (dining and recreation services)	◯	◯	◯
Parking	◯	◯	◯
SGLs	◯	◯	◯
Study Spaces	◯	◯	◯
Other	◯	◯	◯

Additional Comments

43. In this survey, you have answered questions relating to quality of life, support services, physical resources, academics, and NPS policy and requirements. Is there anything else you would like to tell us about your experiences at NPS?

End

Thank you for participating in this survey. We appreciate your time and effort in helping us make NPS the best it can be.

Educational Technology Inventory

Annual Recapitalization and Installation Totals

	2008	2009	2010	2011	2012	2013	2014	2015
Recapitalization Totals: Learning Resource Centers & Classroom Multimedia Presentation Systems including Computers and Monitors	**512,475**	**724,755**	**627,922**	**484,770**	**1,203,743**	**469,150**	**859,967**	**631,135**
Audiovisual Recapitalization Totals:	**134,768**	**473,809**	**376,582**	**110,321**	**952,800**	**217,813**	**485,521**	**380,195**
Multimedia Presentation Systems	**214,928**	**481,564**	**485,767**	**188,726**	**959,935**	**326,998**	**563,926**	**387,950**

Installed Total:	**3,294,177**
Installed Audiovisual Total:	**2,411,667**
Installed Multimedia Presentation System Total: (Classrooms, Learning Resource Centers, Auditoria, Conference Rooms)	**2,481,237**

THIS SHEET PULLS DATA FROM INDIVIDUAL BUILDING WORKSHEETS

Annual Recapitalization

BLDG		2008	2009	2010	2011	2012	2013	2014	2015
339	DKL	-	-	3,510	15,000	51,500	3,510	-	-
233	Bullard	-	-	56,065	-	21,600	56,065	-	-
302	Glasgow	107,810	150,900	109,050	124,460	258,300	20,300	116,550	256,930
302	Glasgow Annex	-	-	22,500	-	297,868	22,500	-	-
220	Herrmann	-	22,000	-	46,400	30,000	-	20,000	20,000
234	Halligan	3,510	1,755	14,440	1,755	17,755	1,500	1,755	13,455
330	Ingersoll	7,500	53,500	218,875	9,960	179,670	166,065	39,607	113,630
235	Root	204,955	342,700	50,772	117,455	163,400	119,500	393,455	86,600
232	Spanagel	105,300	95,700	140,530	100,960	110,700	55,410	161,320	137,320
245	Watkins	83,400	58,200	12,180	68,780	72,950	24,300	127,280	3,200
	RECAP TOTALS:	**512,475**	**724,755**	**627,922**	**484,770**	**1,203,743**	**469,150**	**859,967**	**631,135**

INSTALLLED TOTAL: **3,294,177**

BLDG		2008	2009	2010	2011	2012	2013	2014	2015
339	DKL	-	-	-	15,000	51,500	-	-	-
233	Bullard	-	-	-	-	21,600	-	-	-
302	Glasgow	13,300	20,900	109,050	31,450	128,300	20,300	23,540	126,930
302	Glasgow Annex	-	-	-	-	297,868	-	-	-
220	Herrmann	-	16,000	-	46,400	24,000	-	20,000	14,000
234	Halligan	-	-	14,440	-	16,000	1,500	-	11,700
330	Ingersoll	3,000	47,100	107,310	5,460	173,270	54,500	35,107	107,230
235	Root	97,500	277,800	50,772	10,000	98,500	119,500	286,000	21,700
232	Spanagel	4,340	55,000	88,620	-	70,000	3,500	60,360	96,620
245	Watkins	14,620	55,000	4,380	-	69,750	16,500	58,500	-
	AV only RECAP TOTALS:	**134,768**	**473,809**	**376,582**	**110,321**	**952,800**	**217,813**	**485,521**	**380,195**

INSTALLED AV TOTAL: **2,411,667**

BLDG		2008	2009	2010	2011	2012	2013	2014	2015
339	DKL	-	-	3,510	15,000	51,500	3,510	-	-
233	Bullard	-	-	2,600	-	21,600	2,600	-	-
339	DKL	-	-	3,510	15,000	51,500	3,510	-	-
302	Glasgow	41,310	20,900	109,050	59,460	128,300	20,300	51,550	126,930
302	Glasgow Annex	-	-	22,500	-	297,868	22,500	-	-
220	Herrmann	-	22,000	-	46,400	30,000	-	20,000	20,000
234	Halligan	3,510	1,755	14,440	1,755	17,755	1,500	1,755	13,455
330	Ingersoll	7,500	47,100	172,075	9,960	172,650	119,265	39,607	107,230
235	Root	119,255	277,800	50,772	31,755	98,500	119,500	307,755	21,700
232	Spanagel	21,125	55,000	96,630	16,785	70,000	11,510	77,145	96,620
245	Watkins	20,220	55,000	12,180	5,600	69,750	24,300	64,100	-
	MMPS RECAP TOTALS:	**214,928**	**481,564**	**489,277**	**203,726**	**1,011,435**	**330,508**	**563,926**	**387,950**

INSTALLED MMPS TOTAL: **2,481,237**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
DKL	339	151	1	PC & Monitor	1,755	1	1,755	1,755	3	2007	2010	-	-	1,755	-	-	1,755	-	-
				MMPS	11,000	2	22,000	22,000	5	2007	2012	-	-	-	-	22,000	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**12,755**		**23,755**	**23,755**				**-**	**-**	**1,755**	**-**	**22,000**	**1,755**	**-**	**-**
DKL	339	263	CONF	PC & Monitor	1,755	1	1,755	1,755	3	2007	2010	-	-	1,755	-	-	1,755	-	-
				MMPS	11,000	2	22,000	22,000	5	2007	2012	-	-	-	-	22,000	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**12,755**		**23,755**	**23,755**				**-**	**-**	**1,755**	**-**	**22,000**	**1,755**	**-**	**-**
DKL	339	251	STDY	FSDS	7,500	1	7,500	7,500	5	2006	2011	-	-	-	7,500	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**7,500**		**7,500**	**7,500**				**-**	**-**	**-**	**7,500**	**-**	**-**	**-**	**-**
DKL	339	252	STDY	FSDS	7,500	1	7,500	7,500	5	2006	2011	-	-	-	7,500	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**7,500**		**7,500**	**7,500**				**-**	**-**	**-**	**7,500**	**-**	**-**	**-**	**-**
DKL	339	254	STDY	FSDS	7,500	1	7,500	7,500	5	2007	2012	-	-	-	-	7,500	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
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							-	-			0	-	-	-	-	-	-	-	-
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							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**7,500**		**7,500**	**7,500**				**-**	**-**	**-**	**-**	**7,500**	**-**	**-**	**-**
					48,010		**70,010**	**70,010**		**-**	**-**	**-**	**-**	**3,510**	**15,000**	**51,500**	**3,510**	**-**	**-**
				PC & Monitor only			3,510	3,510				-	-	3,510	-	-	3,510	-	-
				Printer only			-	-				-	-	-	-	-	-	-	-
				AV only			**66,500**	**66,500**				**-**	**-**	**-**	**15,000**	**51,500**	**-**	**-**	**-**
				PC & Monitor only			3,510	3,510				-	-	3,510	-	-	3,510	-	-
				LRC PC & Monitor			-	-				-	-	-	-	-	-	-	-
				Classroom PC & Monitor			3,510	3,510				-	-	3,510	-	-	3,510	-	-
				AV			66,500	66,500				-	-	-	15,000	51,500	-	-	-
				Total MMPS			**70,010**	**70,010**				**-**	**-**	**3,510**	**15,000**	**51,500**	**3,510**	**-**	**-**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
Bullard	**233**	**100A**	**LRC**	PC & Monitor	1,755	9	15,795	15,795	3	2007	2010	-	-	15,795	-	-	15,795	-	-
				Printer	3,200	1	3,200	3,200	3	2007	2010	-	-	3,200	-	-	3,200	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**4,955**		**18,995**	**18,995**				**-**	**-**	**18,995**	**-**	**-**	**18,995**	**-**	**-**
Bullard	**233**	**100B**	**LRC**	PC & Monitor	1,755	7	12,285	12,285	3	2007	2010	-	-	12,285	-	-	12,285	-	-
				Printer	3,200	2	6,400	6,400	3	2007	2010	-	-	6,400	-	-	6,400	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**4,955**		**18,685**	**18,685**				**-**	**-**	**18,685**	**-**	**-**	**18,685**	**-**	**-**
Bullard	**233**	**100C**	**LRC**	PC & Monitor	1,435	11	15,785	15,785	3	2007	2010	-	-	15,785	-	-	15,785	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
					-		-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**1,435**		**15,785**	**15,785**				**-**	**-**	**15,785**	**-**	**-**	**15,785**	**-**	**-**
Bullard	**233**	**103**	**1**	MMPS	10,800	1	10,800	10,800	5	2007	2012	-	-	-	-	10,800	-	-	-
				Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,300**		**15,300**	**15,300**				**-**	**-**	**1,300**	**-**	**10,800**	**1,300**	**-**	**-**
Bullard	**233**	**202**	**1**	MMPS	10,800	1	10,800	10,800	5	2007	2012	-	-	-	-	10,800	-	-	-
				Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,300**		**15,300**	**15,300**				**-**	**-**	**1,300**	**-**	**10,800**	**1,300**	**-**	**-**
					41,945		**84,065**	**84,065**		**-**	**-**	**-**	**-**	**56,065**	**-**	**21,600**	**56,065**	**-**	**-**
				PC & Monitor only			46,465	46,465				-	-	46,465	-	-	46,465	-	-
				Printer only			9,600	9,600				-	-	9,600	-	-	9,600	-	-
				AV only			**28,000**	**28,000**				**-**	**-**	**-**	**-**	**21,600**	**-**	**-**	**-**
				PC & Monitor only			46,465	46,465				-	-	46,465	-	-	46,465	-	-
				LRC PC & Monitor			43,865	43,865				-	-	43,865	-	-	43,865	-	-
				Classroom PC & Monitor			2,600	2,600				-	-	2,600	-	-	2,600	-	-
				AV			28,000	28,000				-	-	-	-	21,600	-	-	-
				Total MMPS			**30,600**	**30,600**				**-**	**-**	**2,600**	**-**	**21,600**	**2,600**	**-**	**-**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
Glasgow	302	102	6	MMPS	26,000	1	26,000	26,000	5	2007	2012	-	-	-	-	26,000	-	-	-
				Projection Screen	7,500	1	7,500	7,500	20	1990	2010	-	-	7,500	-	-	-	-	-
				Lectern/Console	3,500	1	3,500	3,500	10	2003	2013	-	-	-	-	-	3,500	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2003	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**38,755**		**38,755**	**38,755**				**1,755**	**-**	**7,500**	**1,755**	**26,000**	**3,500**	**1,755**	**-**
Glasgow	302	109	6	MMPS	26,000	1	26,000	26,000	5	2007	2012	-	-	-	-	26,000	-	-	-
				Projection Screen	7,500	1	7,500	7,500	20	1990	2010	-	-	7,500	-	-	-	-	-
				Lectern/Console	3,500	1	3,500	3,500	10	2003	2013	-	-	-	-	-	3,500	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2003	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**38,755**		**38,755**	**38,755**				**1,755**	**-**	**7,500**	**1,755**	**26,000**	**3,500**	**1,755**	**-**
Glasgow	302	110	1	Projector	4,300	1	4,300	4,300	5	2004	2009	-	4,300	-	-	-	-	4,300	-
				AVRC	3,700	1	3,700	3,700	5	2004	2009	-	3,700	-	-	-	-	3,700	-
				Projection Screen	620	1	620	620	10	2004	2014	-	-	-	-	-	-	620	-
				Cables & Misc	750	1	750	750	5	2004	2009	-	750	-	-	-	-	750	-
				Installation Labor	1,700	1	1,700	1,700	5	2004	2009	-	1,700	-	-	-	-	1,700	-
				Lectern/Console	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,270**		**13,270**	**13,270**				**1,500**	**10,450**	**-**	**1,500**	**-**	**-**	**13,270**	**-**
Glasgow	302	113	1	Projector	4,000	1	4,000	4,000	5	2007	2012	-	-	-	-	4,000	-	-	-
				AVRC	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				Projection Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2007	2012	-	-	-	-	1,000	-	-	-
				Installation Labor	1,500	1	1,500	1,500	5	2007	2012	-	-	-	-	1,500	-	-	-
				Lectern/Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,500**		**15,500**	**15,500**				**1,500**	**-**	**-**	**1,500**	**10,800**	**-**	**1,500**	**-**
Glasgow	302	114	1	Projector	4,000	1	4,000	4,000	5	2007	2012	-	-	-	-	4,000	-	-	-
				AVRC	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				Projection Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2007	2012	-	-	-	-	1,000	-	-	-
				Installation Labor	1,500	1	1,500	1,500	5	2007	2012	-	-	-	-	1,500	-	-	-
				Lectern/Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,500**		**15,500**	**15,500**				**1,500**	**-**	**-**	**1,500**	**10,800**	**-**	**1,500**	**-**
Glasgow	302	115	1	Projector	4,000	1	4,000	4,000	5	2007	2012	-	-	-	-	4,000	-	-	-
				AVRC	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				Projection Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2007	2012	-	-	-	-	1,000	-	-	-
				Installation Labor	1,500	1	1,500	1,500	5	2007	2012	-	-	-	-	1,500	-	-	-
				Lectern/Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,500**		**15,500**	**15,500**				**1,500**	**-**	**-**	**1,500**	**10,800**	**-**	**1,500**	**-**
Glasgow	302	117	1	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300

				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,270**		**13,270**	**13,270**				**1,500**	**-**	**10,450**	**1,500**	**-**	**-**	**1,500**	**11,770**
Glasgow	**302**	**118**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,270**		**13,270**	**13,270**				**1,500**	**-**	**10,450**	**1,500**	**-**	**-**	**1,500**	**11,770**
Glasgow	**302**	**122**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,270**		**13,270**	**13,270**				**1,500**	**-**	**10,450**	**1,500**	**-**	**-**	**1,500**	**11,770**
Glasgow	**302**	**128**		Projector	4,000	1	4,000	4,000	5	2007	2012	-	-	-	-	4,000	-	-	-
				AVRC	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				Projection Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2007	2012	-	-	-	-	1,000	-	-	-
				Installation Labor	1,500	1	1,500	1,500	5	2007	2012	-	-	-	-	1,500	-	-	-
				Lectern/Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
			LRC	PC & Monitor	1,300	25	32,500	32,500	3	2006	2009	-	32,500	-	-	32,500	-	-	32,500
				Printer	1,500	1	1,500	1,500	3	2006	2009	-	1,500	-	-	1,500	-	-	1,500
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,800**		**48,000**	**48,000**				**-**	**34,000**	**-**	**-**	**44,800**	**-**	**-**	**34,000**
Glasgow	**302**	**129**	**1**	Projector	4,000	1	4,000	4,000	5	2007	2012	-	-	-	-	4,000	-	-	-
				AVRC	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				Projection Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2007	2012	-	-	-	-	1,000	-	-	-
				Installation Labor	1,500	1	1,500	1,500	5	2007	2012	-	-	-	-	1,500	-	-	-
				Lectern/Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,500**		**15,500**	**15,500**				**1,500**	**-**	**-**	**1,500**	**10,800**	**-**	**1,500**	**-**
Glasgow	**302**	**130**	**1**	Projector	4,000	1	4,000	4,000	5	2007	2012	-	-	-	-	4,000	-	-	-
				AVRC	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				Projection Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2007	2012	-	-	-	-	1,000	-	-	-
				Installation Labor	1,500	1	1,500	1,500	5	2007	2012	-	-	-	-	1,500	-	-	-
				Lectern/Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,500**		**15,500**	**15,500**				**1,500**	**-**	**-**	**1,500**	**10,800**	**-**	**1,500**	**-**
Glasgow	**302**	**133**	**1**	Projector	4,300	1	4,300	4,300	5	2004	2009	-	4,300	-	-	-	-	4,300	-
				AVRC	3,700	1	3,700	3,700	5	2004	2009	-	3,700	-	-	-	-	3,700	-
				Projection Screen	620	1	620	620	10	2004	2014	-	-	-	-	-	-	620	-
				Cables & Misc	750	1	750	750	5	2004	2009	-	750	-	-	-	-	750	-

				Installation Labor	1,700	1	1,700	1,700	5	2004	2009	-	1,700	-	-	-	-	1,700	-
				Lectern/Console	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				PC & Monitor	1,500	1	1,500	1,500	3	2005	2008	1,500	-	-	1,500	-	-	1,500	-
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,270**		**13,270**	**13,270**				**1,500**	**10,450**	**-**	**1,500**	**-**	**-**	**13,270**	**-**
Glasgow	**302**	**203**		Projector	4,300		-	-	5	2007	2012	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				AVRC	3,700		-	-	5	2007	2012	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				Projection Screen	620		-	-	10	2007	2017	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				Cables & Misc	750		-	-	5	2007	2012	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				Installation Labor	1,700		-	-	5	2007	2012	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				Lectern/Console	700		-	-	10	2007	2017	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
			LRC	PC & Monitor	1,500	32	48,000	48,000	3	2006	2009	**-**	48,000	-	-	48,000	-	-	48,000
				Printer	1,500	1	1,500	1,500		2006	2008	1,500	**-**	**-**	**-**	**-**	**-**	**-**	**-**
							-	-			0	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
							-	-			0	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				Subtotal:	**14,770**		**49,500**	**49,500**				**1,500**	**48,000**	**-**	**-**	**48,000**	**-**	**-**	**48,000**
Glasgow	**302**	**286 Conferenc e Room**	**1**	Projector	4,000	1	4,000	4,000	5	2002	2008	4,000	-	-	-	-	4,000	**-**	**-**
				AVRC	4,300	1	4,300	4,300	5	2002	2008	4,300	-	-	-	-	4,300	**-**	**-**
				Projection Screen	700	1	700	700	10	2002	2012	-	-	-	-	700	-	**-**	**-**
				Installation Labor	1,500	1	1,500	1,500	5	2002	2008	1,500	-	-	-	-	1,500	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2002	2008	1,000	-	-	-	-	1,000	**-**	**-**
				Lectern/Console	2,500	1	2,500	2,500	5	2002	2008	2,500	-	-	-	-	2,500	**-**	**-**
				PC & Monitor	1,300	1	1,300	1,300	3	2005	2008	1,300	-	-	1,300	-	-	1,300	-
							-	-			0	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
							-	-			0	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
							-	-			0	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				Subtotal:	**15,300**		**15,300**	**15,300**				**14,600**	**-**	**-**	**1,300**	**700**	**13,300**	**1,300**	**-**
Glasgow	**302**	**303**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,500	1	1,500	1,500	3	2004	2008	1,500	-	-	1,500	-	-	1,500	-
				Plasma	3,500	1	3,500	3,500	4	2007	2011	-	-	-	3,500	-	-	-	3,500
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,770**		**16,770**	**16,770**				**1,500**	**-**	**10,450**	**5,000**	**-**	**-**	**1,500**	**15,270**
Glasgow	**302**	**306**	**1**	Projector	4,000	1	4,000	4,000	5	2007	2012	-	-	-	-	4,000	-	-	-
				AVRC	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				Projection Screen	700	1	700	700	10	2007	2017	-	-	-	-	-	-	-	-
				Cables & Misc	1,000	1	1,000	1,000	5	2007	2012	-	-	-	-	1,000	-	-	-
				Installation Labor	1,500	1	1,500	1,500	5	2007	2012	-	-	-	-	1,500	-	-	-
				Lectern/Console	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2004	2008	1,300	-	-	1,300	-	-	1,300	-
				Plasma	3,500	1	3,500	3,500	4	2007	2011	-	-	-	3,500	-	-	-	3,500
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,800**		**18,800**	**18,800**				**1,300**	**-**	**-**	**4,800**	**10,800**	**-**	**1,300**	**3,500**
Glasgow	**302**	**318**		Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
			LRC	PC & Monitor	1,500	31	46,500	46,500	3	2006	2009	-	46,500	-	-	46,500	-	-	46,500
				Printer	1,500	1	1,500	1,500	3	2006	2009	-	1,500	-	-	1,500	-	-	1,500
							-	-			0	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
							-	-			0	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				Subtotal:	**14,770**		**59,770**	**59,770**				**-**	**48,000**	**10,450**	**-**	**48,000**	**-**	**-**	**59,770**
Glasgow	**302**	**386**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620

				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,300	1	1,300	1,300	3	2004	2008	1,300	-	-	1,300	-	-	1,300	-
				Plasma	3,500	1	3,500	3,500	4	2007	2011	-	-	-	3,500	-	-	-	3,500
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,570**		**16,570**	**16,570**				**1,300**	**-**	**10,450**	**4,800**	**-**	**-**	**1,300**	**15,270**
Glasgow	**302**	**387**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,300	1	1,300	1,300	3	2004	2008	1,300	-	-	1,300	-	-	1,300	-
				Plasma	3,500	1	3,500	3,500	4	2007	2011	-	-	-	3,500	-	-	-	3,500
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,570**		**16,570**	**16,570**				**1,300**	**-**	**10,450**	**4,800**	**-**	**-**	**1,300**	**15,270**
Glasgow	**302**	**388**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,300	1	1,300	1,300	3	2004	2008	1,300	-	-	1,300	-	-	1,300	-
				Plasma	3,500	1	3,500	3,500	4	2007	2011	-	-	-	3,500	-	-	-	3,500
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,570**		**16,570**	**16,570**				**1,300**	**-**	**10,450**	**4,800**	**-**	**-**	**1,300**	**15,270**
Glasgow	**302**	**389**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Projection Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Lectern/Console	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				PC & Monitor	1,500	1	1,500	1,500	3	2004	2008	1,500	-	-	1,500	-	-	1,500	-
				Plasma	3,500	1	3,500	3,500	4	2007	2011	-	-	-	3,500	-	-	-	3,500
				Printer			-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,770**		**16,770**	**16,770**				**1,500**	**-**	**10,450**	**5,000**	**-**	**-**	**1,500**	**15,270**
Glasgow	**302**	**STBL**		Projector	4,300	1	4,300	4,300	5	2006	2011	-	-	-	4,300	-	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2006	2011	-	-	-	3,700	-	-	-	-
				Projection Screen	620	1	620	620	10	2006	2016	-	-	-	-	-	-	-	-
				Cables & Misc	750	1	750	750	5	2006	2011	-	-	-	750	-	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2006	2011	-	-	-	1,700	-	-	-	-
				Lectern/Console	700	1	700	700	10	2006	2016	-	-	-	-	-	-	-	-
			LRC	PC & Monitor	1,500	43	64,500	64,500	3	2005	2008	64,500	-	-	64,500	-	-	64,500	-
				Printer	500	1	500	500	3	2005	2008	500	-	-	500	-	-	500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,770**		**76,770**	**76,770**				**65,000**	**-**	**-**	**75,450**	**-**	**-**	**65,000**	**-**
					398,820		**572,750**	**572,750**	**-**	**-**	**-**	**107,810**	**150,900**	**109,050**	**124,460**	**258,300**	**20,300**	**116,550**	**256,930**
				PC & Monitor only			219,510	219,510				92,510	127,000	-	92,510	127,000	-	92,510	127,000
				Printer only			5,000	5,000				2,000	3,000	-	500	3,000	-	500	3,000
				AV only			**348,240**	**348,240**				**13,300**	**20,900**	**109,050**	**31,450**	**128,300**	**20,300**	**23,540**	**126,930**
				PC & Monitor only			219,510	219,510				92,510	127,000	-	92,510	127,000	-	92,510	127,000
				LRC PC & Monitor			191,500	191,500				64,500	127,000	-	64,500	127,000	-	64,500	127,000
				Classroom PC & Monitor			28,010	28,010				28,010	-	-	28,010	-	-	28,010	-
				AV			348,240	348,240				13,300	20,900	109,050	31,450	128,300	20,300	23,540	126,930
				Total MMPS			**376,250**	**376,250**				**41,310**	**20,900**	**109,050**	**59,460**	**128,300**	**20,300**	**51,550**	**126,930**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
Glasgow Annex	**302**	**B03**	**1**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
												-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**B04**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
												-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**B06**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
												-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**B09**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
												-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**B10**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-

				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**B11**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**B13**	**1**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**104**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**106**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**122**	**1**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-

							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**117**	**3A**	AVRC	9,565	1	9,565	9,565	5	2007	2012	-	-	-	-	9,565	-	-	-
				Sound Reinforcement	2,215	1	2,215	2,215	5	2007	2012	-	-	-	-	2,215	-	-	-
				Cables & Misc	345	1	345	345	5	2007	2012	-	-	-	-	345	-	-	-
				IW Tablet	3,135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4,344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
				Plasma Display (50")	3,750	2	7,500	7,500	5	2007	2012	-	-	-	-	7,500	-	-	-
				Plasma Display (61")	8,500	1	8,500	8,500	5	2007	2012	-	-	-	-	8,500	-	-	-
				VTC System	23,009	1	23,009	23,009	5	2007	2012	-	-	-	-	23,009	-	-	-
				IW Student Tablet	600	6	3,600	3,600	5	2007	2012	-	-	-	-	3,600	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2,890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				Document Camera	2,000	1	2,000	2,000	5	2007	2012	-	-	-	-	2,000	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**62,643**		**69,393**	**69,393**				**-**	**-**	**1,500**	**-**	**64,213**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**204**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**219**	**2B**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**327 Conference Room**	**1**	AVRC	3645	1	3,645	3,645	5	2007	2012	-	-	-	-	3,645	-	-	-
				Sound Reinforcement	1815	1	1,815	1,815	5	2007	2012	-	-	-	-	1,815	-	-	-
				Cables & Misc	95	1	95	95	5	2007	2012	-	-	-	-	95	-	-	-
				PC & Monitor	1500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				IW Tablet	3135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,214**		**18,214**	**18,214**				**-**	**-**	**1,500**	**-**	**13,034**	**1,500**	**-**	**-**
Glasgow Annex	**302**	**3rd Floor Conference Room (326)**	**1**	AVRC	9,565	1	9,565	9,565	5	2007	2012	-	-	-	-	9,565	-	-	-
				Sound Reinforcement	2,215	1	2,215	2,215	5	2007	2012	-	-	-	-	2,215	-	-	-
				Cables & Misc	345	1	345	345	5	2007	2012	-	-	-	-	345	-	-	-
				IW Tablet	3,135	1	3,135	3,135	5	2007	2012	-	-	-	-	3,135	-	-	-
				Projector	4,344	1	4,344	4,344	5	2007	2012	-	-	-	-	4,344	-	-	-
				Projector Screen	790	1	790	790	10	2007	2017	-	-	-	-	-	-	-	-
				Plasma Display (50")	3,750	2	7,500	7,500	5	2007	2012	-	-	-	-	7,500	-	-	-
				Plasma Display (61")	8,500	1	8,500	8,500	5	2007	2012	-	-	-	-	8,500	-	-	-

				VTC System	23,009	1	23,009	23,009	5	2007	2012	-	-	-	-	23,009	-	-	-
				IW Student Tablet	600	6	3,600	3,600	5	2007	2012	-	-	-	-	3,600	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Custom Podium	2,890	1	2,890	2,890	10	2007	2017	-	-	-	-	-	-	-	-
				Document Camera	2,000	1	2,000	2,000	5	2007	2012	-	-	-	-	2,000	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**62,643**		**69,393**	**69,393**				**-**	**-**	**1,500**	**-**	**64,213**	**1,500**	**-**	**-**
					362,068		**375,568**	**375,568**				**-**	**-**	**22,500**	**-**	**297,868**	**22,500**	**-**	**-**
				PC & Monitor only			**22,500**	**22,500**				**-**	**-**	**22,500**	**-**	**-**	**22,500**	**-**	**-**
				Printer only			**-**	**-**				**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
				AV only			**353,068**	**353,068**				**-**	**-**	**-**	**-**	**297,868**	**-**	**-**	**-**
				PC & Monitor only			22,500	22,500				-	-	22,500	-	-	22,500	-	-
				LRC PC & Monitor			-	-				-	-	-	-	-	-	-	-
				Classroom PC & Monitor			22,500	22,500				-	-	22,500	-	-	22,500	-	-
				AV			353,068	353,068				-	-	-	-	297,868	-	-	-
				Total MMPS			**375,568**	**375,568**				**-**	**-**	**22,500**	**-**	**297,868**	**22,500**	**-**	**-**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	EXTENDED COST	RECAP COST	LC
Halligan	**234**	**121B**	**1**	Projector	4,300	1	4,300	4,300	5
				AVRC	3,700	1	3,700	3,700	10
				Cables & Misc	750	1	750	750	3
				Installation Labor	1,700	1	1,700	1,700	5
				Lectern/Console	2,000	1	2,000	2,000	5
				Projection Screen	620	1	620	620	10
				PC & Monitor	1755	1	1,755	1,755	3
							-	-	
							-	-	
							-	-	
				Subtotal:	**14,825**		**14,825**	**14,825**	
Halligan	**234**	**123**	**1**	Projector	4,300	1	4,300	4,300	5
				AVRC	3,700	1	3,700	3,700	10
				Cables & Misc	750	1	750	750	3
				Installation Labor	1,700	1	1,700	1,700	5
				Lectern/Console	2,000	1	2,000	2,000	5
				Projection Screen	620	1	620	620	10
				PC & Monitor	1,755	1	1,755	1,755	
							-	-	
							-	-	
							-	-	
				Subtotal:	**14,825**		**14,825**	**14,825**	
Halligan	**234**	**125**	**1**	MMPS	11,000	1	11,000	11,000	5
				Console	700	1	700	700	10
				Projection Screen	700	1	700	700	10
				PC & Monitor	1,755	1	1,755	1,755	3
							-	-	
							-	-	
							-	-	
							-	-	
							-	-	
							-	-	
				Subtotal:	**14,155**	**4**	**14,155**	**14,155**	**28**
					43,805		**43,805**	**43,805**	
				PC & Monitor only			**5,265**	**5,265**	
				Printer only			**-**	**-**	
				AV only			**38,540**	**38,540**	

PC & Monitor only	5,265	5,265
LRC PC & Monitor	-	-
Classroom PC & Monitor	5,265	5,265
AV	38,540	38,540
Total MMPS	**43,805**	**43,805**

YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
2007	2012	-	-	-	-	4,300	-	-	-
2007	2017	-	-	-	-	-	-	-	-
2007	2010	-	-	750	-	-	750	-	-
2007	2012	-	-	-	-	1,700	-	-	-
2007	2012	-	-	-	-	2,000	-	-	-
2000	2010	-	-	620	-	-	-	-	-
2006	2009	-	1,755	-	-	1,755	-	-	1,755
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
		-	**1,755**	**1,370**	**-**	**9,755**	**750**	**-**	**1,755**
2007	2012	-	-	-	-	4,300	-	-	-
2007	2017	-	-	-	-	-	-	-	-
2007	2010	-	-	750	-	-	750	-	-
2007	2012	-	-	-	-	1,700	-	-	-
2007	2012	-	-	-	-	2,000	-	-	-
2000	2010	-	-	620	-	-	-	-	-
2006	2008	1,755	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
		1,755	**-**	**1,370**	**-**	**8,000**	**750**	**-**	**-**
2005	2010	-	-	11,000	-	-	-	-	11,000
2005	2015	-	-	-	-	-	-	-	700
2000	2010	-	-	700	-	-	-	-	-
2005	2008	1,755	-	-	1,755	-	-	1,755	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-	-
8,015	**8,043**	**1,755**	**-**	**11,700**	**1,755**	**-**	**-**	**1,755**	**11,700**
8,015	**8,043**	**3,510**	**1,755**	**14,440**	**1,755**	**17,755**	**1,500**	**1,755**	**13,455**
		3,510	**1,755**	**-**	**1,755**	**1,755**	**-**	**1,755**	**1,755**
		-	**-**	**-**	**-**	**-**	**-**	**-**	**-**
		-	**-**	**14,440**	**-**	**16,000**	**1,500**	**-**	**11,700**
		3,510	1,755	-	1,755	1,755	-	1,755	1,755
		-	-	-	-	-	-	-	-
		3,510	1,755	-	1,755	1,755	-	1,755	1,755
		-	-	14,440	-	16,000	1,500	-	11,700
		3,510	**1,755**	**14,440**	**1,755**	**17,755**	**1,500**	**1,755**	**13,455**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY
HERRMANN	220	SIGS Conf Room	1	PC & Monitor	2,000	1
				Projector	4,300	1
				Console/Lectern	2,000	1
				Plasma Displays	7,000	2
					-	
					-	
					-	
					-	
					-	
					-	
				Subtotal:	**15,300**	
HERRMANN	220	PCR	5b	Projector	4,300	2
				AVRC	25,000	1
				Console/Lectern	2,000	1
				VTC system	25,000	1
				Control System	10,000	1
				PC & Monitor	2,000	1
				Conference Table	20,000	1
				Subtotal:	**88,300**	
HERRMANN	220	SIGS Dean's Office (Conference System)	1	PC & Monitor	2,000	1
				Plasma Display	3,500	1
				SmartBoard Overlay	3,000	1
					-	
					-	
					-	
					-	
					-	
					-	
				Subtotal:	**8,500**	
					112,100	

PC & Monitor only
Printer only
AV only

PC & Monitor only
LRC PC & Monitor
Classroom PC & Monitor
AV
Total MMPS

TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012
2,000	2,000	3	2006	2009	-	2,000	-	-	2,000
4,300	4,300	5	2006	2011	-	-	-	4,300	-
2,000	2,000	5	2006	2011	-	-	-	2,000	-
14,000	14,000	3	2006	2009	-	14,000	-	-	14,000
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
22,300	**22,300**				**-**	**16,000**	**-**	**6,300**	**16,000**
8,600	8,600	5	2006	2011	-	-	-	8,600	-
25,000	25,000	10	1999	2007	-	-	-	-	-
2,000	2,000	10	1999	2009	-	2,000	-	-	-
25,000	25,000	5	2006	2011	-	-	-	25,000	-
10,000	10,000	5	2007	2012	-	-	-	-	10,000
2,000	2,000	3	2006	2009	-	2,000	-	-	2,000
20,000	20,000	15	1999	2014	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
92,600	**92,600**		**14,022**	**14,073**		**4,000**	**-**	**33,600**	**12,000**
2,000	2,000	3	2006	2009	-	2,000	-	-	2,000
3,500	3,500	5	2006	2011	-	-	-	3,500	-
3,000	3,000	5	2006	2011	-	-	-	3,000	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
-	-			0	-	-	-	-	-
8,500	**8,500**				**-**	**2,000**	**-**	**6,500**	**2,000**
123,400	**123,400**				**-**	**22,000**	**-**	**46,400**	**30,000**
6,000	6,000				-	6,000	-	-	6,000
-	-				-	-	-	-	-
117,400	**117,400**				**-**	**16,000**	**-**	**46,400**	**24,000**

6,000	6,000				-	6,000	-	-	6,000
-	-				-	-	-	-	-
6,000	6,000				-	6,000	-	-	6,000
117,400	117,400				-	16,000	-	46,400	24,000
123,400	**123,400**				**-**	**22,000**	**-**	**46,400**	**30,000**

2013	2014	2015
-	-	2,000
-	-	-
-	-	-
-	-	14,000
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	**-**	**16,000**
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	2,000
-	20,000	-
-	-	-
-	-	-
-	-	-
-	**20,000**	**2,000**
-	-	2,000
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	**-**	**2,000**
-	**20,000**	**20,000**
-	-	6,000
-	-	-
-	**20,000**	**14,000**

-	-	6,000
-	-	-
-	-	6,000
-	20,000	14,000
-	**20,000**	**20,000**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	Next Recap	2008	2009	2010	2011	2012	2013	2014	2015
Ingersoll	330	122	6	MMPS	18,500	1	18,500	18,500	5	2007	2012	-	-	-	-	18,500	-	-	-
				Console/Lectern	3,500	1	3,500	3,500	10	2003	2013	-	-	-	-	-	3,500	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2003	2008	1,500	-	-	1,500	-	-	1,500	-
				Screen	7,500	1	7,500	7,500	20	1990	2010	-	-	7,500	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**31,000**		**31,000**	**31,000**				**1,500**	**-**	**7,500**	**1,500**	**18,500**	**3,500**	**1,500**	**-**
Ingersoll	330	167 Conference Room	5B	Projector	4,300	2	8,600	8,600	5	2007	2012	-	-	-	-	8,600	-	-	-
				Plasma	3,500	1	3,500	3,500	3	2007	2010	-	-	3,500	-	-	3,500	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
				Screen	1,000	2	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Smartboard Overlay	2,500	1	2,500	2,500	3	2007	2010	-	-	2,500	-	-	2,500	-	-
				Control System	10,000	1	10,000	10,000	5	2007	2012	-	-	-	-	10,000	-	-	-
				Wireless Touch Panel	2,500	1	2,500	2,500	5	2007	2012	-	-	-	-	2,500	-	-	-
				VTC System	25,000	1	25,000	25,000	5	2007	2012	-	-	-	-	25,000	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**50,300**		**55,600**	**55,600**				**-**	**-**	**7,500**	**-**	**46,100**	**7,500**	**-**	**-**
Ingersoll	330	221	1	Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Lectern/Console	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Projection Screen	620	1	620	620	10	2001	2011	-	-	-	620	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2007	2010	-	-	1,755	-	-	1,755	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,825**		**14,825**	**14,825**				**-**	**-**	**1,755**	**620**	**10,450**	**1,755**	**-**	**-**
Ingersoll	330	224		Projector	4,300	1	4,300	4,300	5	2004	2009	-	4,300	-	-	-	-	4,300	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Lectern/Console	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
			LRC	Projection Screen	620	1	620	620	10	2002	2012	-	-	-	-	620	-	-	-
				PC & Monitor	1,800	20	36,000	36,000	3	2007	2010	-	-	36,000	-	-	36,000	-	-
				Scanner	1,500	1	1,500	1,500	3	2006	2009	-	1,500	-	-	1,500	-	-	1,500
				Printer	3,200	1	3,200	3,200	3	2006	2009	-	3,200	-	-	3,200	-	-	3,200
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**19,570**		**53,770**	**53,770**				**-**	**9,000**	**36,000**	**-**	**11,470**	**36,000**	**4,300**	**4,700**
Ingersoll	330	250		Projector	4,300	1	4,300	4,300	5	2004	2009	-	4,300	-	-	-	-	4,300	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Projection Screen	887	1	887	887	10	2004	2014	-	-	-	-	-	-	887	-
			LRC	PC & Monitor	1,800	26	46,800	46,800	3	2007	2010	-	-	46,800	-	-	46,800	-	-
				Printer	3,200	1	3,200	3,200	3	2006	2009	-	3,200	-	-	3,200	-	-	3,200
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,337**		**63,337**	**63,337**				**-**	**7,500**	**46,800**	**-**	**9,350**	**46,800**	**5,187**	**3,200**
Ingersoll	330	260	3a	Computer & Document Ca	4,000	1	4,000	4,000	3	2005	2008	4,000	-	-	4,000	-	-	4,000	-
				Computer Refresh (Lapto	1,000	45	45,000	45,000	3	2007	2010	-	-	45,000	-	-	45,000	-	-
				Dual projector system w/	20,000	1	20,000	20,000	5	2005	2010	-	-	20,000	-	-	-	-	20,000
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				VTC System	15,000	1	15,000	15,000	6	2003	2009	-	15,000	-	-	-	-	-	15,000
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	2,500	1	2,500	2,500	5	2005	2010	-	-	2,500	-	-	-	-	2,500
								-			0	-	-	-	-	-	-	-	-
								-			0	-	-	-	-	-	-	-	-
								-			0	-	-	-	-	-	-	-	-
				Subtotal:	**46,950**		**90,950**	**90,950**				**4,000**	**15,000**	**71,950**	**4,000**	**-**	**45,000**	**4,000**	**41,950**
Ingersoll	330	263	1	Projector	4,300	1			5	2007	2012	-	-	-	-	-	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-

				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	960	1	960	960	10	2000	2010	-	-	960	-	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,410**		**11,110**	**11,110**				**-**	**-**	**2,960**	**-**	**6,150**	**2,000**	**-**	**-**
Ingersoll	**330**	**265**	**1**	Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	960	1	960	960	10	2001	2011	-	-	-	960	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**2,000**	**960**	**10,450**	**2,000**	**-**	**-**
Ingersoll	**330**	**267**	**1**	Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	960	1	960	960	10	2001	2011	-	-	-	960	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**2,000**	**960**	**10,450**	**2,000**	**-**	**-**
Ingersoll	**330**	**271**	**2b**	Dual screen MMPS with touch panel control	36,000	1	36,000	36,000	5	2007	2012	-	-	-	-	36,000	-	-	-
				Console/Lectern	3,500	2	7,000	7,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	960	1	960	960	10	2007	2017	-	-	-	-	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-
				Client Server Workstation	800	45	36,000	36,000	8	2007	2015	-	-	-	-	-	-	-	36,000
				AVRC	4,500	1	4,500	4,500	5	2007	2012	-	-	-	-	4,500	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**$ 47,760**		**86,460**	**86,460**				**-**	**-**	**2,000**	**-**	**4,500**	**2,000**	**-**	**36,000**
Ingersoll	**330**	**280**	**1**	Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	960	1	960	960	10	2001	2011	-	-	-	960	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**2,000**	**960**	**10,450**	**2,000**	**-**	**-**
Ingersoll	**330**	**282**	**1**	Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2005	2015	-	-	-	-	-	-	-	2,000
				Screen	960	1	960	960	10	2005	2015	-	-	-	-	-	-	-	960
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**2,000**	**-**	**10,450**	**2,000**	**-**	**2,960**
Ingersoll	**330**	**285**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	960	1	960	960	10	2005	2015	-	-	-	-	-	-	-	960
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-

							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**12,450**	**-**	**-**	**2,000**	**-**	**11,410**	
Ingersoll	**330**	**322**	**1**	Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-	
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-	
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-	
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-	
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-	
				Screen	960	1	960	960	10	2007	2017	-	-	-	-	-	-	-	-	
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**2,000**	**-**	**10,450**	**2,000**	**-**	**-**	
Ingersoll	**330**	**323**	**1**	Projector	4,300	1	4,300	4,300	5	2005	2010	-	-	4,300	-	-	-	-	4,300	
				AVRC	3,700	1	3,700	3,700	5	2005	2010	-	-	3,700	-	-	-	-	3,700	
				Cables & Misc	750	1	750	750	5	2005	2010	-	-	750	-	-	-	-	750	
				Installation Labor	1,700	1	1,700	1,700	5	2005	2010	-	-	1,700	-	-	-	-	1,700	
				Console/Lectern	2,000	1	2,000	2,000	10	2005	2015	-	-	-	-	-	-	-	2,000	
				Screen	960	1	960	960	10	2005	2015	-	-	-	-	-	-	-	960	
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**12,450**	**-**	**-**	**2,000**	**-**	**13,410**	
Ingersoll	**330**	**325**	**2A**	Projector	4,300	1	4,300	4300	5	2007	2012	-	-	-	-	4,300	-	-	-	
				AVRC	3,700	1	3,700	3700	5	2007	2012	-	-	-	-	3,700	-	-	-	
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-	
				Installation Labor	1,700	1	1,700	1700	5	2007	2012	-	-	-	-	1,700	-	-	-	
				Console/Lectern	2,000	1	2,000	2000	10	2007	2017	-	-	-	-	-	-	-	-	
				Screen	960	1	960	960	10	2001	2011	-	-	-	960	-	-	-	-	
				PC & Monitor	2,000	1	2,000	2000	3	2007	2010	-	-	2,000	-	-	2,000	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
				Subtotal:	**$ 15,410**		**15,410**	**15410**				**-**	**-**	**2,000**	**960**	**10,450**	**2,000**	**-**	**-**	
Ingersoll	**330**	**366**	**1**		4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-	
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-	
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-	
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-	
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-	
				Screen	960	1	960	960	10	2007	2017	-	-	-	-	-	-	-	-	
				PC & Monitor	2,000	1	2,000	2,000	3	2007	2010	-	-	2,000	-	-	2,000	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
				Subtotal:	**15,410**		**15,410**	**15,410**				**-**	**-**	**2,000**	**-**	**10,450**	**2,000**	**-**	**-**	
Ingersoll	**330**	**368**	**1**	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-	
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-	
				Screen	960	1	960	960	10	2004	2014	-	-	-	-	-	-	960	-	
				PC & Monitor	1,755	1	1,755	1,755	3	2007	2010	-	-	1,755	-	-	1,755	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
				Subtotal:	**14,415**		**14,415**	**14,415**				**-**	**11,000**	**1,755**	**-**	**-**	**1,755**	**12,660**	**-**	
Ingersoll	**330**	**369**	**1**	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-	
				Console/Lectern	2,000	1	2,000	2,000	10	2008	2018	2,000	-	-	-	-	-	-	-	
				Screen	960	1	960	960	10	2004	2014	-	-	-	-	-	-	960	-	
				PC & Monitor	1,755	1	1,755	1,755	3	2007	2010	-	-	1,755	-	-	1,755	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
							-	-			0	-	-	-	-	-	-	-	-	
				Subtotal:	**15,715**		**15,715**	**15,715**				**2,000**	**11,000**	**1,755**	**-**	**-**	**1,755**	**11,960**	**-**	

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
Root	235	117	1	MMPS	11,000	0	-	-	5		0	-	-	-	-	-	-	-	-
				Console/Lectern	700	0	-	-	10		0	-	-	-	-	-	-	-	-
				Screen	660	0	-	-	10		0	-	-	-	-	-	-	-	-
				PC & Monitor		0	-	-	3		0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**12,360**		**-**	**-**				**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Root	235	123N		MMPS	11,000	0	-	-	5		0	-	-	-	-	-	-	-	-
				Console/Lectern	700	0	-	-	10		0	-	-	-	-	-	-	-	-
				Screen	660	0	-	-	10		0	-	-	-	-	-	-	-	-
			LRC	PC & Monitor	2,500	33	82,500	82,500	3	2004	2008	82,500	-	-	82,500	-	-	82,500	-
				Printer	3,200	1	3,200	3,200	3	2005	2008	3,200	-	-	3,200	-	-	3,200	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**18,060**		**85,700**	**85,700**				**85,700**	**-**	**-**	**85,700**	**-**	**-**	**85,700**	**-**
Root	235	200B Conference Room	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	568	1	568	568	10	2000	2010	-	-	568	-	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2003	2008	2,000	-	-	2,000	-	-	2,000	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,268**		**14,268**	**14,268**				**2,000**	**11,000**	**568**	**2,000**	**-**	**-**	**13,700**	**-**
Root	235	200C	1	Projector	4,300	1	4,300	4,300	5	2004	2009	-	4,300	-	-	-	-	4,300	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	568	1	568	568	10	2000	2010	-	-	568	-	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2005	2008	2,000	-	-	2,000	-	-	2,000	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,018**		**15,018**	**15,018**				**2,000**	**4,300**	**568**	**2,000**	**6,150**	**-**	**6,300**	**-**
Root	235	204		Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
			LRC	PC & Monitor	1,500	21	31,500	31,500	3	2006	2009	-	31,500	-	-	31,500	-	-	31,500
				Printer	3,200	1	3,200	3,200	3	2006	2009	-	3,200	-	-	3,200	-	-	3,200
				MMPS	11,000	1	11,000	11,000	5	2007	2012	-	-	-	-	11,000	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**28,150**		**58,150**	**58,150**				**-**	**34,700**	**-**	**-**	**56,150**	**-**	**-**	**34,700**
Root	235	208	1	MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	568	1	568	568	15	1995	2010	-	-	568	-	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,023**		**14,023**	**14,023**				**1,755**	**-**	**11,568**	**1,755**	**-**	**-**	**1,755**	**11,700**
Root	235	228		Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
			LRC	PC & Monitor	1,500	18	27,000	27,000	3	2006	2009	-	27,000	-	-	27,000	-	-	27,000
				Printer	3,200	1	3,200	3,200	3	2006	2009	-	3,200	-	-	3,200	-	-	3,200
							-	-				-	-	-	-	-	-	-	-
							-	-				-	-	-	-	-	-	-	-
							-	-				-	-	-	-	-	-	-	-
				Subtotal:	**17,150**		**42,650**	**42,650**				**-**	**30,200**	**-**	**-**	**40,650**	**-**	**-**	**30,200**
Root	235	240	1	Projector	4,300	1	4,300	4,300	5	2007	2012	-	-	-	-	4,300	-	-	-
				AVRC	3,700	1	3,700	3,700	5	2007	2012	-	-	-	-	3,700	-	-	-
				Cables & Misc	750	1	750	750	5	2007	2012	-	-	-	-	750	-	-	-
				Installation Labor	1,700	1	1,700	1,700	5	2007	2012	-	-	-	-	1,700	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Console/Lectern	2,000	1	2,000	2,000	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	568	1	568	568	15	1995	2010	-	-	568	-	-	-	-	-
				PC & Monitor	2,000	1	2,000	2,000	3	2004	2008	2,000	-	-	2,000	-	-	2,000	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**17,018**		**17,018**	**17,018**				**2,000**	**-**	**568**	**2,000**	**10,450**	**-**	**2,000**	**-**
Root	235	242	3A	PC & Monitor	2,000	1	2,000	2,000	3	2003	2008	2,000	-	-	2,000	-	-	2,000	-
				VTC system	25,000	1	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Control System	10,000	1	10,000	10,000	5	2004	2009	-	10,000	-	-	-	-	10,000	-
				Plasma displays	10,000	2.5	25,000	25,000	5	2003	2008	25,000	-	-	-	-	25,000	-	-
				Projection Display	7,500	1	7,500	7,500	5	2003	2008	7,500	-	-	-	7,500	-	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2001	2011	-	-	-	2,500	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**57,000**		**72,000**	**72,000**				**34,500**	**35,000**	**-**	**4,500**	**-**	**32,500**	**37,000**	**-**
Root	235	256	3B	PC & Monitor	2,000	1	2,000	2,000	3	2003	2008	2,000	-	-	2,000	-	-	2,000	-
				VTC system	25,000	1	25,000	25,000	5	2007	2012	-	-	-	-	25,000	-	-	-
				Control System	10,000	1	10,000	10,000	5	2004	2009	-	10,000	-	-	-	-	10,000	-
				Plasma displays	10,000	2.5	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Projector w/short throw lens	7,500	1	7,500	7,500	5	2003	2008	7,500	-	-	-	-	7,500	-	-
				Rear projection screen enclosure	17,000	1	17,000	17,000	15	2006	2021	-	-	-	-	-	-	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2004	2014	-	-	-	-	-	-	2,500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**74,000**		**89,000**	**89,000**				**9,500**	**35,000**	**-**	**2,000**	**25,000**	**7,500**	**39,500**	**-**
Root	235	260	3B	PC & Monitor	2,000	1	2,000	2,000	3	2003	2008	2,000	-	-	2,000	-	-	2,000	-
				VTC system	25,000	1	25,000	25,000	5	2003	2008	25,000	-	-	-	-	25,000	-	-
				Control System	10,000	1	10,000	10,000	5	2005	2010	-	-	10,000	-	-	-	-	10,000
				Plasma displays	10,000	2.5	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Projector w/short throw lens	7,500	1	7,500	7,500	7	2003	2010	-	-	7,500	-	-	-	-	-
				Rear projection screen enclosure	17,000	1	17,000	17,000	10	2003	2013	-	-	-	-	-	17,000	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2004	2014	-	-	-	-	-	-	2,500	-

				-			-	-			0	-	-	-	-	-	-	-	-
				-			-	-			0	-	-	-	-	-	-	-	-
				-			-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**74,000**		**89,000**	**89,000**				**27,000**	**25,000**	**17,500**	**2,000**	**-**	**42,000**	**29,500**	**10,000**
Root	**235**	**262**	**3B**	PC & Monitor	2,000	1	2,000	2,000	3	2003	2008	2,000	-	-	2,000	-	-	2,000	-
				VTC system	25,000	1	25,000	25,000	5	2007	2012	-	-	-	-	25,000	-	-	-
				Control System	10,000	1	10,000	10,000	7	2003	2010	-	-	10,000	-	-	-	-	-
				Plasma displays	10,000	2.5	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Projector w/short throw lens	7,500	1	7,500	7,500	5	2006	2011	-	-	-	7,500	-	-	-	-
				Rear projection screen enclosure	17,000	1	17,000	17,000	10	2006	2016	-	-	-	-	-	-	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2003	2013	-	-	-	-	-	2,500	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**74,000**		**89,000**	**89,000**				**2,000**	**25,000**	**10,000**	**9,500**	**25,000**	**2,500**	**27,000**	**-**
Root	**235**	**272**	**3A**	PC & Monitor	2,000	1	2,000	2,000	3	2003	2008	2,000	-	-	2,000	-	-	2,000	-
				VTC system	25,000	1	25,000	25,000	5	2003	2008	25,000	-	-	-	-	25,000	-	-
				Control System	10,000	1	10,000	10,000	7	2003	2010	-	-	10,000	-	-	-	-	-
				Plasma displays	10,000	2.5	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Projection Display	7,500	1	7,500	7,500	5	2003	2008	7,500	-	-	-	-	7,500	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2003	2013	-	-	-	-	-	2,500	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**57,000**		**72,000**	**72,000**				**34,500**	**25,000**	**10,000**	**2,000**	**-**	**35,000**	**27,000**	**-**
Root	**235**	**277A**	**3A**	PC & Monitor	2,000	1	2,000	2,000	3	2003	2008	2,000	-	-	2,000	-	-	2,000	-
				VTC system	25,000	1	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Control System	10,000	1	10,000	10,000	5	2004	2009	-	10,000	-	-	-	-	10,000	-
				Plasma displays	10,000	2.5	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Projection Display	7,500	1	7,500	7,500	5	2004	2009	-	7,500	-	-	-	-	7,500	-
				Console/Lectern	2,500	1	2,500	2,500	10	2004	2014	-	-	-	-	-	-	2,500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**57,000**		**72,000**	**72,000**				**2,000**	**67,500**	**-**	**2,000**	**-**	**-**	**72,000**	**-**
Root	**235**	**277B**	**5A**	PC & Monitor	2,000	1	2,000	2,000	3	2000	2008	2,000	-	-	2,000	-	-	2,000	-
				VTC system	25,000	1	25,000	25,000	5	2004	2009	-	25,000	-	-	-	-	25,000	-
				Control System	10,000	1	10,000	10,000	5	2004	2009	-	10,000	-	-	-	-	10,000	-
				Plasma displays	10,000	1.5	15,000	15,000	5	2004	2009	-	15,000	-	-	-	-	15,000	-
				Projection Display	7,500	0	-	-			0	-	-	-	-	-	-	-	-
				Conference Table	500	1	500	500	10	2004		-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**55,000**		**52,500**	**52,500**				**2,000**	**50,000**	**-**	**2,000**	**-**	**-**	**52,000**	**-**
					584,047		**782,327**	**782,327**				**204,955**	**342,700**	**50,772**	**117,455**	**163,400**	**119,500**	**393,455**	**86,600**
				PC & Monitor only			**162,755**	**162,755**				**104,255**	**58,500**	**-**	**104,255**	**58,500**	**-**	**104,255**	**58,500**
				Printer only			**9,600**	**9,600**				**3,200**	**6,400**	**-**	**3,200**	**6,400**	**-**	**3,200**	**6,400**
				AV only			**609,972**	**609,972**				**97,500**	**277,800**	**50,772**	**10,000**	**98,500**	**119,500**	**286,000**	**21,700**
				PC & Monitor only			162,755	162,755				104,255	58,500	-	104,255	58,500	-	104,255	58,500
				LRC PC & Monitor			141,000	141,000				82,500	58,500	-	82,500	58,500	-	82,500	58,500
				Classroom PC & Monitor			21,755	21,755				21,755	-	-	21,755	-	-	21,755	-
				AV			609,972	609,972				97,500	277,800	50,772	10,000	98,500	119,500	286,000	21,700
				Total MMPS			**631,727**	**631,727**				**119,255**	**277,800**	**50,772**	**31,755**	**98,500**	**119,500**	**307,755**	**21,700**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
Spanagel	232	105	LRC	PC & Monitor	1,500	10	15,000	15,000	3	2007	2010	-	-	15,000	-	-	15,000	-	-
				printer	3,200	1	3,200	3,200	3	2007	2010	-	-	3,200	-	-	3,200	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**4,700**		**18,200**	**18,200**				**-**	**-**	**18,200**	**-**	**-**	**18,200**	**-**	**-**
Spanagel	232	136	1	MMPS	14,000	1	14,000	14,000	5	2007	2012	-	-	-	-	14,000	-	-	-
				Console/Lectern	700	1	700	700	10	2003	2013	-	-	-	-	-	700	-	-
				Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				PC & Monitor	1,500	1	1,500	1,500	3	2004	2008	1,500	-	-	1,500	-	-	1,500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,820**		**16,820**	**16,820**				**1,500**	**-**	**-**	**1,500**	**14,000**	**700**	**1,500**	**620**
Spanagel	232	138	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	10	1995	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**13,820**	**13,820**				**620**	**11,000**	**1,500**	**-**	**-**	**1,500**	**11,700**	**-**
Spanagel	232	140	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	10	1995	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**13,820**	**13,820**				**620**	**11,000**	**1,500**	**-**	**-**	**1,500**	**11,700**	**-**
Spanagel	232	208	1	MMPS	14,000	1	14,000	14,000	5	2007	2012	-	-	-	-	14,000	-	-	-
				Console/Lectern	700	1	700	700	10	2003	2013	-	-	-	-	-	700	-	-
				Screen	620	1	620	620	10	1995	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2007	2010	-	-	1,755	-	-	1,755	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**17,075**		**17,075**	**17,075**				**620**	**-**	**1,755**	**-**	**14,000**	**2,455**	**-**	**-**
Spanagel	232	221	1	MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	620	1	620	620	10	1995	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2007	2010	-	-	1,755	-	-	1,755	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,075**		**14,075**	**14,075**				**620**	**-**	**12,755**	**-**	**-**	**1,755**	**-**	**11,700**
Spanagel	232	226	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	10	2004	2014	-	-	-	-	-	-	620	-
				PC & Monitor	1,500	1	1,500	1,500	3	2004	2008	1,500	-	-	1,500	-	-	1,500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**13,820**	**13,820**				**1,500**	**11,000**	**-**	**1,500**	**-**	**-**	**13,820**	**-**
Spanagel	232	231	1	MMPS	14,000	1	14,000	14,000	5	2007	2012	-	-	-	-	14,000	-	-	-
				Console/Lectern	700	1	700	700	10	2003	2013	-	-	-	-	-	700	-	-
				Screen	620	1	620	620	10	1995	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**17,075**		**17,075**	**17,075**				**2,375**	**-**	**-**	**1,755**	**14,000**	**700**	**1,755**	**-**
Spanagel	232	263	LRC	PC & Monitor	1,500	25	37,500	37,500	3	2006	2009	-	37,500	-	-	37,500	-	-	37,500
				Printer	2,300	1	2,300	2,300	3	2004	2008	2,300	-	-	2,300	-	-	2,300	-
						1	-	-	3	2003	2008	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**3,800**		**39,800**	**39,800**				**2,300**	**37,500**	**-**	**2,300**	**37,500**	**-**	**2,300**	**37,500**
Spanagel	232	310	1	MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,075**		**14,075**	**14,075**				**1,755**	**-**	**11,000**	**1,755**	**-**	**-**	**1,755**	**12,320**
Spanagel	232	316	1	MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	620	1	620	620	10	2000	2010	-	-	620	-	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-

							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,075**		**14,075**	**14,075**				**1,755**	**-**	**11,620**	**1,755**	**-**	**-**	**1,755**	**11,700**
Spanagel	**232**	**321**	**1**	MMPS	14,000	1	14,000	14,000	5	2007	2012	-	-	-	-	14,000	-	-	-
				Console/Lectern	700	1	700	700	10	2003	2013	-	-	-	-	-	700	-	-
				Screen	620	1	620	620	10	1995	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**17,075**		**17,075**	**17,075**				**2,375**	**-**	**-**	**1,755**	**14,000**	**700**	**1,755**	**-**
Spanagel	**232**	**332**	**1**	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	10	2004	2014	-	-	-	-	-	-	620	-
				PC & Monitor	1,500	1	1,500	1,500	3	2004	2008	1,500	-	-	1,500	-	-	1,500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**13,820**	**13,820**				**1,500**	**11,000**	**-**	**1,500**	**-**	**-**	**13,820**	**-**
Spanagel	**232**	**341**	**LRC**	PC & Monitor	2,000	19	38,000	38,000	3	2004	2008	38,000	-	-	38,000	-	-	38,000	-
				Printer	3,200	1	3,200	3,200	3	2007	2010	-	-	3,200	-	-	3,200	-	-
				MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**16,200**		**52,200**	**52,200**				**38,000**	**-**	**14,200**	**38,000**	**-**	**3,200**	**38,000**	**11,000**
Spanagel	**232**	**342**	**1**	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	10	2004	2014	-	-	-	-	-	-	620	-
				PC & Monitor	1,500	1	1,500	1,500	3	2007	2010	-	-	1,500	-	-	1,500	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**13,820**	**13,820**				**-**	**11,000**	**1,500**	**-**	**-**	**1,500**	**12,320**	**-**
Spanagel	**232**	**404**		MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
			LRC	PC & Monitor	1,500	15	22,500	22,500	3	2007	2010	-	-	22,500	-	-	22,500	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**34,820**	**34,820**				**-**	**-**	**33,500**	**-**	**-**	**22,500**	**-**	**12,320**
Spanagel	**232**	**408**	**1**	MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,075**		**14,075**	**14,075**				**1,755**	**-**	**11,000**	**1,755**	**-**	**-**	**1,755**	**12,320**
Spanagel	**232**	**421**	**1**	MMPS	14,000	1	14,000	14,000	5	2007	2012	-	-	-	-	14,000	-	-	-
				Console/Lectern	700	1	700	700	10	2003	2013	-	-	-	-	-	700	-	-
				Screen	620	1	620	620	10	1990	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**17,075**		**17,075**	**17,075**				**2,375**	**-**	**-**	**1,755**	**14,000**	**700**	**1,755**	**-**
Spanagel	**232**	**429**	**1**	MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
				PC & Monitor	1,755	1	1,755	1,755	3	2005	2008	1,755	-	-	1,755	-	-	1,755	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**14,075**		**14,075**	**14,075**				**1,755**	**-**	**11,000**	**1,755**	**-**	**-**	**1,755**	**12,320**
Spanagel	**232**	**431**		MMPS	11,000	1	11,000	11,000	5	2005	2010	-	-	11,000	-	-	-	-	11,000
				Console/Lectern	700	1	700	700	10	2005	2015	-	-	-	-	-	-	-	700
				Screen	620	1	620	620	10	2005	2015	-	-	-	-	-	-	-	620
			LRC	PC & Monitor	1,755	25	43,875	43,875	3	2005	2008	43,875	-	-	43,875	-	-	43,875	-
				Printer	3,200	1	3,200	3,200	3	2006	2009	-	3,200	-	-	3,200	-	-	3,200
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**17,275**		**59,395**	**59,395**				**43,875**	**3,200**	**11,000**	**43,875**	**3,200**	**-**	**43,875**	**15,520**

BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
Watkins	245	AUD	6	PC & Monitor	1,300	1	1,300	1,300	3	2008	2011	1,300	-	-	1,300	-	-	1,300	-
				Projector	13,250	1	13,250	13,250	5	2007	2012	-	-	-	-	13,250	-	-	-
				MMPS	22,000	1	22,000	22,000	5	2007	2012	-	-	-	-	22,000	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
												-	-	-	-	-	-	-	-
				Subtotal:	**36,550**		**36,550**	**36,550**				**1,300**	**-**	**-**	**1,300**	**35,250**	**-**	**1,300**	-
Watkins	245	Conf Rm	Conf Rm	PC & Monitor	1,300	1	1,300	1,300	3	2004	2008	1,300	-	-	1,300	-	-	1,300	-
				Console/Lectern	2,500	1	2,500	2,500	5	2003	2008	2,500	-	-	-	-	2,500	-	-
				MMPS	11,500	1	11,500	11,500	5	2003	2008	11,500	-	-	-	-	11,500	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
												-	-	-	-	-	-	-	-
				Subtotal:	**15,300**		**15,300**	**15,300**				**15,300**	**-**	**-**	**1,300**	**-**	**14,000**	**1,300**	-
Watkins	245	138	LRC	PC & Monitor	1,755	36	63,180	63,180	3	2005	2008	63,180	-	-	63,180	-	-	63,180	-
				Printer	3,200	1	3,200	3,200	3	2006	2009	-	3,200	-	-	3,200	-	-	####
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**4,955**		**66,380**	**66,380**	**6**	**4,011**	**4,017**	**63,180**	**3,200**	**-**	**63,180**	**3,200**	**-**	**63,180**	**####**
Watkins	245	145	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	10	1995	2008	620	-	-	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,620**		**13,620**	**13,620**				**620**	**11,000**	**1,300**	**-**	**-**	**1,300**	**11,700**	**-**
Watkins	245	146	1	MMPS	11,500	1	11,500	11,500	5	2007	2012	-	-	-	-	11,500	-	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	620	1	620	620	15	1995	2010	-	-	620	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,920**		**15,920**	**15,920**				**-**	**-**	**1,920**	**-**	**11,500**	**1,300**	**-**	**-**
Watkins	245	147	1	MMPS	11,500	1	11,500	11,500	5	2007	2012	-	-	-	-	11,500	-	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2007	2017	-	-	-	-	-	-	-	-
				Screen	620	1	620	620	15	1995	2010	-	-	620	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,920**		**15,920**	**15,920**				**-**	**-**	**1,920**	**-**	**11,500**	**1,300**	**-**	**-**
Watkins	245	150	1	MMPS	11,500	1	11,500	11,500	5	2007	2012	-	-	-	-	11,500	-	-	-
				Console/Lectern	2,500	1	2,500	2,500	10	2003	2013	-	-	-	-	-	2,500	-	-
				Screen	620	1	620	620	15	1995	2010	-	-	620	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**15,920**		**15,920**	**15,920**				**-**	**-**	**1,920**	**-**	**11,500**	**3,800**	**-**	**-**
Watkins	245	275	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	660	1	660	660	15	1995	2010	-	-	660	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,660**		**13,660**	**13,660**				**-**	**11,000**	**1,960**	**-**	**-**	**1,300**	**11,700**	**-**
Watkins	245	285	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	15	1995	2010	-	-	620	-	-	-	-	-
				PC & Monitor	1,300	1	1,300	1,300	3	2007	2010	-	-	1,300	-	-	1,300	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,620**		**13,620**	**13,620**				**-**	**11,000**	**1,920**	**-**	**-**	**1,300**	**11,700**	**-**
Watkins	245	375	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	15	1995	2010	-	-	620	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2004	2008	1,500	-	-	1,500	-	-	1,500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**13,820**	**13,820**				**1,500**	**11,000**	**620**	**1,500**	**-**	**-**	**13,200**	**-**
Watkins	245	387	1	MMPS	11,000	1	11,000	11,000	5	2004	2009	-	11,000	-	-	-	-	11,000	-
				Console/Lectern	700	1	700	700	10	2004	2014	-	-	-	-	-	-	700	-
				Screen	620	1	620	620	15	1995	2010	-	-	620	-	-	-	-	-
				PC & Monitor	1,500	1	1,500	1,500	3	2004	2008	1,500	-	-	1,500	-	-	1,500	-
							-	-			0	-	-	-	-	-	-	-	-
							-	-			0	-	-	-	-	-	-	-	-

									0	-	-	-	-	-	-	-	-
									0	-	-	-	-	-	-	-	-
									0	-	-	-	-	-	-	-	-
									0	-	-	-	-	-	-	-	-
				Subtotal:	**13,820**		**13,820**	**13,820**				**1,500**	**11,000**	**620**	**1,500**	**-**	**-**	**13,200**	**-**
					173,105		**234,530**	**234,530**				**83,400**	**58,200**	**12,180**	**68,780**	**72,950**	**24,300**	**127,280**	**####**
				PC & Monitor only			76,580	76,580				68,780	-	7,800	68,780	-	7,800	68,780	-
				Printer only			**3,200**	**3,200**				**-**	**3,200**	**-**	**-**	**3,200**	**-**	**-**	**####**
				AV only			**154,750**	**154,750**				**14,620**	**55,000**	**4,380**	**-**	**69,750**	**16,500**	**58,500**	**-**
				PC & Monitor only			76,580	76,580				68,780	-	7,800	68,780	-	7,800	68,780	-
				LRC PC & Monitor			63,180	63,180				63,180	-	-	63,180	-	-	63,180	-
				Classroom PC & Monitor			13,400	13,400				5,600	-	7,800	5,600	-	7,800	5,600	-
				AV			154,750	154,750				14,620	55,000	4,380	-	69,750	16,500	58,500	-
				Total MMPS			**168,150**	**168,150**				**20,220**	**55,000**	**12,180**	**5,600**	**69,750**	**24,300**	**64,100**	**-**

Lifecycle Management Plan

March 2008

Background:

- In 2004 NPS began substantial investment in educational technology.
- Progress to date:
  - All classrooms equipped with a basic multi-media presentation system.
  - Auditoriums upgraded
  - Eight residential Video-Tele-Education facilities
    * *includes one VTC Conference Room in Root Hall*
  - Multiple special purpose conference/VTC rooms.

- The Lifecycle Management Plan (LMP) has been in place for four years:
  - Classrooms categorized to reflect baseline requirements.
  - Categories based on a model developed at the University of Wisconsin, but customized for NPS needs.
    - Appendices A-1 and A-2

- The plan (continued):
  - Identifies life-cycle in years
  - Identifies replacement cost
  - Amortizes over life-cycle
  - Specifies a replacement cycle
  - Calculates annual recap cost based on amortization and replacement cycle.

- Three facets to academic facilities:
  - Labor
  - Educational Technology
  - Environment

- Labor

  - One Director
  - 5 Educational Technology specialists:
    - 2 Audio-visual technicians
    - 2 Video-teleconferencing specialists (VTC & VTE)
    - 1 Audio-visual technical engineer

- Labor (continued)
  - 5 specialists:
    - 2.5 FTE support 7 VTE Classrooms & the PCR during videoconferences
    - 2.5 FTE support the following;
      - 119 facilities (classrooms, labs, LRCs, auditoriums, conference rooms, and study rooms)
      - Outdoor events (NPS, La Mesa, others)
      - MWR spaces & functions
      - AV equipment for loan

- Labor (continued)
  - AV Techs support over 500 AV requests per year:
    - Classroom support
    - Conferences, seminars, short courses, workshops by outside groups
    - Concerts on the Lawn
    - International Day
    - Special off campus events for tenants & others
    - Award, retirement and other ceremonies
    - MWR Dinners, Weddings, Parties
    - See Appendix B for annual labor costs.

- Educational Technology
  - Multi-media presentation systems
  - Public Address (PA) systems
  - Computers
  - Instruction consoles
  - Custom equipment installations
    - Multiple visual displays
    - Videoconferencing systems

- Educational Technology

  - Replacement cost (Installed Assets): $3,294,177
  - Portable equipment: $ 172,575
  - Video Bridge: $ 250,000
  - Total: **$3,716,752**

    **Includes all VTE classrooms, Portable Equipment and Video Bridge*

  - Recapitalization cost (FY08): **$587,516**

    **Based on amortized life cycle*

    - Appendix C1: Life Cycle Assumption
    - C2: Replacement Cost Example
    - D1: Annual Recapitalization Summary
    - D2: Portable Equipment Breakout

- Environment
  - Window coverings
  - Blackboard/Whiteboard
  - Desks
  - Chairs
  - Lighting
  - Room surfaces (carpet, paint, ceiling tiles)

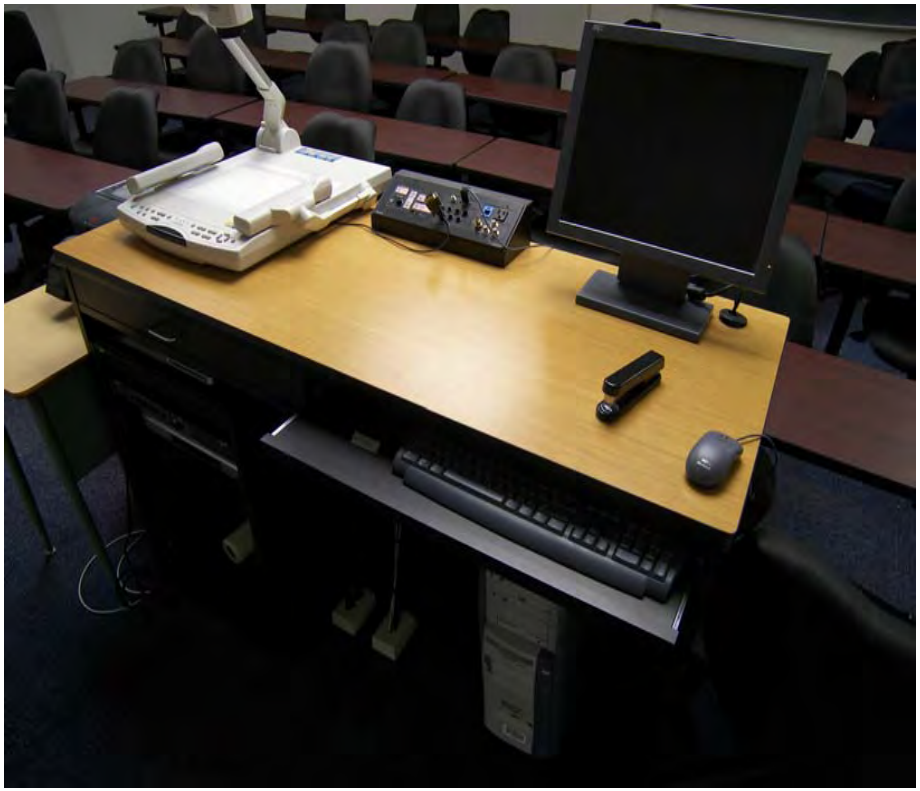
- Environment (continued):
  - Estimated replacement cost of environmental assets: **$ 1,616,806**
  - Estimated annual recap cost: **$ 75,282**
    - Appendix E: Environment Lifecycles
    - Appendix F: Environment Recap Budget

- Avoid large lump sum investments in the physical environment
  - Plan for periodic refurbishment
  - Amortize based on designated life-cycles
  - Establish a renovation cycle to maintain quality
  - Spread the burden over years

NPS Classrooms - some improvements.

Spanagel 138

NPS Classrooms - some improvements (continued)

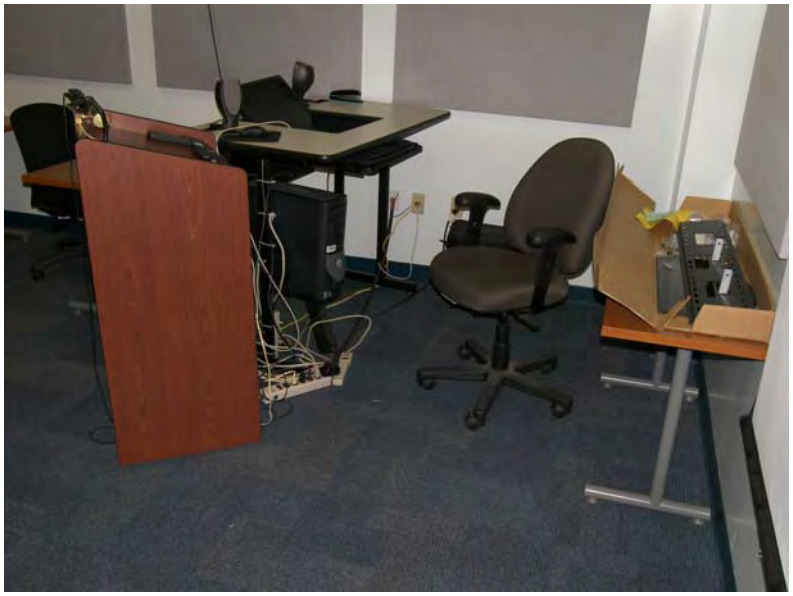


NPS Classrooms - some improvements and continuing issues

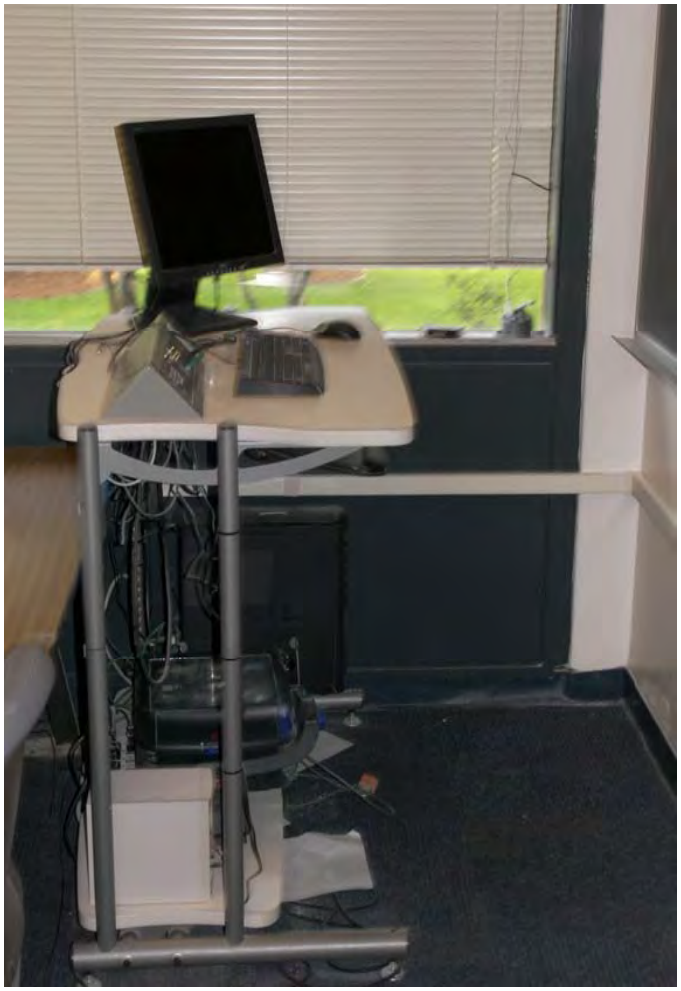
NPS Classrooms - some continuing issues

NPS Classrooms - some continuing issues

NPS Classrooms and Conference Rooms - some continuing issues.



Glasgow 286



Spanagel 140

NPS LRCs - some continuing issues.

Spanagel 431

NPS Classrooms - some continuing issues

NPS Auditorium - some continuing issues

NPS Classrooms - some continuing issues

Spanagel 341

NPS Classrooms - some continuing issues

Glasgow 113

Support

- Current Status:
  - If a piece of equipment fails, we want to repair or replace it a soon as possible.
  - Routine maintenance performed as manpower and spaces are available.
  - 60% of our projectors currently monitored over the LAN. Potentially 100% of our projectors can be monitored over the LAN.
    - Lamps changed prior to failure
    - Some problems can be detected before failure

- Weaknesses:
  - Not always quick: Help may not arrive until after class is over.
  - Unfunded: The technology infusion that began in 2004 has not been programmatically funded for ongoing maintenance or equipment replacement.
    - AV OPTAR is $35k and has remained static for the last 15 years.
    - Funding sources and amounts vary from year to year.
      - No money for spare lamps or parts after initial purchase
      - No money for repairs

Support (continued):

Improved Maintenance

- Scheduled filter and console electronics cleaning with system check
- The most recent standard projector features a self-cleaning filter.
  - A clogged filter shortens the service life of a projector and the lamp, and can cause temporary shut down.

Appendix A-1

Facilities Profile

Room Type	Function	Quantity	Description
Type 1	**Baseline Classroom or Conference Room**	70	Traditional classroom or conference room with multi-media projection system and instuctor computer. This is the minimum baseline technology for all traditional classrooms
Type 2a	**Laptop Ready Classroom**	1	Baseline classroom with AC electrical and LAN ports run to each seat for connecting laptops.
Type 2b	**Computer Equipped Classroom or Lab**	10	Baseline classroom with networked PCs and AC at each student seat
Type 3a	**VTE Classroom**	5	Video tele-education classroom. Traditional style classroom augmented with videoconferencing technology, specialized video display system, instructor PC, document camera, vcr, microphones, loudspeakers, and audiovisual routing matrix.
Type 3b	**VTE Studio**	3	Video tele-education teaching studio. Enhanced version of Type 3a VTE Classroom, but without seats for local students. Used for VTE programs with only remote students.
Type 4a	**LRC Windows**	15	Public Learning Resource Centers. Equipped with networked computers for student use, instructor computer, networked printer. Commonly used as a computer classroom on an irregular basis.
Type 4b	**LRC Unix/Linux**	3	Public Learning Resource Centers. Equipped with networked computers for student use, instructor computer, networked printer. Commonly used as a computer classroom on an irregular basis.
Type 5a	**VTC Suite**	1	Small meeting room with videoconferencing capability. (Meyer Institude VTE, Root 277A suite)
Type 5b	**VTC Conference Rooms**	3	PCR, CEE Classrooms
Type 6	**Glasgow 102 & 109, IN122**	3	Auditorium with built-in multimedia presentation and public address systems.
Type 6	**King Hall**	1	Large venue facilities used for conferences, all hands meetings and teaching. Equipped with multi-media projection system, PA system. Normally requires technician assistance prior to or during use.
Type 6	**M.E. Auditorium**	1	Mid-size Auditorium used for conferences, all hands meetings and teaching. Equipped with multi-media projection system, PA system. Normally requires technician assistance prior to or during use.
Type 7	**Study Room**	3	Small study space (3 or 4 student) with display system.

Appendix A-2

BASELINE REQUIREMENTS FOR LEARNING SPACES

Type 1	BASIC AV CLASSROOM	Life Cycle	Est. Cost	Type 1	Type 2a	Type 2b	Type 3a	Type 3b	Type 4a	Type 4b
PCW	COMPUTER & MONITOR, WINDOWS (INSTRUCTOR)	3	2,400.00	2,400.00	2,400.00	2,400.00	2,400.00	2,400.00	2,400.00	
MMPS	MULTI-MEDIA PROJECTION SYSTEM	5	10,000.00	10,000.00	10,000.00	10,000.00			10,000.00	10,000.00
LTN	LECTERN	10	800.00	800.00	800.00	800.00			800.00	800.00
PS	PROJECTION SCREEN, MANUAL	10	450.00	450.00	450.00	450.00			450.00	450.00
TP	TRANSPARENCY PROJECTOR	10	400.00	400.00	400.00	400.00			400.00	400.00
CB	CHALKBOARD/WHITEBOARD	15	2,000.00	2,000.00	2,000.00	2,000.00			2,000.00	2,000.00
				16,050.00						
Type 2a	COMPUTER READY CLASSROOM									
AC	ELECTRICAL POWER DROPS, 1 PER SEAT	10	5,000.00		5,000.00	5,000.00			5,000.00	5,000.00
					21,050.00					
Type 2b	COMPUTER EQUIPPED CLASSROOM									
PCW24	COMPUTER & MONITOR, WINDOWS (24 STUDENTS)	3	48,000.00			48,000.00				
NP	NETWORKED PRINTERS (AVERAGE PER ROOM)	3	5,352.94			5,352.94			5,352.94	
						74,402.94				
Type 3a	VTE CLASSROOM									
VTC	VTC SYSTEM	5	25,000.00				25,000.00	25,000.00		
SVD	SPECIALIZED VIDEO DISPLAY SYSTEM	5	50,000.00				50,000.00	50,000.00		
VHS	VHS DECK	5	500.00				500.00	500.00		
AVI	AV INTERFACE & CONTROL (AVI)	5	4,000.00				4,000.00	4,000.00		
ICS	INTEGRATED CONTROL SYSTEM	5	10,000.00				10,000.00	10,000.00		
IC	INSTRUCTION CONSOLE	5	2,500.00				2,500.00	2,500.00		
LV	LIGHTING FOR VIDEO	10	10,000.00				10,000.00	10,000.00		
TZC	TIME-ZONE CLOCK	10	500.00				500.00	500.00		
AT	ACOUSTIC TREATMENTS (AT)	15	5,000.00				5,000.00	5,000.00		
ER	EQUIPMENT RACKS	10	1,500.00				1,500.00	1,500.00		
DC	DOCUMENT CAMERA, SINGLE	5	2,000.00				2,000.00			
CKS	CHROMAKEY SYSTEM	5	5,000.00				5,000.00	5,000.00		
							118,400.00			
Type 3b	VTE STUDIO									
MDC	DOCUMENT CAMERAS, MULTIPLE (incl. control mods)	5	15,000.00					15,000.00		
								131,400.00		
Type 4a	LRC WINDOWS									
LRC	LRC Student Seat (per seat)	3	77,066.67						77,066.67	
									103,469.61	
Type 4b	LRC UNIX/LINUX									
PCU	COMPUTER & MONITOR, UNIX/LINUX (24 STUDENTS)	3	5,000.00							5,000.00
PCU24	COMPUTER & MONITOR, UNIX/LINUX (24 STUDENTS)	3	120,000.00							120,000.00
										0.00
										0.00
										0.00
										0.00
										143,650.00

Appendix B

Annual Labor Costs		
	VTE	144,000
	AV	131,000
	Engineering	90,000
		365,000

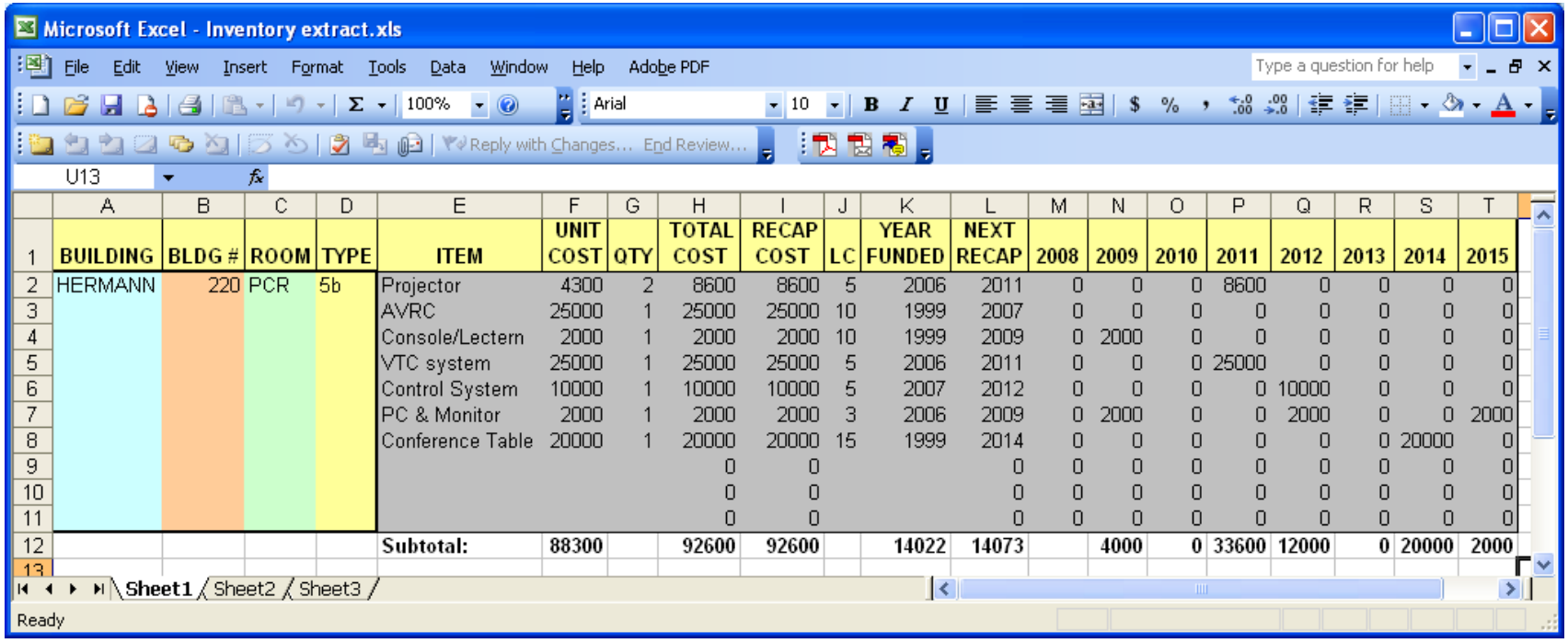
* Includes benefits and 40k in overtime

Appendix C1

Educational Technology Lifecycles

Code		LIFE CYCLE	UNIT COST	Annual Amortized Unit Cost
	3 YEAR			
PCW	COMPUTER & MONITOR, WINDOWS (INSTRUCTOR)	3	2,400.00	800.00
PCW24	COMPUTER & MONITOR, WINDOWS (24 STUDENTS)	3	48,000.00	16,000.00
PCU	COMPUTER & MONITOR, UNIX/LINUX (24 STUDENTS)	3	5,000.00	1,666.67
PCU24	COMPUTER & MONITOR, UNIX/LINUX (24 STUDENTS)	3	120,000.00	40,000.00
NP	NETWORKED PRINTERS (AVERAGE PER ROOM)	3	5,352.94	1,784.31
	5 YEAR			
AVI	AV INTERFACE & CONTROL (AVI)	5	4,000.00	800.00
CKS	CHROMAKEY SYSTEM	5	5,000.00	1,000.00
DC	DOCUMENT CAMERA, SINGLE	5	2,000.00	400.00
MDC	DOCUMENT CAMERAS, MULTIPLE (incl. control mods)	5	15,000.00	3,000.00
DVD	DVD Player (DVD)	5	500.00	100.00
IC	INSTRUCTION CONSOLE	5	2,500.00	500.00
ICS	INTEGRATED CONTROL SYSTEM	5	10,000.00	2,000.00
SB	INTERACTIVE COMPUTER DISPLAY (SB)	5	18,000.00	3,600.00
MMPS	MULTI-MEDIA PROJECTION SYSTEM	5	10,000.00	2,000.00
PD	PLASMA DISPLAYS	5	15,000.00	3,000.00
SVD	SPECIALIZED VIDEO DISPLAY SYSTEM	5	50,000.00	10,000.00
VHS	VHS DECK	5	500.00	100.00
AVP	VIDEO PROJECTOR (AUDITORIUM)	5	10,000.00	2,000.00
CVP	VIDEO PROJECTOR (Classroom)	5	5,550.00	1,110.00
VTC	VTC SYSTEM	5	25,000.00	5,000.00
	10 YEAR			
AC	ELECTRICAL POWER DROPS, 1 PER SEAT	10	5,000.00	500.00
ER	EQUIPMENT RACKS	10	1,500.00	150.00
LTN	LECTERN	10	800.00	80.00
LTNA	LECTERN, AUDITORIUM	10	4,000.00	400.00
LV	LIGHTING FOR VIDEO	10	10,000.00	1,000.00
PS	PROJECTION SCREEN, MANUAL	10	450.00	45.00
MS	PROJECTION SCREEN, MOTORIZED	10	750.00	75.00
TZC	TIME-ZONE CLOCK	10	500.00	50.00
TP	TRANSPARENCY PROJECTOR	10	400.00	40.00
	15 YEAR			
AT	ACOUSTIC TREATMENTS (AT)	15	5,000.00	333.33
CB	CHALKBOARD/WHITEBOARD	15	2,000.00	133.33
EQR	EQUIPMENT RACKS	15	1,500.00	100.00
APA	PUBLIC ADDRESS SYSTEM, AUDITORIUM	15	10,000.00	666.67
PA	PUBLIC ADDRESS SYSTEM (PA)	15	5,000.00	333.33

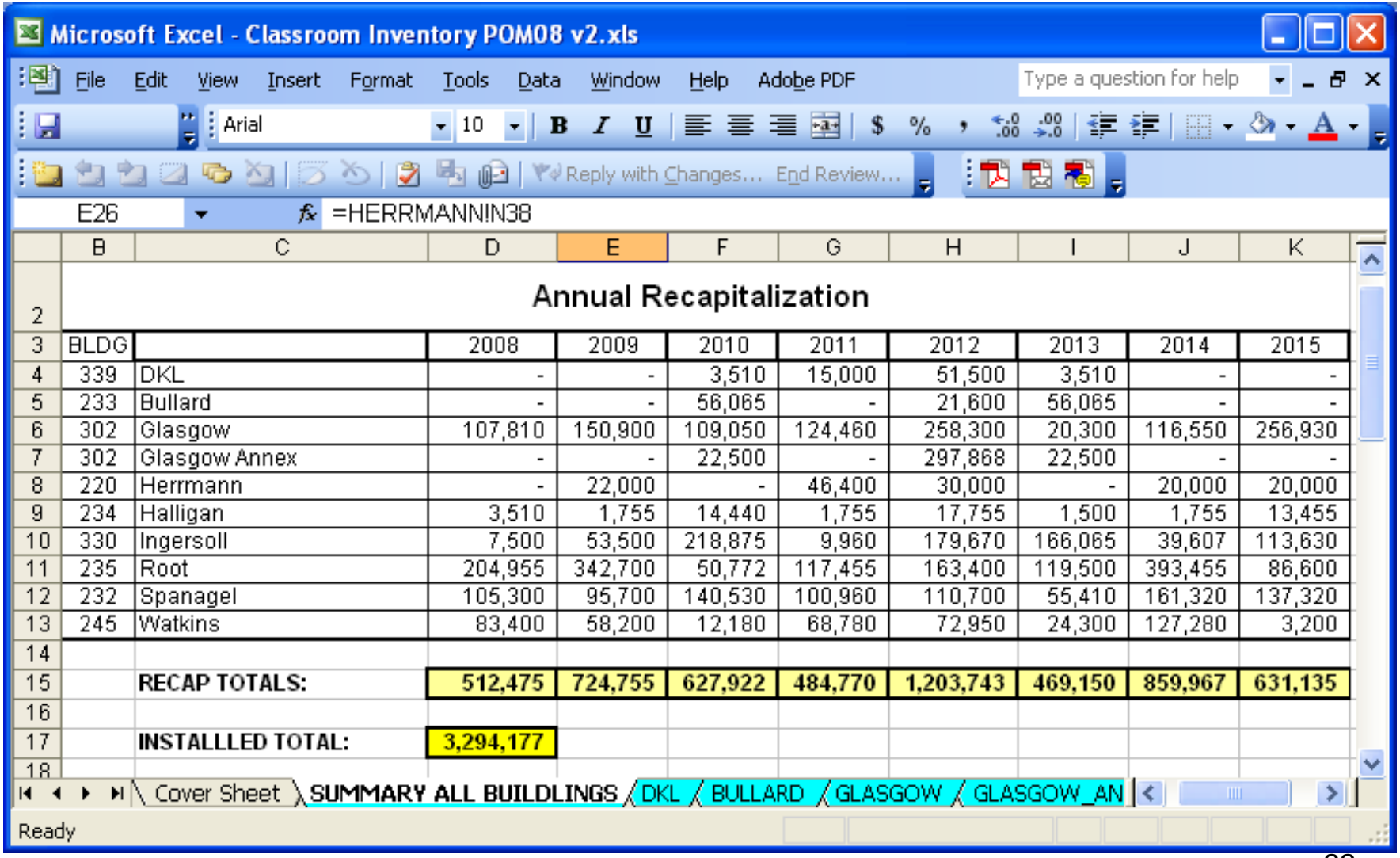
Appendix C2:
Replacement Costs (example)



Microsoft Excel - Inventory extract.xls

	BUILDING	BLDG #	ROOM	TYPE	ITEM	UNIT COST	QTY	TOTAL COST	RECAP COST	LC	YEAR FUNDED	NEXT RECAP	2008	2009	2010	2011	2012	2013	2014	2015
2	HERMANN	220	PCR	5b	Projector	4300	2	8600	8600	5	2006	2011	0	0	0	8600	0	0	0	0
3					AVRC	25000	1	25000	25000	10	1999	2007	0	0	0	0	0	0	0	0
4					Console/Lectern	2000	1	2000	2000	10	1999	2009	0	2000	0	0	0	0	0	0
5					VTC system	25000	1	25000	25000	5	2006	2011	0	0	0	25000	0	0	0	0
6					Control System	10000	1	10000	10000	5	2007	2012	0	0	0	0	10000	0	0	0
7					PC & Monitor	2000	1	2000	2000	3	2006	2009	0	2000	0	0	2000	0	0	2000
8					Conference Table	20000	1	20000	20000	15	1999	2014	0	0	0	0	0	0	20000	0
9								0	0			0	0	0	0	0	0	0	0	0
10								0	0			0	0	0	0	0	0	0	0	0
11								0	0			0	0	0	0	0	0	0	0	0
12					**Subtotal:**	**88300**		**92600**	**92600**		**14022**	**14073**		**4000**	**0**	**33600**	**12000**	**0**	**20000**	**2000**

Appendix D1
Summary



Annual Recapitalization

BLDG		2008	2009	2010	2011	2012	2013	2014	2015
339	DKL	-	-	3,510	15,000	51,500	3,510	-	-
233	Bullard	-	-	56,065	-	21,600	56,065	-	-
302	Glasgow	107,810	150,900	109,050	124,460	258,300	20,300	116,550	256,930
302	Glasgow Annex	-	-	22,500	-	297,868	22,500	-	-
220	Herrmann	-	22,000	-	46,400	30,000	-	20,000	20,000
234	Halligan	3,510	1,755	14,440	1,755	17,755	1,500	1,755	13,455
330	Ingersoll	7,500	53,500	218,875	9,960	179,670	166,065	39,607	113,630
235	Root	204,955	342,700	50,772	117,455	163,400	119,500	393,455	86,600
232	Spanagel	105,300	95,700	140,530	100,960	110,700	55,410	161,320	137,320
245	Watkins	83,400	58,200	12,180	68,780	72,950	24,300	127,280	3,200
	RECAP TOTALS:	**512,475**	**724,755**	**627,922**	**484,770**	**1,203,743**	**469,150**	**859,967**	**631,135**
	INSTALLLED TOTAL:	**3,294,177**							

Appendix D2
Portable Equipment

			Life Cycle	Price Each	Qty	TOTAL	Annual Recap
Projection	Video Projectors	Small Venue	4	3500	18	63,000	15,750
Audio	Sound System, large venue		10	15000	1	15,000	1,500
Projection	Transparency Projectors:		10	400	16	6,400	640
Audio	Microphones, dynamic		10	125	27	3,375	338
Audio	Microphones, condenser		10	300	7	2,100	210
Audio	Microphones, boundary		10	350	6	2,100	210
Display	Display Easels		10	200	8	1,600	160
Display	Poster Easels		10	250	14	3,500	350
Audio	Powered Speakers		10	750	4	3,000	300
Audio	Audio mixers, utility		10	500	7	3,500	350
Audio	Audio mixers, multi channel		10	1000	3	3,000	300
Display	Podium, wood		10	2000	5	10,000	1,000
Audio	Podium, built-in sound		10	1500	4	6,000	600
Audio	Ballroom Sound		15	50000	1	50,000	3,333
						$172,575	$25,041

Appendix E

ENVIRONMENT (NON-TECHNOLOGY)

		LIFE CYCLE	UNIT COST	Annual Amortized Unit Cost
	10 YEAR			
EC	ENVIRONMENTAL CONTROLS	10	$2,500	$250
EB	WINDOW BLINDS, MOTORIZED	10	$10,000	$1,000
	15 YEAR			
CPT	CARPET	15	$2,500	$167
LTS	LIGHTING, CONTROLLED	15	$5,000	$333
FL	LIGHTING, STANDARD FLOURESCENT	15	$5,000	$333
PT	PAINT	15	$1,000	$67
SC	STUDENT CHAIRS	15	$150	$10
SD	STUDENT DESKS	15	$208	$14
WC	WINDOW COVERING, MANUAL	15	$2,000	$133

Appendix F

RECAP BUDGET: ENVIRONMENT

Room Type		# Rooms		10	15	Total Replacement Cost of ALL ROOMS by type:
Type 1	Baseline Classroom or Conference Room	70	Each Room	0.00	10,858.00	$760,060.00
			Total All Rooms	0.00	760,060.00	
			Amortized	0.00	50,670.67	
			Room/year	7.00	4.67	
Type 2a	Laptop Ready Classroom	1	Each Room	0.00	10,858.00	$10,858.00
			Total All Rooms	0.00	10,858.00	
			Amortized	0.00	723.87	
			Room/year	0.10	0.07	
Type 2b	Computer Equipped Classroom or Lab	10	Each Room	0.00	10,858.00	$108,580.00
			Total All Rooms	0.00	108,580.00	
			Amortized	0.00	7,238.67	
			Room/year	1.00	0.67	
Type 3a	VTE Classroom	5	Each Room	0.00	10,858.00	$54,290.00
			Total All Rooms	0.00	54,290.00	
			Amortized	0.00	3,619.33	
			Room/year	0.50	0.33	
Type 3b	VTE Studio	3	Each Room	0.00	10,858.00	$32,574.00
			Total All Rooms	0.00	32,574.00	
			Amortized	0.00	2,171.60	
			Room/year	0.30	0.20	
Type 4a	LRC Windows	15	Each Room	0.00	10,858.00	$162,870.00
			Total All Rooms	0.00	162,870.00	
			Amortized	0.00	10,858.00	
			Room/year	1.50	1.00	
Type 4b	LRC Unix/Linux	3	Each Room	0.00	10,858.00	$32,574.00
			Total All Rooms	0.00	32,574.00	
			Amortized	0.00	2,171.60	
			Room/year	0.43	0.64	
Type 5a	VTC Suite	1	Each Room	0.00	5,000.00	$5,000.00
			Total All Rooms	0.00	5,000.00	
			Amortized	0.00	333.33	
			Room/year	10.00	15.00	
Type 5b	VTC Conference Rooms	3	Each Room	0.00	50,000.00	$150,000.00
			Total All Rooms	0.00	150,000.00	
			Amortized	0.00	10,000.00	
			Room/year	0.30	0.20	
Type 6	AUDITORIUMS	5	Each Room	0.00		$300,000.00
			Total All Rooms	0.00	300,000.00	
			Amortized	0.00	20,000.00	
			Room/year	10.00	0.33	
Type 7	Study Rooms	3	Each Room	0.00	2,000.00	$6,000.00
			Total All Rooms	0.00	6,000.00	
			Amortized	0.00	400.00	
			Room/year	10.00	0.20	
		116				$1,616,806.00

Total Replacment Cost (by life cycle):	$0.00	$1,129,232.00	TOTAL ANNUAL RECAP:
Total Annual Recap (by life cycle):	$0.00	$75,282.13	$75,282.13

THE INFORMATION REVOLUTION

PLANNING FOR | INSTITUTIONAL CHANGE

THE NPS INFORMATION TECHNOLOGY STRATEGIC PLAN

NAVAL POSTGRADUATE SCHOOL | FY 2003

CONTENTS

INTRODUCTION

NPS MISSION

PROVIDE RELEVANT AND UNIQUE ADVANCED EDUCATION AND RESEARCH PROGRAMS IN ORDER TO INCREASE THE COMBAT EFFECTIVENESS OF U.S. AND ALLIED ARMED FORCES AND ENHANCE THE SECURITY OF THE UNITED STATES.

IT AS MISSION CRITICAL

The Joint Vision of NPS outlines the future goals for the institution within the context of national priorities and defines academic goals through excellence in scholarly accomplishment and peer recognition. It requires that our faculty and staff are experienced in using modern technologies for teaching and learning. We must nurture and sustain efforts in high performance computing, multi-media technology, educational technology, and the technology of distance education.

The NPS mission underscores the importance of advanced education and research to the future security of the U.S. and the world. Advanced education and research in the 21st century is rooted in and enhanced by Information Technology (IT) as an enabling tool for scientific discovery, learning, and communication.

Never has the university had a greater opportunity to fulfill its mission of education, research and service to the Department of Defense. The NPS Strategic Plan defines a number of issues that will drive change nationally and that will affect NPS directly. One of the five "guiding principles" in the plan focuses on the need to "invest in technology to fulfill our mission." Finally, the NPS Strategic Plan identifies Information and Technological Superiority as one of the six institutional priority areas, although IT is also clearly represented in the other five priority areas.

The recent NPS self-study report to the Western Association of Schools and Colleges reflects an overall commitment to improvement and innovation. One of the most salient themes within the report refers to computing and information services:

> *A first class communications network is an essential part of the IT infrastructure required to achieve preeminence … None of our forward-looking plans would be possible without reliable and high-performance communication links within the campus and with external sites.*

Defining IT as a strategic resource and as mission critical is appropriate. The use of IT is ubiquitous in everyday life in the U.S. The latest report from the National Telecommunications and Information Administration, A Nation Online: How Americans are Expanding their Use of the Internet (February, 2002), shows that the "growth of Internet use in the U.S. is currently two million new Internet users per month." More than 50 percent of Americans are now online. Ninety percent of children between the ages of 5 and 17 now use computers. Residential use of broadband service more than doubled (from 11 to 20 percent of Internet

users) from 2000 to 2001. As a result, the report concludes that the U.S. is "truly a nation online."

Research universities, in partnership with the Department of Defense, have led the development and use of computing and advanced networks from the beginning. Recognized as a vital enabling strategy, universities have wired and wireless campuses, seeing access to this valuable technology as important to research, instruction, and service; the three cornerstones of a research university mission.

Information Technology is now used in classrooms to enhance the learning experience in the finest universities in the U.S. Faculty members enrich lectures with examples that students can experience in ways never before possible. The experience of virtual experimentation is available to students where previously certain experiments were too expensive or too dangerous to duplicate or to allow students to perform at all. Collaboration with colleagues at other institutions has been made easier and more effective with video-conferencing. Development of both online and video-conferencing based educational courses and resources has given access to students who otherwise could not attend residential campus environments. In the case of the military, providing education and training opportunities to military personnel stationed at remote locations is often essential to their effectiveness in performing their given missions.

IT AS COMPETITIVE NECESSITY

Defining IT as a mission critical strategic resource is appropriate, especially at the Naval Postgraduate School. As our colleagues at UCLA have said in their Information Strategic Plan, "Successful planning, implementation and innovation of IT has become a competitive necessity for higher education (2001)." Every goal and strategy defined in the NPS Strategic Plan is dependent either directly or indirectly on IT. Our students are already IT aware when they begin their studies, and they expect their expertise to increase significantly as a result of their education here. Our faculty members are hired from the best universities in the world and arrive at NPS with research and educational programs that require advanced networking infrastructure, sophisticated user support, and access to high performance computing. Our administrative systems are linked with the Department of Navy systems, which are increasingly upgraded to more efficient system architectures and performance standards.

In order to provide the kind of environment that supports our current academic mission and vision, we must plan collaboratively and mark our progress carefully. The IT Task Force was formed at the beginning of

"SUCCESSFUL PLANNING, IMPLEMENTATION AND INNOVATION OF IT HAS BECOME A COMPETITIVE NECESSITY FOR HIGHER EDUCATION."

2001 STRATEGIC PLAN UNIVERSITY OF CALIFORNIA, LOS ANGELES

last year by the Superintendent and Provost to develop an IT Strategic Plan that supports the NPS Strategic Plan. The goals of the IT Strategic Plan are:

- Improve technological support for the core mission of teaching and research;
- Improve the educational experience of students by incorporating technology into instruction, where appropriate;
- Improve communication about IT as a strategic NPS priority.

After defining the above goals, the IT Task Force posed this question to focus our overall strategy: "What are the factors or areas of IT that are so critical to our success that failure to accomplish any one of them puts our other goals at risk?"

After substantial discussion and consultation with several sectors of the university community, the IT Task Force outlined five elements necessary for successful achievement of the above goals. It is appropriately these five elements that constitute the core areas of the strategic plan:

1. Network Infrastructure Issues: Campus intranet, data and network security, world wide remote access, internet accessibility, and connectivity to other high-speed networks (e.g. Internet2, the University of California system backbone). Also included are issues relating to supercomputing access and support. Information network extends beyond the traditional concept of simple connections between computers to include the applications, data repositories, and interoperability with the Navy Marine Corps Intranet and other allied networks, along with the required system support, and other hardware and software that allow faculty, staff and students to access and backup the information, applications, or services they need.

2. Academic Applications and Services: IT services provided, equipment acquisition, maintenance and replacement, software license acquisition, maintenance and upgrades, and customer support. Includes support of instructional technology in local and remote settings.

3. Administrative Applications and Services: Current status, review of future options (near-term and longer view), comparability with other institutions, customer support, and compatibility with other Navy requirements.

4. Management and Resources: Management, resources, security, planning, professional development, user training and orientation.

5. Communication, Partnerships, and Outreach: Including internal communications and external visibility.

PHYSICAL INFRASTRUCTURE

The NPS network infrastructure must be updated. The current backbone of the NPS network, installed a few years ago, is built using 3Com ATM switches. 3Com has abandoned the ATM market. Replacement parts for 3Com ATM equipment are difficult to find and soon will be impossible to find. The longer NPS depends on this unsupported 3Com equipment, the greater the exposure to an extended service interruption while searching for 3Com spare parts. In addition, plans must be formulated based upon regular monitoring of network usage, traffic patterns, and projection models of future demand. Issues of speed, responsiveness, reliability, and capacity must all be considered. Redundancy is required for maximum reliability and network efficiency.

The backbone switch centers of the NPS network (Ingersoll, Spanagel, and Herrmann) require replacement with current enterprise level technology (gigabit Ethernet). The ATM backbone technology installed a few years ago is no longer supported. Portions of the existing architecture are scheduled for replacement this year to improve performance and slightly reduce out-year replacement costs.

Recommendations

1. Up-to-date maps of network infrastructure conduits (voice, video, and data) will be maintained by Public Works. The logical network diagrams will be maintained by the Network Operations Center (NOC). All plans for renovation or construction will include consultation with the NOC to ensure IT requirements are included in the planning cycle.

2. NPS will replace its in-ground conduit and fiber plant. The replaced fiber will last approximately 20 years (one-time cost).

3. The network backbone will be upgraded to replace ATM technology with gigabit Ethernet (one-time costs), and network architecture will be changed so that every major building will have connections with two other buildings on campus.

INTERNET ACCESS

NPS connectivity to the rest of the world needs to be planned as well. Whereas the Defense Research and Engineering Network (DREN) provides adequate service for DoD connectivity, it does suffer slowdowns and inefficiencies in connectivity to the commercial internet that create problems for the NPS mission. It is clear that expanded capacity and speed are an immediate strategic priority.

As NPS expands its role in Internet2, the primary connection to this architecture will require the equivalent of OC-48 (2.5 Gbps speed - this is the speed of the University of California backbone). Even more important than speed is redundancy. NPS needs parallel router connections with the outside world. Both routers should connect to an Internet Service Provider (ISP–PacBell Internet, for example) and DREN. By implementing this change, speed and capacity would be increased, as would reliability of access to the outside world.

Firewalls control access and provide security to the environments in which they are installed. By their very nature, they provide a barrier that makes

THE BENEFITS OF MOBILE, UNTETHERED NETWORK CONNECTIVITY PROMISES SOME OF THE SAME ADVANTAGES FOR E-MAIL AND OTHER APPLICATIONS THAT THE CELL PHONE DID FOR TELEPHONE SERVICE.

access more difficult but provides a level of assurance to the network. In a university environment this can be a particularly difficult situation. While the underlying principle of academic instruction and research is collaboration, peer review and the ability to replicate findings, firewalls place limitations on these activities. The NPS firewall is a mandated necessity because the network is in a dot mil (.mil) domain. The educational institution domain designation called dot edu (.edu) provides less restrictions than the .mil domain and may address some of the access problems encountered at NPS.

As a result, NPS will move to operationalize the .edu designation for NPS. Connecting with the University of California system backbone would ensure access to current network technology over the long term. Appropriate network speed and capacity for a research university such as NPS would be assured. The .edu designation would be available in addition to the existing .mil designation, which would continue and provide for future connection to the Navy Marine Corps Intranet (NMCI).

Recommendation

4. Connection to the internet should be expanded to multiple routers, accessing, minimally, DREN and a commercial ISP. This would permit use of the .edu designation as well as continuing with the required .mil utilizing the 802.1x VPN technology implemented within the network fabric.

WIRELESS NETWORKING

Wireless network technologies and standards are becoming available and will play an important role in complementing the existing and future networks at NPS. The benefits of mobile, untethered network connectivity promises some of the same advantages for e-mail and other applications that the cell phone did for telephone service.

Wireless networks also have the potential to dramatically increase the number of network connections. There is a growing need to provide network connectivity not only to every classroom, but to every seat in the classroom. Just as information technology is used to facilitate business processes and decision-making throughout all branches and levels of organizations, it is also being used to facilitate the instruction of many different academic courses throughout universities. NPS must participate actively in this substantive change and provide an educational experience that makes effective use of wireless capabilities. Wireless technology has helped to advance the information revolution in that universities are seeing a pedagogical shift from using information technology in limited courses to using IT in virtually all courses. Wireless networking is not considered to be a replacement for a well-wired campus with wired access speeds continuing to stay significantly faster than wireless technologies. As applications that require higher bandwidth become commonplace, wireless network technology may not be able to provide a suitable network connection.

Thus, wireless should be seen as an augmentation to the physical wire plant, extending the network for general-purpose network access into zones of transient use (such as common areas), and enabling applications that require the mobility offered by wireless but do not require the bandwidth or reliability of wired connections.

Wireless networking is the most cost effective and operationally

augmentation-responsive technology available today and is in keeping with the strategic vision of every major university in America.

Recommendation

5. Institutionalize and continue expansion of the existing wireless capability at NPS.

REMOTE ACCESS

In addition, issues surrounding remote access must be considered within any discussion of network infrastructure. Remote access can be defined as the ability to use the resources of the NPS campus network from a site other than the campus proper. This applies to the student housing areas at La Mesa and the Ord Military Community, distance learning environments including ships and shore stations worldwide and for faculty and students while traveling. This may include expansion of the network to include the local housing areas, addition of wireless access points, high speed dial-in access or access through commercial internet service providers.

In order to ensure that the network remains secure while still providing for unfettered remote access, a comprehensive program of network monitoring and reporting must be in place.

Recommendations

6. Access to the NPS network must be expanded to ensure that the local student housing areas as well as remote sites supporting distance learning and travel are supported.

7. Monitoring of remote access capability will be reported on the intranet web site.

NAVY AND MARINE CORPS INTRANET

The Navy and Marine Corps Intranet (NMCI) is a program underway in the Department of the Navy to provide networked services into a single entity. The program is designed to present an efficient model of services and access enterprise-wide. NMCI will serve as a single network across all of the Navy's shore-based sites. The program has been outsourced to EDS Corporation. Designed as a way of streamlining the number of applications used and supported, the challenges in implementation lie in legacy application integration, security, and remote access capability.

NPS is currently enrolled in NMCI with several hundred seats, largely in administrative areas. The program is scheduled to be operational at NPS in October, 2003.

In May 2002, NPS requested a site visit by NMCI officials to explore the program's viability for a research university environment. Two NMCI administrators and two EDS staff visited the campus and met with faculty and administrators. The team concluded that the research and education environment was not a likely candidate for NMCI application for two reasons:

(1) The academic environment is based on experimentation, testing, and development of new operating systems, software, and middleware. This

IN ORDER TO ENSURE THAT THE NETWORK REMAINS SECURE WHILE STILL PROVIDING FOR UNFETTERED REMOTE ACCESS, A COMPREHENSIVE PROGRAM OF NETWORK MONITORING AND REPORTING MUST BE IN PLACE.

NPS HAS ADMINISTRATIVE SYSTEMS TO SUPPORT THE ACADEMIC MISSION THAT ARE NOT DUPLICATED ELSEWHERE IN THE NAVY, AND INCORPORATION OF THOSE SYSTEMS MUST BE ASSURED BEFORE NMCI ENROLLMENT CAN BE CONTRACTED.

requires putting things on the university network that would violate NMCI integrity; and,

(2) academic work is fundamentally based on peer review and collaborative work. As a result, NPS faculty and students engage in research projects with other universities, research centers and laboratories and access databases and research sources that would undermine NMCI standards.

The visit yielded intriguing possibilities for the NPS staff using administrative systems, however. The decision was made to initiate a six-month engineering study, conducted by a joint NMCI and NPS team. The study will examine how many NMCI seats will truly be appropriate at NPS, at what level of enrollment, and at what cost. The initial estimate is for 400 seats in the FY04 and FY05 timeframe.

NMCI offers an interesting opportunity to benefit from the Navy's streamlining of its reliance on legacy administrative applications. However, the NMCI program must be rigorously evaluated. NPS has administrative systems to support the academic mission that are not duplicated elsewhere in the Navy, and incorporation of those systems (e.g. student systems and research administration systems) must be assured before enrollment can be contracted. The engineering study will address these and other issues important to making the best recommendation to NPS leadership.

Recommendations

8. A six-month engineering study will be conducted by a team of NMCI and NPS IT staff to determine appropriate numbers and levels of NMCI enrollment for administrative staff at NPS. The report will be used by the NPS NMCI Performance Evaluation Team to provide a formal recommendation about NMCI expansion at NPS.

9. A team of NPS faculty, staff and students (NPS NMCI Performance Evaluation Team) will be designated by the Provost to review and performance test NMCI capabilities for a period of six months.

INTERNET2 AND TECHNOLOGICAL INNOVATION

Recent application for membership in Internet2 has brought with it a great deal of excitement on campus. Faculty and students are eager to be part of this state-of-the-art network with colleagues at other research universities and federal agencies. Being part of the group that will be inventing the future Internet is an exhilarating prospect and provides important momentum to NPS IT development, and it will be important to keep this momentum strong into the future. Internet2 membership represents an institutional commitment to have faculty involved in the development of internet technology and IT staff involved in the development of IT and internet-related policies.

Recommendation

10. Assign central IT operations with responsibility for Internet2 membership support.

Equally important, central IT should be involved in developing, testing, and experimenting with a wide variety of technological products and processes.

NETWORK INFRASTRUCTURE

NPS excellence is tied inextricably to its intellectual vitality. The IT division must support that vitality by supporting emerging technologies and expressing willingness to pilot new technologies with faculty members. IT excellence is based on change, innovation, experimentation, and imagination. The central IT division in a research university should provide leadership in the testing and demonstration of emerging technologies. A few examples of emerging technologies include: wireless environments, video streaming, security assessments, quality of service, high performance computing research and education, and voice over I/P (internet protocol).

IT EXCELLENCE IS BASED ON CHANGE, INNOVATION, EXPERIMENTATION, AND IMAGINATION. THE CENTRAL IT DIVISION IN A RESEARCH UNIVERSITY SHOULD PROVIDE LEADERSHIP IN THE TESTING AND DEMONSTRATION OF EMERGING TECHNOLOGIES.

Recommendation

11. Central IT services at the Naval Postgraduate School will be integrally involved in testing and evaluating emerging technologies.

Since video is an essential dimension of electronic communications and features prominently in a number of core mission areas for the university, it should be included in planning for IT network infrastructure.

Recommendation

12. Video will be included as an important component of network infrastructure and IT service planning.

Security and privacy of data and the network are conventional areas of responsibility for a central IT department. Regular security audits are included in those responsibilities and university leadership are apprised of audit outcomes.

Recommendations

13. IT security policies and procedures must be evaluated on an ongoing basis to keep pace with new technologies, new methods of penetrating existing systems, innovative safeguards, etc. The results of those evaluations will be reported in the IT annual report.

14. Conduct security audits on a regular basis.

15. Identify a crisis response team to address possible technology-based attacks.

AVAILABILITY OF SERVICES

Information and systems required by NPS staff, faculty, students and other customers will be made available to those users wherever they may be located, and whenever such access is needed. The current backup systems installed on the campus are no longer adequate to backup the volume of critical research and administration data stored on the central servers and client workstations.

Recommendation

16. Develop a central plan for systems and data redundancy and backup.

2 ACADEMIC APPLICATIONS AND SERVICES

IT support for the academic enterprise in a research university environment is challenging. Faculty and students are constantly using and developing new technologies. Keeping up with academic needs is daunting and yet absolutely essential.

Support for selected equipment and software is part of any central IT department's work. Equally important is providing current technical expertise and an IT culture of continuous learning and skills development. Help to meet this challenge is available in various forms from a variety of sources. Research universities around the U.S. have developed multi-tiered models of staff support for faculty and students. National organizations have developed certification programs, skills training and development courses and programs. And, sensitive to the important issue of cost control in an area of continuous customer need, industry vendors have negotiated with higher education for reduced costs with multiple site licenses.

CLASSROOMS

Providing quality educational programs represents the core mission of NPS. Quality educational experiences at the graduate and professional level require access to technology tools, electronic information resources, high-bandwidth applications, and a variety of research and instructional applications.

To date, classroom and technology upgrades have been done on an ad hoc basis, as resources permitted and priorities indicated. Classroom technology upgrades were not part of a university-wide planning process.

It became evident that the institution needed a systematic process of classroom technology renewal. Classrooms must have the technology required by curriculum and faculty and students, and that technology must be maintained and updated at regular intervals. In addition, classroom technology issues must be integrated within a larger Information Technology planning process to insure technical interoperability and compatibility, and to leverage resources to maximize efficiencies.

Recommendations

17. The FY2000-2007 Laboratories, Library, LAN and Classrooms Funding Plan should be accelerated. This planning process has been successful in providing a systematic way of acquisition, maintenance, and replacement of IT-related equipment. With a modest increase in funds, a larger number of classrooms could be equipped with network access and multimedia capabilities.

DISTANCE LEARNING

NPS Schools and Departments have embarked on a path that will lead to greatly expanded outreach to students who will not have the opportunity to spend lengthy periods of time in residence at NPS. Key to this endeavor is the establishment of, and on-going support for, a robust Distributed Learning Program. Web technology now has the capability to provide learners with a variety of virtual learning environments and functionality, with more choices/options for obtaining relevant information and knowledge. When

combined with traditional delivery methods, it holds the promise of reducing seat time at both resident and satellite sites. The long-term objective is to shorten residency requirements, accommodate changing demographics and make critical/relevant Graduate Education readily available to Naval Forces worldwide, and have every Naval officer obtain a graduate degree, that is relevant to DoN needs, before reaching the 06 promotion point.

Recommendations

18. NPS should invest in systems and processes that enable delivery of classes to off-campus students.

19. Distance Learning students will have access to the same services as resident students.

IT SERVICES TO SUPPORT INSTRUCTION

IT support for the academic enterprise in a research university environment is challenging. Faculty and students are constantly using and developing new technologies. Keeping up with academic needs is daunting and yet absolutely essential.

Support for selected equipment and software is part of any central IT department's work, but providing technical expertise and opportunities for ongoing skills development and training are equally as important, if not more so. Research universities around the U.S. have developed multi-tiered models of staff support for faculty and students. National organizations have developed certification programs, skills training and development courses and programs. And, sensitive to the important issue of cost control in an area of continuous customer need, industry vendors have negotiated with higher education for reduced costs with multiple site licenses.

SUPPORT FOR SELECTED EQUIPMENT AND SOFTWARE IS PART OF ANY CENTRAL IT DEPARTMENT'S WORK, BUT PROVIDING TECHNICAL EXPERTISE AND OPPORTUNITIES FOR ONGOING SKILLS DEVELOPMENT AND TRAINING ARE EQUALLY AS IMPORTANT, IF NOT MORE SO.

Recommendations

20. Increase the number of IT staff to support instruction. IT staff should be available to ensure that equipment is in working order for lecture and laboratory times. According to peer institutions, NPS should have one technician to maintain and help support every five interactive classrooms. An audio-video engineer should be available on an on-call basis for particularly complex problems that might arise.

21. Establish IT "design teams" to work with faculty in the development of IT-based materials for instruction. At NPS, staff members from the DLRC work as members of design teams to identify resources on the Web that might be appropriate for faculty to incorporate into courses. The faculty training offered via DLRC courses will continue to offer assistance in placing material on the Web. The design teams can also assist faculty in dealing with copyright issues and provide guidance on how to operationalize a faculty member's vision for a course (using original design, available software, and resources that include images or materials from archives). In the future, searchable archives of DoD and government owned learning objects (Sharable Content Objects) will form the building blocks of new courseware.

22. A clearinghouse for instructional IT materials and methods is being developed, including an ongoing series of brown bag lunches in which faculty, students, and staff share their findings about instructional technologies. This is an area in which the NPS Library has provided a key partnership with the Office of Continuous Learning.

23. Partner with the Library and Office of Continuous Learning to develop data-rich portals, interactive websites, data delivery systems.

IT SERVICES TO SUPPORT RESEARCH

Two tiers of IT support are required for research at NPS: (1) a common level of support campus-wide that includes a highly professionalized IT staff that provide information and service about information and communications technology and (2) highly specialized, high-end applications support for research computing.

Recommendations

24. Increase the number of IT staff to support research.

25. Provide the following expertise and knowledge to support faculty research about information technology:
- Advanced computation (e.g. computer modeling and simulation, high-performance computing, wireless systems, distributed processing).
- Data visualization, mining, management, storage and retrieval.
- Data and network security.

IT INFRASTRUCTURE TO SUPPORT RESEARCH

Infrastructure must be planned and coordinated in such a way as to provide a reliable and responsive university-wide network for instruction and administrative purposes, but also to provide high-speed network access to support research computing.

Exploration of partnerships with other institutions and consortia can further expand the reach of the NPS network. Membership in Internet2 is an example. Joining the CalRen2, the University of California network reaching from UC Berkeley to UC San Diego is another example. Participating in Monterey Peninsula I-Net, a local consortium of organizations, schools, and higher education institutions is yet another example.

Finally, NPS faculty collaborate with various Navy sponsors and with graduates. One of NPS strategic goals includes NPS in the top 50 research universities in the country by the year 2020. Providing state of the art collaboration technology is essential to this goal.

Recommendations

26. Provide planning and coordination in support of the academic, research and administration network requirements.

27. Provide leadership in partnering with other institutions and consortia to further expand the reach of the NPS network.

28. Provide a vehicle for collaboration with our graduates.

3 ADMINISTRATIVE APPLICATIONS AND SERVICES

ENVISIONING CHANGE

Administrative systems provide electronic ways to perform the day-to-day business activities of a university. NPS is in a somewhat unique situation, relative to other universities, since many of its administrative requirements are mandated by the Department of Defense. Meeting the requirements of larger government systems while providing optimal service to our local constituencies is a challenge. The first step in addressing that challenge is to define the environment we would like to see at NPS:

- A collaborative environment where faculty, students and staff have ready access to the information and tools necessary to do their job efficiently and effectively.

- A university portal with web-enabled services and applications that support faculty, students and staff in work supporting the university mission of education, research and service to the Department of Defense.

- A workplace that is committed to the highest level of customer service and quality of work.

- A presence on the Navy Enterprise Portal for library services and distributed learning.

DEFINING WHAT IS NEEDED

Today's NPS web environment is a disparate collection of school, departmental and research web sites. These web sites provide static web pages with infrequent updates and content maintenance. Navigating the current web environment can be difficult and time-consuming.

Today's NPS business applications and databases are stand-alone legacy systems. These applications require multiple logins and duplicate data entry. The databases are not integrated nor do they comply with emerging DoD XML standards. In some cases this has led to data redundancy and a lack of confidence in data reliability.

Several options were reviewed: Enterprise Resource Planning (ERP) systems, database architecture systems, web-based systems, and user-interface-based systems. Systems at other universities were considered: Naval Academy, NAVAIR, SPAWAR, UC San Diego, Baylor University, Cal Tech, Claremont Graduate University, and UC Santa Cruz. From those reviews, a number of conclusions were reached about how to move from the current environment to the NPS vision.

There is a need for a new information architecture that goes beyond the functions of the current NPS Intranet. Consolidating the disparate applications and information at NPS enables a new operating environment where faculty, staff and students have the information and tools necessary to support implementation of the Functionality Assessment Team (FAT) recommendations, handle the increase in the number of resident and distance learning students, and generally perform the daily business functions of the university in a more efficient and effective manner.

NPS must put in place a new web-based information architecture that will leverage innovative technology to provide a robust, self-service working environment to our constituents.

ADMINISTRATIVE APPLICATIONS AND SERVICES

NPS IS IN A SOMEWHAT UNIQUE SITUATION, RELATIVE TO OTHER UNIVERSITIES, SINCE MANY OF ITS ADMINISTRATIVE REQUIREMENTS ARE MANDATED BY THE DEPARTMENT OF DEFENSE.

A recent report summarized administrative systems in use at NPS (KPMG Consulting LLC, 2002):

Standard Accounting and Reporting System (STARS). This is a DoD mandated, interactive real-time accounting system used for processing and reporting of funds.

Funds Administration and Standardized Document Automation (FASTDATA). This is a Navy mandated legacy system that will eventually be replaced.

Travel Manager. This is a web-based system designed to facilitate travel arrangements, interfacing with SATO and FASTDATA. This is a Navy legacy system.

ANSERS. A contracting system. It is a Navy legacy system.

PARIS/XP. This is a purchase card reconciliation system. NPS is the only Navy shore activity using PARIS.

Departmental Online Reporting System (DORS). This is an NPS developed system used to provide a consolidated view of labor, travel and purchases and account balances for both reimbursable and direct funded activities/departments. It is a data mart/warehouse retrieving data from ETAC et.al.

Electronic Time and Attendance Certification (ETAC). This is an NPS developed system used to certify CIVPERS payroll and allocate an individual's labor hours by JONs. Uploading labor from ETAC into STARS is done manually.

Defense Civilian Pay System (DCPS). This is the standard DoD civilian pay system.

Standard Labor Data Collection and Distribution Application (SLDCADA). This is a NAVSEA developed system selected as the DoN standard. It provides inputs into DCPS which feeds STARS.

Defense Property Accountability System (DPAS). A Navy mandated system. DPAS is used for property inventory, property accountability, property valuation, equipment utilization and preventive maintenance scheduling.

Product Yet To Have An Official Name (PYTHON). This is an NPS-developed and maintained administrative system containing student, staff and faculty information.

MOVING TO AN INTEGRATED SYSTEMS ENVIRONMENT

The development of a new information architecture requires adherence to the Department of Defense guiding principles for administrative systems: quality, timely customer services; integrated, standard systems that comply with applicable accounting principles and internal controls; robustness based

on efficient, standard, shared information systems; reliable, flexible, scalable, interoperable and secure operations; recognition of the DFAS corporate data environment; standards-based architecture; stewardship accountability; single entry of data; user-friendly interfaces; module reusability; rapid technology update capability and; compliance with laws and regulations.

NPS has further elaborated the above principles:

- Organized structured and unstructured information – Information will be logically organized and categorized based on user needs and habits. Information can be structured (i.e. Course Catalog) or unstructured (i.e. Threaded Discussion) and will be captured in a centralized document repository for search and archive.

- Current and relevant content – Content will be fresh and relevant to the user based on the user's job description, work habits and life interests.

- Data in a context that is meaningful to the user – data will be delivered to the user using web interfaces based on the job description and need.

- User-friendly navigation – logical flow based on established standards of usability and accessibility, including the use of content analysis and a content map.

- Back-end data integration – Seamless integration across all university assets and resources pointing to authoritative data sources.

- Single sign on (SSO) is defined as a capability providing authenticated access to multiple web-enabled resources using a single password. This approach also implies a single or unified security administration mechanism, and the associated development and operational cost and resource savings.

DEFINING THE NPS PORTAL

An NPS Portal is central to the new information architecture. The Portal's web browser interface will serve as the entry point for faculty, students, and staff to access information, tools and training particular to their roles and work habits.

The NPS Portal will serve as an integration mechanism that aggregates applications, content, and data. It will connect us with everything we need and with everyone we need. The NPS Portal will support many internal sub portals based on business unit, role and individual. The initial enclaves of sub portals will be:

- Business to Faculty and Staff Portal (Employee) - Provide targeted information and tools to all members of NPS Faculty and Staff based on role with in the organization. Provide discovery mechanism to help members select the components that they want.

- Business to Student Portal (Student Services) - Provide targeted

THE NPS PORTAL WILL SERVE AS AN INTEGRATION MECHANISM THAT AGGREGATES APPLICATIONS, CONTENT, AND DATA. IT WILL CONNECT US WITH EVERYTHING WE NEED AND WITH EVERYONE WE NEED.

THREE MAJOR ELEMENTS MUST BE INVOLVED IN THE ADMINISTRATIVE APPLICATION TRANSFORMATION:

1. PROCESSES AND POLICIES
2. PEOPLE
3. TECHNOLOGY

information, applications and services applicable to all students. Provide discovery mechanism to help members select the components that they want.

• Business to Recruit Portal (New Student, Faculty, Staff) – Provide targeted information applicable to potential faculty, students and staff as a recruiting mechanism.

• Business to Department Portal (Financial Systems) – Provide an "ERP like" business portal to make current and relevant financial information readily available to managers across the university.

• Knowledge Portal – Provide knowledge capture and transfer of the expertise between NPS staff, faculty and students.

Three major elements must be involved in the administrative application transformation:

A. Processes and Policies – NPS is beginning a business process and procedure redesign effort to improve performance of administrative processes. We can use this opportunity to integrate these processes into the information architecture. Over the next decade the NPS staff will fundamentally change the way they perform their work. The process improvement and web integration efforts are key to the transition to an information-based work environment, where staff can easily find the information they need to do their jobs.

B. People – The effectiveness of the new information architecture lies in the acculturation of the NPS workforce. It also lies in the workforce's baseline technical, interpersonal and managerial competencies. To successfully employ the web architecture we must recognize that the interactions between our people on a day-to-day basis are an important determinant of the success of our organization. We must recognize the need for appropriate investment of staff resources to design and implement the new web architecture.

C. Technology – Technology should be used to move manual administrative work online. It is time to web-enable NPS campus services and applications. As an example, PYTHON allows students to routinely access grades, schedules and other student information via the Internet. This model can be used throughout the organization to provide similar functionality, content and information to faculty and staff.

<u>Recommendations</u>

29. Prioritize administrative applications with regard to content, services and applications for a phased web implementation.

30. Web-enable business applications with back-end integration. Ensure that user interfaces are intuitive and easily navigable.

31. Develop a portal model that migrates from static web pages to a database-driven environment.

32. Develop a prototype corporate portal template, based on best practices in industry and higher education.

MANAGEMENT AND GOVERNANCE

In order to fulfill its role as a mission critical resource, IT must offer service at the highest level of excellence. To do so, the IT division should be managed with the highest degree of accountability and responsiveness to institutional goals.

Several changes in IT structure and process should be considered. It should be noted that a few of the suggestions listed below have been implemented or are being implemented. They are included on the list as they are important elements of a larger strategy to generate and sustain the momentum for change.

Recommendations

33. Institute management practices that include: an updated organizational chart with clear reporting responsibilities; updated position titles and descriptions; communications plan; routine and documented budget process; central compilation of all IT-related policies; publication that describes services.

34. Establish an IT planning process to centrally control acquisition and life cycle maintenance of hardware and software.

35. Centrally coordinate software licensing in IT to exploit economies of scale. Publish available software inventory on Intranet.

36. Feature IT prominently in macro-level planning initiatives, having IT serve as an integrator of area plans and as an institutional priority in the university-wide plan.

37. Include IT leadership at the highest-level institutional meetings.

38. Develop an IT strategic plan that supports the larger academic plan of the institution and other institution-wide strategic initiatives. IT goals should be aligned with NPS key initiatives and goals. The strategic plan should be followed by a number of operational plans that can provide blueprint-level outlines for action in the short and medium term. All plans should have concomitant resource plans, which are updated and presented to NPS leadership at appropriate times for review.

39. An annual report on IT operations should be made to NPS leadership and to all internal NPS constituencies. Report should include:
- Measurement of progress on plan.
- Achievement of milestones.
- Identification of potential obstacles to next stage of implementation.
- Update on budget and expenditures.
- Update on IT information from peer institutions.
- Information about emerging technologies that will affect NPS.
- Information about customer satisfaction with IT services.

40. Institutionalize faculty, student, and staff input and guidance to IT-related issues through standing committees. The IT Strategic Planning Task Force can serve as the over-arching university-wide advisory body on IT matters. Subgroups addressing administrative systems, the network, and academic IT services

IN ORDER TO FULFILL ITS ROLE AS A MISSION CRITICAL RESOURCE, IT MUST OFFER SERVICE AT THE HIGHEST LEVEL OF EXCELLENCE. TO DO SO, THE IT DIVISION SHOULD BE MANAGED WITH THE HIGHEST DEGREE OF ACCOUNTABILITY AND RESPONSIVENESS TO INSTITUTIONAL GOALS.

should be established and charged with a formal advisory role. Departmental representation is essential and participation a priority.

41. Include an IT review of all proposals for institutional funding to realize economies of scale and that technology investments are consistent with support and maintenance policies (e.g. POM review process).

42. Encourage partnerships between IT and other NPS departments in order to leverage opportunities and resources (e.g. library, advancement, multi-media services, distance learning, etc.).

43. Evaluate customer service through regular surveys.

44. Seek out partnerships and consortial arrangements with peer institutions to better leverage IT investments, benefit from experience of other institutions, and become visible national IT leaders.

45. In order to ensure efficient IT planning, formally include IT requirements planning in any and all plans for renovations or new construction at NPS.

46. Undertake a benchmarking study as soon as possible to determine a peer group of institutions and similar IT operations that can be used as a baseline to compare planning processes, staffing levels, use of new technologies, and resources.

47. In order to ensure alignment of IT plans with academic goals, ask individual colleges and institutes to include IT needs and priorities in their annual reports to the provost.

HUMAN RESOURCES

The functioning of any IT organization is directly proportional to the talent and skill levels of the staff. As a result, the recruitment and retention of talented staff must be one of the highest priorities.

IT is defined by change and innovation – staff supporting IT at a research university must be highly skilled, and interested in engaging in high-level work with sophisticated customers. They also must be involved in ongoing programs of professional development. In addition, staff should participate in national organizations of IT professionals in order to engage in the leading issues in IT and to make contacts with colleagues at other institutions. Those contacts can provide important benchmarking information, advice about lessons learned, best practices, etc.

Some of the most talented IT staff left in the last seven years to take more lucrative positions in Silicon Valley. Those who remained at NPS have not attended many continuing education programs, conferences, vendor-sponsored certifications, or other programs providing IT training or instruction. Technical expertise must be developed in the organization and that expertise must be maintained through continuous education programs structured by IT leadership. These professional development opportunities will be powerful recruitment and retention strategies. Other recruitment and retention strategies should be explored, including higher pay scales for mission-critical positions, incentive pay, merit-based pay, etc.

The Campus Computing Project's latest report, Campus Computing 2001, shows the results of the 12th annual survey of computing and information technology in U.S. higher education. Two of the five most urgent strategic issues facing IT involved human resources. One priority issue was providing for the professional development of IT personnel and the other issue had to do with the challenges of retaining IT personnel. Even with the recent economic downturn, it is estimated that "almost half of the new IT jobs will remain vacant…because of a lack of applicants with the requisite technical and non-technical skills" (Information Technology Association of America, www.itaa.org).

Investing in human resources is the most important element in the management of IT. In order to accommodate current and projected needs in all three major areas of IT service (administrative, academic, and infrastructure), a number of human resource initiatives should be considered.

Recommendations

48. The need to increase the number of IT staff members is documented in the FY 2003 FA study. Areas requiring additional support include network engineering, administrative systems, and academic services for research and instruction. Specific suggestions for staff ramp-up are made in the IT Resource Summary.

49. Recruitment and retention of the most talented IT professionals should be a high NPS priority. A plan for recruitment should be developed immediately. This plan should include an organizational structure that is consistent with the best IT organizations at peer universities. Career paths and compensation levels should be developed as well.

50. A program of professional development should be established in order to ensure core competencies are developed and maintained. In addition, opportunities for continuing education should be made available. These will serve as important recruitment and retention benefits.

51. The entire IT organization should be reviewed from a Human Resource perspective. Each professional IT position should have a concomitant title and career path.

52. Compensation levels for IT professionals should be reviewed for market competitiveness. Incentive and merit-based pay are possibilities to consider.

CUSTOMER FOCUS

Customer orientation is a difficult priority when resources are diminished and expectations increase. Staff members are busy with crisis management and have little or no time for collecting information about customer needs, priorities, or satisfaction. Unfortunately, this creates a cycle of dissatisfied customers, and staff are unable to turn the tide. The cycle then leads to an "us versus them" orientation that is not constructive. Sufficient resources must be provided to rebuild customer trust and relationships. Leadership must direct the required change in culture.

THE CAMPUS COMPUTING PROJECT'S LATEST REPORT SHOWS THE RESULTS OF THE 12TH ANNUAL SURVEY OF COMPUTING AND INFORMATION TECHNOLOGY IN U.S. HIGHER EDUCATION. TWO OF THE FIVE MOST URGENT STRATEGIC ISSUES FACING IT INVOLVED HUMAN RESOURCES.

STAFF MEMBERS ARE BUSY WITH CRISIS MANAGEMENT AND HAVE LITTLE OR NO TIME FOR COLLECTING INFORMATION ABOUT CUSTOMER NEEDS, PRIORITIES, OR SATISFACTION. UNFORTUNATELY, THIS CREATES A CYCLE OF DISSATISFIED CUSTOMERS, AND STAFF ARE UNABLE TO TURN THE TIDE.

The following recommendations address customer service:

Recommendations

53. The culture of the IT organization should reflect a customer orientation. Customers should be defined by two general categories: (1) U.S. Navy and (2) NPS internal constituent groups. Customer opinions and advice should be sought regularly. A variety of approaches might be employed:
- Formal committees.
- Informal but regular meetings with constituent representatives.
- Ensure alignment with Navy directions (system changes).
- Seek corporate partnerships to:
  - Tap industry opinion about future technology directions.
  - Get assistance for IT issues.
  - Collaborate on demonstration projects important for Navy objectives.
  - Enlist support for key IT initiatives at NPS.

54. Since IT involves time-sensitive skill sets, it is equally important that the central IT organization help in developing a program of workshops, training classes, seminars and online resources for the larger NPS community. This effort should be coordinated with Human Resources.

IT RESOURCE REQUIREMENTS

The Information Technology Strategic Plan recommends significant investment in Naval Postgraduate School IT operations in order to provide technological support for mission critical functions of research and instruction and service to the Navy and the Department of Defense. Historically underfunded, the central IT operation is currently unable to meet the rising expectations of NPS constituents: faculty, students, and staff. In order to bring NPS IT to a level comparable with peer institutions and to participate in national IT leadership initiatives (e.g. Internet2), a substantial increase in IT support is required.

A recent series of site visits provided comparative data to illustrate this point. The following is a summary of central IT resources per faculty member (in the case of SPAWAR, Pt. Loma, 1/3 of the staff total was used as a comparable figure for faculty total):

UCSC	$33,750	UCSD	$25,000
Cal Tech	$32,600	Claremont Grad. Univ.	$20,769
SPAWAR	$25,000	Naval Postgrad. School	$10,000

Three models of IT support are presented for consideration:

MODEL 1: Status Quo

Costs

Financial

Operating budget	$600,000
Labor budget	$3,500,000
Annual central IT budget	$4,100,000

Other

Little ability to implement IT Strategic Plan. Concerns about IT largely not addressed. Issues about IT continue to increase. Realization of academic quality undermined. Morale diminished. Academic aspirations lowered.

Benefits

Maintain low resource requirement for central IT division.

MODEL 2: Beginning the Transformation

Costs

Financial

Six-year IT Resource Unfunded Request Summary (in $000s)

	FY04	FY05	FY06	FY07	FY08	FY09
Personnel	1,400	1,700	2,100	2,400	2,700	3,000
Non-Personnel	2,775	1,450	1,670	1,300	2,250	1,800
Total	4,175	3,150	3,770	3,700	4,950	4,800

Two areas of investment are recommended: human and financial resources:

1. Human resources:

- 15 staff by June 2004 (12 technical, 3 non-technical).
- 15 staff by June 2007 (12 technical, 3 non-technical).

Includes enhanced network support, Internet2, wireless environment, video element of voice and data network, security enhancement, communication and outreach, administrative system replacement/upgrade.

2. Financial resources:

- One-time infrastructure and administrative system costs:
  - In-ground wiring replacement (conduit at capacity, currently experiencing root and asphalt compression in places) (life cycle estimate = 20 years).
  - Router/switch replacement on national standard replacement cycle (every 3-4 years).
  - Development of video capability on voice and data network.
  - Administrative systems replacement/upgrade – installation or development of system integration, interfaces, and enhanced executive reporting.

- Ongoing required non-staff resources:
  - Additional annual by June 2003.
  - Additional annual by June 2007.

Includes:

- Expansion of internet connectivity.
- Annual security audit, crisis response team.
- Improvement of faculty, staff, and student satisfaction with IT services.
- Communication and outreach.
- Support of Internet2 initiative.

HISTORICALLY UNDER-FUNDED, THE CENTRAL IT OPERATION IS CURRENTLY UNABLE TO MEET THE RISING EXPECTATIONS OF NPS CONSTITUENTS. IN ORDER TO BRING NPS IT TO A LEVEL COMPARABLE WITH PEER INSTITUTIONS AND TO PARTICIPATE IN NATIONAL IT LEADERSHIP INITIATIVES, A SUBSTANTIAL INCREASE IN IT SUPPORT IS REQUIRED.

PROGRESS TOWARD THESE GOALS WILL BE ACCELERATED AND SUBSTANTIAL ACCOMPLISHMENT WILL ALSO BE SEEN IN THE FOLLOWING: VISUALIZATION SUPPORT, LIBRARY KNOWLEDGE PORTAL, HIGH PERFORMANCE COMPUTING, VIDEO NETWORK CAPABILITY AND DISTANCE LEARNING SUPPORT.

– Mapping of infrastructure, network monitoring software.
– Training.
– Instructional design teams to support IT and multimedia use in instruction and distance education.
– Routine acquisition and replacement of IT equipment and software for instructional purposes.
– Implementation of first stages of NPS Portal architecture for administrative applications and services.
– Development of wireless campus.
– Implementation of management, governance, and other policies and processes per higher education IT standards and best practices.
– Increased recognition by media and stakeholders of IT excellence at NPS.

MODEL 3: Accelerating the Transformation

Costs

Financial

Six-year IT Resource Unfunded Request Summary (in $000s)

	FY04	FY05	FY06	FY07	FY08	FY09
Personnel	1,400	3,100	4,900	5,200	5,400	5,800
Non-Personnel	2,975	1,650	1,870	1,700	2,550	2,200
Total	4,375	4,750	6,770	6,900	7,950	8,000

Two areas of investment are recommended: human and financial resources:

1. Human resources:

• 15 staff by June 2004 (12 technical, 3 non-technical).
• 15 staff by June 2005 (12 technical, 3 non-technical).
• 15 staff by June 2006 (12 technical, 3 non-technical).
• 15 staff by June 2007 (12 technical, 3 non-technical).

Includes support for enhanced network support, Internet2, wireless environment, video element of voice and data network, security enhancement, communication and outreach, and administrative system replacement/upgrade.

Progress toward above goals will be accelerated and substantial accomplishment will also be seen in the following: visualization support, library knowledge portal, high performance computing, video network capability and distance learning support.

2. Financial resources:

• One-time infrastructure and administrative system costs:
– In-ground wiring replacement (conduit at capacity, currently experiencing root and asphalt compression in places)(life cycle estimate = 20 years).
– Router/switch replacement on national standard replacement cycle (every 3-4 years).
– Development of video capability on voice and data network.
– Administrative systems replacement/upgrade – installation or development of system integration, interfaces, and enhanced executive reporting.

• Ongoing required non-staff resources:
  – Additional annual by June 2003.
  – Additional annual by June 2007.

Includes:
  – Expansion of internet connectivity.
  – Annual security audit, crisis response team.
  – Communication and outreach.
  – Support of Internet2 initiative.
  – Mapping of infrastructure, network monitoring software.
  – Training.
  – Instructional design teams to support IT and multimedia use in instruction and distance education.
  – Routine acquisition and replacement of IT equipment and software for instructional purposes.
  – Implementation of first stages of NPS Portal architecture for administrative applications and services.
  – Development of wireless campus.
  – Implementation of management, governance, and other policies and processes per higher education IT standards and best practices.

Assumes substantial acceleration toward achievement of the above milestones. Also provides for significant progress toward high-end network support for Internet2 participants and academic applications in specific departments: astronautics/aeronautics, electrical and computer engineering, computer science, meteorology, oceanography, mechanical engineering.

Expect the following performance measures to be realized:

• Widespread acknowledgement of NPS as technological leader on the central coast.
• Significant improvement in results of IT satisfaction surveys of NPS faculty, students, and staff.
• Active engagement in video network roll-out.
• NPS contributes regularly to local area access television channels.
• NPS contributes to the national Research Channel.
• NPS produces annual video of IT-related highlights.
• Demonstrated improvements in NPS network reliability, speed, and capacity.
• Frequent media coverage of research and instruction innovations.
• Frequent presentations by NPS IT staff in professional association conferences, workshops, seminars, etc.
• Featuring of NPS leadership in publications highlighting IT leadership: Military Technology, EDUCAUSE, SCUP.
• NPS leadership invited to do keynote addresses at IT-related conferences: Sun Microsystems Education and Research Conference, Cisco Summit, IBM Higher Education Leadership Conference, etc.
• NPS becomes the Network Operations Center for the Monterey Peninsula I-Net.
• Monterey Peninsula secures a regional GigaPop site.

5 COMMUNICATION, PARTNERSHIP, AND OUTREACH

COMMUNICATION

Since IT is a strategic institutional priority, communication about IT matters must be frequent, timely and accessible to all members of the NPS community. In addition, external communications about IT events and news should be part of the IT communications strategy, and an integral part of the larger advancement strategic plan for NPS. IT-related communications should be managed by the central IT office in order to ensure most efficient and accurate dissemination of information. The following recommendations focus on improvement of IT communications.

Recommendations

55. Increase the frequency and expand the modalities of communications about NPS IT. All means of communication will be explored for appropriate use: electronic, existing committee structures, web capabilities, video, face-to-face meetings and presentations, leadership speeches and presentations, publications, program agendas for important campus visitors, NPS reports, etc. Regular opportunities for effective communication within NPS and with NPS friends and stakeholders off-campus about IT will be identified and coordinated with Institutional Advancement.

56. Communicate IT commitment to consultation, information-sharing, and reflective practice, in order to better support collaboration and effective decision-making.

57. Include IT Services in larger NPS advancement efforts. Since IT itself is a mode of communication as well as a strategic resource priority within the institution, IT services will be part of larger advancement efforts. For example, website development will be defined as a priority for both IT and advancement.

58. Develop a publication describing IT services at NPS.

59. An important element of a communication and outreach approach is training. IT is an invaluable institutional resource, but it requires a commitment to training in order to fully maximize its potential. As a result, NPS will develop an IT training program for campus constituencies.

- Content will be determined through consultation with campus constituencies.
- Mode of delivery will include a mix of different types of learning modalities. For example, delivery options will include asynchronous learning opportunities, hands-on, in-class opportunities, electronic tutorials, workshops, etc.
- Training will be coordinated centrally and be responsive to the needs of individual schools, departments, institutes, programs, and administrative units.
- Training will be coordinated with Human Resources in order

to ensure links with institution-wide policies and with other training opportunities.

PARTNERSHIP AND OUTREACH

In order to leverage institutional resources most effectively, NPS must forge partnerships with peer institutions, IT companies, and local communities. Partnerships and alliances permit applying a multiplier to the IT activities and resources at NPS, increasing the political and economic influence of NPS, and raising visibility about NPS IT in general. Toward this end, the following recommendations are proposed.

Recommendations

60. Coordinate IT-related corporate vendor relations within central IT services. Relationships with companies should be developed that go beyond transaction-based contracts. Longer term multi-dimensional relationships will be explored. NPS leadership will be involved in initiating contacts with leaders of partner companies. Benefits include:

- Continuity of service over a longer time.
- Investment in NPS academic mission.
- Higher volume transactions resulting in lower costs.
- Additional voices to promote and advocate for NPS priorities.

61. Establish consortial relationships with local Department of Defense organizations to coordinate IT training for IT professional staff. A number of local organizations have expressed interest in this kind of cooperative effort, that can result in lowered costs and access to higher level professional development opportunities.

62. Establish consortial relationships to access high speed networks within the state. Fleet Numerical Meteorology and Oceanography Center, CSU-Monterey Bay, and Monterey Bay Aquarium Research Institute (MBARI) have expressed interest in such arrangements. Lowered costs for access to higher speed and capacity networks than NPS could afford individually can result.

63. Make outreach to local communities a part of the central IT agenda. Participation in local and regional networks (e.g. I-Net) can leverage NPS IT investments and provide increased visibility for the NPS mission.

64. Identify budget shortfalls each year so that opportunities to extend programmed budget with research related resources are possible.

COMMUNICATION ABOUT IT MATTERS MUST BE FREQUENT, TIMELY AND ACCESSIBLE TO ALL MEMBERS OF THE NPS COMMUNITY. IN ADDITION, EXTERNAL COMMUNICATIONS ABOUT IT EVENTS AND NEWS SHOULD BE PART OF THE IT COMMUNICATIONS STRATEGY, AND AN INTEGRAL PART OF THE LARGER ADVANCEMENT STRATEGIC PLAN FOR NPS.

CONCLUSION

URGENCY TO CHANGE

Information Technology is a strategic institutional resource, and has an impact on every dimension of the Naval Postgraduate School mission. Research, education, and service to the Navy and the Department of Defense are all affected by the currency, reliability, and support of Information Technology.

The central IT division has an important responsibility to provide the tools and services necessary to support NPS mission, and should be resourced to fulfill this responsibility. NPS leadership has asked for an IT Strategic Plan that will provide for a way to realize that responsibility. The urgency for change is voiced by every constituency at NPS because of the very nature of the change that is required. No class is taught without IT, no research is performed without IT, and no administrative system is managed without IT.

NPS must move now from a perspective that Information Technology is limited in importance to defining Information Technology as virtually limitless in its application. Rather than seeing IT as a series of problems about which faculty, students and staff voice concerns, NPS must see IT as a trigger for profound institutional change.

THE NPS IT STRATEGIC PLAN

The changes recommended for IT operations at NPS in this report are substantial, and must be accomplished over time. The optimal way of making the necessary changes is through a systematic planning process that is reviewed and evaluated on an annual basis. Goals and objectives have been identified and implementation strategies for each of the major IT areas have been defined – all focused on improving IT operations and services in a way that is consistent with overall NPS mission.

It must be underscored that incremental improvements will be made over time, but jump-starting a new institutional perspective will take a public, visible, and consistent refocusing of priorities and resources.

IMPLEMENTATION AND ACCOUNTABILITY

Implementation will begin October 1, 2002 and will end September 30, 2007. Annual reports on progress will be shared with the NPS leadership and the entire NPS community. These will include action plans for the coming year, updated based on emerging trends and technologies, ongoing consultation and advisement by the IT Task Force, and possible new, unforeseen opportunities. Annual action plans will include updated costing estimates and implementation timelines.

OUTCOMES

The vision for IT at NPS is to enable NPS to realize its goal to become one of the top research universities in the U.S. by the year 2020. This environment will have a centrally coordinated IT service organization that provides high-level support for research and instruction as its core mission.

The NPS IT environment will be characterized by:

• INNOVATION – Provide support for faculty and student leadership in the testing and demonstration of emerging technologies. Recognition that IT excellence is rooted in a commitment to change, innovation, experimentation, and imagination.

• TALENT - Enable leading-edge research by support for sophisticated communications and computing. This means highly skilled technical support for visualization, streaming video, instructional multimedia applications, security testing and evaluation, wireless landscapes, high performance computing, etc. Access to talented, knowledgeable technical staff, who participate in ongoing professional development programs and engage in national professional associations to maintain skill currency and contacts with colleagues at peer institutions.

• ACCESS TO ADVANCED TOOLS – Ubiquitous access to state of the art communications infrastructure that integrates voice, video, and data capabilities that is renewed and upgraded at regular cycles. Access to current technology in equipment and software.

• COMMITMENT TO SERVICE – Dedication to serving faculty, students, and staff that is visible through degree of effort, courtesy of interactions, regular seeking of constituent advice and input, and routine assessments of how well service is being provided.

• INTEGRATED, EFFICIENT ADMINISTRATIVE SYSTEMS – Enable administrative leaders to develop, maintain, and upgrade administrative systems that maximize institutional effectiveness and efficiency. Working with administrative leaders to provide systems that are characterized by single point data entry, internal consistency and integration, flexibility, relational database structure, useful management reporting systems, and customer orientation.

• LEADERSHIP – Provide leadership of IT services through strategic planning, informing the university of emerging technological directions and opportunities, managing and leading institutional change, annual reporting to the community about IT operations and services, development of partnerships and alliances with other institutions and agencies to maximize technological currency and minimize costs, and to make an articulate, persuasive case for IT resources on a regular basis.

RECOMMENDATIONS FOR FUTURE WORK

This IT Strategic Plan articulates needed initiatives, actions and resources to execute critical NPS responsibilities. It further provides a repeatable process for annual review of NPS needs and priorities.

Recommended areas of future development include:

- Measurement of progress and problems in execution.
- Establishing a connection between the Strategic Plan and budgeting process.
- Conducting further strategic planning on how a "Net-Centric NPS" approach might better engage and integrate NPS capabilities into Navy and Defense operations.

THIS IT STRATEGIC PLAN ARTICULATES NEEDED INITIATIVES, ACTIONS AND RESOURCES TO EXECUTE CRITICAL NPS RESPONSIBILITIES. IT FURTHER PROVIDES A REPEATABLE PROCESS FOR ANNUAL REVIEW OF NPS NEEDS AND PRIORITIES.

INFORMATION TECHNOLOGY STRATEGIC PLANNING TASK FORCE

Chris Arias ..... Student Services
Alex Bordetsky ..... Information Sciences
Doug Brinkley ..... Business
Don Brutzman ..... Faculty Council
Christine Cermak ..... Chief Information Officer
Glenn Cook ..... Information Sciences
Lisa Curtin ..... Dean of Students
Vince Darago ..... Office of Continuous Learning
Dean Ebert ..... Student Council
Douglas Fouts ..... Electrical and Computer Engineering
Jack Gallagher ..... Financial Planning
Lillian Gassie ..... Library
Tom Halwachs ..... Chief Technology Officer
Tracy Hammond ..... Registrar
Stephen Hurst ..... Defense Resource Management Institute
Alan Jones ..... IT Department
Shu Liao ..... Business
Beny Neta ..... Mathematics
Rudy Panholzer ..... Space Systems
Megan Reilly ..... Chief Financial Officer
Joe Roth ..... Student Council

NAVAL POSTGRADUATE SCHOOL

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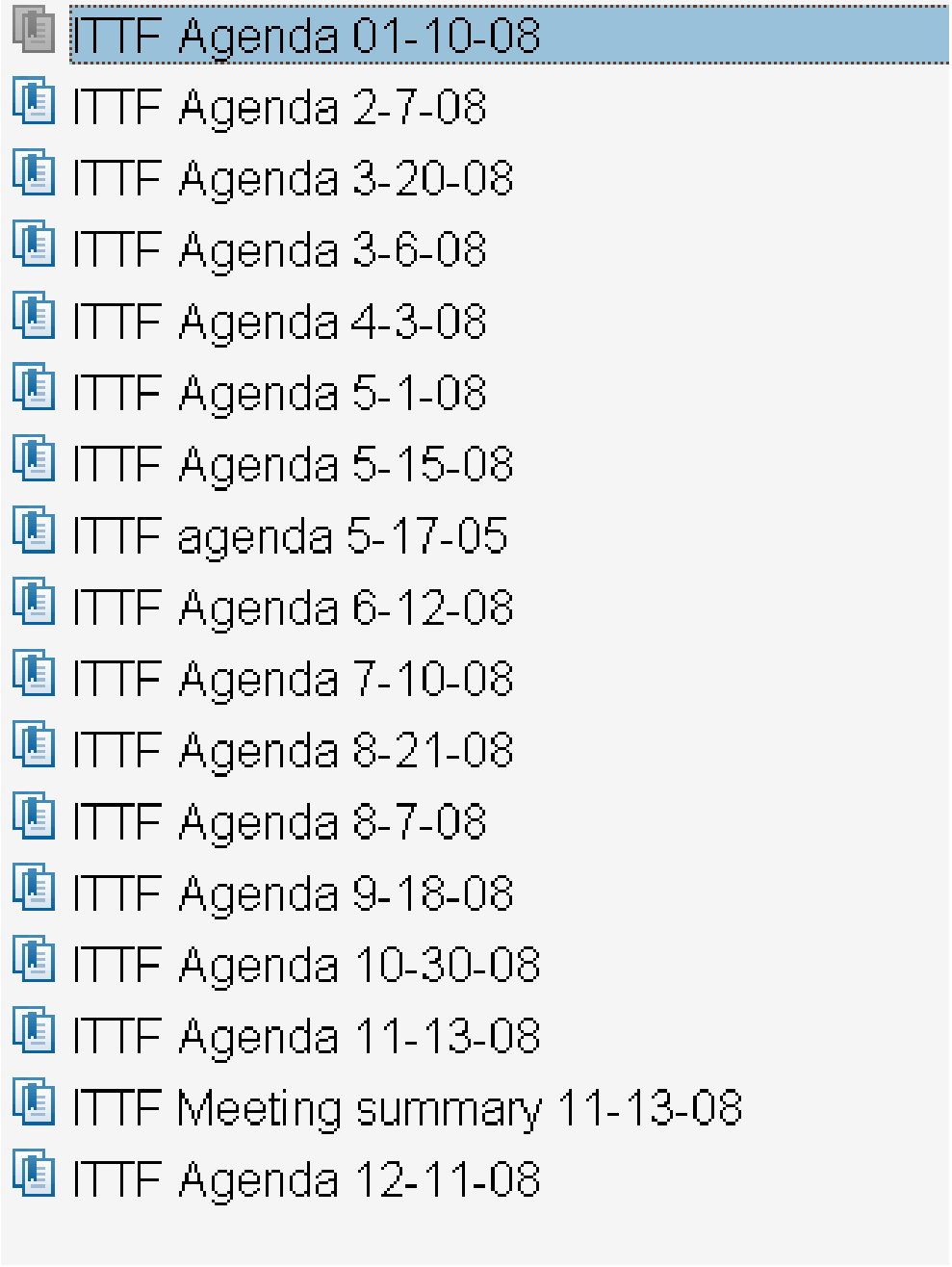
ITTF Agenda 01-10-08
ITTF Agenda 2-7-08
ITTF Agenda 3-20-08
ITTF Agenda 3-6-08
ITTF Agenda 4-3-08
ITTF Agenda 5-1-08
ITTF Agenda 5-15-08
ITTF agenda 5-17-05
ITTF Agenda 6-12-08
ITTF Agenda 7-10-08
ITTF Agenda 8-21-08
ITTF Agenda 8-7-08
ITTF Agenda 9-18-08
ITTF Agenda 10-30-08
ITTF Agenda 11-13-08
ITTF Meeting summary 11-13-08
ITTF Agenda 12-11-08

IT Task Force
Proposed Agenda

January 10, 2008

Meeting location: PCR
Meeting time: 11:00 a.m.

1. Recent storm and Disaster Recovery Planning -- Jim Hall
2. Navy IT Consortium -- Terri Brutzman
3. Network Upgrade-- Joe LoPiccolo
4. AV systems installations over the break -- Tracy Hammond
5. ITACS organization -- Joe LoPiccolo
6. Profile corruption issues -- Terri Brutzman
7. Annual Accountability Report -- Christine Cermak
8. Ingersoll renovation update -- Joe LoPiccolo
9. Other?

IT Task Force
Proposed Agenda

February 7, 2008

Meeting location: PCR
Meeting time: 11:00 a.m.

1. Password protocol update – C. Cermak

2. Profile corruption issue – update – T. Brutzman

3. Multi-functional devices – return on investment update – J. Sedillos

3. Network Upgrade—J. LoPiccolo

4. Project management training – A. Pires

5. V-Brick demonstration – J. LoPiccolo

6. Other?

IT Task Force
Proposed Agenda

March 20, 2008

Meeting location: PCR
Meeting time: 11:00 a.m.

1. CENIC conference and CENIC president's visit to campus March 18, 2008 – C. Cermak

2. Navy Higher Education IT Consortium – C. Cermak

3. Network Upgrade—J. LoPiccolo

4 Larry Smarr visit to campus March 27

5. Western Regional EDUCAUSE conference – C. Cermak

6. Distributed learning tools – Joe LoPiccolo

7. Other?

IT Task Force
Proposed Agenda

March 6, 2008

Meeting location: PCR
Meeting time: 11:00 a.m.

1. Audio-Visual Virtual Manager – Tracy Hammond and Harry Thomas
2. NGEN update – C. Cermak
3. Technology Review – C. Cermak
4. CENIC conference and CENIC president visiting campus – C. Cermak
5. Network Upgrade—J. LoPiccolo

4 Center for Asymmetric Warfare – Joe LoPiccolo and Terri Brutzman

5. Larry Smarr visit to campus March 27
6. Other?

IT Task Force
Proposed Agenda

April 3, 2008

Meeting location: Ingersoll 162
Meeting time: 11:00 a.m.

1. EDUCAUSE conference presentations – C. Cermak & T. Brutzman

2. Recap of the Larry Smarr and Jim Dolgonas Visits --- C. Cermak

3. Microsoft Vista Training – Chris Abila

4 Python Presentation – Mike Anderson

5. Other?

IT Task Force
Proposed Agenda

May 1, 2008

Meeting location: President's Conference Room
Meeting time: 11:00 a.m.

1. Network upgrade status – J. LoPiccolo

2. Recap of the WASC conference – J. LoPiccolo

3. PYTHON update – C. Cermak

4. Expanding Apple presence on campus – W. Yu

5. Navy Higher Education IT Consortium and NGEN – C. Cermak

6. Other?

IT Task Force
Proposed Agenda

May 15, 2008

Meeting location: President's Conference Room
Meeting time: 11:00 a.m.

1. Web project update – F. Horvath
2. Network upgrade status – J. LoPiccolo
3. Minor property tracking – J. Hall
4. Lab recap status – T. Hammond
5. San Diego planning – C. Cermak
6. Navy Higher Education IT Consortium and NGEN – C. Cermak
7. Other?

IT Task Force

Proposed Agenda

May 17, 2005

1. Department of Navy CIO, Director of Knowledge Management Jim Knox visiting NPS today.
2. Power consumption update
3. CENIC funding update
4. IT Strategic Plan update
5. .edu/ERN transition
6. Streaming media – project milestones
7. ITACS and Instructional Technology end-of-year funding requests
8. Email quota committee – status update on implementation
9. President's Digitization Committee
10. other?

Reminder: ITTF meeting summaries are posted on the intranet site.

IT Task Force
Proposed Agenda

June12, 2008

Meeting location: President's Conference Room
Meeting time: 11:00 a.m.

1. Monterey Peninsula DoDNet – Doug Weismann
2. Homeland Security Digital Library update – Tom Mastre
3. Certification and accreditation of systems – T. Brutzman
4. Budget – C. Cermak and Jim Hall
5. Lab recap status – T. Hammond and J. LoPiccolo
6. Sun Microsystems – J. Haferman
7. Management Inventory Control Program – J. Hall
8. Other?

IT Task Force
Proposed Agenda

July 10, 2008

Meeting location: President's Conference Room
Meeting time: 11:00 a.m.

1. Phishing – Jason Cullum
2. Incentive award program – J. Hall
3. Network and annex upgrades – Joe LoPiccolo
4. Navy Higher Education IT Consortium Business Case Analysis – C. Cermak
5. Budget – C. Cermak and Jim Hall
6. Lab recap status – T. Hammond and J. LoPiccolo
7. Sun Microsystems – J. Haferman
8. FastData – T. Brutzman
9. Other?

IT Task Force
Proposed Agenda

August 21, 2008

Meeting location: President's Conference Room
Meeting time: 11:00 a.m.

1. IT Strategic Plan – Cyberinfrastructure chapter – C. Cermak
2. WASC draft report – Capacity and Prepatory Review – C. Cermak
3. UCSC VP Information Technology Mary Doyle visit to NPS August 28.
4. CENIC 2010 Conference Committee visit to Monterey and NPS this week
5. CENIC HPR workshop in San Diego September 15-16
6. Other?

IT Task Force
Proposed Agenda

August 8, 2008

Meeting location: President's Conference Room
Meeting time: 11:00 a.m.

1. Lab recap – recommendation to NPS leadership – T. Hammond
2. Kuali update – C. Cermak and K. Little
3. Sony 4K Installation update – T. Update
4. Navy Higher Education IT Consortium Business Case Analysis – C. Cermak
5. Other?

IT Task Force
Proposed Agenda

September 18, 2008

Meeting location: President's Conference Room
Meeting time: 11:00 a.m.

1. President Oliver remarks
2. IT Strategic Plan Academic Technology section -- All
3. High Performance Research Workshop at UCSD – D. Weismann
4. NGEN news and Navy Higher Education IT Consortium report - C. Cermak
5. Other?

IT Task Force
Proposed Agenda

October 30, 2008

Meeting location: President's Conference Room
Meeting time: **11:30 a.m.**

1. Board of Advisors report – C. Cermak
2. Kuali Student System – T. Hammond
3. Kuali Financial System – T. Halwachs
4. Account closure notices – A. Pires
5. IT Strategic Plan – Administrative Applications and Services -- All
6. NGEN news and Navy Higher Education IT Consortium report - C. Cermak
7. Monterey Institute of International Studies invitation to a presentation by Diana Stuart Sinton (University of Redlands) on Geographic Information Systems, *New Ways to Map a Changing World* – Monday, November 10, 2008 12:30 to 1:45 p.m. Irvine Auditorium – 499 Pierce Street in Monterey
8. Other?

IT Task Force
Proposed Agenda

November 13, 2008

Meeting location: President's Conference Room
Meeting time: **11:00 a.m.**

1. Sun cluster update – J. Haferman
2. Account expiration update – C. Gaucher
3. Learning Management System update – J. Russell
4. Other?

IT Task Force Meeting **President's Conference Room**
13 November 2008 **Naval Postgraduate School**
11a.m.-12:05 p.m.

Attendees:

Christine Cermak	Chris Gaucher
Terri Brutzman	LCDR Warren Yu
Paul Sanchez	Mary Bronzan
Simson Garfinkel	Jon Russell
Rudy Panholzer	Tom Mastre
Jeff Haferman	LCDR Simon McLaren
Jason Cullum	Andrew Ware

Sun Cluster Update by Jon Haferman:

- Sun Cluster: on campus through partnership with Sun, 1100 CPUs plus 110 TB of storage
- Researchers will be using for modeling efforts to include oceanography, physics, mechanical and electrical engineering, operations research, information sciences, computer science. Campus-wide cluster will be open to all across campus for access.
- Cluster arrived 1 month ago and is currently in storage at warehouse
- Room 141 in Ingersoll is receiving upgrades. Asbestos discovered underneath tiles
- Chiller for equipment arrived today, storage space also arrived.
- Friday and Monday: cooling units from APC and power distribution units to arrive
- Next week: Construction of room with one month deadline. Contractors coming in from TN and hope to be finished by Thanksgiving
- Ribbon-cutting presentation to be scheduled
- Process in place for naming machine; nominations being taken. Possibly named after a prominent NPS person (admiral or faculty); Hamming a possibility. Dr. Cermak will send an email to the IT Task Force and ask for ideas. Decision to be made at next meeting.

Account Expiration Update by Chris Gaucher:

- C. Gaucher is the new director of Information Assurance and Privacy and will be taking over as supervisor from Terri Brutzman to develop privacy framework
- Current issue: manually processing expired accounts. Many dormant accounts are still active.
- Possible solutions: for security and accuracy, generate list of users and have them reviewed by academic planning, which is to be done on an annual basis. Also to look at estimated time of departure for non-student users to determine CAC expiration date. Create notification that emphasizes security and accuracy concerns.

- Problems with maintaining accurate list of users: Contractors difficult to manage as individuals change readily and without much notification. Staff has a process for checking out, but faculty is harder to manage.
- Long term goals: Consolidate user data stores.
- Difficult for ITACS staff to disable accounts as access and authorization must be received from the top.
- Check out process must be refined with HRO, academic planning and student services
- Many STBL accounts are dormant, as it is often overlooked in student checkout process

Learning Management System Update by Jon Russell:

- Issues with Blackboard: hosted system, not integrated. Students have multiple accounts, integration is difficult, student data is in two locations, customer response time slow (2-3 weeks for response), poor reliability (4-6 hour outages), not able to support systems until majority of customers make demands, licensing restrictions and cost
- 5-year relationship with MC CCE and NSA ADET ended because of licensing issues with Blackboard
- Open source LMS currently gaining acceptance and increase in market
- Blackboard losing market share (66% to 56% in one year)
- 4-year private universities moving toward Moodle for fiscal reasons
- Public research universities moving toward Sakai for flexibility purposes
- Trends at NPS: strategic goals of continuous improvement, operations, and influx of DL students
- LMS Faculty committee members from various departments currently representing associate deans; providing opinions and input
- Alternative options: keep status quo, host blackboard in-house, Sakai, Moodle
- Evaluation Criteria: replace functionality, reliability, student experiences, added functionality, scalability, integration capabilities, cost
- Timeline: Form committee, stand up pilot of Sakai, list of function requirements, Blackboard to Moodle switch, demo Sakai and Moodle, interview CHDS staff, pilot class in January, make formal recommendations to IT task force, faculty council and NPS executive leadership.
- Ron Fricker will provide pilot class in January
- Contract for Blackboard scheduled for renewal in September, would like to scale down licensing costs
- Demonstration of Sakai: allows users to imbed existing websites into frame, allows access to intranet for DL students
- Prime candidate for needs involving research with other universities; potential for off-campus work
- Envisioning bulk of static information stored inside the system and ability to link out to other locations
- Concern posed by Simson: with a significant investment already made in Blackboard, the cost of faculty transition time may overwhelm licensing costs; many faculty members will not want to make the change.

- Sakai as an open source system won't necessarily be open to everyone; will have password controls and allow for control of copyrighted materials
- Interviews with universities (Delaware and LSU) who have made the switch for feedback

News Items by Christine Cermak:

- Jeff Haferman re-elected to city council
- Tom Mastre is the new NPS Director of OCL, reports to Doug Moses
- Terri Brutzman flying to USNA to meet with CIO and representatives from NETWARCOM, NWC; report is being formally presented to NETWARCOM
- Dr. Cermak will be attending Kuali Conference next week in Southern California (with team of NPS representatives)
- Recommendation for Dr. Cermak to take active role in administrative systems; however, functional areas have to be in charge and can't delegate to IT. But Dr. Cermak will be taking a more active role in partnering with effort.

IT Task Force
Proposed Agenda

December 11, 2008

Meeting location: **Mechanical Engineering Auditorium**
Meeting time: **11:00 a.m.**

1. Sony 4K projector demonstration – J. Russell and Sony Representatives
2. Sun cluster update – J. Haferman
3. Learning Management System (LMS) update – J. Russell
4. UPS (uninterruptible power supply) upgrade – T. Brutzman
5. INFOCON 3/removable media – C. Gaucher
6. Kuali update – C. Cermak
7. Holiday period upgrades/maintenance – T. Brutzman
8. VP Finance and Administration – C. Cermak
9. Other?

Office of Human Resources
Naval Postgraduate School
New Employee Orientation

Welcome!

Grab a cup of coffee and settle in to the easy way to get "oriented" to working at NPS, FNMOC, or any of our other tenant commands.

The Department of the Navy is part of the Executive Branch of the US Government, under the direction of the Chief Executive -- the President of the United States. As an employee of the Navy, and a new member of the faculty, staff, or tenant activity of the Naval Postgraduate School, you are also an employee of the government of the United States.

The purpose of this course is to answer the many questions you may have about your position, your responsibilities, your rights, and the benefits available to you as a federal employee. Your immediate supervisor will acquaint you with the staff, organizational structure, and mission of the department to which you have been assigned and will help you get started in your new job. You may work through the course at your own pace, but you are expected to complete it within 30 days of the date you first report to work.

As a new employee, your questions should first be addressed to your supervisor. If you require additional assistance, please feel free to contact the Human Resources Office (HRO) or information or referral to the appropriate resource. If you have questions which this training session does not answer but which you believe it should, please submit them to the course administrator.

Stay Informed!

You are encouraged to stay informed by regularly checking notices posted on the NPS Intranet home Page, the bulletin boards throughout the installation, and checking the "What's New" page of the HRO web site.

Your loyal, dedicated and enthusiastic support will help the Naval Postgraduate School and its tenant organizations accomplish their missions for the Navy Department and the United States. We are happy that you have chosen to join the proud team of officers, enlisted personnel and civilians working together in Monterey!

Begin New Employee Orientation Course

As you work through the course, click on "Next" at the bottom of each page to advance to the next section. If there isn't a "Next" button, simply click on the "Back" button on your browser menu. Start the course.

Contact the Orientation Web Site Manager

Office of Human Resources
Naval Postgraduate School
New Employee Orientation

Our Mission

The missions of NPS and FNMOC, the two major Naval activities in Monterey, are important to understand, as well as the other Department of Defense activities on the Monterey Peninsula, but pay particular attention to the statement of the organization you will be working for.

FNMOC's mission statement is: "To combine innovative technology with the best available science in order to provide the best weather and oceanographic products, data and services to the operating and support forces of the DoD anywhere, anytime." For further details, check out their web site at: https://www.fnmoc.navy.mil/.

Responsibilities as a Government Employee

You need to know what your responsibilities as a government employee are, including the "Standards of Conduct" that all Department of Navy employees are held to. The basic employee and supervisor responsibilities are common to most offices, whether a government office or a private business; most of it is just plain "common sense."

One of the things that may be new to you if you haven't worked on a military installation before are military customs such as "Colors"! The American flag, located in front of Herrmann Hall, is raised each morning at 0800 and lowered at sunset. You may already know that military members have to salute and stand at attention during "Colors", but do you realize that civilian employees are also required to do certain things during this ceremony? If you are driving on the grounds of the Naval Postgraduate School, FNMOC, or other local military installations during this ceremony, please come to a full stop. Do not resume driving your car until the hoisting or lowering of the flag is complete and the playing of the National Anthem has ended. If you are outdoors during Morning or Evening Colors, you should face the flag (or the music if you cannot see the flag) and stand at attention with your right hand over your heart. Those wearing hats should remove them. Foreign Nationals should stand at attention.

Another military custom you need to be familiar with is what to do when the Admiral (NPS President) enters the room in group setting, such as an auditorium, someone will usually say loudly "ATTENTION ON DECK" as the Admiral enters the room: you are expected to stop speaking and stand as a gesture of respect.

Speaking of active duty personnel, military rank is often confusing for civilians, so here's a chart to help you tell the difference between a Navy CAPTAIN and an Air Force Captain, not to mention all those Navy "Chiefs."

There are many services on the base that are available to civilian employees, including various dining facilities and many fitness and recreational activities.

Every new employees must read the Security Brief (click on "Security Brief" in the top-left frame) for NPS, even if you do not have a security clearance, since this section

addresses physical base security issues. Additionally, parking is a HOT issue at NPS and it's tenant commands, so you need to learn the parking rules while reading through the security brief.

Another big issue is ethics for government workers, including receiving gifts on the job, so be sure to review both the ethics and the gifts sections!

Occupational Safety and Health is an important concern for every employee; be sure you understand your responsibilities.

NPS and its tenant activities are all designated as "Drug Free Workplaces" so learn about the Drug Free Workplace Program; you may be subject to testing!

If you use a computer in your work, you need to learn about Information Systems Security at NPS. One of the most important items for you to remember is that email is not "private" and both email and Internet usage are monitored for compliance with appropriate use policy.

Most importantly, you need to understand the details of the personnel issues , such as leave, performance appraisals, benefits, training, grievances, records, hiring and promotions, and so on, that affect your working life in the government.

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NPS Mission

Unique among educational institutions, the Naval Postgraduate School's responsibility for the advanced education of Naval officers is reflected in its stated mission:

"To conduct and direct the advanced education of commissioned officers, and to provide such other technical and professional instruction as may be prescribed to meet the needs of the Naval Service; and in support of the foregoing, to foster and encourage a program of research in order to sustain academic excellence."

History

The idea of a Department of the Navy graduate school was founded in a course of instruction in marine engineering, instituted by the Bureau of Engineering in 1904. The results were so encouraging that in 1909 the Secretary of the navy established a School of Marine Engineering at the Naval Academy at Annapolis, and instruction began with a class of 10 officers. Only three years later the School was designated the Postgraduate Department of the U.S. Naval Academy. By 1948, the scope of the graduate program and the number of officer enrolled had outgrown the east coast facilities, and during the next three years a graduate relocation took place. On 22 December 1951, the Naval Postgraduate School was officially established in Monterey.

Currently, the Naval Postgraduate School occupies a multi-million dollar campus, graduates approximately 800 students per year and offers a range of curricular programs in the scientific, engineering and administrative fields. Its educational and research programs are based on both academic excellence and relevance to Department of Defense requirements. The student body includes officers from all five services, many foreign countries and civilian employees of the Federal government. Fully accredited, the Naval Postgraduate School awards degrees through the doctoral level.

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Other DoD Activities Mission's

Activity	Mission
Defense Resources Management Institute (DRMI)	DRMI is a jointly-staffed Department of Defense-sponsored tenant activity of the Naval Postgraduate School. Located in Halligan Hall, it was originally established in 1966 as the Navy Management Systems Center. DRMI conducts both resident and on-site defense resource management courses for domestic and foreign military personnel and senior level Department of Defense civilians. The Center's programs focus on the concepts, techniques, and applications of modern defense management systems, with specific emphasis on analytical decision-making and effective resource management.
Personnel Support Detachment	The Personnel Support Detachment (PSD), Monterey is a tenant activity under the command of the Personnel Support Activity, Pudget Sound. PSD is located at Fort Ord, in the DMDC facility,, with a mission which includes providing travel arrangements and travel claims processing for all Navy sponsored travelers, both military and civilian, in the Monterey area. PSD also provides personnel and finance services for local area Naval active duty members.
Naval Security Group Detachment	The Naval Security Group Detachment provides administrative services to active duty Navy and Marine Corps members studying at the Defense Language Institute.
Navy Medical Administrative Unit	The Navy Medical Administrative Unit provides medical care for Monterey area Navy personnel and their dependents.
Naval Reserve Center & Recruiting Office	Located in downtown Monterey, the Naval Reserve Center & Recruiting Office provide Naval Reserve and Navy Recruiting services to the Monterey area.

Defense Manpower Data Center	The Defense Manpower Data Center (DMDC) is the most comprehensive repository of personnel, manpower, training, and financial data in the Department of Defense. DMDC maintains databases, files, programs, and delivery systems that can provide DOD with the most accurate and timely data about: Major personnel programs that benefit all members of the Department and their family members Military personnel life cycles from enlistment to retirement Reserve component military members Families and dependents of Service members Civilian employees of the Department of Defense
Defense Finance and Accounting Service	The Defense Finance and Accounting Service (DFAS)was established to reduce the cost and improve the overall quality of Department of Defense financial management through consolidation, standardization and integration of finance and accounting operations, procedures and systems.
Defense Personnel Security Research and Education Center	The Defense Personnel Security Research and Education Center, (PERSEREC), is a research and educational organization which performs policy-relevant research and analysis for the Department of Defense to improve personnel security procedures, programs and policies. It also provides DOD components with technical assistance, instruction and advice on personnel security matters.
Defense Printing Service	The Defense Printing Service (DPS) was established 31 May 1992. Printing services formerly operating under Navy, Army and Air Force sponsorship were consolidated under Navy administrative components. In the Monterey area, DPS has print shops located at the former Fort Ord, the Defense Language Institute, and the Naval Postgraduate School. The regional office of DPS is the Defense Printing Service Western Area, San Diego. Area offices are also located in Monterey and Oakland.


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Standards of Conduct

To maintain the public's confidence in our institutional and individual integrity, all Department of the Navy (DON) personnel shall:

- Avoid any action, whether or not specifically prohibited by the rules of conduct, which might result in or reasonably be expected to create an appearance of:
  - Using public office for private gain
  - Giving preferential treatment to any person or entity
  - Impeding government efficiency or economy
  - Losing complete independence or impartiality
  - Making a government decision outside official channels
  - Adversely affecting the confidence of the public in the integrity of the government
- Not engage in any activity or acquire or retain any financial or associational interest that conflicts or appears to conflict with the public interests of the United states related to their duties
- Not accept gratuities from Department of Defense contractors unless specifically authorized by law or regulation
- Not use their official positions to improperly influence any person to provide any private benefit
- Not use inside information to further a private gain
- Not wrongfully use rank, title, or position for commercial purposes
- Avoid outside employment or activities incompatible with their duties or which may discredit the Navy
- Never take or use government property or services for other than officially approved purposes
- Not give gifts to your superiors or accept them from your subordinates when it is not appropriate to do so
- Not conduct official business with persons whose participation in the transaction would violate law or regulation
- Seek ways to promote efficiency and economy in government operations
- Preserve the public's confidence in the Navy and its personnel by exercising public office as a public trust
- Put loyalty to the highest moral principles and to country above loyalty to persons, party, or government department

- Uphold the Constitution, laws, and regulations of the United States and never be a party to their evasion
- Give a full day's labor for a full day's pay, providing earnest effort to the performance of duties
- Never discriminate unfairly by the dispensing of special favors or privileges to anyone, whether for remuneration or not, and never accept for himself or herself or for family members, favors or benefits under circumstances which might be construed by reasonable persons as influencing the performance of governmental duties
- Make no private promises of any kind binding upon the duties of office
- Not engage in business with the government, either directly or indirectly, inconsistent with the conscientious performance of governmental duties
- Expose corruption wherever discovered

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Basic Employee and Supervisor Responsibilities

Your Supervisor will...	You should..
Explain the chain of command, and identify the first and second line supervisors in your rating chain.	Know the chain of command and be able to identify your first and second line supervisors by name and position title.
Provide you with instruction and answer questions concerning your duties and responsibilities.	Follow directives and instructions issued by your department head, chairperson or supervisor.
Outline the mission requirements, assign work, define job expectations and provide you with performance standards within 30 days of starting your new job.	Understand your role in the organizational mission, complete work assignments and know what is required to successfully meet your job expectations.
Counsel you and provide you with regular feedback on job performance, furnish training, guidance and assistance as needed, and complete your annual performance evaluation.	Work as a courteous and cooperative team member with a focus on getting the job done, continually self-evaluate and seek self improvement opportunities, and provide your supervisor with feedback on your performance.
Review and discuss your problems to arrive at a satisfactory solution and initiate formal performance improvement plans or disciplinary action should it become necessary.	Discuss misunderstandings, unsatisfactory working conditions or other problems with your supervisor and strive for a mutually agreeable resolution or compromise.
Establish the work unit's leave schedule and approve or disapprove leave requests as permitted by work schedules and mission requirements.	Schedule non-emergency requests for leave in advance to ensure completion of work assignments and to avoid disrupting the goals of the work unit.
Ensure that you are provided with appropriate safety equipment, if any is required and take action to verify and resolve unsafe conditions.	Identify and report unsafe conditions you may observe in your daily work and immediately report accidents to your supervisor or other appropriate official.
Provide instruction on how to secure a medical examination if you are injured on the job, and explain how to file an accident report and, if necessary, a claim for an on-the-job injury.	Follow correct procedures for reporting accidents and secure medical examination and treatment of any injury to be eligible for compensation benefits.

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Military Rank and Grade

Officers					
Grade	Navy	Army	Air Force	Marin Corps	Coast Guard
O1	Ensign (ENS)	2nd Lieutenant (2LT)	2nd Lieutenant (2d Lt)	2nd Lieutenant (2ndLt)	Ensign (ENS)
O2	Lieutenant Junior Grade (LTJG)	1st Lieutenant (1LT)	1st Lieutenant (1st Lt)	1st Lieutenant (1stLt)	Lieutenant Junior Grade (LTJG)
03	Lieutenant (LT)	Captain (CPT)	Captain (Capt)	Captain (Capt)	Lieutenant (LT)
04	Lieutenant Commander (LCDR)	Major (MAJ)	Major (Maj)	Major (Maj)	Lieutenant Commander (LCDR)
05	Commander (CDR)	Lieutenant Colonel (LTC)	Lieutenant Colonel (Lt Col)	Lieutenant Colonel (LtCol)	Commander (CDR)
06	Captain (CAPT)	Colonel (COL)	Colonel (Col)	Colonel (Col)	Captain (CAPT)
07	Rear Admiral (Lower Half) (RADM)(L)	Brigadier General (BGEN)	Brigadier General (Brig Gen)	Brigadier General (BrigGen)	Rear Admiral (Lower Half) (RADM)(L)
08	Rear Admiral (Upper Half) (RADM) (U)	Major General (MGEN)	Major General (Maj Gen)	Major General (MajGen)	Rear Admiral (Upper Half) (RADM) (U)
09	Vice Admiral (VADM)	Lieutenant General (LGEN)	Lieutenant General (Lt Gen)	Lieutenant General (LtGen)	Vice Admiral (VADM)
10	Admiral (ADM)	General (GEN)	General (Gen)	General (Gen)	Admiral (ADM)
11	Fleet Admiral (FADM)	General of the Army (GA)	NA	NA	NA
12	Chairman of the Joint Chiefs of Staff				

Benefits
Performance Appraisals
Employee Awards
Local Labor Unions
Wellness Program
Holidays and Leave
Certification Test

Warrant Officers				
Grade	**Navy**	**Army**	**Marine Corps**	**Coast Guard**
W1		Warrant Officer-1 (WO1)		
W2	Chief Warrant Officer-2 (CWO-2)	Warrant Officer-2 (CW2)	Chief Warrant Officer 2 (CWO2)	Chief Warrant Officer 2 (CWO2)
W3	Chief Warrant Officer-3 (CWO-3)	Warrant Officer-3 (CW3)	Chief Warrant Officer 3 (CWO3)	Chief Warrant Officer 3 (CWO3)
W4	Chief Warrant Officer-4 (CWO-4)	Chief Warrant Officer-4 (CW4) "Chief"	Chief Warrant Officer 4 (CWO4)	Chief Warrant Officer 4 (CWO4)

Enlisted					
	Navy	**Army**	**Air Force**	**Marine Corps**	**Coast Guard**
E1	Seaman Recruit (SR)	Private E-1 (PV1)	Airman Basic (AB)	Private (Pvt)	Seaman Recruit (SR)
E2	Seaman Apprentice (SA)	Private E-2 (PV2)	Airman (Am)	Private First Class (PFC)	Seaman Apprentice (SA)
E3	Seaman (SN)	Private First Class (PFC)	Airman First Class (A1C)	Lance Corporal (LCpl)	Seaman (SN)
E4	Petty Officer 3rd Class (PO3) "Third Class"	Specialist 4 OR Corporal (SPC/CPL)	Sergeant (SGT) OR Senior Airman (SrA)	Corporal (Cpl)	Petty Officer 3rd Class (PO3) "Third Class"
E5	Petty Officer 2nd Class (PO2) "Second Class"	Sergeant (SGT)	Staff Sergeant (SSgt)	Sergeant (Sgt)	Petty Officer 2nd Class (PO2) "Second Class"
E6	Petty Officer 1st Class (PO1) "First Class"	Staff Sergeant (SSG)	Technical Sergeant (TSgt)	Staff Sergeant (SSgt)	Petty Officer 1st Class (PO1) "First Class"

	E7	Chief Petty Officer (CPO) "Chief"	Sergeant First Class (SFC)	Master Sergeant (MSgt) OR First Sergeant (E-7)	Gunnery Sergeant (GySgt)	Chief Petty Officer (CPO) "Chief"
	E8	Senior Chief Petty Officer (SCPO) "Senior Chief"	Master Sergeant (MSG) OR First Sergeant (1SG)	Senior Master Sergeant (SMSgt) OR First Sergeant (E-8)	First Sergeant (1st Sgt) OR Master Sergeant (MSgt)	Senior Chief Petty Officer (SCPO) "Senior Chief"
	E9	Fleet (or Command) Master Chief Petty Officer OR Master Chief Petty Officer (MCPO)	Sergeant Major (SMAJ) OR Command Sergeant Major (CSM)	Chief Master Sergeant (SMSgt) OR First Sergeant (E-9)	Sergeant Major (SgtMaj) OR Master Gunnery Sergeant (MGySgt)	Command Enlisted Advisor OR Master Chief Petty Officer (MCPO)
	E10	Master Chief Petty Officer of the Navy (MCPON)	Sergeant Major of the Army (SMA)	Chief Master Sergeant of the Air Force (CMSAF)	Sergeant Major of the Marine Corps (SgtMajMC)	Master Chief Petty Officer of the Coast Guard (MCPO-CG)

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Base Services

Post Office

A Monterey branch U.S. Post Office (ZIP 93943) is located in Building 260 on NPS. It is open Monday through Friday from 9:30am until 3:30 p.m. Last mail pickup is 4:00 pm. Closed for lunch 12:30 p.m. to 1:30 p.m.

Bulletin Boards

You should monitor the NPS intranet and read Official Bulk email to keep informed on matters of importance. All official orders and information of general interest are supposed to be posted on the NPS intranet.

Lost and Found

Lost articles may be turned into and retrieved from the Quarterdeck, Herrmann Hall, ext 2441, or you may contact the Base Police Department., Bldg 200, ext 2555.

Dining:

- **Commissioned Officers and Faculty Club**
- **El Prado Room - Herrmann Hall Basement**
  - Breakfast
    0645 - 0900
    Monday - Friday
  - Lunch
    1100 - 1400
    Monday - Friday
- **Trident Room - Herrmann Hall Basement**
  - Lunch
    1045 - 1315
    Monday - Friday
  - Normal business dress or clothing appropriate for special events is expected when using these facilities. Bare feet, no shirt, bathing suits, etc. are not appropriate attire.
- **Commercial Dining Options**
  - Café Del Monte, in the Academic Quadrangle, Mon-Fri, 10:30am-1:30pm
  - The Navy Exchange Food Court, Bldg. 301

Library Privileges

Library cards may be issued to employees once they have received NPS identification cards. Questions regarding library usage should be directed to the Reference Librarian, 656-2485. Library privileges entitle users to check out books and use library services.

Special Services Facilities

All employees are eligible to participate in any of the Recreation Department activities, programs or clubs. Featured activities include basketball, tennis, golf, bowling, swimming, and diving. Clubs and associations include flying, golf, karate, lacrosse, racquetball, rugby, sailing, scuba and tennis. A Child Care Center is available for children six months and older. A Pre-School Activity is also available for children who are at least three years old. Additional information may be obtained by calling 656-2734.

Travel Office

Click here for more info: http://www.nps.navy.mil/travel/.

Navy Exchange Privileges

Civilian employees are not allowed to use the Navy Exchange facilities unless this privilege is based upon prior military service (Retired Military status) or family members currently in the service. The only exceptions to this rule are:

1. Eating facilities operated by the Navy Exchange (open to all civilian staff/faculty);
2. Civilian staff/employees making "Bookstore" purchases for a professor (with supervisory approval);
3. Civilian staff/employees purchasing textbooks for an NPS academic class they are enrolled in.

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Ethics

Command Ethics Counsel Don Lincoln
1 University Circle, Hermann Hall, Monterey, CA 93943-5000
(831) 656-2506

US Government Resources

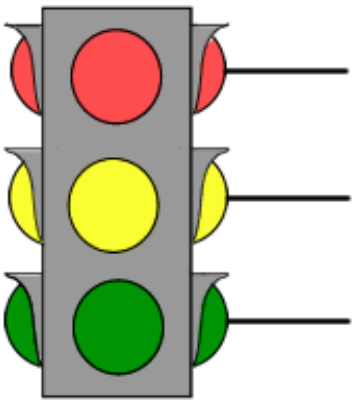
- Equipment/Supplies
- Communications
- Time
- Information
- Position
- Transportation
- Benefits

General Rule

"Employees shall protect and conserve Federal property and shall not use it for other than authorized purposes. "
5 CFR 2635.101(b(9))

As Ben Franklin used to say: "A penny saved is applied to the National Debt under miscellaneous receipts."

What is Authorized?



Personal Use: unrelated to mission (no permission)

Personal Use: supportive of mission (with supervisor's permission)

Official Use: directly related to mission accomplishment.

Authorized Personal Use

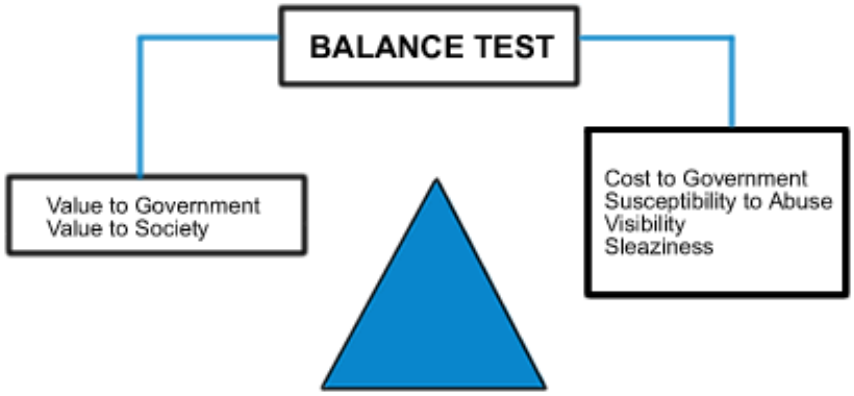
Personal Use: (supportive of mission)

- Does not adversely affect performance of official duties
- Is of reasonable duration and frequency
- Is performed on employee's personal time (of-duty, lunch)
- Serves a legitimate public interest
- Does not reflect adversely on DoD
- Creates no significant additional cost to DoD

Guiding Principles

Rule # 1: Government resources are for the benefit of the Government
Rule # 2: Sometimes, the Government benefits by allowing its employees to use Government resources

- Make employees more efficient
- Improve employee morale
- Increase public's confidence in its officials



The Devil is in the Details

Official Use:
Determined by mission. Must be directly related to and necessary for accomplishing the mission.

Mission:
Will differ from the agency to agency, office to office.

Personal Use:
Supervisor's Approval

1. Formal Regulation
2. Office Policy
3. Case by Case

Equipments/Supplies
(Computers, Copiers, Printers, Paper)

Official Use:

- Accomplish mission

Personal Use:

- Does not adversely affect official duties
- Is of reasonable duration and frequency
- Is performed on employee's personal time
- Serves a legitimate public interest
- Does not reflect adversely on DoD
- Creates no significant additional cost to DoD

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Gifts

Gift Acceptance Analysis

This is an easy analysis we can use to determine whether or not we can accept a gift.

When you use the analysis, remember that you will be deemed to have accepted a gift if it is given with your knowledge to a parent, sibling, spouse, child, or dependent relative and given because of that person's relationship with you.

Also, you will be determined to have accepted a gift if you designate a charity to which the gift is given.

There are four general gift rules:

1. Is it:
    1. a form of prohibited source?
    2. offered because of your official position?
2. Is it defined as a "gift"?
3. Is there an exception?
4. Is there a limitation on using the exception?

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Occupational Safety and Health

Code 223

The following information will be covered through the Occupations Safety and Health section:

- Information Covered By Your Supervisor
- Local OSH Policy Statement
- Individual Responsability for Safety and Health
- Navy Employee Report of Unsafe and Unhealthy Working Conditions
- Local Occupational Health Program
- Reproductive Hazards
- Basic Element of the HAZMAT inst. & Health Hazards Associated with "common use" products

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Equal Employment Opportunity

The Department of the Navy and the Naval Postgraduate School are committed to ensuring in both policy and practice that all persons are afforded equal opportunity for employment, advancement, and treatment regardless of race, color, sex, religion, national origin, age or disability. Equal Employment Opportunity (EEO) is promoted through a continuing Affirmative Employment Program in all situations where under-representation or under-utilization of minorities, women, and individuals with disabilities exist. This includes a work environment free from discrimination which provides equal opportunity for advancement to an individual's maximum potential, and fair and impartial review of complaints of discrimination. It also includes a work force free from sexual harassment by supervisors, colleagues, or subordinates (civilian or military).

The processing of discrimination complaints applies to both appropriated and non-appropriated fund employees of the Naval Postgraduate School and designated tenant activities. Complainants, their representatives or witnesses, EEO Counselors, and EEO program officials shall be free from restraint, interference, coercion, discrimination, or reprisal at any stage during the presentation and processing of a discrimination complaint, or any time thereafter.

Within the framework of the Equal Employment Opportunity Program there are two major divisions, the Discrimination Complaints Process and Affirmative Action which consists of the Special Emphasis Programs. The major goal of these programs is to identify barriers in the employment, advancement, and retention of that particular special emphasis area.

Special Emphasis Programs

- Federal Women's Program
- Hispanic Employment Program
- Black Employment Program
- Asian American/Pacific Islander/Native American Indian Program
- Handicapped/Disabled Veterans Program

The Superintendent of the Naval Postgraduate School is the Equal Employment Opportunity Officer and the Deputy Equal Employment Opportunity Officer is the technical advisor for the EEO Program and may be contacted for additional information in this area.

Deputy EEO Officer (x2025)

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How Jobs are Classified

All new employees should have received a copy of their position description (PD).

The PD cover sheet includes the title, grade and series of the position as determined by the classification used that best describes work being done. In most cases these standards are based on the 9 Factor Evaluation System (FES) classification factors described below. Each factor is written at various levels that have been assigned points. The points provide the classifier with a means of determining the grade of the position.

Number 7 on the PD cover sheet documents the Fair Labor and Standards Act (FLSA) status of the position, (i.e., Exempt or Non-Exempt). If you are **non-exempt,** and you are required to work overtime, you will receive overtime pay for all hours worked over 40 hours per week, or 8 hours per day. If you are **exempt,** and work overtime you will receive overtime pay computed at the overtime rate of a GS-10 step 01. You may wish to work compensatory time in lieu of overtime.

Your PD will describe the following FES Factors:

Major duties and responsibilities:

- Factor 1 - Knowledge Required - describes the knowledge, skills, and abilities required for the position.
- Factor 2 - Supervisory Controls - Describes how the work is assigned, what the employee's responsibilities are for carry out the work, and how the work is reviewed.
- Factor 3 - Guidelines - Describes the guidelines available to you, and how much judgment is needed to use them.
- Factor 4 - Complexity - Describes the nature of the assignment, what the employee considers when deciding what must be done, and how difficult and original are the employee's actions or responses.
- Factor 5 - Scope and Effect - Describes the purpose of the wo4k, and the impact of the work product.
- Factor 6 - Personal Contacts - Covers the people contacted and the conditions under which the contacts take place.
- Factor 7 - Purpose of Contacts - Explains the purpose of the contacts described in Factor 6. Factor 6 and 7 presume that the same contacts will be evaluated for both factors.
- Factor 8 - Physical Demands - Describes the nature of physical demands placed on the employee.

- Factor 9 - Work Environment - Describes the physical surroundings in which the employee works and any special safety regulations or precautions that the employee must observe to avoid mishaps or discomfort.

Professional and clerical positions are written in FES format. However the classification standards are written in a narrative format, where the responsibilities are described at each grade level. In some cases there are bench-marks to describe the work performed such as positions in the financial series. These benchmarks resemble a written PD that has already been classified and may be used to classify a position that is essentially identical to the PD being classified.

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DEPARTMENT OF THE NAVY
OFFICE OF THE SECRETARY
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

DEC 13 2005

MEMORANDUM FOR DISTRIBUTION

Subj: GENERAL NOTICE OF DRUG TESTING FOR NEW EMPLOYEES UNDER DEPARTMENT OF THE NAVY DRUG-FREE WORKPLACE PROGRAM

On September 15, 1986, President Reagan signed Executive Order 12564 establishing the goal of a Drug-Free Federal Workplace. The Executive Order made it a condition of employment for all Federal employees to refrain from using illegal drugs on or off duty. The Department of the Navy (DON) Drug-Free Workplace Program (DFWP), developed to implement the Order, is designed to accomplish these goals through deterrence, identification, rehabilitation, and personnel action. While the DON will assist employees with drug problems, it must be recognized that employees who use illegal drugs are primarily responsible for changing their own behavior and actions.

Illegal drug use by any civilian employee of the DON is incompatible with the maintenance of high standards of conduct and performance. Moreover, illegal drug use could adversely affect personnel safety, risk damage to government and personal property, and significantly impair day-to-day operations. The DON program is aimed at identifying illegal drug users in order to maintain a safe, secure workplace and efficient DON operation.

The determination that an employee uses illegal drugs may be made on the basis of direct observation, a criminal conviction, the employee's own admission, other appropriate administrative determination or by a confirmed positive drug test. The program subjects all civilian appropriated and non-appropriated fund employees to drug testing under the following conditions:

a. When there is a reasonable suspicion that the employee uses illegal drugs.

b. As part of an authorized examination regarding an accident or unsafe practice.

c. As a part of or as a follow-up to counseling or rehabilitation for illegal drug use.

In addition, certain employees occupying specifically designated sensitive positions within the DON will be subject to random drug testing. These are called Testing Designated Positions (TDPs).

a. Employees in this category will receive individual written notices that their positions have been included in the activity random testing pool at least 30 days prior to actual testing.

b. Employees selected for, or otherwise placed in, a test-designated position will be subject to a drug test prior to final selection/placement and to random testing thereafter.

c. Any employee can volunteer for random testing and will be included in the activity random testing pool.

All employees subject to testing shall be allowed to provide urine specimens in private except when there is reason to believe the specimen will be altered or substituted. The DON has developed strict chain-of-custody procedures to ensure proper identification of the specimen tested.

All specimens will be tested in certified laboratories following mandatory guidelines published by the Department of Health and Human Services as published in the Federal Register. A Medical Review Officer (MRO) will review all positive, non-negative, and negative test results. Employees will be given an opportunity to provide evidence to a MRO for verification of the legitimate use of over-the-counter or prescription drugs authorized by a physician or medical officer.

Drug test results will be handled in a confidential manner. Non-negative test results from the laboratory will only be disclosed to a MRO. Non-negative results, verified by the MRO, may only be disclosed to the employee, the activity Drug Program Coordinator, the appropriate Civilian Employee Assistance Program (CEAP) Administrator and appropriate supervisory/management officials necessary to process an administrative and/or adverse action against the employee, or to a court of law or administrative tribunal in any adverse personnel action.

Medical and rehabilitation records in the CEAP will be deemed confidential "patient" records and may not be disclosed without the prior written consent of the patient, an authorizing court order or otherwise as permitted by federal law.

The DON will not tolerate the use of illegal drugs. Employees of the DON having a substance abuse problem are encouraged to seek assistance through their activity CEAP. Such assistance may be obtained by contacting the activity CEAP administrator. Employees who voluntarily identify themselves to their supervisor or other appropriate management official as a user of illegal drugs, prior to being so identified by other means and who seek counseling and/or rehabilitation assistance, will not be subject to disciplinary action for their prior drug use. This is referred to as safe harbor. It is

important to note that once an employee is officially informed of an impending drug test, the employee is no longer eligible for safe harbor.

All employees are expected to refrain from illegal drug use. Disciplinary action up to and including removal from Federal service will be initiated for the first failure to remain drug-free. Removal action will be initiated for any employee upon a second positive test result, failing to refrain from illegal drug use after counseling and/or rehabilitation, altering or substituting a specimen, failure to report for testing or refusal to submit to a drug test.

This updated General Notice supersedes the DON General Notice of the Navy DWFP initially published on August 6, 1988, and does not affect the ability of activities/commands to continue to conduct drug testing.

William A. Navas Jr.
Assistant Secretary of the Navy
(Manpower and Reserve Affairs)

Distribution:
Echelon I & II

Office of Human Resources
Naval Postgraduate School
New Employee Orientation

Conduct and Discipline

Conduct

As a government employee you are expected to adhere to basic rules of personal conduct, for example:

- Personal work of any kind is not permitted during duty hours.
- Gambling is prohibited on Navy property.
- Telephones are for official use only. Public phone booths are available for employees who need to make personal calls.
- Working or reporting for work while under the influence of drugs or alcohol is not permitted

In general, the rules governing your personal conduct on the job are no different from those of similar jobs in private industry. You are expected to do a fair day's work, carry out the orders of your supervisor, and properly care for government tools and equipment.

The Department of the Navy Bedrock Rules and Standards of Conduct are listed in this Orientation. You are expected to be aware and always comply with these rules.

Discipline

Infractions of rules, regulations and prescribed standards may result in disciplinary action. No disciplinary action will be taken until the circumstances have been thoroughly reviewed and a decision rendered by the responsible official. Employees against whom disciplinary action is taken have various grievance or appeal rights which are explained in detail at the time of the disciplinary action.

Grievances

Most problems involving employee job concerns or dissatisfactions are settled through discussion between the employee and his or her supervisor. For the rare situation in which dissatisfaction persists, procedures have been established whereby employees or groups of employees may carry their case to a higher authority for resolution. The Human Resources Office Human Relations Division will, upon request, provide information concerning these grievance procedures.

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Employee Benefits

Employee benefits include:

- Employee Assistance Program
- Health Benefits
- Workers Compensation
- Life Insurance
- Retirement
- Thrift Savings Plan
- U.S. Savings Bond

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Performance Appraisals

Performance Evaluation

Employee development plans which outline your work expectations are formally established and presented to you within 30 days of your appointment to your new position to provide you with an opportunity to succeed and to encourage you to make a meaningful contribution towards the accomplishment of the mission. Depending on the nature of your appointment, your performance will be evaluated under one of the following performance appraisal systems:

Performance Feedback System (PFS).
Naval Postgraduate School and NSAMB employees on General Schedule (GS) and Federal Wage System (FWS) on appointments of 90 days or more.

Alternate Performance Appraisal System (APAS).
Fleet Numerical Meteorology and Oceanography Center (FNMOC) GS and FWS employees on appointments lasting 90 days or longer.

The Faculty Appraisal System (FPAS).
Faculty members appointed to positions lasting 120 days or longer.

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Employee Awards

Incentive Awards

The Incentive Awards Program is intended to encourage all Department of the Navy employees to participate in the task of improving the efficiency and economy of its operations. At the Naval Postgraduate School your contributions may be awarded through a variety of recognition devices (e.g. time off, cash, peer recognition, and honorary awards).

Special Act or Service Award

You may be eligible to receive this type of cash award in recognition of a group or individual special act, service, or non-recurring contribution which goes significantly beyond the expected job performance.

On The Spot Award

Cash award ranging from $25 to $250, and an "On The Spot" Cash Award Certificate presented for exceeding job expectations (e.g. taking on an extra project, demonstrating excellence, showing initiative to improve ways of getting the job done, etc.).

Time Off Award

Employees are eligible to receive from 8 to 40 hours of time off in recognition of an act or service which significantly exceeds work expectations. Time Off Awards must be used within one calendar year of its effective date or prior to transfer, retirement, or resignation from the Naval Postgraduate School.

Peer Recognition Awards (aka, Extra MILES Award)

This award is given by one employee to another to personally thank employees and coworkers who demonstrate quality public service, commitment to improvement, and teamwork. Supervisors cannot nominate their own employees, and employees cannot nominate their supervisor. Further, an employee may not be recognized more than four times in a fiscal year. The award and process are available on the Safety Office web site.

Beneficial Suggestion and Invention Program

The Beneficial Suggestion and Invention Program recognizes employee proposals that directly increase economy, efficiency or effectiveness of Government operations.

Beneficial suggestions conserve time, supplies, and equipment, reduce paperwork, improve safety conditions, and otherwise directly contribute to increased productivity, decreased cost, or better service to the public. Adopted suggestions and inventions are ordinarily rewarded through cash awards. To submit a suggestion, use a beneficial suggestion form, available from the Human Resources Office.

Length Of Service Award

All civilian employees are eligible for this award. It is granted to employees to recognize all creditable federal service to include honorable military service. Employees will receive a length of service award after 10, 15, 20, 25, 30, 35, 40, 45 and 50 years of service. The award consists of a lapel pin and a certificate. Employees who complete 40 or more years of service, also receive a certificate signed by the Secretary of the Navy.

Honorary Awards

An Honorary Award may be granted in recognition of continued distinguished service, a single achievement, an act of personal heroism, or any other employee contribution. It may be granted independently of or as a supplement to a cash award.

Navy Distinguished Civilian Service Award (DCSA)

The DCSA is the highest honorary award the Secretary of the Navy can confer on a DON civilian employee. The DCSA is granted only to employees who have given distinguished and/or extraordinary services to the Department of the Navy. The achievements of service must be truly exceptional when measured against position requirements of the individual, and should far exceed the contributions and service of others with comparable responsibilities. The award consists of a citation signed by the Secretary of the Navy, a medal, rosette and lapel bar.

Navy Superior Civilian Service Award (SCSA)

The SCSA is the highest award granted at the major claimant level, and the second highest Navy civilian service award. It is given to recognize superior service or contributions resulting in exceptional value or benefits to the DON; however, contributions while exceptional in value, would be narrower in scope and/or impact than for the DCSA. The award consists of a certificate, citation , medal and lapel bar.

Navy Meritorious Civilian Service Award (MCSA)

The MCSA is the third highest Navy civilian award. It is granted by the local activity head to recognize service or contributions resulting in high value or benefit to DON but, unlike the SCSA or DCSA, the contribution may be limited in scope or impact to the activity level. The award consists of a certificate and citation signed by the activity head, medal and lapel emblem.

Certificate Of Recognition

This certificate may be presented to employees to provide honorary recognition for contributions furthering the achievements and prestige of the Command. It can be awarded for a contribution which does not meet the requirements for the MCSA or SCSA, but has significance meriting more public recognition than a letter of commendation.

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Local Labor Unions

The Naval Postgraduate School and NSAMB have granted the following two unions exclusive recognition for representation of civilian employees:

National Federation of Federal Employees, Local 1690. NFFE represents all non-professional General Schedule and Wage Grade employees of the Naval Postgraduate School (NPS), except fire fighters, guards, managers, supervisors, and casual hires -- appointments of not more than 90 days.

International Association of Fire Fighters, Local F-166. IAFF represents all NPS non-supervisory fire fighters.

You have the right to join or refrain from joining a union or other employee groups not subversive in character. Union officials can provide you with more information about these employee organizations:

The NFFE bulletin board is located in the basement of Herrmann Hall on the wall opposite the Navy Federal Credit Union. Current phone numbers, names of officers and stewards, as well as other information is maintained by NFFE.

Information about the Fire Fighters Local F-166 is available at the Fire Department.

Weingarten Rule
Right to Representation

In accordance with Title VII, Section 7114, of the Civil Service Reform Act of 1978, employees represented by the exclusive bargaining unit are informed that:

"An exclusive representative of an appropriate unit in an agency shall be given the opportunity to be represented at any examination of an employee in the unit by a representative of the agency in connection with an investigation if the employee reasonably believes that the examination may result in disciplinary action against the employee; and the employee requests representation."

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Wellness Program

This program is designed to encourage a healthy civilian workforce, which is essential to the successful accomplishment of the Naval Postgraduate School mission. NPS wants every employee to have the opportunity to actively seek and sustain good physical and mental health. In recognition of the personal commitment many civilians are making in pursuit of a healthier existence, supervisors and managers are encouraged to support that initiative by matching the employee's personal time investment with limited excused absence. The Wellness Program offers health education training, as well as encourages employees to develop and participate in individual wellness regimens.

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Holidays and Leave

- Paid Holidays
- Annual Leave
- Sick Leave
- Advance Leave
- Family Medical Leave
- Sick Leave for Family Care or Bereavement
- Voluntary Leave Transfer Program
- Leave Bank
- Leave Without Pay
- Absent Without Leave
- Excused Absence
- Court Leave
- Military Leave

*** For very specific information on leave issues, check out the leave FAQ .**

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Certification Test

Thank you for completing this test. When you have completed the test , just click on the "Submit" button at the bottom of the page to send the test to the HRO. The results will be provided to you and if you have correctly answered at least 80% of the questions, you will receive credit for the course. Be sure to mark the box below if you would like to receive a course certificate.

Name:

Department:

Guardmail Address (for Certificate of Completion, if desired):

Please tell us what your status is:

How useful did you find this course?

Course Test

Here's the test---good luck! When you are finished, press the "Submit to HRO" button at the bottom of the page

1. What is the mission of NPS? (Help)

Select Your Answer

2. What is the mission of FNMOC? (Help)

Select Your Answer

3. What courses does DRMI present? (Help)

Select Your Answer

4. Which of these is in the NPS Strategic Plan's "Guiding Principles"? (Help)

Select Your Answer

5. Which strategic initiative mentions the "Navy Virtual University"? (Help)

Select Your Answe

6. Which of these are not violations of the Standards of Conduct? (Help)

Select Your Answer

7. Which of these is not one of your "employee responsibilities"? (Help)

Select Your Answer

8. Which of these is not one of your supervisor's responsibilities? (Help)

Select Your Answer

9. "Colors" is being played & you are outside: which don't you have to do? (Help)

Select Your Answer

10. An Army "Captain" is the same "rank" as a Navy "Captain" (Help)

True
False

11. Civilian employees are entitled to use the following services except: (Help)

Select Your Answe

12. If you have a traffic accident on NPS you must call the NPS Police. (Help)

True
False

13. What cannot be used to determine an employee is using illegal drugs? (Help)

Select Your Answer

14. The NPS EEO Program is designed to provide all of these except: (Help)

Select Your Answer

15. These are all Thrift Savings Plan fund options except: (Help)

Select Your Answer

16. You may receive free EAP counseling for these types of problems except: (Help)

Select Your Answe

17. If injured on the job, you must notify your boss within: (Help)

Select Your Answe

18. Which is not true under the Federal Employees' Health Benefits Program? (Help)

Select Your Answer

19. Employees new to federal service are covered by "FERS" retirement. (Help)

True
False

20. Which of these are not part of the "FERS" three-part system? (Help)

Select Your Answer

21. Which of these are not Federal Group Life Insurance options? (Help)

Select Your Answe

Congratulations! You have finished the test. Please add any comments or questions you may have in the block below, then press "submit" to send the test results.

Comments or Questions About This Test:

Submit Test

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Ethics

Pop Quiz

Which of the following use of Government resources is an authorized use?

- ○ Office copier to make myself a personal copy of my daughter's report card to send to her grandparents?
- ○ Office copier to reproduce 75 color copies of my daughter's graduation from Mrs. Smith's Finishing School and Mud Wrestling Academy?
- ○ Office copier to reproduce 200 copies of Secretary of Defense's address to the graduating class of Mrs. Smith's school?
- ○ Office fax machine to receive a 40 page personal fax during working hours?

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Gifts - Prohibited Sources

An employee shall not solicit or accept any gift or other item of monetary value:

- from a prohibited source; or
- given because of the employee's official position.

United states Code 7353 prohibits employees from soliciting or accepting anything of value from a prohibited source.

Even if the donor is not a prohibited source, you are not allowed to accept a gift that is offered because of your official position (e.g., a gift to the DoD liaison to the Retired Officer's Association from the Association).

Prohibited Sources:

Any person:

1. Seeking official action from, doing business with, or conducting activities regulated by, the individual's employing agency; or
2. Whose interest may be substantially affected by the performance or nonperformance of the individual's official duties.

A "prohibited source" is an entity (or an entity with a majority of its member who):

- seeks official action from your agency (e.g., the Boy Scouts, the USO, or the Red Cross)
- does business or seeks to do business with your agency (e.g., defense contractor)
- conducts activities regulated by your agency (e.g., if you work for the Corps of Engineers, then any entity that wants to drain wet lands)
- has interest that may be substantially affected by your performance or nonperformance of official duties (e.g., if you are a procurement officer, then the contractor you deal with; if you are a personnel officer, then outside associations for employees)

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Information Covered By Your Supervisor

The following information will be covered by your supervisor:

- Work unit policy on occupational safety and health.
- Awareness of hazards common to the individual's worksite, trade, occupation, or task.
- Specific hazards of chemicals/materials used in the workplace.
- Personal protective equipment requirements for the job.

NOTE: Appropriate training must be provided prior to an employee working with HM/ HW. The NPS HAZCOM instruction will be reviewed with the employee through Safety Stand Down meeting / formal training.

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Local OSH Policy Statement :

The policy statement has been issued by the Superintendent of NPS and reflects the commitment to Occupational Safety and Health (OSH) and to programs which prevent or minimize occupational mishaps. The policy statements were distributed to all personnel, and posted on all official bulletin boards.

The policy statements share:

- Maintenance of a staffed OSH Office
- Clear lines of accountability for all personnel concerning their obligations and personal responsibilities to the OSH Program
- Performance evaluations consistent with the duties of the position and with appropriate recognition of superior performance or conversely deficient performance, as appropriate
- Compliance with the occupational mishap reporting procedures
- Inspection of all workplaces at least annually and more frequently based on the level of risk
- Maintenance of the Hazard Abatement Plan (HAP), which include quarterly reviews by the Admiral
- Protection of all personnel from coercion, discrimination, or reprisals for participation in the NAVOSH Program
- Access to exposure and medical records for employees and their representatives
- Equal opportunity to NAVOSH education and training programs

For any questions please contact Michael Berry at extension 2822 or Email.

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Individual Responsability for Safety and Health

It is important that you understand your responsibilities in the workplace. They include:

- Participating in on-the-job training programs
- Using required Personal Protective Equipment (PPE), when appropriate
- Practicing good housekeeping
- Informing supervisors of safety and health problems (informal or Employee Report of Unsafe / Unhealthful Working Conditions)
- Being alert for job hazards
- Attend required Safety Briefings

It is the responsibility of all civilian and military personnel to understand and comply with NAVOSH standards and all applicable rules regulations, and orders issued under OPNAVINST 5100.23E.

Violators of NAVOSH regulations or instructions are subject to disciplinary action prescribed in the Civilian Personnel Instruction (CPI) 752, Department of Navy Adverse Actions (NOTAL) or the Uniform Code of Military Justice (Captian's Mast).

Such actions shall also be considered in personnel performance evaluations.

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Navy Employee Report of Unsafe and Unhealthy Working Conditions

"The employee has the right to decline a task because of a reasonable belief that there is an imminent risk of death and insufficient time for hazard reporting and abatement actions. " (OPNAVINST 5100.23E, CHAPTER 10)

Identification and reporting of unsafe or unhealthful working conditions is the responsibility of ALL Navy employees, both military and civilian. Since many conditions can be eliminated as soon as they are identified, an effective channel of oral and written communications is imperative in the development of a sound NAVOSH program.

All navy employees are encouraged to orally report unsafe or unhealthful working conditions to their immediate supervisor who shall promptly investigate the situation and take appropriate actions.

The supervisor (or employee) will use the Navy Employee Report of Unsafe and Unhealthful Working Condition form (OPNAV 5100/11) or the on-line form to report said conditions to the Safety Office, Code 223.

The supervisor shall keep the reporting employee informed of all actions taken.

Upon receipt of a hazard report, the Safety Office shall log in the report, contact the originator by telephone or E-mail to acknowledge receipt, and discuss the seriousness of the reported hazard.

The Safety Office shall investigate all reports brought to its attention. Alleged imminent danger situations shall be investigated within 24 hours. Potentially serious situations shall be investigated within 3 working days. If the situation involves a health hazard, the Safety Office shall refer the report to the cognizant medical activity for investigation.

The Safety Office shall provide an interim or complete response in writing to the originator of the written report within 10 working days of the receipt.

For further information please contact Martin Catanese at extension 3317 or on E-mail.

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Local Occupational Health Program

How to obtain occupational medical assistance:
In case of an injury or illness that is serious in nature, phone 911 or 2333 for immediate help from the Fire Department.

Required routine medical evaluations:
Prior to or during your processing into employment here at NPS, the Human Resources Office (HRO) informs the Safety Office that new employees will be coming onboard.

Certain job classifications are required to be enrolled into the appropriate medical surveillance program(s) for that job. (Public Works, laboratory staff, etc.)

Your supervisor is responsible to ask the medical surveillance program manager (Michele Jay in the Safety Office; #2475) to ensure that you are enrolled in the program and appointments are made to the NPS medical provider.

Mishap Reporting: Procedures to follow in case of occupational illness or injury.
Mishaps that result in damage to Navy facilities and equipment or occupational deaths, injury, and illnesses to Navy personnel degrade operational readiness and increase operational costs.

Investigation of such mishaps to identify causes and preventive actions, and establishing accurate record keeping, are essential to the success of the Navy Occupational Safety and Health (NAVOSH) Program.

Mishap investigations are aimed at determining how and why an event occurred and prevention of future occurrences of similar events.

Accurate records are necessary to establish trends, conduct analysis, and to assess the effectiveness of the overall NAVOSH Program.

Currently at NPS, we use OPNAVINST 5100.23E (Chapter 14: MISHAP INVESTIGATION, REPORTING, AND RECORDKEEPING) as our guidance document. This chapter applies to shore on-duty Navy personnel and Navy shore operational mishaps.

When an accident occurs, an immediate telephonic notification must be made to the Occupational Safety & Health Office, Ext. 2822. A completed original NPS 5102/2 form must be received in our office within 10 working days of any reportable mishap. The Safety Office will also want copies of the Human Resources Office forms (CA-1, CA-2, CA-16), within 5 working days of the

mishap.

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Contact the Orientation Web Site Manager

Reproductive Hazards

Navy policy is to provide safe and healthful working conditions for all employees which will not damage or affect their fertility or offspring. A reproductive hazard is defined as any occupational stressor (biological, chemical, or physical) that has the potential to adversely affect the human reproductive process.

The goal is to keep exposures to all reproductive chemical stressors "As Low As Reasonably Achievable" {ALARA}. No one shall be denied employment due to potential exposure to reproductive hazards/stressors. Furthermore, administrative controls implemented to minimize exposure to reproductive hazards, shall not result in reduction of pay or promotion potential. The OSH office shall refer all employee questions regarding pregnancy employment issues to the human resources office.

Control of Reproductive Hazards in the Workplace

Personnel are encouraged to inform supervisors as soon as possible that they are pregnant and to complete a questionnaire (obtainable from their supervisor or the Safety Office), with OSH assistance, if needed, and submit it to the medical clinic. The occupational health professionals provide evaluation and recommendations, and you may use the questionnaire in consultation with your private physician.

Supervisors

Supply Officer shall identify products currently in Navy use at this facility; the Safety Office and the IH shall identify and evaluate physical and biological reproductive hazard stressors and provide guidance to all departments at NPS/TENANT COMMANDS

All Departments shall supply the Safety Office any and all information about potential Hazardous Materials that the departments want to bring to NPS/TENANT COMMANDS before the material is purchased or samples are given.

Responsabilities

Employees are encouraged to:

- Inform supervisors as soon as possible that they are pregnant
- Completely fill out the questionnaire contained in this section and return it to the occupational health professionals for evaluation and recommendation
- Consultation with their private physicians
- Follow the recommendations provided by Navy occupational health professionals.

Federal Personnel Manual, SubChapter 13, Article 13-5, paragraph a.(2)

Agencies should always be aware of working conditions or strenuous requirements in the workplace that could have an adverse effect on an expectant mother. If, after consulting her doctor, an employee asks for a change in duties or assignment, every reasonable effort should be made to accommodate her. Agencies may request medical certification of the nature of the limitations recommended by the employee's doctor. Sick leave may also be used for physical examinations.

Pregnancy Employment Policies and Questions/Answers

- **If, for pregnancy-related reasons, an employee is unable to perform the functions of her job, does the employer have to provide her an alternative job?**
    - An employer is required to treat an employee temporarily unable to perform the functions of her job because of her pregnancy-related condition in the same manner as it treats other temporarily disabled employees, whether by providing modified tasks, alternative assignments, disability leaves, leaves without pay, etc. For example, a woman's primary job function may be the operation of a machine, and, incidental to that function, she may carry materials to and from the machine. If other employees temporarily unable to lift are relieved of these function, pregnant employees also unable to lift must be temporarily relieved of the function.
- **What procedures may an employer use to determine whether to place on leave as unable to work a pregnant employee who claims she is able to work or deny leave to a pregnant employee who claims that she is disabled from work?**
    - An employer may not single out pregnancy-related conditions for special procedures for determining an employee's ability to work. For example, if an employer requires its employees to submit a doctor's statement concerning their inability to work before granting leave or paying sick benefits, the employer may require employees affected by pregnancy-related conditions to submit such statement. Similarly, if an employer allows its employees to obtain doctor's statements from the personal physicians for absences due to other disabilities or return dates from other disabilities, it must accept doctor's statements from personal physicians for absences and return dates connected with pregnancy-related disabilities.
- **Can an employer have a rule which prohibits an employee from returning to work for a predetermined length of time after childbirth?**
    - **No.**
- **If an employee has been absent from work as a result of a pregnancy-related condition and recovers, may her employer require her to remain on leave until after her baby is born?**
    - No. An employee must be permitted to work at all times during pregnancy when she is able to perform her job.
- **Must an employer hold open the job of an employee who is absent on leave because she is temporarily disabled by pregnancy-related conditions?**
    - Unless the employee on leave has informed the employer that she does not intend to return to work, her job must be held open for her return on the same basis as jobs are held open for employees on sick or disability leave for other reasons.

- **Must an employer hire a woman who is medically unable, because of pregnancy-related conditions, to perform a necessary function of a job?**
  - An employer cannot refuse to hire a woman because of her pregnancy-related condition so long as she is able to perform the major functions necessary to the job. Nor can an employer refuse to hire her because of its preferences against pregnant workers or the preferences of co-workers, clients, or customers.

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Basic Element of the HAZMAT inst. & Health Hazards Associated with "common use" products

Many personnel routinely use a wide range of HM during daily operations. This instruction provides guidelines to prevent improper handling, storage, or disposal of these materials which could result in personal injury, death, or environmental destruction. NPS is required to comply with the detailed federal and state regulations, and is subject to inspection by local (Monterey County Health Department), state (California Toxic Substance Control Board), and federal EPA. Personnel who willfully violate statutes governing the proper use and disposal of Hazardous Material or Hazardous Waste (HW) may be held liable for their actions; penalties of up to $50,000 and 2 years in prison may be imposed.

The HAZMAT instruction (NAVPGSCOLINST 4110.1A) covers information from the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), Department Of Transportation (DOT), the California Code of Regulations (CCR), and the Navy Occupational Safety and Health Program Manual (NAVOSH).

Purpose: To promulgate policies and procedures for the acquisition, handling, awareness, storage, disposal and life-cycle control of hazardous material (HM) acquired and used by NPS/NSAMB/Tenant Commands.

This instruction applies to is NPS and tenant commands. It defines various terms used in conjunction with HM or HW and how those materials will be handled. It also identifies who is in charge of the program at various responsibility levels and what their duties are. It explains about Departmental Authorized Use Lists (DAUL), Material Safety Data Sheets (MSDS) and the NPS Unique Identifier for materials that are ordered for each department. It also contains information concerning Spill Plans, Record Keeping and Reporting, and Training.

"Right to Know"
Hazardous Material Control & Management (HMC & M) manual (4110.1A) - Ref: (a) OPNAVINST 5100.23D

1. Reference (a), CHAPTER 7, 0702., e., The safe use of Hazardous Material, (6) Identify and establish specific HAZCOM training requirements for routine and non- routine Hazardous Material (HM) uses based upon assessments of HM use, prevailing conditions for use, and availability of HM controls, i.e., authorized HM use. In other words, the end user of a HM has a "Right-To-Know" how to store, use, and dispose of the product properly.
2. Found in the following pages, is an example of items that are found on the Exempt Authorized List (EAL), "LIST OF PRODUCTS EXEMPT FROM HMC & M PROGRAM REQUIREMENTS", then follows,"HAZARDS UNIQUE TO OFFICE PRODUCTS", gives generic hazard awareness about these products.
3. If you have need of Material Safety Data Sheet(s) for these specific products, you should contact the Supply department or your departmental Hazardous Materail Program Manager.

List of Products Exempt from HMC & M Program Requirements	
Toner Cartridges	All types are exempt ONLY if quantities stored do not exceed two backups per printer per department AND if all empties are turned in for recycling. **DO NOT THROW AWAY!** A list of quantity purchased / turned in for recycling will be requested FROM THE DEPARTMENTS ANNUALLY to allow for accurate reporting in respect to the Hazard Minimization Standard requirements. (CHEMICAL ACCOUNTING)
"White Out", correction fluid	Exempt if used / stored in quantities less than 1 gallon total per department.
Furniture polish	Exempt if used / stored in quantities less than 1 gallon total per department
Ink pad inks	Exempt if used / stored in quantities less than 2 pints total per department.
White board cleaner	Exempt if used / stored in quantities less than 2 gallons total per department.
Batteries	(other than Mercury batteries) Exempt ONLY if expended batteries are turned into Code N3E. DO NOT THROW AWAY!, unless battery is "alkaline". Alkaline batteries may be discarded into normal trash. A list of quantity-types of batteries purchased / turned in for recycling will be requested FROM THE DEPARTMENTS ANNUALLY to allow for accurate reporting in respect to the Hazard Minimization Standard requirements. (CHEMICAL ACCOUNTING) **Do not store Lithium or Nickel Cadmium batteries in refrigerator.**
Mercury batteries	No exemption
Fax machine toner	Exempt if used / stored quantities do not exceed 3 backup cartridges per fax machine per department.
Glass cleaner	All types exempt if used / stored in quantities do not exceed 2 gallons total per department.
Film for cameras	All types exempt; Instant, 35mm, 125 mm, etc.

HEALTH HAZARDS UNIQUE TO OFFICE PRODUCTS
Routes of exposure: Inhalation, Ingestion, Skin: contact - absorption, Eye

Toner Cartridges (including fax)	Toner is finely divided solid. Do not breathe the dust. Remove to fresh air if any effects occur. No specific hazard is known concerning eye contact, but, any material contacting the eye may be irritating. Flush eyes with plenty of water (15 min. normally) and seek medical treatment. Wash skin with soap and water. No special controls required for storage or use under normal conditions. Clean up with a vacuum cleaner.
"White Out", correction fluid	White or colored fluid with a pungent solvent odor. The product is non-hazardous when used as directed in an office / room with normal air circulation. There are not any anticipated health effects under foreseeable use conditions. Irritation to the skin may occur if contact is prolonged / repeated. Solvents can be absorbed through the skin during prolonged contact, but not likely to happen in short term contact. Wash with soap and water. Eye contact, flush with plenty of water. If irritation persists obtain medical attention. Ingestion; consult a physician.
Furniture polish	Opaque, viscous liquid or spray pleasantly scented. May cause eye irritation. Flush with water and call physician if irritation persists. May cause skin irritation upon prolonged contact. HARMFUL OR FATAL IF SWALLOWED; ASPIRATION OF LIQUID MAY CAUSE CHEMICAL PNEUMONITIS. Store in a dry cool area. Keep from freezing. KEEP OUT OF REACH OF CHILDREN. Read entire label before using.

Ink pad inks	Water soluble material to be cleaned at once. Will cause staining in very high concentration. Wash with soap and water; Drink several glasses of water if ingested.
White board cleaner	Cloudy aqueous solution with a slight sweet aroma. Soluble in water. Keep product out of sewer, watershed, and water system. Use chemical absorbent for large spills. Can cause moderate to severe irritation to the eyes. Flush eyes with water for at least 15 minutes; get medical attention. Amounts ingested incidental to normal use are not likely to cause injury, however, large amounts ingested may cause injury up to death in extreme cases. Do not induce vomiting. Get medical attention immediately. Inhalation of large amounts of concentrated vapor may irritate the nose and throat. Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Wash skin with soap and water while removing contaminated clothing (large spill on to a person).
Batteries *(other than Mercury batteries*)	Normally batteries are non-hazardous to the user, except when they leak. In general, if contact is made with the skin, wash throughly. Eye contact, flush eyes with water for at least 15 minutes and see a physician Clean up of a LITHIUM battery spill should be neutralized with a solution of soda ash (phone HAZMAT or the Fire Department for help). For battery leakers, use neoprene, rubber, latex-nitrile gloves. In the event of an accident or burning batteries, exit the area and notify the Fire Dept.
Glass cleaner	There are many differences between manufactures formulas. Some have ammonia, others use alcohol. Some are clear liquid, others are blue, green, etc. They may have a perfumed smell, or hospital smell. Used under normal conditions, no adverse effects are expected. OVEREXPOSURE: May cause eye irritation. Flush with water. If irritation persists, seek medical attention. May cause drowsiness or dizziness. Remove person to fresh air; If breathing has stopped, administer CPR and seek medical attention. May cause nausea if ingested. Contact the hospital, poison control center, or the Fire Dept. for directions concerning **Emergency and First Aid procedures** about ingestion.
Film for cameras	Used as directed, no adverse effects expected.

Report an occupational exposure of reproductive concern please fill out this form.

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Contact the Orientation Web Site Manager

HUMAN RESOURCES AND
EQUAL EMPLOYMENT OPPORTUNITY OFFICE
NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA

4 February 1998

MEMORANDUM

From: Deputy Equal Employment Opportunity Officer
To: All supervisors and managers

Subj: NEW GUIDANCE ON RELIGIOUS EXERCISE AND RELIGIOUS EXPRESSION IN THE WORKPLACE

Ref: (a) Office of the Press Secretary, White House, Guidance dtd August 14, 1997

Encl: (1) Policy Guidance #2, Religious Exercise and Religious Expression in the Workplace.

1. On August 14, 1997, President Clinton unveiled new executive guidelines aim at protecting religious expression in the federal workplace, provided that it does not conflict with an employee's work. Enclosure (1) provides policy guidance for all civilian federal employees on Religious Exercise and Expression in the workplace.

2. Should you have any questions pertaining to enclosure (1) please feel free to contact me at extension 2480 or by Email (DBaity).

DEBORAH A. BAITY

Policy Guidance #2: Religious Exercise and Religious Expression in the Workplace

1. Background. On August 14, 1997, President Clinton unveiled new executive guidelines aimed at protecting religious expression in the federal workplace, provided that it does not conflict with an employee's work. The guidelines were issued to clarify and reinforce the right of religious expression in the federal workplace. It will also ensure that federal employees and employers will respect the rights of those who engage in religious speech as well as those who do not.

2. Scope. This guidance applies to civilian federal employees only. Uniformed military

personnel are exempted from the guidelines because they have a "different set of concerns and obligations."

3. Discussion. This guidance specifically addresses an employee's religious exercise and religious expression when the employees are acting in their personal capacity within the federal workplace. These guidelines do not address whether and when the government and its employees may engage in religious speech directed at the public. This policy guidance should provide answers to frequent questions in the workplace. Actual cases will be reviewed on an individual basis based on facts and circumstances.

4. Policy. Departments must permit personal religious expression by its federal employees to the greatest extent possible. They will not discriminate against employees on the basis of religion, require religious participation or non-participation as a condition of employment, or permit religious harassment. Managers and supervisors must treat all employees with the same respect and consideration, regardless of their religion (or lack thereof).

a. Religious Expression.

(1) Agencies will not restrict personal religious expression by employees in the federal workplace except where the employee's interest in the expression is outweighed by the government's interest in promoting the efficiency of public service, or, where the expression intrudes upon the legitimate rights of other employees or creates the appearance, of an official endorsement of the religion.

(2) Agencies may regulate the time, place and manner of all employee speech, provided it does not discriminate on the basis of content or viewpoint. Agencies are not required, however, to permit employees to use work time to pursue religious or ideological agendas.

(3) Expression in Private Work Areas. Employees should be permitted to engage in private religious expression in personal work areas not regularly open to the public. This is to the same extent that they may engage in non-religious private expressions, subject to reasonable content and viewpoint. This religious expression must be permitted as long as it does not interfere with the agency's carrying out of its official responsibilities.

(4) Expression Among Fellow Employees. Employees can be permitted to engage in religious expression with fellow employees subject to reasonable and content-neutral standards and restriction. This expression should not be restricted as long as it does not interfere with the workplace disruption and efficiency. Employees may not display religious messages on items that convey any governmental endorsement of religion or suppression of another group.

(5) Expression Directed at Fellow Employees. Employees are permitted to engage in religious expression directed at fellow employees, and may even attempt to persuade fellow employees of the correctness of their religious views. Some religions encourage adherents to spread the faith at every opportunity, a duty that can encompass the adherent's workplace. They are entitle to do this as long as a reasonable observer would not interpret the expression as government endorsement of the religion and it does not interfere with workplace efficiency. Employees must refrain from such expressions when a fellow employee asks that it stop or otherwise demonstrates that it is unwelcome.

(6) Expression in Areas Accessible to the Public. When the public has access to the federal workplace, all federal employees must be sensitive to the Establishment Clause requirement that states expression not create the reasonable impression that the government is sponsoring, endorsing, or inhibiting religion generally, or favoring or disfavoring a particular religion. Displaying of religious art and literature in personal work areas subject to the public can be displayed, so long as the viewing public would reasonably understand the religious expression to be that of the employee acting in their personal capacity, and not that of the government.

b. Religious Discrimination. Federal agencies may not discriminate against employees on the basis of their religion, religious beliefs, or views concerning religion.

(1) Discrimination in Terms and Conditions. No employee may promote, refuse to promote, hire, refuse to hire, or otherwise favor or disfavor an employee or potential employee because of his or her religion, religious beliefs, or views concerning religion.

(2) Coercion of Employees Participation or Non-participation in Religious Activities. A supervisor may not explicitly or implicitly insist that the employee participate in religious activities as a condition of continued employment, promotion, salary increases, preferred job assignments, or any other incidents of employment nor may a supervisor insist that an employee refrain from participating in religious activities outside the workplace, except where otherwise legal. A supervisor is free to express their views and engage in some kinds of speech about religion as long as it is understood it is his or her personal view. Because a supervisor has the power to hire, fire, or promote, employees may reasonably perceive their supervisor's religious expression as coercive even if not intended by such. Therefore, supervisors need to be careful of their expressions and that it is not perceived as coercion.

(3) Hostile Work Environment and Harassment. The law against workplace discrimination protects employees from being subjected to a hostile environment or religious harassment, in the form of religiously discriminatory intimidation, or pervasive or severe religious ridicule or insult, whether by supervisors or fellow workers. Religious harassment based on hostile work environment will depend on the frequency or repetiveness, as well as its severity. Employees should always be guided by general principles of civility and workplace efficiency. A hostile environment is not created by the bare expression of speech with which some employees might disagree.

c. Accommodation of Religious Exercise. Federal law requires an agency to accommodate employees' exercise of their religion unless such accommodation would impose an undue hardship on the conduct of the agency's operations. The accommodation should be made unless it would cause an actual cost to the agency or to other employees or an actual disruption of work, or unless it is otherwise barred by law. If the agency's work rule imposes a substantial burden on a particular employee's exercise of religion, the agency must go further; an agency should grant the employee an exemption from the rule, unless the agency has a compelling interest in denying the exemption and there is no less restrictive means of furthering that interest.

d. Establishment of Religion. Supervisors and employees must not engage in activities or expression that a reasonable observer would interpret as Government endorsement or denigration of religion or a particular religion.

DO's and DON'Ts

Employees May/Can	Agencies May Not/Cannot
1. Keep a Bible or Koran on their private desk and read it during breaks.	1. Restrict all posters or posters of a certain size, in private work areas, or require that such posters be displayed facing the employee.
2. Engage in private religious expression in personal work areas.	2. Restrict religious expression as long as it does not interfere with workplace efficiency.
3. Discuss their religious views with one another in the cafeteria and hallways.	3. Refuse to hire Buddhist or impose more onerous requirements on applicants for employment.
4. Display religious messages on items of clothing to the same extent as they are permitted to display other comparable	4. Impose, explicitly or implicitly, stricter promotion requirements based on their religion.
5. Wear religious medallions over their clothes, yarmulke, head scarf or hyob, etc.	5. Impose more onerous work requirements on an employee because the supervisor does not share the employee religious beliefs.

6. Urge a colleague to participate in religious activities, or to refrain from other personal endeavors.	
7. Display religious art and literature.	

Examples of Religious Exercise and Religious Expression

Private Work Areas:

- **An employee may keep a Bible or Koran on their private desk and read it during breaks.**
- **An agency may restrict all posters, or posters of a certain size in private work areas, or require the posters be displayed facing the employee, and not on common walls.**

Fellow Employees:

- **In informal settings, such as cafeterias and hallways, employees are entitled to discuss their religious views with one another, subject only to the same rules of order as apply to other employee expression.**
- **Are entitled to display religious messages on items of clothing to the same extent that they are permitted to display other comparable messages.**
- **May wear religious medallions over their clothes or so that they are otherwise visible. Typically, this alone will not affect workplace efficiency, and therefore is protected.**
- **During a coffee break, one employee engages another in a polite discussion of why his faith should be embraced. The other employee disagree with the first employee's religious exhortations, but does not ask that the conversation stop. Under these circumstances, agencies should not restrict or interfere with such speech.**
- **One employee invites another employee to attend worship services at her church, though she knows that the invitee is a devout adherent of another faith. The invitee is shocked, and asks that the invitation not be repeated. The original invitation is protected, but the employee should honor the request that no further invitations be issued.**
- **A supervisor who is an atheist has made it known that he thinks that anyone who attends church regularly should not be trusted with the public weal. Over a period of years, the supervisory regularly awards merit increases to employees who do not attend church routinely, but not to employees of equal merit who do attend church. This course of conduct would reasonably be perceived as coercive and should be prohibited.**
- **At a lunch table discussion about abortion, during which a wide range of views are vigorously expressed, a supervisor shares with those he supervises his belief that God demands full respect for unborn life, and that he believes it is appropriate for all persons to pray for the unborn. Another supervisor expresses the view that abortion should be kept legal because God teaches that women must have control over their own bodies. Without more, neither of these comments coerces employees' religious conformity or conduct. Therefore,**

unless the supervisors take further steps to coerce agreement with their view or act in ways that could reasonably be perceived as coercive, their expressions are protected in the Federal workplace in the same way and to the same extent as other constitutionally valued speech.

Hostile Work Environment and Harassment:

- **An employee repeatedly makes derogatory remarks to other employees with whom she is assigned to work about their faith or lack of faith. This typically will constitute religious harassment**
- **A group of employees subjects a fellow employee to a barrage of comments about his sex life, knowing that the targeted employee would be discomforted and offended by such comments because of his religious beliefs.**
- **A group of employees that share a common faith decides that they want to work exclusively with people who share their views. They engage in a pattern of verbal attacks on other employees who do not share their views, calling them heathens, sinners, and the like. This conduct should not be tolerated.**
- **Two employees have an angry exchange of words. In the heat of the moment, one makes a derogatory comment about the other's religion. When tempers cool, no more is said. Unless the words are sufficiently severe or pervasive to alter the conditions of the insulted employee's employment or create an abusive working environment, this is not statutory religious harassment.**
- **Employees may wear religious jewelry and medallions over their clothes or so that they are otherwise visible. Others wear buttons with a generalized religious or anti-religious message. Typically, these expressions are personal and do not alone constitute religious harassment.**
- **In her private work area, a Federal worker keeps a Bible or Koran on her private desk reads it during breaks. Another employee displays a picture of Jesus and the text of the Lord's Prayer in her private work area. This conduct, without more, is not religious harassment, and does not create an impermissible hostile environment with respect to employees who do not share those religious views, even if they are upset or offended by the conduct.**
- **During lunch, certain employees gather on their own time for prayer and Bible study in an empty conference room that employees are generally free to use on a first-come, first-served basis. Such a gathering does not constitute religious harassment even if other employees with different views on how to pray might feel excluded or ask that the group be disbanded.**

Accommodation of Religious Exercise:

- **An agency must adjust work schedules to accommodate an employee's religious observance. For example, Sabbath or religious holiday observance, if an adequate substitute is available, or if the employee's absence would not otherwise impose an undue burden on the agency.**
- **An employee must be permitted to wear religious garb, such as a crucifix, a yarmulke, or a head scarf or hijab, if wearing such attire during the work day is part of the employee's religious practice or expression, so long as the wearing of such garb does not unduly interfere with the functioning of the workplace.**
- **An employee should be excused from a particular assignment if performance of that assignment would contravene the employee's religious beliefs and the agency would not suffer undue hardship in reassigning the employee to another**

detail.

- **A corrections officer whose religion compels him or her to wear long hair should be granted an exemption from an otherwise generally applicable hair-length policy unless denial of an exemption is the least restrictive means of preservingving safety, security, discipline or other compelling interests.**
- **An applicant for employment in a governmental agency who is a Jehovah's Witness should not be compelled, contrary to her religious beliefs, to take a loyalty oath whose form is religiously objectionable.**

Establishment of Religion:

- **At the conclusion of each weekly staff meeting and before anyone leaves the room, an employee leads a prayer in which nearly all employees participate. All employees are required to attend the weekly meeting. The supervisor neither explicitly recognizes the prayer. This course of conduct is not permitted unless under all the circumstances a reasonable observer would conclude that the prayer was not officially endorsed.**

Contact the Orientation Web Site Manager

Office of Human Resources
New Employee Orientation
Naval Postgraduate School

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HUMAN RESOURCES AND
EQUAL EMPLOYMENT OPPORTUNITY OFFICE
NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA

3 February 1998

MEMORANDUM

From: Deputy Equal Employment Opportunity Officer
To: All supervisors and managers

Subj: "SPEAK ENGLISH ONLY" RULE

Ref: (a) 29 CFR 1606

Encl: (1) Policy Guidance #4, "Speaking English Only" Rule.

1. Enclosure (1) contains guidance on requirements for employees to speak English in the workplace.

2. Should you have any questions pertaining to enclosure (1) please feel free to contact me at extension 2480 or by Email.

POLICY GUIDANCE #4: "SPEAK ENGLISH ONLY" RULE

1. **Background: An important part of a person's national origin is often their native language. It is not unexpected that people who have learned English as a second language are extremely fluent in English, will at times revert to their native language. When a department imposes a policy that requires employees to speak English at all times in the workplace, the rule is subject to extreme scrutiny. An employer must always provide a business justification for such a rule.**
2. **Scope: This guidance applies to civilian employees of Naval Postgraduate School, Naval Support Activity Monterey Bay, and tenant commands.**
3. **Discussion: Prohibiting employees at all times, in the workplace, from speaking their primary language or language they speak most comfortably, disadvantages an individual=s employment opportunities on the basis of national origin. The EEO Commission presumes that such a rule violates Title VII. An agency may have a rule requiring that employees speak only in English at certain times where the agency can show that the rule is justified by business necessity. If the agency**

believes it has a business necessity for a Speak-English-only rule at certain times, the supervisor should inform its employees of the general circumstances when speaking English only is required and of the consequences of violating the rule.

Where an employee whose primary or first language is not English establishes that the agency has a Speak-English-Only rule in effect at all times, this will constitute a prima facie case of national origin discrimination. Where the "Speak English Only" rule permits the use of a foreign language during breaks and lunchtime, it will not automatically be found burdensome but will be closely scrutinized under the business necessity justification. The business purpose must be sufficiently compelling to override any racial impact; the challenged practice must effectively carry out the business purpose it is alleged to serve; and there must be available no acceptable alternative policy or practice which better accomplishes the business purpose.

4. **Guidance: The following guidance is provided in accordance with 29 CFR 1606.7:**
    1. **When Speak-English-only rule applies at all times. A rule requiring employees to speak only English at all times in the workplace is a burdensome term and condition of employment. The primary language of an individual is often an essential national origin characteristic. Prohibiting employees at all times, in the workplace, from speaking their primary language or the language they speak most comfortably, disadvantages an individual's employment opportunities on the basis of national origin. It may also creates an atmosphere of inferiority, isolation and intimidation based on national origin which could result in a discriminatory working environment. The EEO Commission will presume that this rule violates Title VII and will closely scrutinize it.**
    2. **When Speak-English-only rule applied at certain times. A department may have a rule requiring that employees speak only in English at certain times where the employer can show that the rule is justified by business necessity.**
    3. **Notice of the Speak-English-only rule. It is common for individuals whose primary language is not English to inadvertently change from English to speaking their primary language. Therefore, if an employer believes it has a business necessity for a speak-English-only rule at certain times, the employer should inform its employees of the general circumstances when speaking only in English is required and of the consequences of violating the rule. If an employer fails to effectively notify its employees of the rule and makes an adverse employment decision against an individual based on a violation of the rule, the EEO Commission will consider the employer's application of the rule as evidence of discrimination on the basis of national origin.**
    4. **In accordance with OPNAVINST 5354.1D Section VIII 1.b. :**
        1. **Commanding Officers are responsible for promoting the morale, discipline, and effectiveness of all assigned personnel. They must ensure that all personnel can safely and effectively carry out all assigned duties. Clear and effective communication among all personnel in the command will not only enhance operational effectiveness, but also foster unit morale and cohesion. Effective communication within a department depends on smooth, orderly, and constant flow of information that is received, understood, and accepted by all.**
        2. **Commanding Officers may issue a written oral order that only English may be spoken in the workplace. It must be clear that the purpose of**

such an order is to foster uniformity of action and operations within the workplace.

3. **Policy. If your department wants to implement a Speak-English-only rule, the following procedure must be applied:**
    1. **The department must document the policy in writing and route the memorandum through the appropriate line manager for approval. This policy can only be based on business necessity and must be specified in the memorandum.**
    2. **This policy will not be officially implemented until the Deputy EEO Officer and the appropriate union officials and Commanding Officers has reviewed and approved the guidance.**
    3. **Upon approval, a copy of the policy will be distributed to all employees within the department.**

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Employee Assistance Program

The EAP is a professional counseling and referral service designed to help you with your problems on and off the job. It is free, confidential within the limits of the law, and voluntary. They will:

- Help you assess the problem
- Provide short-term counseling or problem-solving
- Assist you in selecting a community resource
- Follow-up to ensure you receive quality assistance

The EAP assists with emotional, relationship, family, alcohol/drug, job performance, and financial challenges.

To contact, please all 1-800-995-7758 or their TDD is 1-800-882-7610.

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Health Benefits

The Federal Employees' Health Benefits Program protects you and your family against the cost of accident or illness. Federal employees may elect to enroll in one of several plans offered to them. Brochures for the plans are available in the Human Resources Office and should be studied carefully. Coverage may include "self only" or "self and family ." In November of each year, there is usually a health benefits Open Season, during which you have the opportunity to change plans or your enrollment status. Office of Personnel Management (OPM) has an excellent web site which contains most of the benefits booklets for the various federal Health Insurance Plans.

Permanent Employees. All permanent employees are eligible to enroll in this voluntary program during the first 31 calendar days from the starting date of your permanent position, or during the annual Open Season. You may cancel your enrollment at any time. Certain changes are permitted between Open Seasons (e. g., if your marittal statues changes, children are born or adopted, etc.) The Federal Government pays a substantial portion of the premium for permanent employees.

Temporary Employees. Under some circumstances, temporary employees also have the option of enrolling in the health benefits program. Temporary employees who have completed one year of current continuous employment, excluding any breaks in service of three days or less, are eligible to enroll. The employee must enroll within 31 calendar days after becoming eligible. Temporary employees who enroll will have the full premium withheld from their pay.

Health benefits coverage may be continued into retirement; or, if you leave federal service, the insurance may be converted to an individual policy within a specified period at a higher premium.

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Workers Compensation

The Federal Employees' Compensation Act provides compensation benefits to Federal employees for disabilities due to personal injury or disease sustained in the performance of one's duties. The law also provides for payment of funeral and burial expenses and compensation for the employee's dependents if the injury or disease caused the employees death.

You are expected to give your immediate supervisor written notice of injury within two working days after an injury occurs in the performance of duty.

Compensation may be denied if notice of injury is not submitted within two working days, or if the supervisor does not have actual knowledge of the injury.

An employee is required to file a written claim for compensation within three years after the injury to be eligible for compensation. If an employee dies, a written claim for compensation by or on behalf of the dependents is required before compensation may be paid. Benefits are based on the employee's annual salary and number of dependents at the time of injury. In order to be assured of available compensation benefits, notify your supervisor immediately upon experiencing any on-the-job injury or illness, no matter how slight.

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Life Insurance

Most permanent federal employees are eligible to enroll in the Federal Employees' Group Life Insurance Program regardless of health status.

Employees may elect Basic life insurance and, if desired, additional optional insurance in various amounts, as well as coverage for members of their immediate families ("Optional" and Family" options). Basic insurance is equal to the employee's annual salary rounded up to the nearest thousand plus $2,000 (in the case of faculty, 10-month salary). Basic and optional insurance provide additional coverage for additional cost. If you leave the Government, you may convert both basic and optional insurance to an individual policy without medical examination or other evidence of good health.

Additional information may be obtained from the pamphlet entitled "Federal Employees Group Life Insurance" which is available from the Human Resources office.

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Retirement

All permanent employees appointed before 1 January 1984 are automatically enrolled in the Civil Service Retirement System (CSRS). Deductions are 7% of an employee's basic salary (7 1/2% for law enforcement officers and fire fighters). If an employee resigns, all money deposited in the retirement fund may be refunded upon request provided the employee is not eligible for a retirement annuity at that time. If the employee returns to civil service after taking a refund, the employee may make a redeposit in order to receive credit. Employees are eligible to retire voluntarily at age 55 with 30 years of service, age 60 with 20 years of service, and age 62 with 5 years of service.

All permanent employees appointed on or after 1 January 1984 are automatically enrolled in the Federal Employees Retirement System (FERS). The Federal Employees Retirement System is a three-part system composed of a Social Security Benefit, Basic Benefit Plan, and the Thrift Savings Plan. Deductions are .80% for the Basic Benefit (.85% for law enforcement offices and fire fighters) and 6.20% for Social Security Benefit. Upon eligibility, an employee will receive a 1% agency automatic contribution of basic pay per pay period in a Thrift Savings Plan account and will have an opportunity to participate in the Thrift Savings Plan. If an employee resigns under this system, a refund of money can also be made. However, if the employee returns to civil service a redeposit cannot be made to receive credit. Employees are eligible to retire voluntarily if they meet the Minimum Retirement Age (MRA) with 30 years of service, age 60 with 20 years of service, and age 62 with 5 years of service. An option available to employees under this system is the MRA plus 10. An employee can retire if they meet the Minimum Retirement Age and has 10 years of service (minimum of five years of civilian service) but the employee may receive a reduced annuity.

The HRO Web Site contains a page of links on federal retirement, including a link to Office of Personnel Management (OPM)'s excellent web site on retirement issues.

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Thrift Savings Plan

It you are a FERS or CSRS employee with continuous service, you may be eligible to participate in the Thrift Savings Plan (TSP). The TSP is a defined contribution plan. The retirement income that you receive from your TSP account will depend on how much you (and your agency, if you are a FERS employee) have contributed to your account during your working years and the earnings on these contributions. The contributions that you make to your TSP account are voluntary and are separate from your contributions to your CSRS or FERS annuity.

The Thrift Savings Board has a helpful web site you might useful!

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U.S. Savings Bonds

Employees may purchase Series EE, U.S. Savings Bonds through payroll deduction. You may authorize bi-weekly deductions in amounts ranging from $3.75 to $500.00 for the purchase of bonds in $100 to $1,000 denominations. Contact the Human Resources Office for applications.

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Paid Holidays

Employees normally do not work on the following holidays:

- New Year's Day - January 1
- Dr. Martin Luther King's Birthday - third Monday in January
- Washington's Birthday - third Monday in February
- Memorial Day - last Monday in May
- Independence Day - July 4
- Labor Day - first Monday in September
- Columbus Day - second Monday in October
- Veteran's Day - second Monday in November
- Thanksgiving Day - fourth Thursday in November
- Christmas Day - December 25

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Annual Leave

Annual leave is paid leave time earned on the basis of creditable federal service and is accrued at the rates indicated below. Employees may use annual leave as it is earned; however, up to 30 days of leave may be saved for later use. Annual leave must be approved in advance by the supervisor. Employees whose appointments are for less than 90 days do not earn annual leave unless they work longer than 30 days under a successive appointment.

Years of Service	Accrual Rates
Less than 3 years	4 hours per pay period
3 to 15 years	6 hours per pay period except 10 hours on the last pay period of the leave year
15 years or more	8 hours per pay period

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Sick Leave

Full-time employees accumulate sick leave without limit at the rate of four hours per bi-weekly pay period --104 hours or 13 days per year. Your supervisor may approve sick leave for a scheduled medical, dental or optical examination; or if you are unable to perform your duties because of physical or mental illness, injury, pregnancy, or childbirth.

You must notify your supervisor at the beginning of your scheduled work hours on the first day you are absent. Sick leave must be requested and approved in writing. Sick leave requests for scheduled medical, dental, or optical appointments should always be submitted to your supervisor in advance.

Under some circumstances if your sick leave exceeds three consecutive days, you may be required to provide a doctor's certification with the following information:

- The reason for your absence
- The beginning and ending date of your incapacitation
- If your condition is on-going, the date you will be expected to return to work.

It is your responsibility to provide the required doctor's medical statement; however, under some circumstances your supervisor may excuse this requirement.

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Advance Leave

Advance sick or annual leave may be available after approval by your supervisor and management personnel. Each case will be analyzed individually and recommendations and decisions made after careful consideration. The maximum amount of advance sick leave which may be authorized is 30 days (240 hours). Annual leave may be advanced up to the amount the employee will earn during the current leave year.

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Family Medical Leave

The Family Medical Leave Act (FMLA) of 1993 requires employers to provide up to 12 weeks of unpaid, job-protected leave to employees for certain family and medical reasons. If you have worked at least one year, you may be eligible to request unpaid Family Medical Leave for the following reasons:

- To care for your child after birth, or placement for adoption or foster care
- To care for the your spouse, son or daughter, or parent with a serious health condition
- For your own serious health condition that makes you unable to perform your job

You may elect to substitute your paid leave (e.g. annual leave, sick leave, or donated leave as appropriate) during the period you are on approved Family Medical Leave. A physician's certification is required for request to care for family member with a serious health condition or for your own serious health condition. Ordinarily the employee must provide 30 days advance notice when the leave is "foreseeable."

If you meet the criteria for leave and have complied with the requirements and obligations under the Family Medical Leave Act, you may not be denied family medical leave and will, upon return from Family Medical Leave, be restored to your original or equivalent position.

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Sick Leave for Family Care or Bereavement

The 1994 Family Friendly Leave Act authorizes federal employees to use sick leave for the purpose of adopting a child; to care for a family member who is physically or mentally ill, injured, pregnant, or experiencing childbirth; or to accompany a family member who requires care during medical, dental, or optical examination or treatment. Sick leave may also be requested to make the necessary arrangements pertaining to a death in the family or to attend a funeral for a family member.

A family member is defined as follows:

- Spouse or parents of spouse;
- Children, including adopted children and children's spouses
- Brothers, sisters and their spouses
- Any individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship

If you are a full time employee, you may request up to 13 work days (104 hours) during the leave year provided you maintain a minimum balance of 80 hours of sick leave. A part-time employee or an employee with an uncommon tour of duty may only request the maximum equal to the amount sick leave accrued in a leave year.

If you maintain a minimum sick leave balance of less than 80 hours but more than 40 hours, you may request up to 5 work days (40 hours) during the leave year. A part-time employee or an employee with an uncommon tour of duty may only request a maximum equal to the average amount of sick leave accrued in a work-week.

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Voluntary Leave Transfer Program

Employees who have exhausted all available leave may apply to become a leave recipient under the Voluntary Leave Transfer (VLT) Program. To be eligible to apply for leave donations under the VLT Program, you must have a personal or family medical emergency that place you on a non-pay status for at least 24 hours because of unavailable leave. If you wish to become a leave recipient, you are required to complete an application, submit it through your supervisor for approval and forward the application to the Human Resources Office along with medical documentation which supports the period of time requested and a current leave and earnings statement.

Employees who wish to donate annual leave to a recipient under this program must complete a leave donor application, submit it through the supervisor for approval, and forward the application to the Human Resources Office. The minimum amount donated is one hour and the maximum is no more than one-half the amount of annual leave the donor would be entitled to accrue during the leave year in which the donation is made.

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Leave Bank

In addition to the Leave Transfer Program, the Naval Postgraduate School has established a Leave Bank. To be eligible to receive leave from the leave bank, the employee must be a current member of the bank and must meet the above requirements for the leave transfer program. To become a member of the leave bank, you must donate the minimum amount of leave for your leave category (e. g. four, six or eight hours) during the annual open season. The open season for joining is usually held during August and September.

Employees who wish to donate annual leave to a recipient under the leave bank must complete the leave bank donation application, (which can be obtained at the Human Resources office) submit it through the supervisor for approval, and forward the application to the Human Relations Division.

Employees who are not members of the leave bank may donate leave to a leave bank recipient. The minimum and maximum donation amount restrictions are the same for the Voluntary Leave Transfer Program.

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Leave Without Pay

Leave without pay is approved absence from duty granted upon the employee's request and at the discretion of the department head. Leave without pay is only granted when it is held to be in the Government's interest to do so. Leave Without Pay that exceeds more than one pay period will affect you service computation date.

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Absent Without Leave

If you do not report for duty or secure approval for excused absence you may be charged as Absent Without Leave. Pay is withheld for the entire period of such absence and disciplinary action may be initiated.

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Excused Absence

Excused paid absence without charge to leave is left to the discretion of management. It can be granted for reasons such as blood donations, examinations related to your job, official meetings, or for brief periods of absence or tardiness. The amount of time which may be excused will vary based on the reasons for absence. Tardiness may be excused but absences of 1 hour or more require the employee to be placed in an absent without leave (AWOL) or unexcused absence; or annual leave if requested.

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Court Leave

An employee summoned to serve on a jury or to testify as a witness in a judicial proceeding in a nonofficial capacity, on behalf of a state or local government, is entitled to court leave. When an employee is summoned or assigned by his/her agency to testify in their capacity as a Federal employee, he/she is in an official duty status, not a leave status, and is entitled to regular pay. Any compensation (except travel expenses) received from the court must be turned in to the Comptroller's Office to avoid dual compensation.

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Military Leave

A maximum of fifteen calendar days per year of approved absence with pay is granted to permanent employees who are reservists to serve on active duty with their respective National Guard or Armed Forces Reserve unit.

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Ethics

Communications Systems

Official Use:

- Necessary in government's interest
- Personal communications in emergencies
- Approved personal communications when deployed
- Notify family of schedule change when on official travel

Limited personal use authorized:

- No adverse effect on official duties
- Reasonable duration and frequency
- Serve legitimate public interest
- No adverse reflection on Government
- No significant additional cost to DoD

Privacy

Any official or personal use may be monitored by the Government

- E-mail notes
- Internet searches
- Telephone conversations


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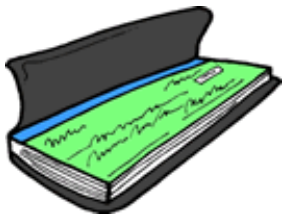
Gifts

What do you do when you may not accept a gift?



1. Decline acceptance
2. Return to donor later if declining on the spot is impractical
3. Pay full market value (not just the amount over $20) and retain

Subsequent reciprocation is not a solution.

Not "Gifts"

- Modest items of food and refreshments
- Greeting cards and times with little intrinsic value, such as plaques, certificates, and trophies
- Loans from financial institutions
- Opportunities and benefits available to the public or a class of employees
- Rewards and prizes to competitors
- Pensions and other benefits from a former employer
- Anything paid for by the Government or by the employee
- Gifts accepted under specific statue

There are 12 Exceptions

As you do your analysis with regard to accepting a gift, remember that even when a gift exception could allow you to accept, it is never inappropriate and frequently prudent to decline a gift offered by a prohibited source or because of your official position.

1. Gifts less than $20, up to $50 per year
2. Discounts and similar benefits
3. You may accept gifts when it is clear that the giving is motivated by a family or personal relationship rather than your official position.
4. Meals, lodging, transportation, other benefits may be accepted under certain circumstances
5. You may accept gifts (other than cash or investment interests) up to $200 as a bona fide award for meritorious public service from an entity that will not be affected by your official performance

6. Travel benefits and free attendance from political organizations
7. Gifts to the President or Vice President
8. Social Invitations from other than prohibited sources
9. Speaking engagements and widely attended gatherings
10. Gifts authorized by supplemental agency regulation
11. Gifts accepted under specific statutory authority
12. Gifts of meals and entertainment in foreign areas

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Ethics Pop Quiz

May Government communications systems be used to?

- ○ Send faxes to advertise the sale of your car?
- ○ Do a 12-minute lunchtime internet search on your gardening hobby?
- ○ Make an off-duty toll-free long-distance call for honeymoon reservations?
- ○ Use DSN to call your friend at DoD installation in Continental United States.

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Gift Exception 1

Gifts less thank $20, up to $50 per year

1. You may accept gifts (other thank cash or investment interests) up to $20 per occasion, if the aggregate market value received from one source under this exception does not exceed $50 a year.
2. You may not pay the amount that exceeds the $20 limit, but may decline any distinct item in order to make the aggregate $20 or less.
3. You are responsible for keeping track of your gifts you receive regarding the $50 limit per year. (Procurement integrity limit is $10)

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Gift Exception 2

Discounts and similar benefits

1. You may accept reduced membership or other fees offered to all Government employees or all military personnel by professional organizations if the only restriction on membership is professional qualifications.
2. You may accept opportunities, benefits, favorable rates, and commercial discounts offered:
    1. to a group in which the membership is unrelated to Government employment (e.g., The Association of Retired Persons)
    2. to members of an organization in which membership is related to Government employment if the same is broadly available to large segments of the public through organizations of similar size, (e.g., The Senior Executive Service Association)
    3. by an entity that is not a prohibited source to a group that is not defined by official Government responsibilities nor favors higher grades (e.g., a community reception honoring returning military personnel)

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Gift Exception 4

Meals, lodging, transportation, other benefits may be accepted when:

1. due to the employment activities of spouse when it is clear that such benefits are not offered because of your official position
2. due to your outside employment activities when it is clear that such benefits are not offered because of your official position
3. customarily provided by a prospective employer in connection with employment discussions. Disqualifications will be required if the performance or nonperformance of your duties could affect prospective employer

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Gift Exception 5

You may accept gifts (other than cash or investment interests) up to $200 as a bona fide award for meritorious public service from an entity that will not be affected by your official performance.

1. Gifts of cash or of value greater than $200 may be accepted if an ethics official determines in writing that is offered under an established program of recognition
    1. awards are regularly mad ore which is funded to ensure awards will be given on regular basis
    2. the selection of recipients is pursuant to written standards

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Gift Exception 8

Social Invitations from other than prohibited sources

1. You may accept food, refreshments, and entertainment, not including travel or lodgings, at a social event attended by several people where the invitation is from a person or entity that is not a prohibited source, and there is no fee charged to any person attending the event.

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Gift Exception 9

Speaking engagements and widely attended gatherings

1. When you are assigned to participate as a speaker or panel member, or otherwise to present information on behalf of the agency at a conference or other event in your official capacity, you may accept an offer of free attendance at the event on the day of your presentation when provided by the sponsor of the event.
2. When there has been a determination that your attendance in your personal capacity is in the interest of the agency because it will further agency programs or operations, you may accept an unsolicited gift of free attendance to a widely attended gathering of mutual interest to a number of parties when provided by the sponsor of the event.
    1. "Widely attended" usually means an event open to at least 20 individuals interested in a given matter.
    2. "Free attendance" includes waiver of fees or the provision of food, refreshments, entertainment, instruction and materials furnished to all attendees as an integral part of the event. IT does not include travel benefits, entertainment collateral to the event, or meals taken apart from the group.
3. Your agency designee (your supervisor) may authorize to accept a sponsor's invitation to an accompanying spouse to participate.

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Gift Exception 10

Gifts authorized by supplemental agency regulation

1. You may accept an unsolicited gift of free attendance from a state, local government, or civic organization for yourself and your accompanying spouse at such an event when there is a community relations interest for your agency (e.g., local special olympics events, high school soccer tournament)
2. You or your dependent may accept an educational scholarship or grant from an entity that does not have interests substantially affected by the performance or nonperformance of your official duties when the DAEO or designee determines the scholarship or grant is:
    1. funded to ensure awards will be given on a regular basis
    2. the selection of recipients is pursuant to written standards

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Gift Exception 11

Gifts accepted under specific statutory authority

1. There are several statues that provide for the acceptance of gifts to individual employees (e.g., honoraria, 5 USC App 501; ship launch, 5 USC 7301; training awards, 5 USC 4111; gifts from foreign governments, 5 USC 7342)
    1. Under the Honoraria rules, 5 USC App. 501, even those DoD employees who aren't allowed to accept honoraria may accept the following if they are related to an appearance, speech or writing given in a personal capacity on a subject unrelated to official duties.
        1. travel expenses
        2. other actual expenses (such as copying and typing costs)
        3. meals and free attendance
        4. written, audio, or video recordings
    2. Gifts related to ship launches and similar ceremonies are allowed , only when attendance is official and approved by the organization head, limited to the following:
        1. Attendance at appropriate functions to the ceremony (dinner, entertainment and related benefits that are not extravagant)
        2. Tangible gift or memento to official participant in the ceremony when value is no more than $100 per family.
    3. Training Awards
        1. An employee may accept
            1. Contributions and awards incident to training in an official capacity in non-Government facilities
            2. Travel and other expenses incident to attendance at meetings when 31 USC 1353 does not apply
    4. Gifts from Foreign Governments
        1. Whenever possible, DoD employees shall decline gifts from foreign governments
        2. Gifts from foreign governments may be accepted to avoid embarrassing or giving offenses to the donor
            1. Gifts of minimal value (currently less than $225) may be retained
            2. Gifts of more than minimal value become the property of the U.S. Government.

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- Holidays and Leave
- Certification Test

Gift Exception 12

Gifts of meals and entertainment in foreign areas

1. If you are assigned to duty in, or on official travel to, a foreign area, you may accept food, refreshments or entertainment in the course of a breakfast, lunch, dinner or other meeting or event provided:
    1. The market value of the gift does not exceed the per diem rate for that area
    2. There is participation in the meeting or event by non-U.S. citizens or by representative of foreign governments or other foreign entities
    3. Attendance at the meeting or event is part of the employee's official duties
    4. The gift is from a person other than a foreign government

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Office of Human Resources
New Employee Orientation
Naval Postgraduate School

Gifts

Limitations to Expectations

There are five limitations on the use of the 12 gift acceptance exceptions:

1. accept a gift in return for being influenced in the performance of an official act
2. solicit or coerce the offering as gift
3. accept from the same or different sources on a basis so frequent that a reasonable person would be led to believe you are using your office for private gain
4. accept a gift in violation of any statue (such as the honoraria prohibition or procurement integrity act)
5. accept vendor promotional training contrary to applicable regulations

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Contact the Orientation Web Site Manager

Office of Human Resources
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New Employee Orientation

Ethics

Government Time

Official Use

-Accomplish mission (includes financial disclosure reports)

Personal Use

- Downsizing
- Non-Federal entities

Non-Federal Entities

1. Reasonable excused absences:
   a. to participate in non-profit professional associations
   b. to volunteer for community support activities and public service
2. Limited use of equipment, administrative support, and official time to prepare papers for professional associations if:
   a. related to employee's duties
   b. DoD derives some benefit
   c. does not interfere with official duties

Information

- Nonpublic information cannot be used for your/another's gain.
- Nonpublic if:
  a. Not available to the general public.
  b. Routinely exempt under FOIA
  c. Protected by statue
  d. Procurement information
  e. Classified information

Government Position

- Endorsements
  - non-federal entity or product
- Fundraising
  - except CFC and Navy/Marine Relief
- Benefits
  - coercion to provide benefit to you/others

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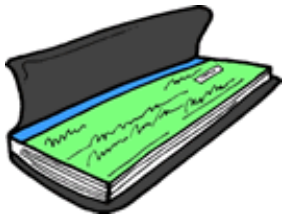
Office of Human Resources
Naval Postgraduate School
New Employee Orientation

What do you do when you may not accept a gift?



1. Decline acceptance
2. Return to donor later if declining on the spot is impractical
3. Pay full market value (not just the amount over $20) and retain

Subsequent reciprocation is not a solution.

Not "Gifts"

- Modest items of food and refreshments
- Greeting cards and times with little intrinsic value, such as plaques, certificates, and trophies
- Loans from financial institutions
- Opportunities and benefits available to the public or a class of employees
- Rewards and prizes to competitors
- Pensions and other benefits from a former employer
- Anything paid for by the Government or by the employee
- Gifts accepted under specific statue

There are 12 Exceptions

As you do your analysis with regard to accepting a gift, remember that even when a gift exception could allow you to accept, it is never inappropriate and frequently prudent to decline a gift offered by a prohibited source or because of your official position.

1. Gifts less thank $20, up to $50 per year
2. Discounts and similar benefits
3. You may accept gifts when it is clear that the giving is motivated by a family or personal relationship rather than your official position.
4. Meals, lodging, transportation, other benefits may be accepted under certain circumstances
5. You may accept gifts (other than cash or investment interests) up to $200 as a bona fide award for meritorious public service from an entity that will not be affected by your official performance
6. Travel benefits and free attendance from political organizations
7. Gifts to the President or Vice President

8. Social Invitations from other than prohibited sources
9. Speaking engagements and widely attended gatherings
10. Gifts authorized by supplemental agency regulation
11. Gifts accepted under specific statutory authority
12. Gifts of meals and entertainment in foreign areas

Contact the Orientation Web Site Manager

Office of Human Resources
Naval Postgraduate School
New Employee Orientation

Gifts

Gifts Between Employees

- You may not give, or solicit contributions from other employees for a gift to a superior.
- You may not accept gifts from an employee receiving less pay, unless there is no subordinate-superior relationship and there is a personal relationship that justifies a gift.

There are a few exceptions to giving or accepting gifts between employee:

1. Item, other than cash, with a value less then $10 per occasion
2. Food and refreshments to be shared in an office
3. Customary personal hospitality provided by a residence
4. Items customarily given in connection with receipt of personal hospitality
5. Transferred leave under 5 CFR 630, expect to an immediate supervisor
6. Special, infrequent occasions

Limitation on use of expectations:

You can never coerce the offering of a gift from a subordinate.

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Naval Postgraduate School
New Employee Orientation

Ethics

Transportation

"Use of Government vehicle shall always be predicated on need, distance and other conditions to justify their use. When an adequate DoD or commercial bus system is available the use of any individual motor vehicle or commercial rental car is prohibited."
DoD 4500.86-R para. 2-5d

Prohibited Use

- Unofficial, personal use
  - Home to work
  - Private social events
  - After-hours official functions from home
  - Personal errands
  - Unaccompanied dependants/visitors

* Mandatory minimum 30 day suspension for Uniform Code of Military Justice violation.

Temporary Duty

Government owned vehicles may be used with on TDY to go to:

- (and from) lodging
- restaurants, PT, barbershop
- religious services
- but not for entertainment
- rental cars not GOVS

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Office of Human Resources
Naval Postgraduate School
New Employee Orientation

Gifts

Special, Infrequent Ocassions

On special, infrequent occassions you may not accept gifts from a donating group if the market value exceeds and aggregate of $300, if any member of the donating group is a subordinate.

Solicitations of voluntary contributions for group gifts to superiors may not exceed $10.

Special, infrequent occassions include events of personal significance such as birth/ adoption, wedding and major illness.

Also included are occasionas that terminate a subordinate/superior relationship, such as retirement, resignation, or transfer out of change of command.

The cost of food, refeshments and entertainment provided for you and your personal guests is not included in the $300 aggregate limit and a speperate collection of voluntary contributions of up to $10 per person may be solicited for such accomodations.

The value of the gifts from tow or more donating groups shall be aggregated and considered from on donating group if you have reason to know that an indvidual who is your subordinate member of each donating group.

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New Employee Orientation

Welcome

- Overview
- NPS Mission
- Other DoD Activities Mission's
- Standards of Conduct
- Employee/Supervisor Responsibilities
- Military Rank Chart
- Base Services
- Ethics
- Gifts
- Occupational Safety and Health
- Equal Employment Opportunity
- Classification of Jobs
- Drug Free Workplace (pdf)
- Employee Development
- Conduct and Discipline
- Employee Benefits
- Performance Appraisals
- Employee Awards
- Local Labor Unions
- Wellness Program
- Holidays and Leave
- Certification Test

Ethics

Pop Quiz

- ○ Since my organization is downsizing, may I use my Government computer during duty hours to prepare my resume?
- ○ May I use my name and title to ask employees to support CFC or Navy/Marine Corps relief?
- ○ May I take a GOV to a fitness center to exercise while on TDY?

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Office of Human Resources
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Naval Postgraduate School

Gifts

Frequent Flyer Benefits

Anything of value that you receive as a direct result of travel at the Government's expense belongs to the Government, including:

- frequent flyer benefits
- discounts on future hotel accommodations
- other benefits that would not have been possible if not for the official travel

This is a rule made by the General Services Administration, in accordance with many opinions by the Comptroller General.

You may keep careful records of which frequent flyer benefits are from office travel and which are from personal travel. The benefits received due to personal travel are yours to use any way you wish.

You may not use benefits resulting from official travel after you retire. They still belong to the Government.

You may use frequent flyer benefits to upgrade your accommodations to anything other than first class airline seats.

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Contact the Orientation Web Site Manager

Staff Development Advisory Committee

The Staff Development Advisory Committee's (SDAC) purpose is to provide a framework for career and professional development opportunities for all levels of core and contingent staff. This will be accomplished through individual assessment, learning opportunities and support. The goal is increased value and competencies, operational excellence and continuous improvement for both individuals and NPS.

View our entire charter here (PDF).

SDAC News, Information & Events

- **Staff Development Advisory Committee Reports Findings** - The Staff Development Advisory Committee (SDAC) presented the survey findings in detail at an All Hands presentation, March 13, 2008. The presentation was followed by a brief question and answer period.
  Read more...
- **Taking a Closer Look at Career Development**

PROFESSIONAL ORGS

CLUBS

VOLUNTEER

Needs (PDF) As a dynamic component of the Provost's vision for NPS, the Business Process Implementation Task Force established the Staff Development Advisory Committee (SDAC) in spring 2007, and charged the group with exploring how it might augment and support staff learning opportunities at NPS. Read more...

- **Professionalism Workshops** (PDF)
  Earlier this year, many NPS staff members attended a workshop on Professionalism. The decision to offer this workshop is the result of the work of the Business Practices Task Force and is further explained in the attached letter. Read more...

Survey Results Available Now!
View the survey results presentation

Contact the SDAC

If you have questions or would like more information, please contact us via email at SDAC@nps.edu.

Naval Postgraduate School

Staff Development Advisory Committee

Spring 2007

Purpose:

The Staff Development Advisory Committee's (SDAC) purpose is to provide a framework for career and professional development opportunities for all levels of core and contingent staff. This will be accomplished through individual assessment, learning opportunities and support. The goal is increased value and competencies, operational excellence and continuous improvement for both individuals and NPS.

Staff Development is defined as the strategic investment in training, education and assimilation into NPS, of the School's core and contingent individual contributor and management staff employees, in support of the NPS mission and goals, and in alignment with employees' specific job requirements and career goals.

The Committee is a consensus-driven forum. The input from staff and the subsequent recommendations generated by this Committee are shared widely on campus with staff to ensure broad-based inclusion and involvement at all levels of NPS.

Charge:

The BPTF established the SDAC as a standing committee. The charge is to raise awareness among the staff about the impact continuous improvement can have on their careers and to provide a framework for staff to achieve their own professional development and career goals.

The objectives of this charge are: (1) improved morale and performance by staff in their current jobs, (2) a workforce better prepared to move into jobs with greater or new responsibilities, and (3) a more productive, versatile and nimble workforce for NPS.

With these 3 objectives in mind, the committee's work may include the following actions:

1. Collect input from employees, managers and senior leadership regarding:

a. current training needs, and
b. expectations about career management and development support.

2. Provide the following tools to the NPS workforce:
    a. A continuously updated menu of learning resources for specific jobs, and
    b. A career development program that meets the needs of a majority of staff.

    Career Development is defined as a combination of the employee's view of upward mobility, the supervisor's view of motivation and retention, Senior Management's view of succession planning and the Navy's view of NSPS.

Membership:

Membership of the Staff Development Advisory Committee is representative of the campus-wide workforce.

Responsibilities:

The Committee meets bi-weekly, and periodically updates the Business Processes Implementation Task Force. The Committee reaches out to the campus-wide workforce through the NPS Intranet, the campus newspaper, the SDAC email box, live forums, focus groups and surveys.

Staff Development Advisory Committee

Staff Development Advisory Committee Reports Findings

The Staff Development Advisory Committee (SDAC) presented the survey findings in detail at an All Hands presentation, March 13, 2008. The presentation was followed by a brief question and answer period.

- **Click here to view the Survey Results presentation (PPT)**

Under the direction of the Provost, the SDAC has collected data from the staff through interviews, focus groups and an online survey to ascertain people's opinions and ideas surrounding staff development. 231 staff members completed the online survey.

The SDAC recently presented the findings to the President, Provost and the Chief of Staff and discussed the possibilities for improving employee engagement through training and education. The SDAC will continue to communicate the results of the findings through an All Hands presentation and meetings with possible stakeholder groups across the University. The SDAC will submit recommendations to the President, for review and approval within the next month or so. The approved recommendations should improve employee engagement as well as enhance the development and education of the NPS staff.

Update NPS

Secondary Report

Taking a Closer Look at Career Development Needs

As a dynamic component of the Provost's vision for NPS, the Business Process Implementation Task Force established the Staff Development Advisory Committee (SDAC) in spring 2007, and charged the group with exploring how it might augment and support staff learning opportunities at NPS. Committee members Toni Dickenson, Mike DiFranco, Jodie Dodge, Megan Heath, Robbie Johnson, Ben Roberts, Liza Rosa, Chair Sue Dooley and Advisor Sheila Dominguez, an HR/OD Consultant, developed a charter and a mission statement:

To raise awareness of career development opportunities and to provide a framework to continuously improve individual and operational excellence at the Naval Postgraduate School.

As its initial project, the SDAC has decided to conduct a Staff Development survey in October. To determine the wants and needs of campus groups, and to understand the challenges that the committee will need to consider when developing its menu of services, Advisor Sheila Dominguez suggested that the SDAC research the formats of various Career and Professional Development programs, and how other private and governmental organizations have collected input from their respective workforces. Fran Horvath, Director of Institutional Research at NPS, also gave the group input on the best methods for collecting data.

Career development services and programs are established based upon a person's position within an organization:

- **Employee**: The acquisition of knowledge, skills and experience as part of a plan or curriculum, in order to grow in a career
- **Supervisor:** Internally or externally provided services or programs that may help to motivate employees and to retain good workers
- **Management:** A tool to help management identify which employees have the right skills to meet the current and future challenges of the organization
- **Human Resources**: A system that is integrated with the organizations' other systems, such as NSPS, job postings, EEO, etc., to enhance the career progress of employees, to retain good performers and/or to help the organization become an "employer of choice"

The services offered through career development programs cover three basic levels:

- **One:** Employee training, to support a person's current job, with no formal ties to either departmental or organizational goals
- **Two:** Training needed for job growth or promotion within a department or organization
- **Three:** Career development program(s) as part of the organization's strategic plan, integrating both the needs of the organization to have skilled employees prepared to assume new responsibilities and the needs of the individual to advance in a career that is personally fulfilling

The SDAC recognizes that there are many aspects to a Career Development program, and their intention is to develop an effective and successful one at NPS. You can help them achieve that by completing the Staff Development survey when it is distributed in October!

To contact the SDAC, email them at: sdac@nps.edu.

Update NPS

For: In Brief
CS Prof. Bret Michael and his colleagues are finishing a technical report that highlights multiple NPS research projects funded by and in support of the Missile Defense Agency.

For: Announcements
Tom Hazard, former Director of the Office of Continuous Learning at NPS, is now the Director of the National Capital Region, headquartered in Washington, DC.

COL Ty Seidule from the the US Military Academy just began a one-year teaching fellowship in the NSA Department

New faculty - NSA: Scott Siegel, Sophal Ear and Clay Moltz

Glen Woodbury has been recently been named Director of the Center for Homeland Defense and Security

Hires – August 2007:
Rebekah K. Dietz, Research Associate
Michael Edelen, Office Automation Clerk
Dennis Hocevar, Visiting Research Professor
Sarath Menon Research Professor of Mechanical Engineering
Lisa Phillips Administrative support Assistant
Lillian Ramirez, Transportation Assistant
Chong Wang Assistant Professor of Finance

Update NPS
Calendar Events

September 2007
September 21 **Dr. Delores Etter**, Assistant Secretary of the Navy for Research, Development and Acquisition, Graduation Speaker. POC: Protocol, x2466
September 21 **Summer Graduation Ceremony -** View Schedule
September 24 – 25 **Mrs. Mary Margaret Graham**, Deputy Director of National Intelligence for Collection. Visit with NPS students and faculty, deliver SGL to student body. POC: CAPT(ret) Robert Simeral x3276
October 2007
October 4 **Rear Adm. Victor See**, USN, Commander, SPAWAR Space Field Activity, Attend CAPT. Al Scott's Retirement, POC: Protocol x2466
October 8 **Columbus Day (Holiday)**
October 22 – 24 **Partnership for Peace Conference**, POC: Mr. John Feely, x3085
October 25 – 26 **CNO DFP MDA Workshop**, POC: Cindy Kohatsu x2564
October 30-November 1 SIGS will host a three-day Homeland Defense and Civil Support Experiment for NORTHCOM

August 29, 2007

Colleagues,

This is your invitation to attend a workshop on Professionalism. The impetus behind this workshop came out of the Provost's *Ad Hoc* Committee on Business Practices. If you have not had a chance to read the report, the report is posted on the Provost's website and sets the stage for a number of initiatives already undertaken or planned for later this year next (http://intranet.nps.edu/Code01/documents/Business_Practices_Report-FINAL.pdf).

Since the report was completed, the Provost established a Task Force to oversee the implementation of the report recommendations. During the course of both the Committee and Task Force's work, we had a great deal of discussion about the need to rededicate ourselves to serving our academic mission – how best to do that, how to demonstrate an institutional commitment to service, and how to support principles of profession management practice. We decided that reaching consensus about these issues within our NPS community was an important first step. To that end, we engaged Ms. Sheila Dominguez, a local human resources consultant (and recent GSBPP Lecturer) to facilitate our campus conversations about professionalism and to provide training based on best practices in other organizations.

We have an important opportunity to rededicate ourselves to standards of professionalism and to think about modeling that behavior for ourselves and the people with whom we work most closely on a day-to-day basis. This workshop is a chance to think about strategies we might use throughout the year to remind ourselves of how to reinforce professionalism within our organization -- modeling professionalism personally, and actively showing others how professionalism can be promoted, rewarded, and sustained throughout NPS.

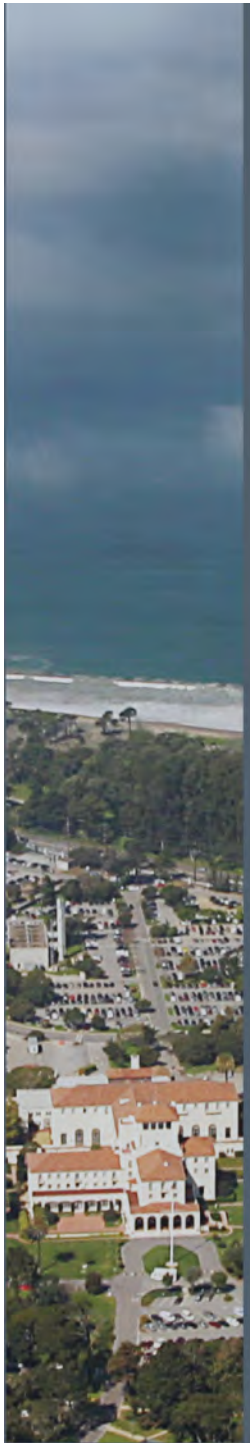
We look forward to hearing from you about how things go at the workshop and perhaps suggestions about things we might employ going forward. Thank you again for your participation!

Sincerely,

Business Practices Implementation Task Force

Dr. Julie Filizetti, chair
Ms. Terri Brutzman
Dr. Christine Cermak
Dr. Gil Howard
Ms. Danielle Kuska

Ms. Megan Reilly



NAVAL
POSTGRADUATE
SCHOOL

Employee Survey Results

All Hands Meeting
(Complete Set of Slides for Website)

March 13, 2008

Staff Development Advisory Committee

NAVAL POSTGRADUATE SCHOOL

Employee Survey Description

- In October 2007, a survey was sent out by the Staff Development Advisory Committee (SDAC) to all NPS Administrative staff, Academic support staff, and Contractors.
- Approximately 350 NPS Administrative staff and Academic support staff
- The survey elicited input about one's training and professional development desires, possible obstacles to achieving professional growth, and what one would be willing to participate in if it was available.
- Supervisors were asked about training for their employees and how they would support a Staff Development Program.

Employee Survey Description

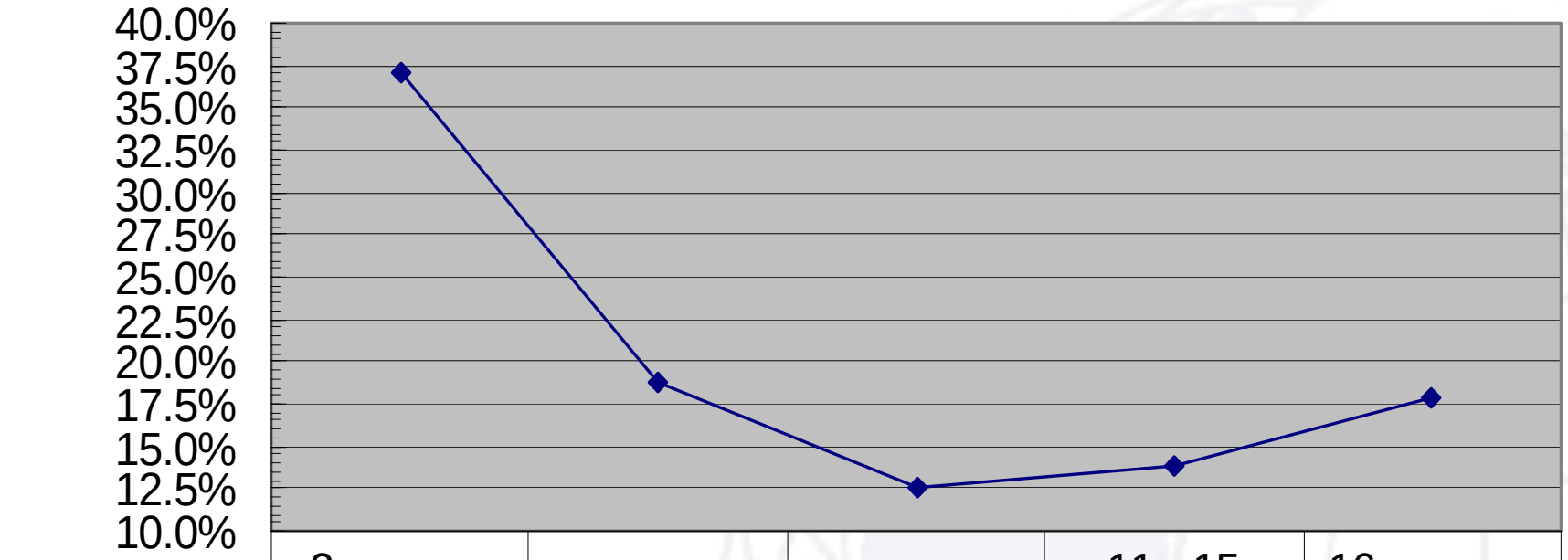
- Only data from those who filled out the survey completely was included
- We received input from 231 on training needs, obstacles to growth, and readiness to participate
- We received input from 47 supervisors about supporting a Staff Development Program

Employee Demographics

- 37% have worked at NPS for 2 years or less
- 48% have been in their current position and department for 2 years or less
- Approximately 40% of staff are 42 years old or younger
- 39% are over 50 years old

Employee Demographics

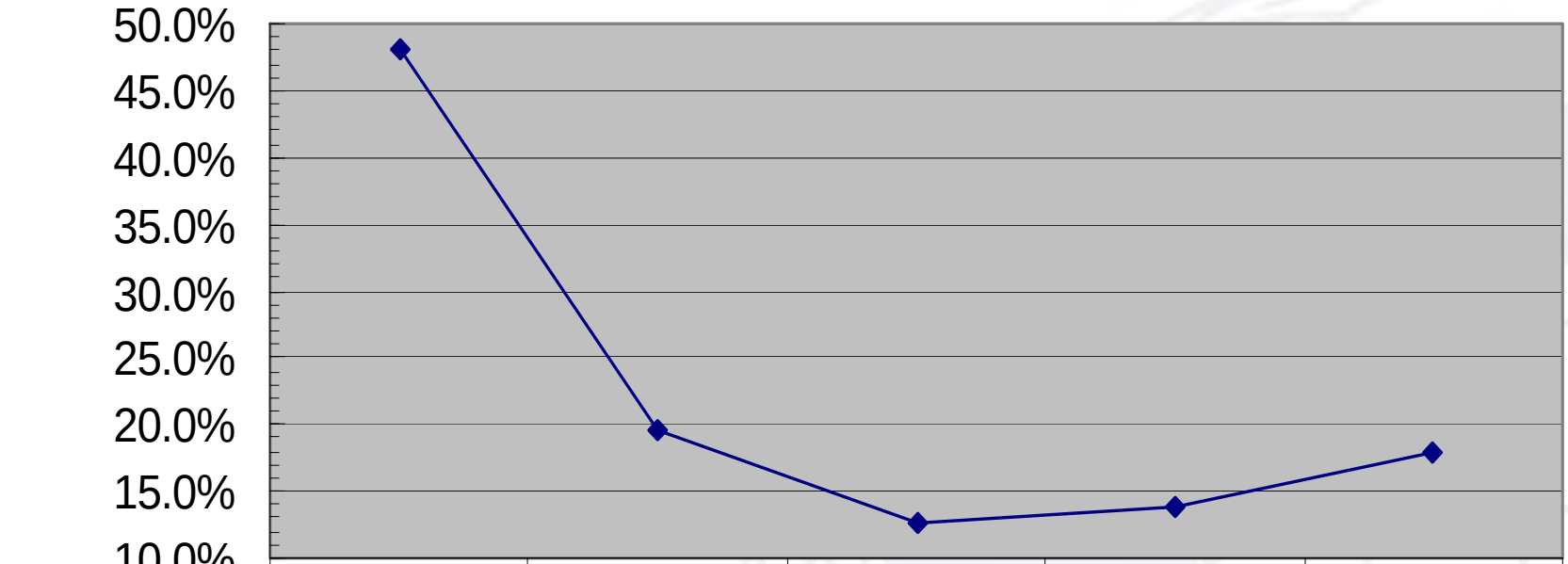
Years of Service at NPS



	2 years or less	3 - 5 years	6 - 10 years	11 - 15 years	16 or more years
Series1	37.0%	18.7%	12.6%	13.9%	17.9%

Employee Demographics

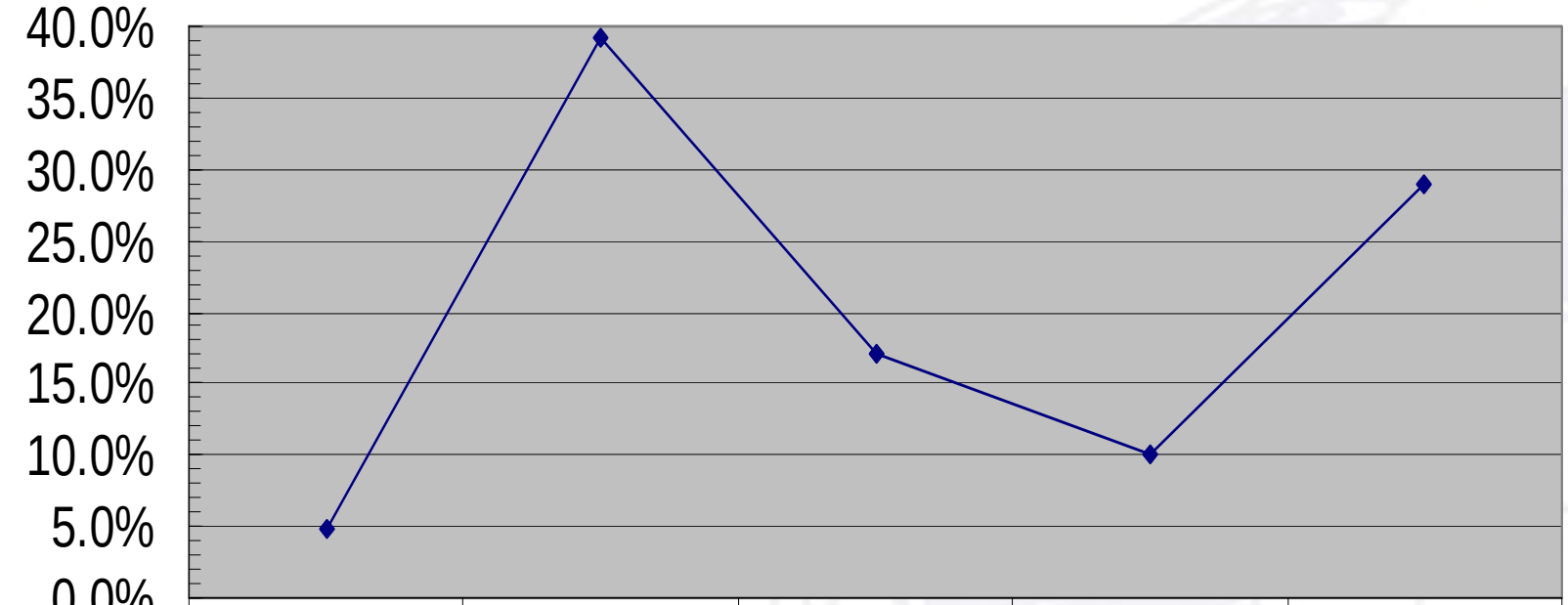
Years of Service in Current Department



	2 years or less	3 - 5 years	6 - 10 years	11 - 15 years	16 or more years
Series1	48.0%	19.6%	12.6%	13.9%	17.9%

Employee Demographics

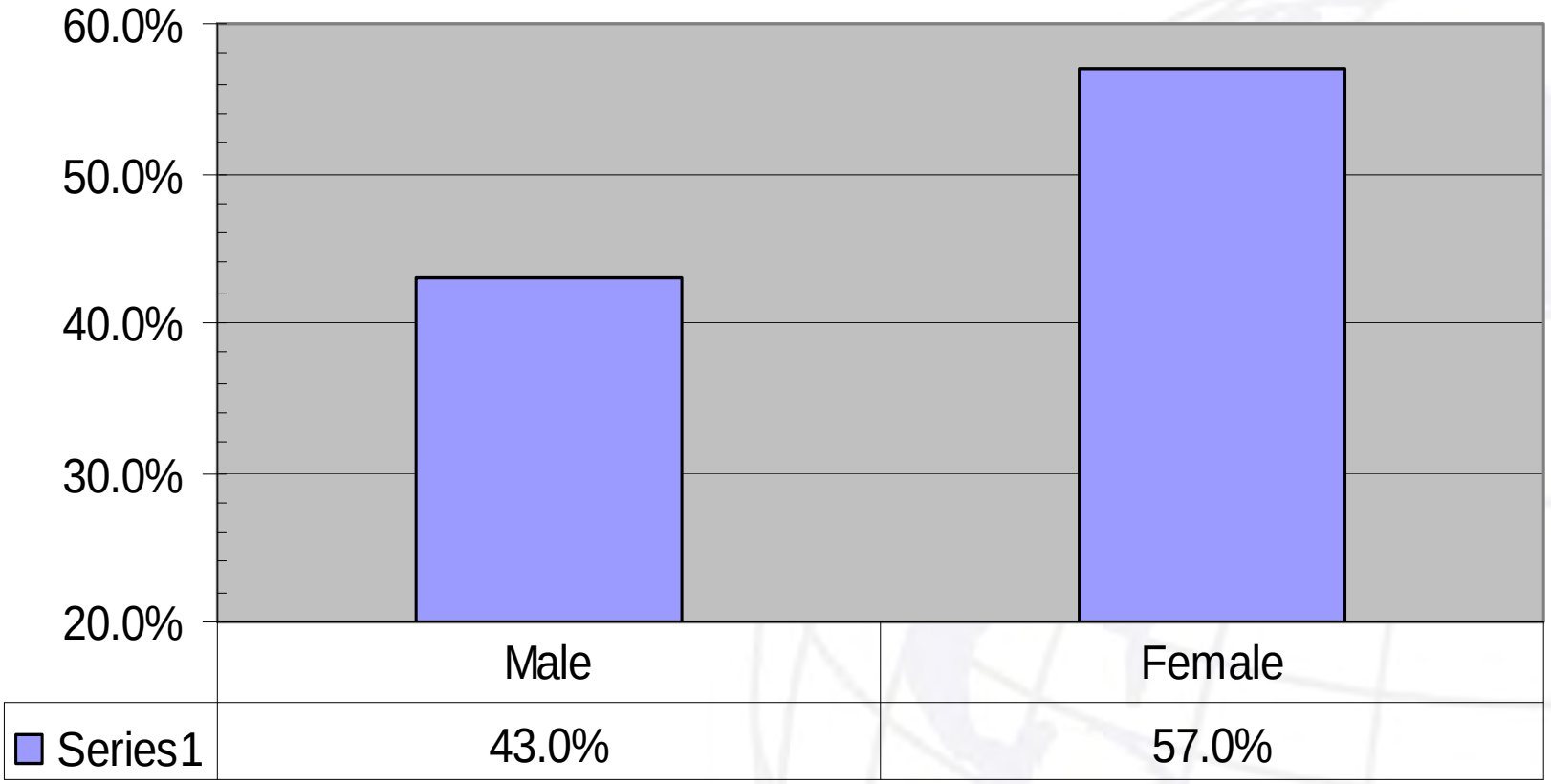
Educational Level



	High School or GED	Some post High School coursework	Undergraduate Degree	Some postgraduate coursework	Masters Degree or higher
Series1	4.8%	39.2%	17.0%	10.0%	29.0%

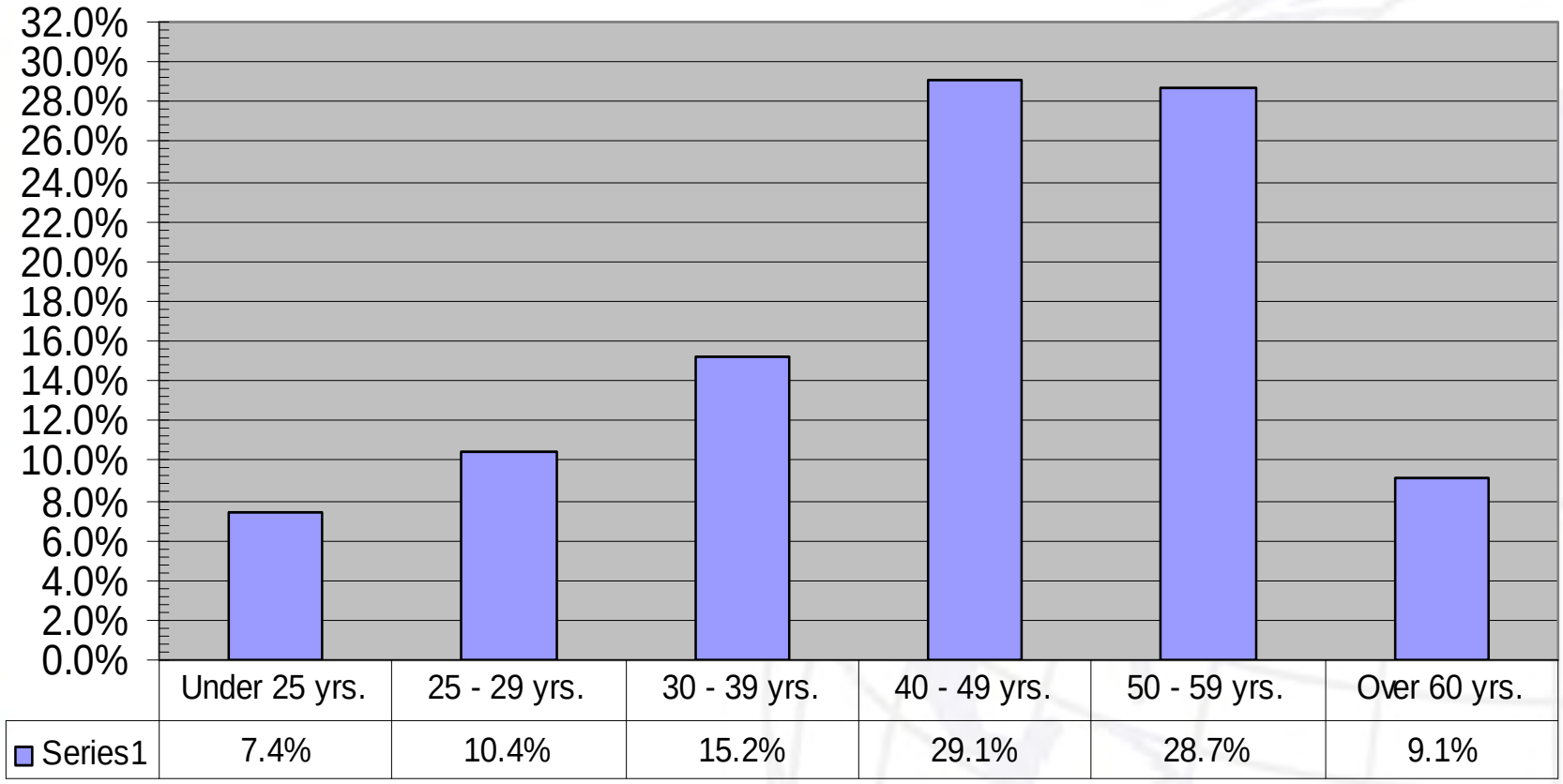
Employee Demographics

Gender



Employee Demographics

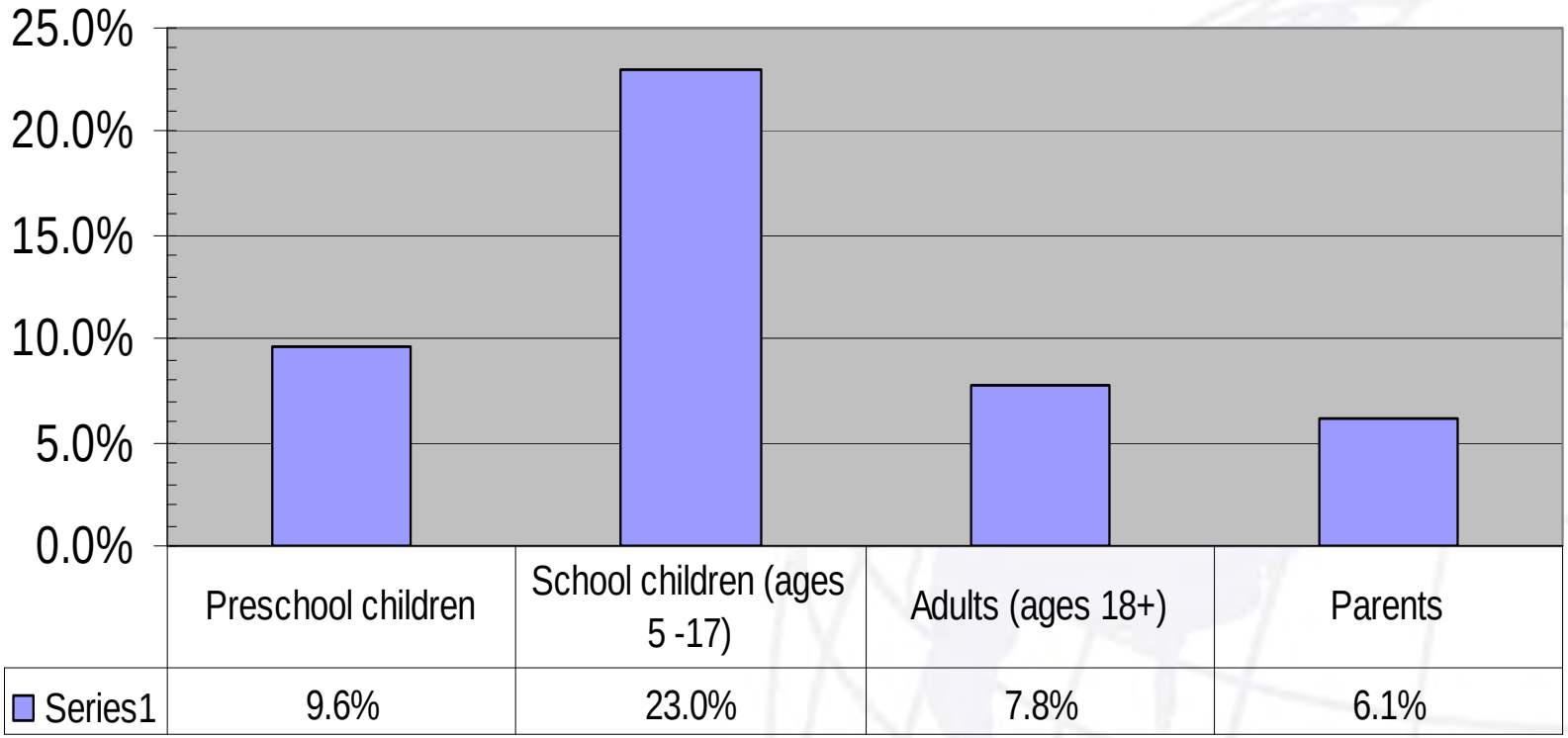
Age Groups



	Under 25 yrs.	25 - 29 yrs.	30 - 39 yrs.	40 - 49 yrs.	50 - 59 yrs.	Over 60 yrs.
Series1	7.4%	10.4%	15.2%	29.1%	28.7%	9.1%

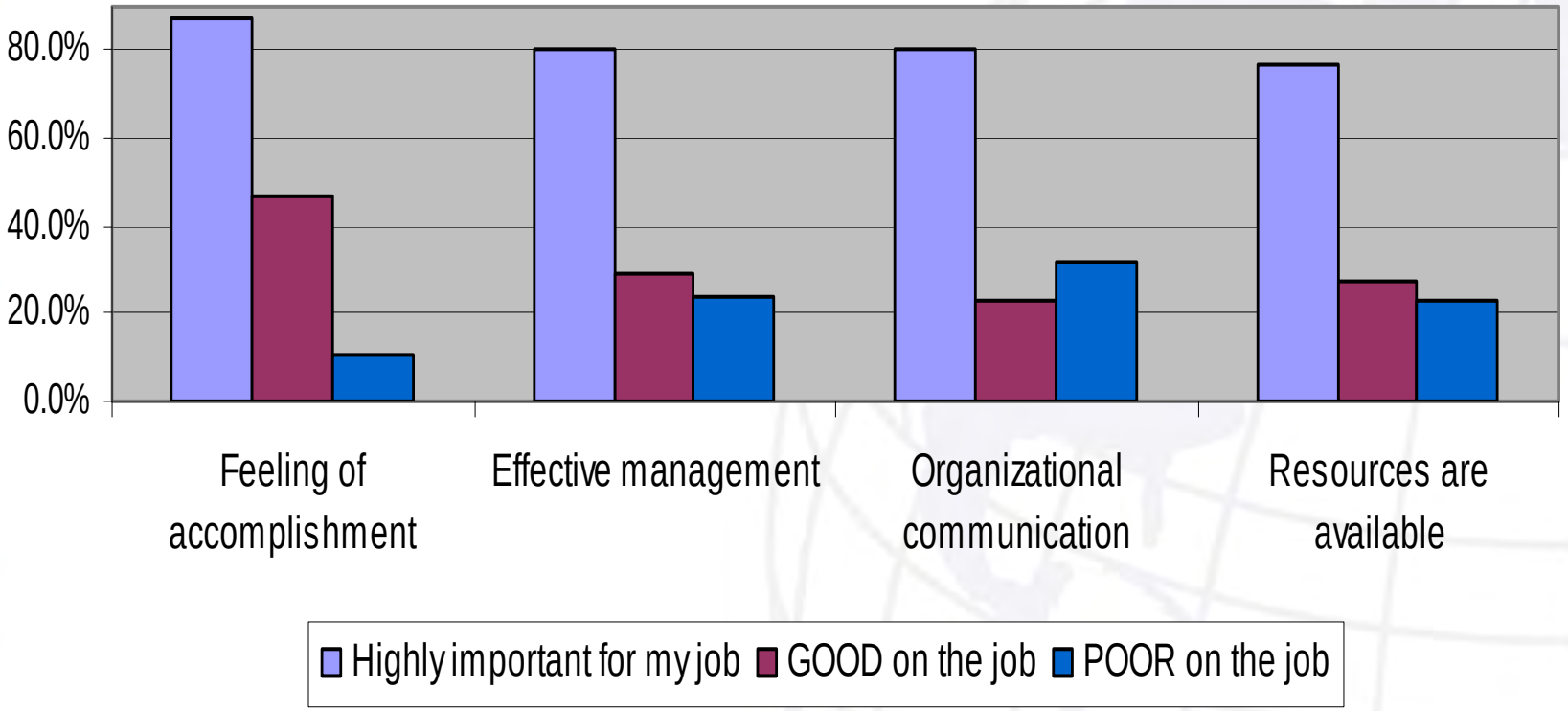
Employee Demographics

39% Provide Primary Care



Work Environment

- Work Environment factors important to respondents and the degree to which those factors are fulfilled at work



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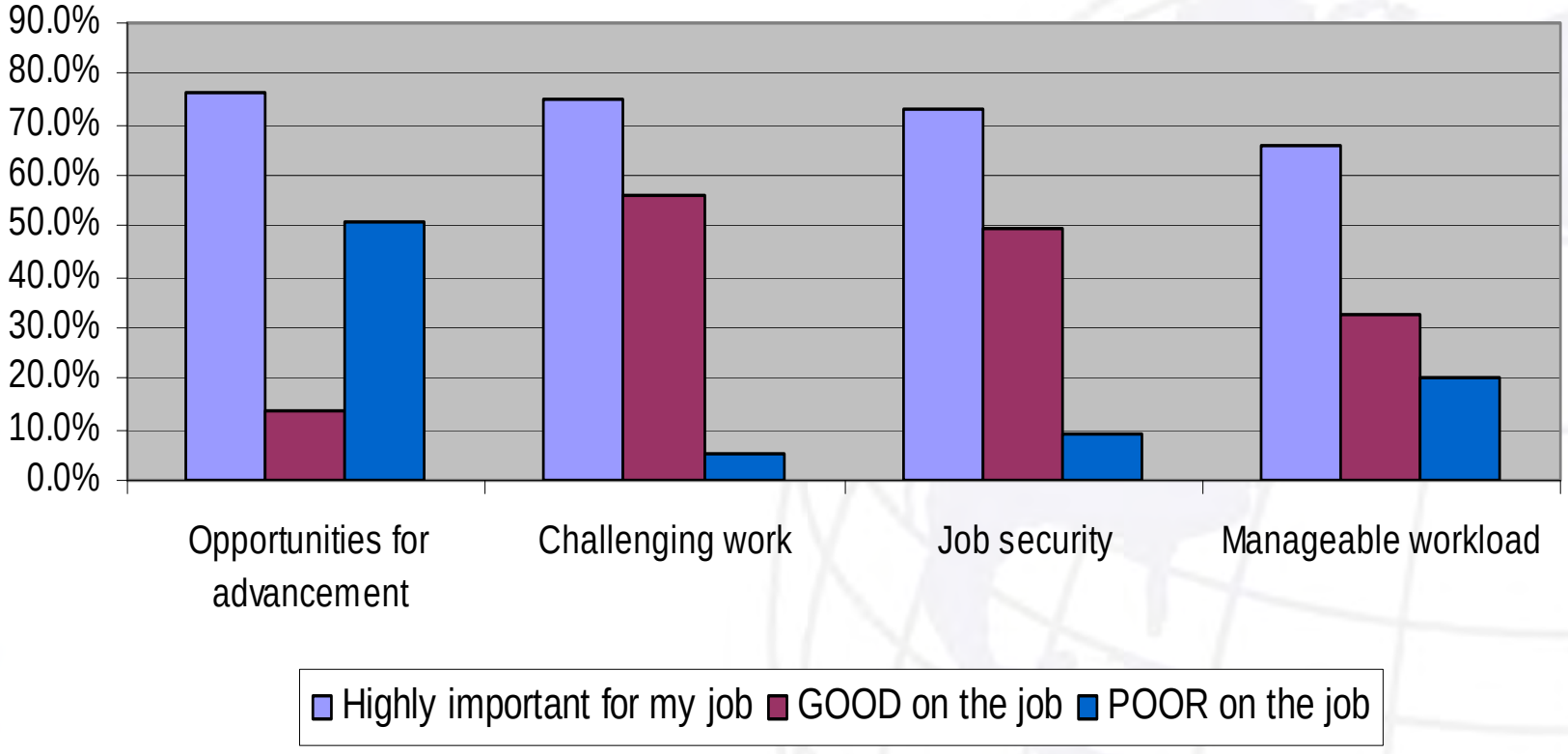

Work Environment

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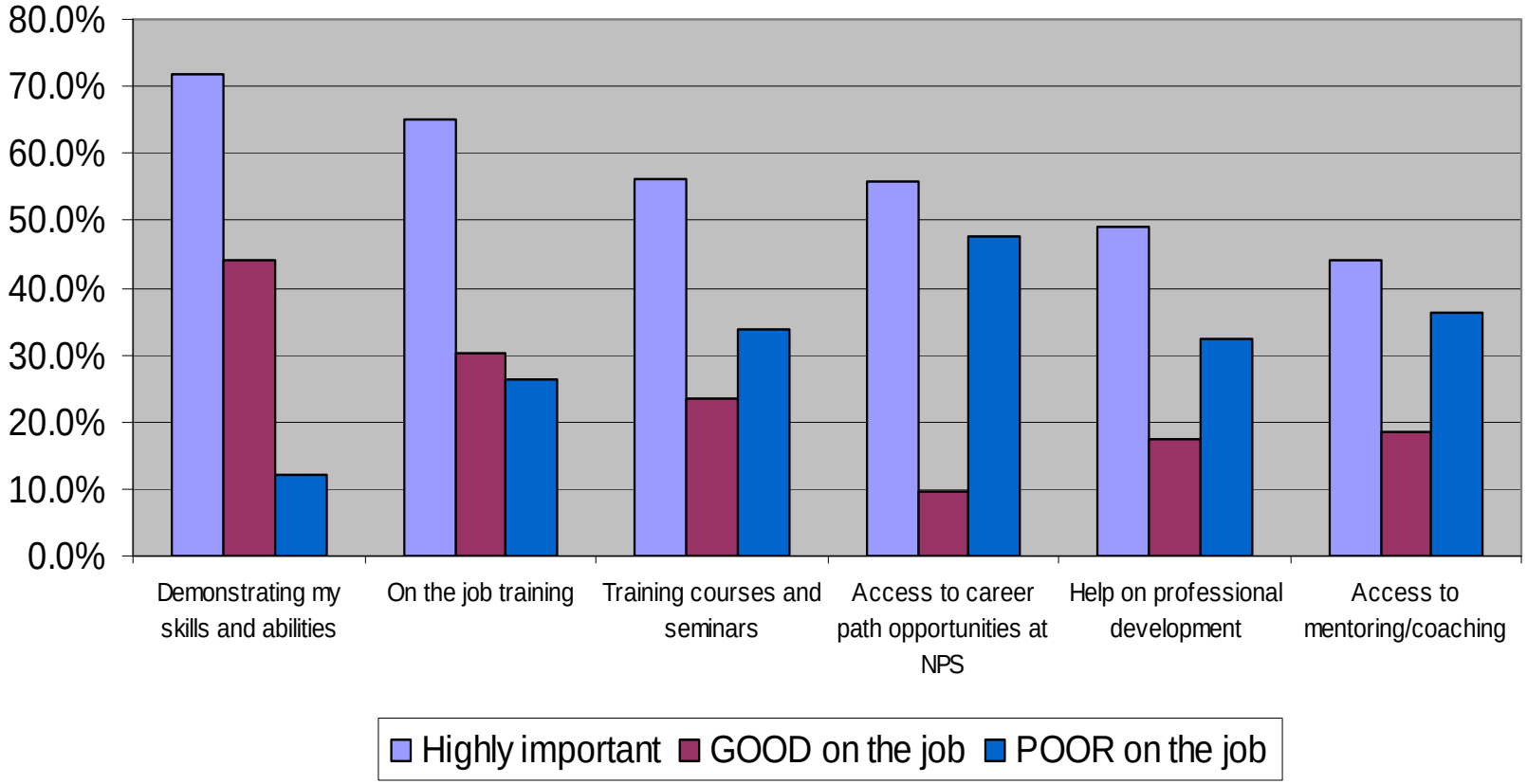
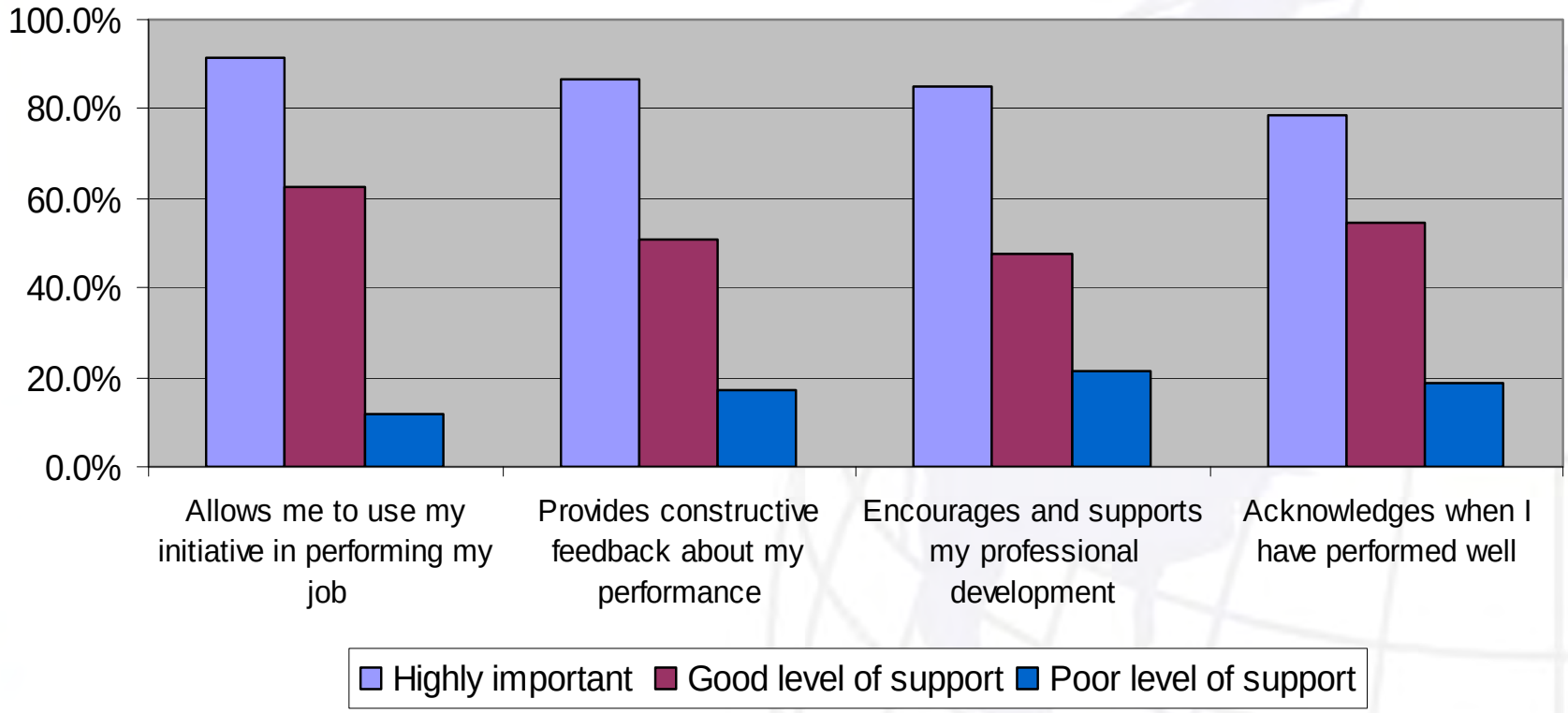


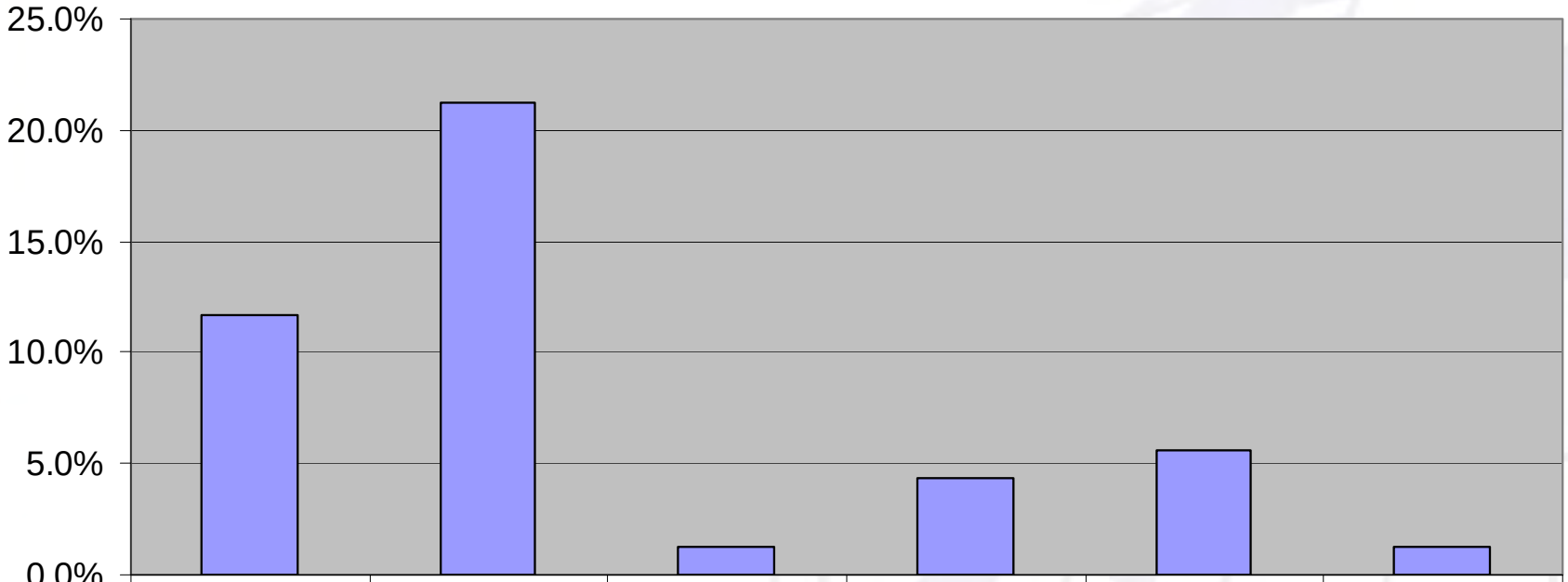
Work Environment

- Importance of management support and the degree to which those factors are fulfilled



Work Environment

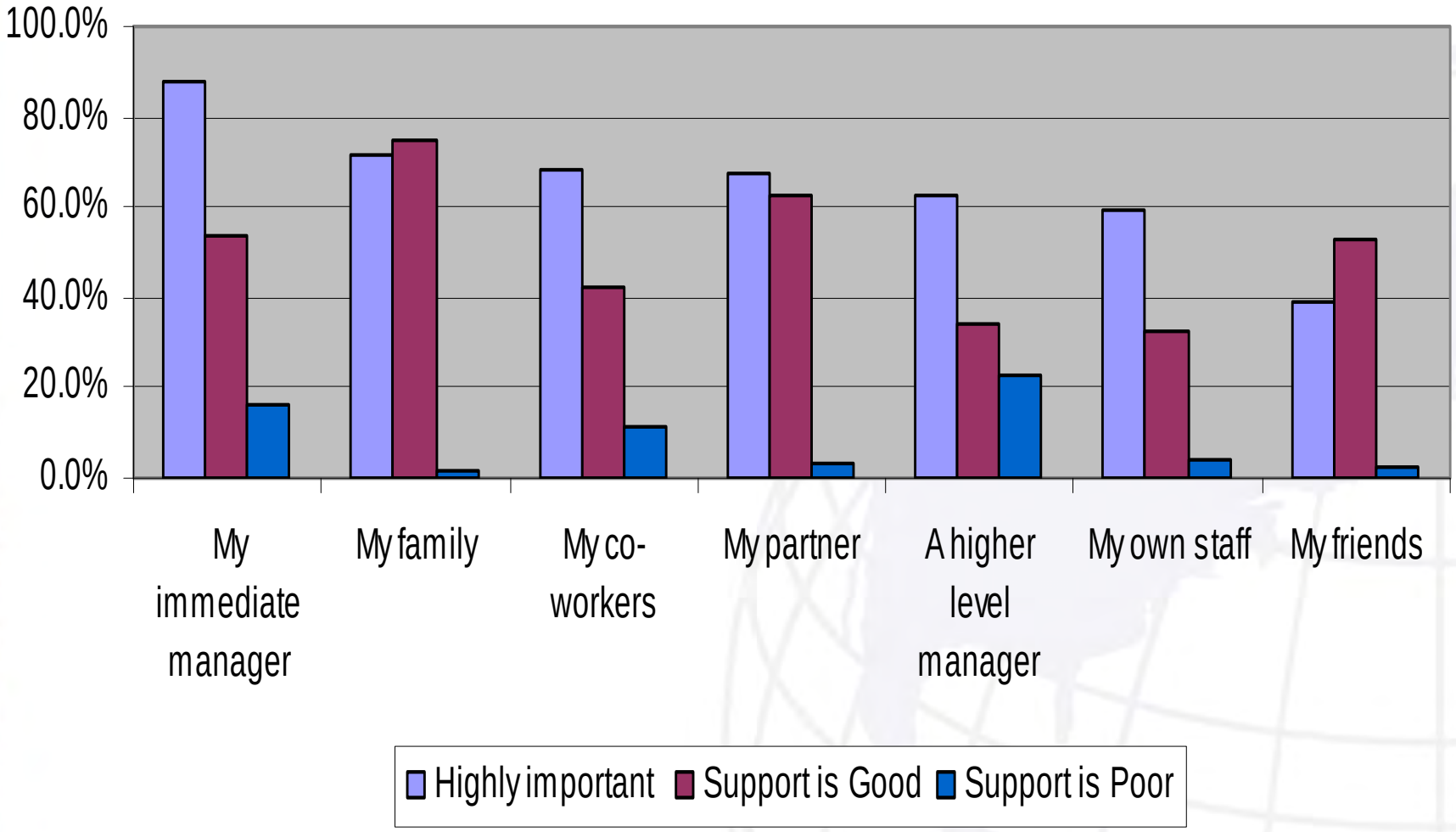
- Other factors that have hindered my career growth



	Workload too great	Poor communication/quality of dept.	Poor leadership from Mezanine	Dept. co-w orkers: negative attitudes, non collaborative	Poor job design w ith no evidence of a career path	No money available for training and development
Series1	11.7%	21.2%	1.3%	4.3%	5.6%	1.3%

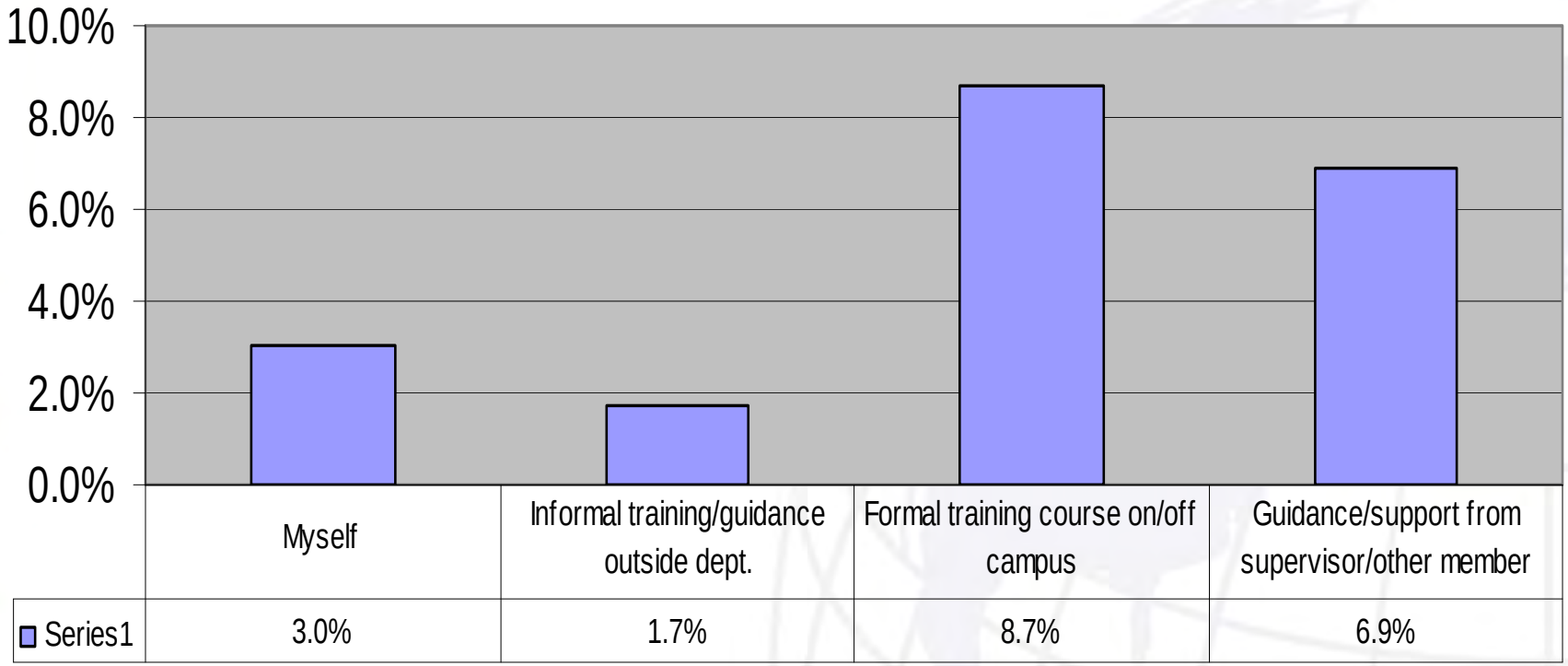
NAVAL POSTGRADUATE SCHOOL

Support for Career Growth



Support for Career Growth

- Other factors that have helped in my career growth

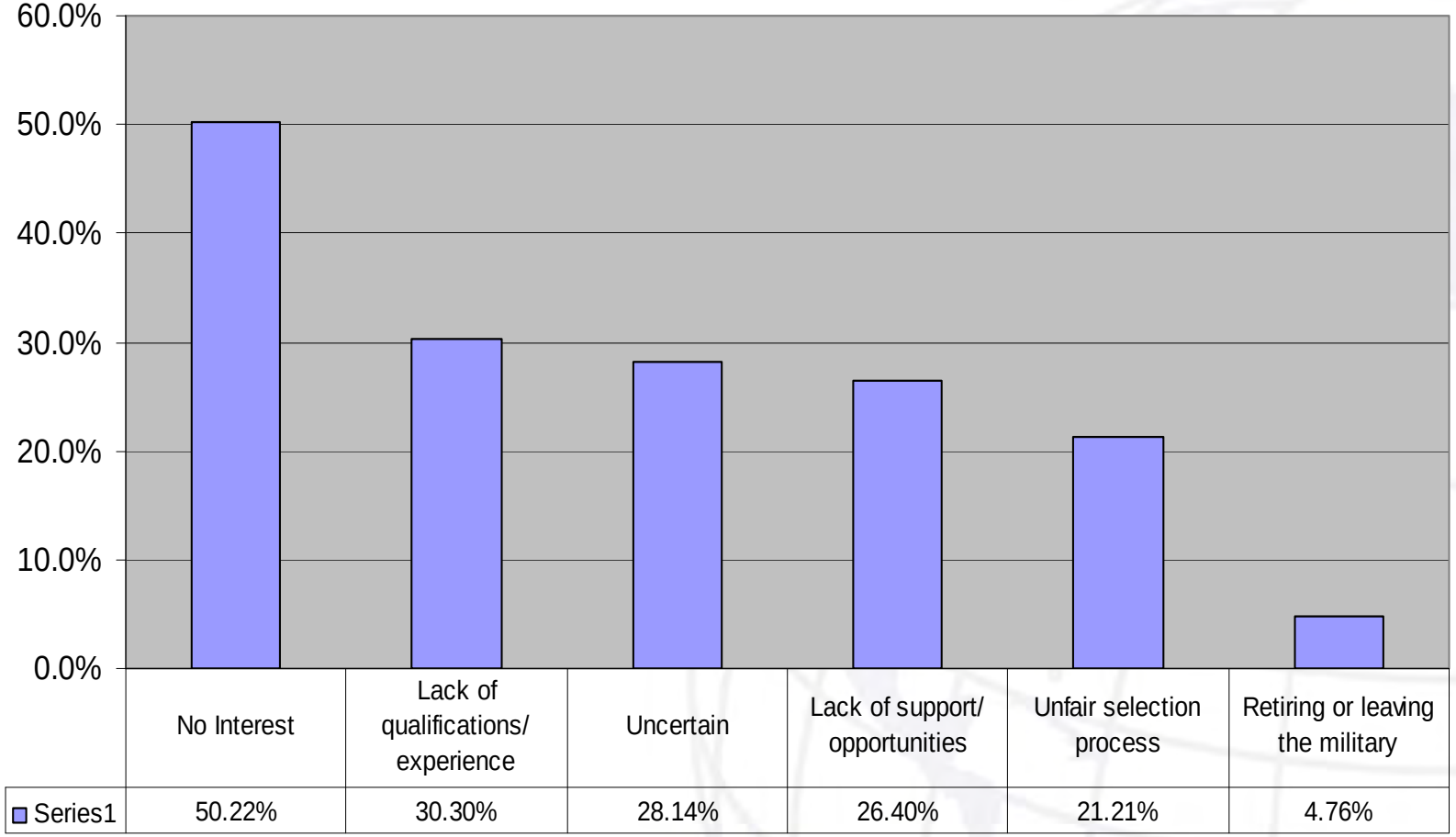


Workforce Mobility

- 49% of respondents are passively or actively looking for another position either internally or externally
- 44% said they will leave NPS if they must in order to further their careers.
- A 2006 SHRM survey indicated that approximately 75% of workforce were passively or actively looking for another position

Reasons for Not Applying

- What stops staff from applying for other positions at NPS



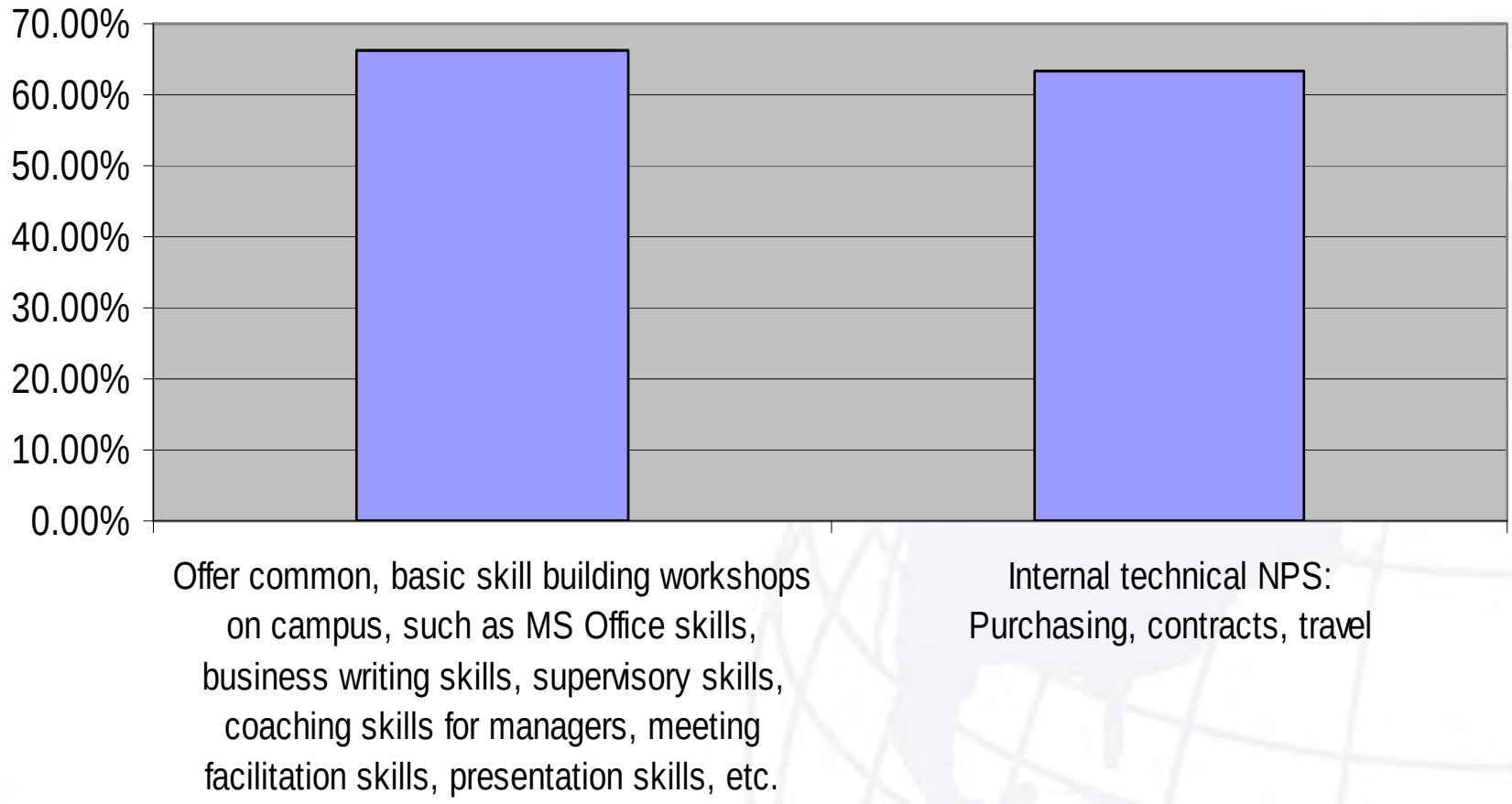
	No Interest	Lack of qualifications/ experience	Uncertain	Lack of support/ opportunities	Unfair selection process	Retiring or leaving the military
Series1	50.22%	30.30%	28.14%	26.40%	21.21%	4.76%

What Staff Are Willing To Do

- 40% would take courses outside of work hours and pay for courses themselves, if their managers could be flexible with scheduling.
- 55% would take courses outside of work hours if their manager paid for them.
- 70% would take courses if paid for by employer and courses were held during work hours.

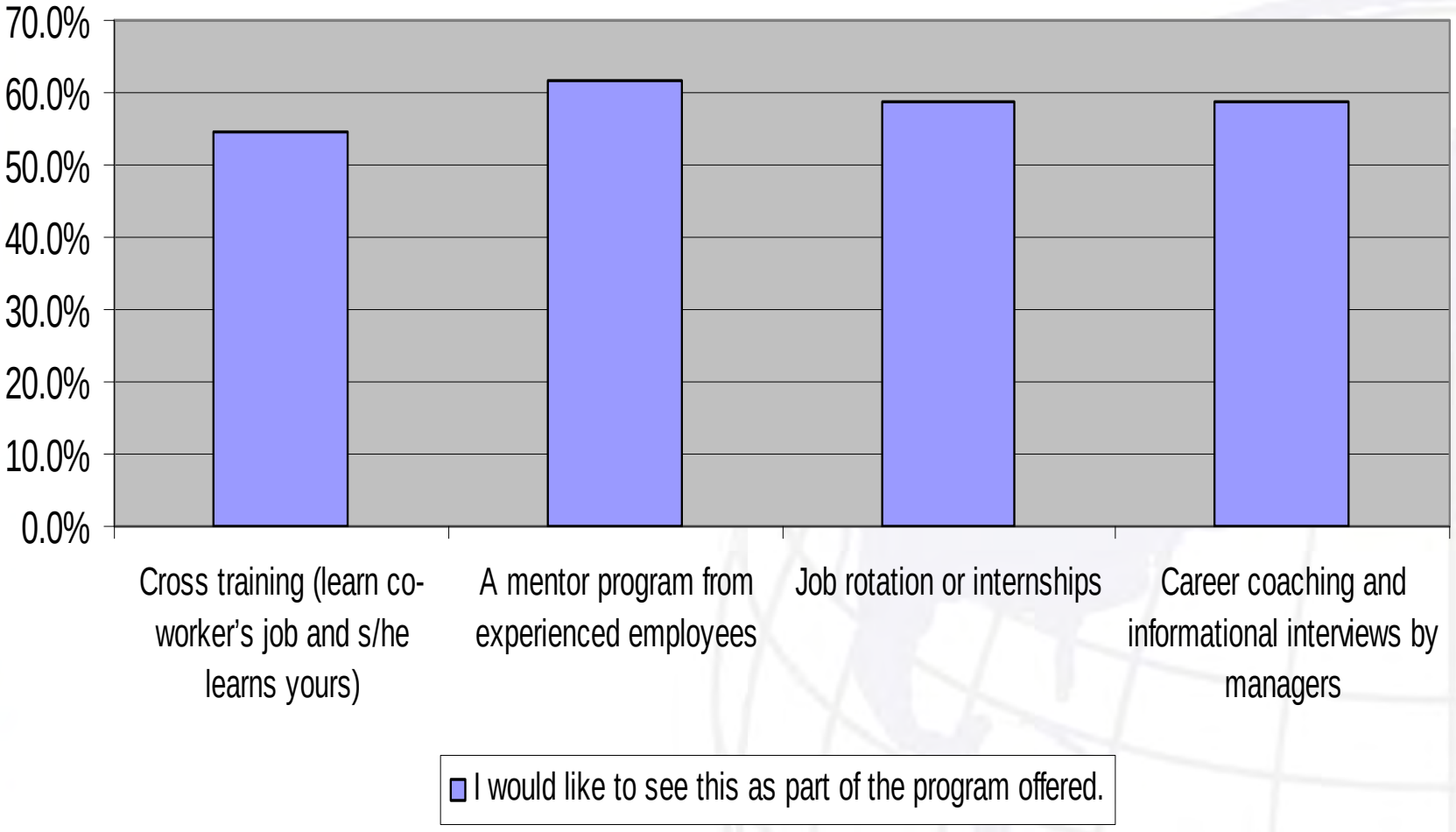
Program Design Ideas

Courses

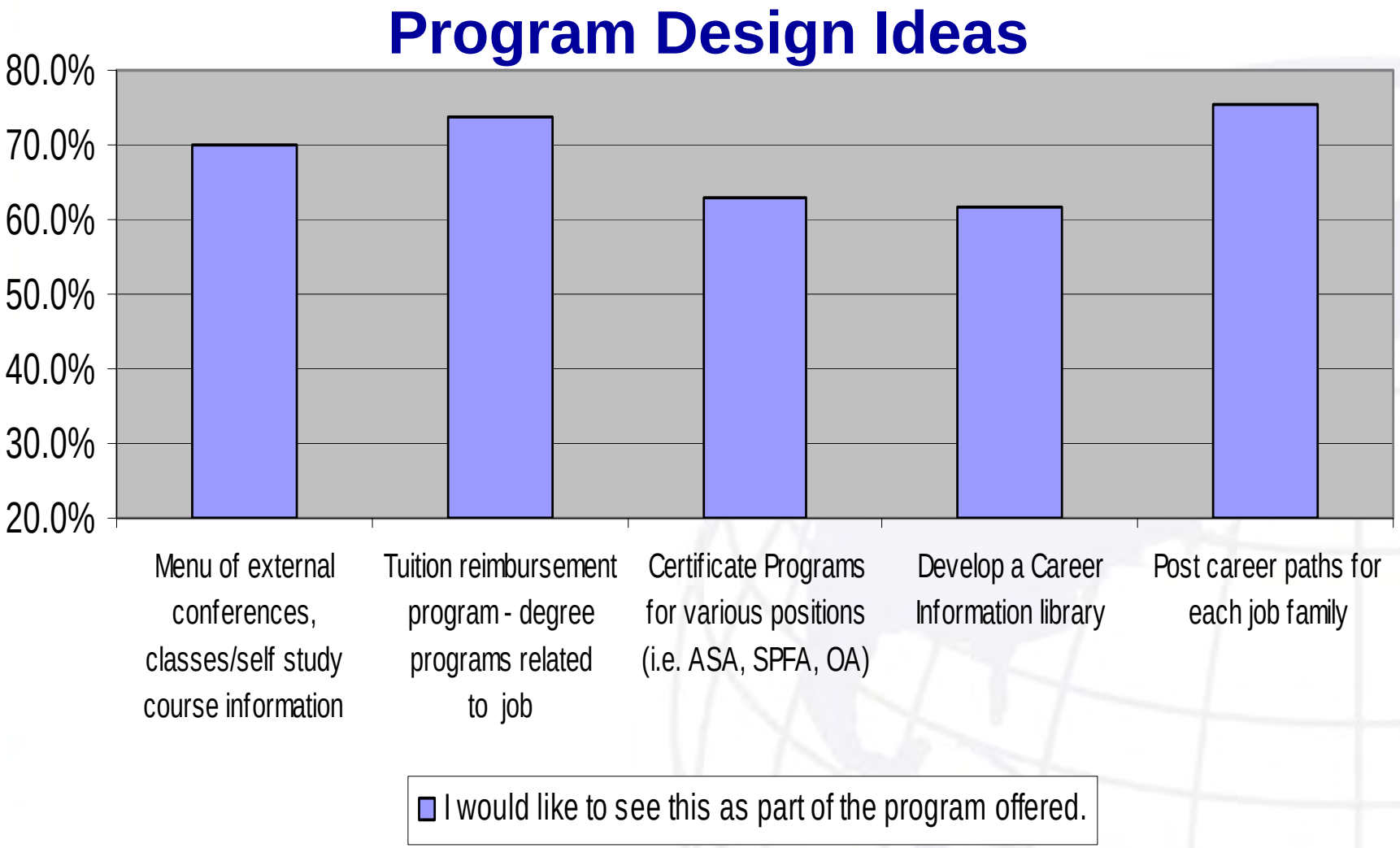


Program Design Ideas

Ways of Learning from Each Other

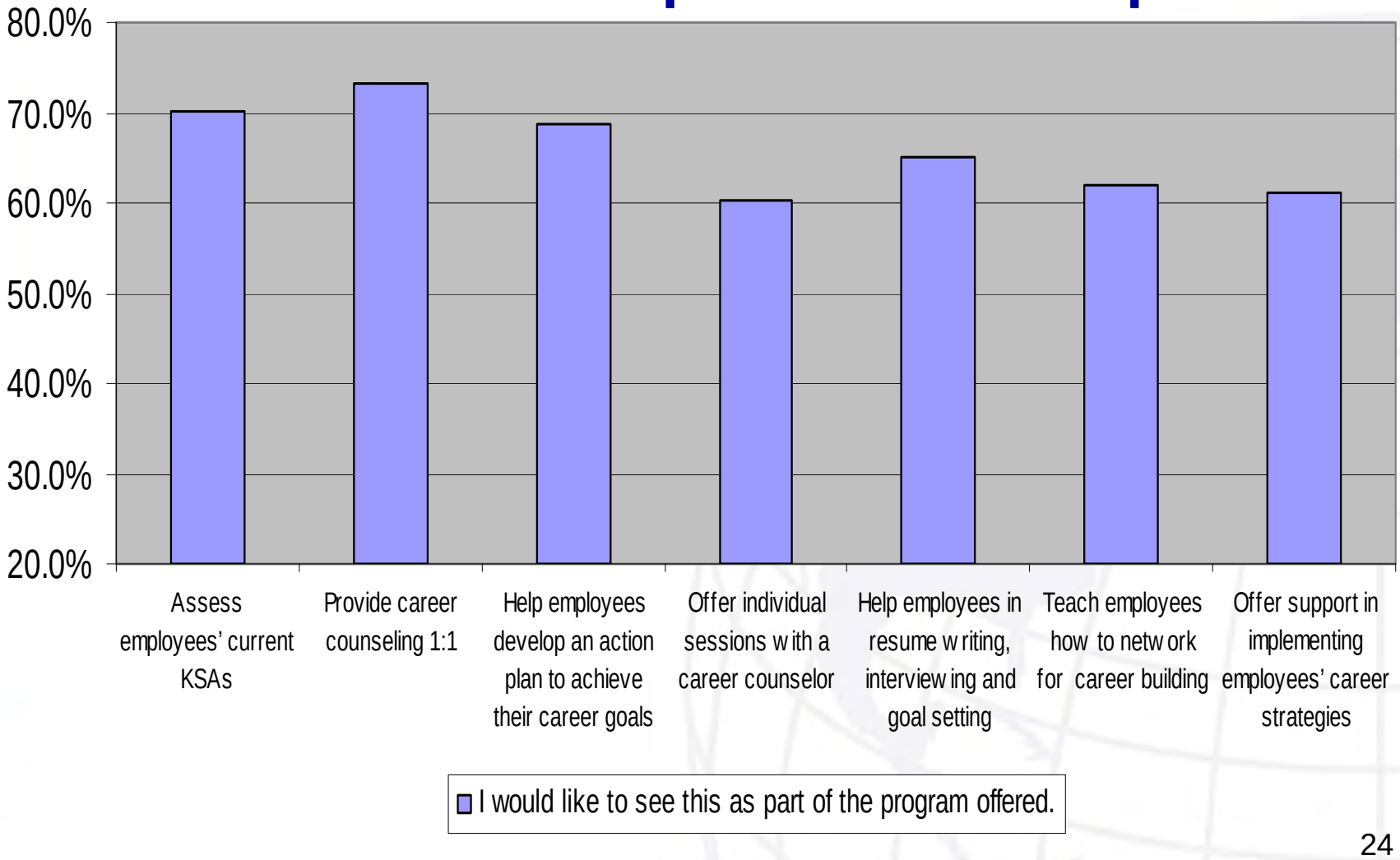


Program Design Ideas



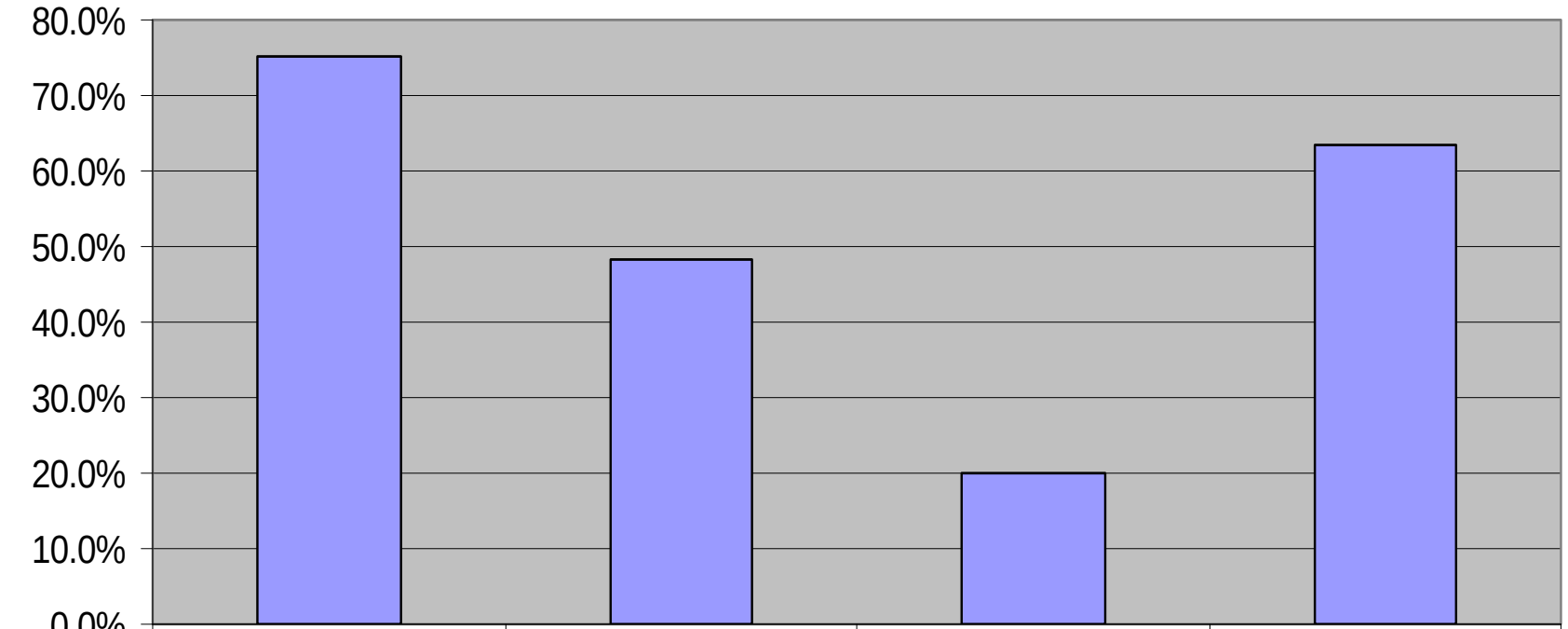
Program Design Ideas

A Career Development Workshop



Training Needed Now

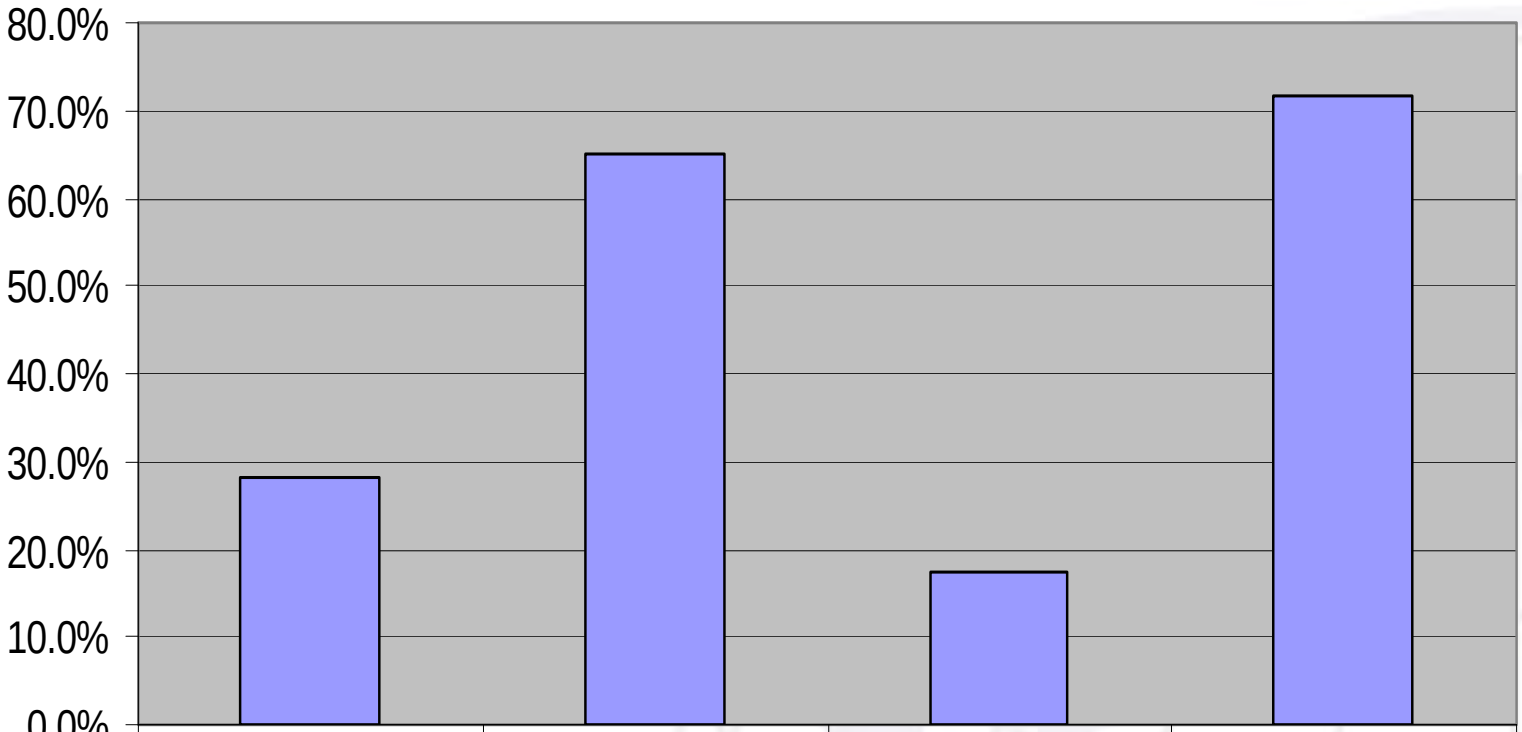
Training I Need Now



	Computing, Web and Software training at all levels	NPS specific progam training	Other professional level training	People management/ supervisory skill building
For Self	75.2%	48.3%	20.0%	63.4%

Training Needed Now

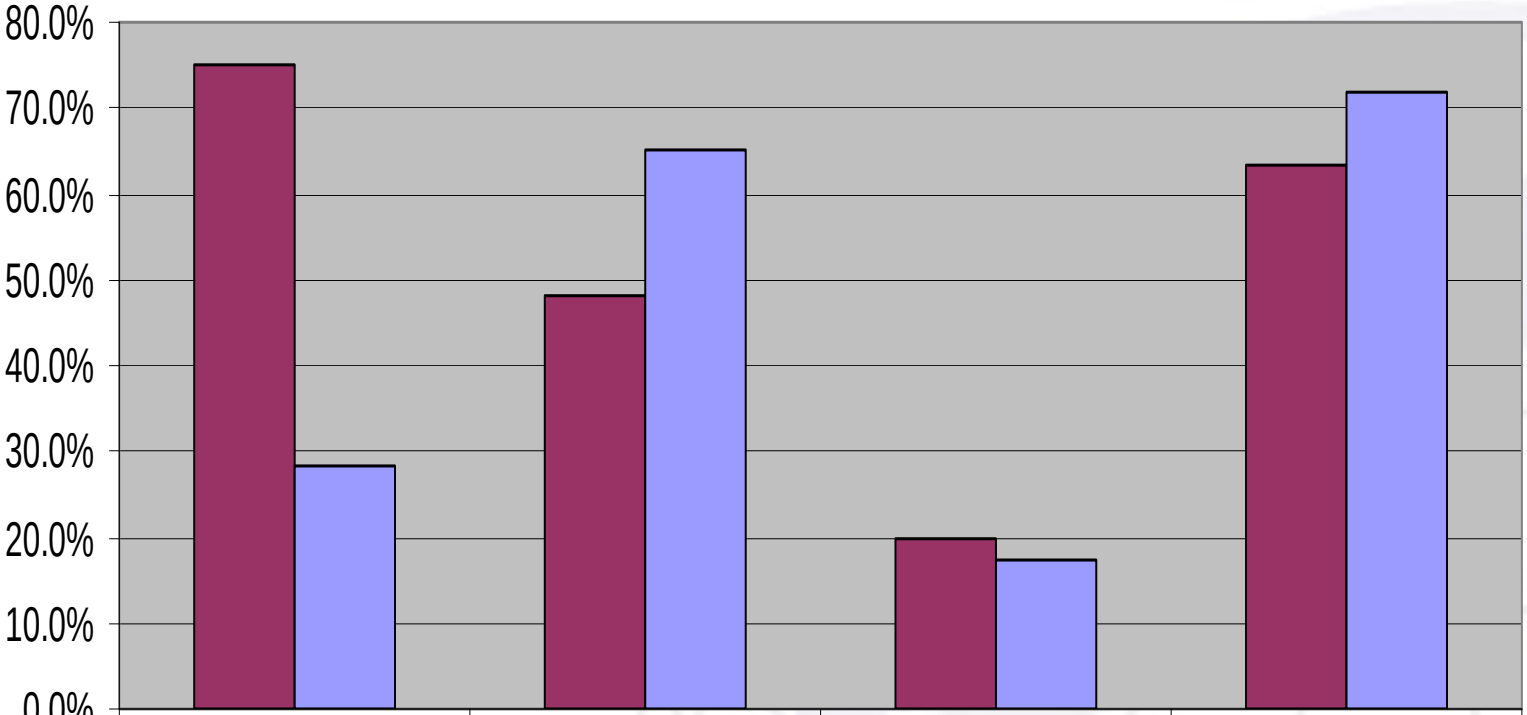
Training My Employees Need Now



	Computer training	NPS specific progam training	Other professional level training	People management/ supervisory skill building
For Direct Reports	28.3%	65.2%	17.4%	71.7%

Training Needed Now

Two Views of Training Needed Now



	Computer training	NPS specific progam training	Other professional level training	People management/ supervisory skill building
For Self	75.2%	48.3%	20.0%	63.4%
For Direct Reports	28.3%	65.2%	17.4%	71.7%

Managers' Support

- Over 94% said they would be willing to allow their employees to attend career workshops on campus during work hours and would help their employees to set and achieve their career goals.
- 70% said they would provide career coaching to their employees (and would take a course in career coaching skills to learn how to do it)

Paying for Training

- 42 or 91% of Managers would pay for the training if it is required to perform the employee's job.
- 37 or 80% of Managers would pay for training if it would enhance the employee's performance.
- 27 or 59% of Managers would pay for training if it would help employees in their career growth.
- 25 or 54% of Managers would pay for training if it would help employees get promoted or another position at NPS.

Next Steps

- Formal Report of Recommendations will be submitted to the President
- Stay informed: News Update/Website
- You can help!
  - Let us know what is on your mind
  - Contribute your talents to this effort
  - Contact us at sdac@nps.edu

NAVPGSCOL INSTRUCTION 11010.1 (DRAFT)

Subj: SPACE MANAGEMENT POLICY (SMP)

Ref: (a) NAVFAC P-80 Facility Planning Criteria.
(b) NAVFAC P-73 Real Estate Procedural Manual
(c) COMNAVREGSW Instruction 5910.1
(d) NAVSUPPDETINST 11010.1A – NSDM Space Allocation
(e) Regional Shore Infrastructure Plan (RSIP) for Naval Postgraduate School Monterey, CA (February 2003).
(f) NPS Strategic Plan 2008
(g) NPS Space Management Floor Plans: http://intranet.nps.navy.mil/PublicWorks/FloorPlans.html
(h) Space Allocation Status Tracker: https://intranet.nps.navy.mil/PublicWorks/SpaceManagementTracker.html

Encl: (1) The Road Ahead: October 2006-September 2011.
(2) Space Allocation Request Form

1. Purpose. To define the space usage policy within Naval Postgraduate School (NPS) as directed by Naval Region Southwest (ref a-c). To establish responsibility for campus space allocation with provided graphic representations (ref g). NPS will institute a Space Management and Prioritization Committee (SMPC) to address major changes involving on campus spaces.

2. Applicability. This instruction applies to entities of NPS to include affiliated organizations, contractors, and any other activities occupying space within the environs designated for the NPS by Commander Naval Region Southwest (CNRSW).

3. Background.

a. NPS Space Management policies must continue to keep in alignment with the core mission and Strategic Plan (ref f). NPS' core missions include providing the highest quality in graduate education and research, extending education to the total force and partners, to broaden National Security research, and to seek operational excellence in financial, business, administrative and support areas (ref f). Space allocation and prioritization will stay consistent with the missions.

b. The last official master plan for the Naval Postgraduate School is the April 2003 RSIP listed as reference (e). Enclosure (1) is an NPS planning document which describes changes as currently understood to the RSIP over the next three to five years.

c. Since 2001, NPS reorganized into four graduate schools, four institutes, and a support organization. The desired end state is for these elements to be geographically aligned to achieve academic and support synergy.

d. In 2004, the Navy created the Commander, Naval Installations Command (CNIC), a centralized, programmatic matrix organization which subsumed all shore installation commands through a regionalization process which further resulted in regional commands which manage the requisite installations within their area of governance. The Naval Support Detachment Monterey (NSDM) became the landlord and holder of all class 1 and 2 property (land and buildings), responsible to Commander Naval Region Southwest (CNRSW). The NPS became the primary tenant for the NSDM, CNRSW.

e. This SMP is derived from and in accordance with the references indicated above. The primary measurement criteria for allocation of space and facilities for the Navy is the Basic Facility Requirement (BFR). The BFR allows facilities to be appropriately sized and provides uniformity. They further ensure that the existing and planned facilities are neither too small nor too large to accomplish standard mission objectives.

f. The guiding criteria for the BFR process follow: “The Criteria should be considered guidelines, not regimented formulas. No activity is automatically entitled to a facility size allowance or the facility itself, just because the facility is included in the BFR document. Every facility must be justified on the basis of need. Requirements should neither be based on the size of existing assets simply to justify their retention nor inflated to accommodate existing inefficient or oversized assets. In fact, a smaller facility than the maximum gross allowance may be adequate to meet an activity’s needs. Although a BFR is initially based on facilities sizing guidelines and established planning criteria, the resulting maximum allowances should be reviewed within the context of existing conditions.”

4. Space Usage Policy. NPS has a limited amount of space and exceptional management is essential. All naval spaces will

conform to the definitions and space allowances as stated in ref (a). This space usage policy establishes the guidelines for space allocation and prioritization within NPS. This policy will be used during the review process of space requests.

a. NPS intends to place institutional key leaders and their administrative support staff, to the maximum extent possible, within Herrmann Hall.

b. The academic quad area will be utilized for education and research purposes to the greatest extent possible.

c. Space is allocated to the School Deans for their use as per encl 1. When available, additional space will be allocated at the Dean level for flexibility. Deans that have new space requirements that cannot be accommodated by reallocating their spaces will submit a space allocation request questionnaire (ref g) to the Space Management Audit Group(SMAG)(see paragraph 5).

d. All space not allocated to the NPS executive staff is managed by the Base Director for further allocation. Staff will be doubled up or in multiple workstation arrangements whenever functionality permits.

e. Relocations and expansions of space greater than 3000 square feet must be reported through NSDM to the Regional Space Allocation Committee (RSAC), CNRSW as per ref (c).

f. Overall priority will be given to those organizations, schools and institutes that provide direct mission support, i.e., those that provide direct impact on the education of students. Non-mission related tenant activities will have less priority.

g. Shared Spaces.

1) Space allocation for classrooms, learning resource centers (LRCs), video teleconference classrooms and video tele-conferencing centers (VTCs) is managed by the Associate Provost for Academic Affairs, regardless of who occupies the surrounding space.

2) Scheduling. Classrooms, LRCs, VTCs and Conference rooms are available to all through proper scheduling. Classrooms, VTCs and LRCs are scheduled by the central classroom scheduler. Conference rooms are scheduled through their respective department, school or institute. Auditoriums are

scheduled by the Conference scheduler, with the exception of Glasgow 109 which is scheduled as a classroom. The President's conference room is scheduled through the Executive Assistant to the President.

3) Learning Resource Centers. LRCs are considered shared resources with shared responsibilities. The Associate Provost for Academic Affairs along with the respective School Deans will set the number of required LRCs. Inputs for LRC requirements (i.e. number of computers, software loads, etc.) will be provided by the Departments whose students use the LRC and coordinated with the respective school's Dean. IT Support will provide maintenance and upkeep for computer equipment within the LRCs and classrooms. The Director of Educational Technology is responsible for the classroom, LRC maintenance and recapitalization plans. Upon request, Deans may be authorized to convert classrooms, VTCs, and LRCs into another type of space. These requests will be handled by the SMPC as per Figure 5.1.

h. Office Guidelines. Offices will be allocated as space permits. Table 4-1 can be used as a general guideline for space allocation.

1) There will be no office space used solely as a library other than the Dudley Knox Library. Faculty and staff must store their professional books/resources in their own office space or other storage space approved by the SMPC.

2) No individual will be permitted to have more than one office with the exception of Department Chairs. It is recognized that the Department Chair position is for a specific time period and at the conclusion of their tenure, they will move back to their original faculty office. During the period of their chairmanship, it is recommended that the appointed faculty provide their original faculty offices for other temporary uses such as visiting professors, contract professors, post docs, PhD students, and/or other appropriate uses.

	Office Type	Position
1	Private	President, Tenured/tenure track faculty and executive positions.
2	Private	Associate Deans; Division heads; Heads of directorates
3	Private / Shared	Non-tenure track faculty (to include endowed/designated chair professors,

		administrative faculty and Military faculty), distinguished research professors/associate professors, Reference librarians, supervisory positions and technical/support staff
4	Shared	Post doctorates, research assistants/technical staff, administrative support, contractors who provide direct mission support, and emeritus professors. **
5	Shared	PhD Students
6	Shared / Study Area	Masters students in thesis quarters

*See ref (a) for further details.
**Exceptions can be made for administrative staff members or contractors who routinely work with privacy act information, purchasing agents who need to secure deliveries and others as directed by the respective Dean. Consideration should be given for placing research staff near or within their respective labs without using additional space for offices.

Table 4-1

i. The Information Technology (IT) organization needs critical network infrastructure wiring closets and enterprise server rooms throughout campus; identified inref (g). IT also has staff personnel distributed throughout the academic campus iaw ref (g).

j. The Public Works organization needs mechanical rooms and utility closets to provide building system maintenance. These rooms are identified in ref (g).

k. All unoccupied space within a school is to be held at the Dean level for subsequent prioritization, and allocation, first to support school/institute needs, and/or requirements as deemed necessary by the SMPC.

l. All new research projects/programs must identify the space required prior to approval of the project. A Space Request Questionnaire will need to be submitted to the SMAG. The resulting data audit will be considered during the project approval process. Necessary information considered will include: How much space is needed, which organization will provide the space, special requirements/modification for the space, when the space is needed, and the length of time space is needed. In the case of special requirements or modifications, funding resources must first be identified.

m. Space prioritization guidelines.

Priority	Space Type	Definition
1	Offices	See table 4-1
2	Classrooms	Provides accommodations for classroom lecture instruction, using standard chairs with fixed tablet arms, or a working surfaces in lieu. An instructor station is provided, with space for use of portable training aids. Individual classroom sizes is dictated by the required number of seats as per ref (a).
3	Type I Labs	Spaces used for theoretical or applied research, development and testing operations that provide educational research and generate income.*
4	Type II Labs	Spaces used for theoretical or applied research, development and testing operations that provide educational research.*
5	Type III Labs	Spaces used for theoretical or applied research, development and testing operations that generate income.*
6	LRCs-Non-scheduled	Shared resource areas that provide computer resources to departments for educational purposes. LRC size will be based on number of workstations required.
7	Administrative Spaces	Spaces used for administrative purposes, i.e. mail rooms, copy rooms, prep rooms, etc.
8	Conference Rms	Spaces between 150-500 sf based on size of conference requirements
9	Offices-Professor Emeritus	Offices may be provided to Professor Emeritus who are officially recognized by NPS.
10	Departmental Study Spaces	Study space may be allocated where/when available through the respective Deans. Thesis

		students will have priority for student study space.
11	Storage	Storage for equipment and files.
12	Break Rooms/Lounges	
13	Type IV Labs	Spaces used for personal research and are not generating income, or used for student education.*
14	Dept Libraries	Departmental Libraries are not authorized spaces.

* Laboratories are for teaching and research and belong to the respective departments under the School Deans and, in the case of the Institutes, to the Dean of Research.

Table 4-2

5. Space Management Organization. Space requirements will be managed by one committee and three sub-committees. Requests for additional space or changes will be made as per paragraph 6 and Figure 5.1.

a. Space Management Prioritization Committee (SMPC). The SMPC will address major changes involving space at NPS, including the establishment of space priorities. The SMPC will meet annually or as required. The President will chair and the President's Executive Secretary will schedule the meeting with the required participants. The President's office will also arrange for minutes and required decision documentation.

1) President Of Committee. The President of NPS has overall responsibility for space management, and shall maintain this instruction and oversee its implementation.

2) Membership.

- NPS Executive Vice President and Provost
- Senior Military Assistant and Chief of Staff
- NPS Base Director
- Dean of the Graduate School for Business and Public Policy
- Dean of the Graduate School for Engineering and Applied Sciences
- Dean of the Graduate School for Operational and Informational Sciences
- Dean of the School of International Graduate Studies
- Dean of Students
- Vice President and Dean of Research

- Vice Provost for Academic Affairs
- University Librarian
- NPS Vice President for Information Resources and CIO
- Vice President for Finance and Administration

Additional participants may attend as required.

3) Minutes will be taken at each meeting and posted on the NPS intranet for general dissemination. Decisions made at the proceedings will also be documented and binding.

b. SM Working Group. The SM WG will meet on a quarterly basis to review/validate policies and develop options on space issues for the SMPC. SM WG will create ad hoc working groups of non-biased department representatives in order to process space issues and requests as necessary. They will present their findings and recommendations to the SMPC for final change approval.

1) Membership.

- NPS Base Director
- Deputy Dean of Students
- Military Associate Deans
- Associate University Librarian
- Public Works Officer
- NAVFAC Planner
- NSDM N3
- Registrar
- Executive Director of ITACs
- NPS Deputy Comptroller
- Representatives of campus activities as required

c. Space Management Audit Group (SMAG). The NPS Space Management Audit Group will be charged with the general management of the Space Management Program to include the tracking of space requests, filing SMPC official minutes, maintaining approved changes to the space allocation database, and updating the official space allocation floorplans. The group will review requests, collect background research and present the issues before the SMWG and/or the SMPC.

6. Space Request Process. Deans and executive staff may use allocated space in accordance with guidelines provided. When

formal requests for additional space are submitted, then anything outside of this instruction will be justified.

a. Internal Space Allocations. New space requirements should be resolved internally when possible. When a resolution cannot be established, a formal space request submitted to the SMAG is required.

b. Formal Space Request. A formal request for new space requirements may be submitted to the SMPC through the SMAG and SMWG.

1) Space Request Form. The requester must file a Space Request Form (encl 2) signed by the associated Vice President, Vice Provost or School Dean with the SMAG. The form may be filed submitted to the SMAG at Public Works. Space request status will be tracked on the Public Works website through closure of the case (ref h).

2) SMAG Request Review. The SMAG will review the request, conduct a space audit for the requesting department, and provide an initial internal departmental solution if available. If no viable solution is available, the SMAG will forward the request with potential cross-departmental solutions to the SM Working Group for action.

3) SM Working Group Review. The SM WG will review the request and provide a recommended solution to the SMPC for approval.

4) SMPC Approval. The SMPC will review the request and proposal for final approval.

5) Approved Space Change. If the space change has been approved by the SMPC, the President will sign an official change directive to the Dean or VP. The Dean or VP will reallocate the identified space to the new department. This will be filed by the SMAG until further change of allocation occurs. The SMAG will update the floorplans (ref g) to indicate the new allocations.

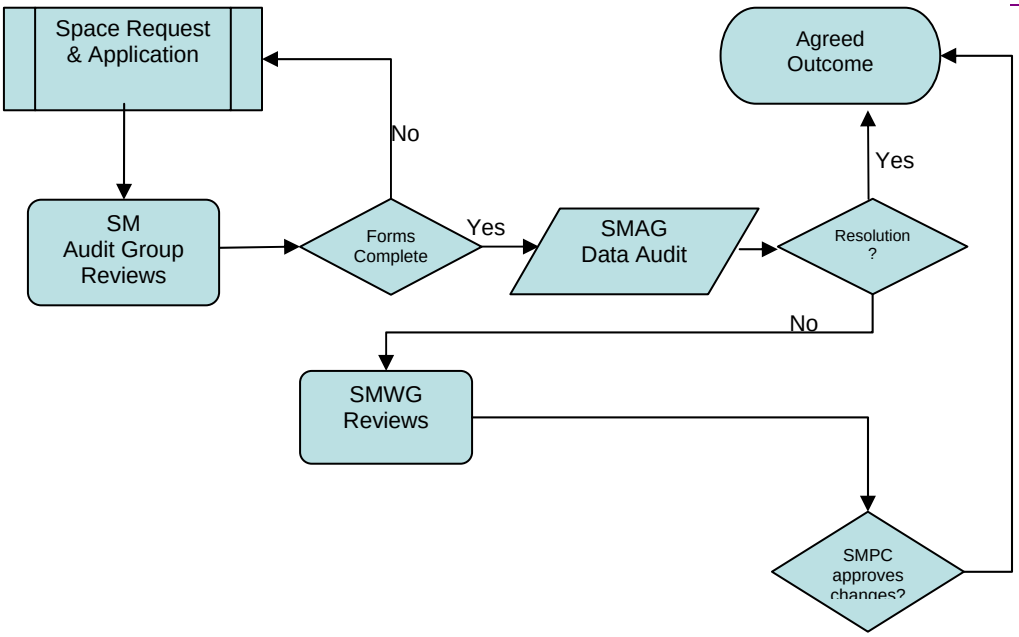


Figure 5.1

DAVID A. SMARSH
Chief of Staff

Distribution:
http://intranet.nps.navy.mil/code00/instructions/index2.html

THE ROAD AHEAD
The next Five Years, October 2006 - September 2011

1. PURPOSE: the purpose of this document is to generally describe the major base facilities initiatives within the next five years, to include construction, renovation, and major departmental, other moves subject to the approval of the PROVOST's Space Management Prioritization Committee (SMPC). This is intended to be a living document with regular review periods.

2. BACKGROUND:

    a. Original goal of reorganizing the campus was to realign the facilities in order to correlate and better support the academic reorganization of December 2001, which changed the Naval Postgraduate School into four separate graduate schools, each under its own respective Dean, and three institutes aligned under a separate Dean of Research. All movements have been intended and are progressing to an end state, where each graduate school with its respective academic departments and centers, reside in the same general geographic area with the respective buildings under the ownership of the school Dean.
    b. The last official Master Plan is the April 2003 Regional Shore Infrastructure Plan (RSIP). The end state described in the April 2003 RSIP demolishes both Spanagel Hall and Root Hall, and replaces Spanagel Hall with three separate replacement buildings, which the Graduate School for Engineering and Applied Sciences (GSEAS) resides in, along with Watkins Hall, Halligan Hall, and the 2nd floor of Bullard Hall. The Meyer Institute is housed in the 1st floor of Bullard Hall, while the Modeling, Virtual Environments, and Simulation (MOVES) Institute is housed in the Watkins Hall Extension. The Graduate School for Operational and Informational Sciences (GSOIS) resides in Glasgow Hall with it's major extension building. The Graduate School for Business and Public Policy, along with Information Technology resides in Ingersoll Hall with it's major extension building. A new major building has been constructed for the School for International Graduate Studies (SIGS) behind Herrmann Hall, and houses the entire school. Both the Batchelor Enlisted quarters and the Post Office have been demolished to make way for this new building.

c. In accordance with the original plans, and RSIP, the MOVE Institute, the Navy War College, and the Math Department have all moved to their general end-state locations. Significant changes for the NPS since the RSIP include:
    1) increased student growth in GSOIS, and GSBPP
    2) the State Historic Preservation Officer (SHPO) pronouncement that the Skidmore, Owens, and Merrill (SOM) academic complex which consists of Spanagel, Bullard, Root, and Halligan Halls is now eligible for the National Historic Register and replacement/demolition plans will not be favorably considered.
    3) Herrmann Hall Wings renovation project which converted all the existing admin space to billeting, resulting in the moves of the Defense Resource Management Institute (DRMI) to Halligan Hall, the Center for Civil-Military Relations to Glasgow Hall , and the Personnel Services Detachment to the DOD Center Building on the former Fort Ord.

3. NEXT THREE TO FIVE YEARS (November 2006 – October 2011)

a. Computer Science, (CS) and Cebrowski Institute (GSOIS, DOR) move into new Glasgow Extension from Spanagel Hall (5^{th}, 4^{th}, 2^{nd} floors) (Oct – Dec 06)
b. Basic Clean Room (GSEAS) to be built into Watkins Hall (Nov 06 – Apr 07), ($490K)
c. Classroom renovation Program, (Nov 06-Feb 07) ($214K) …with follow on $100K/FY through FY08, 09, 10, & 11.
d. Herrmann Hall Basement room 060 project for MWR/SMART Team, (Nov 06-Feb 07), (Seabees)
e. MWR Golf Course renovation, (Nov 06-Oct 08) ($4M est)
f. ECIP Irrigation project, ph 1, (Nov 06-Jun 07), ($312K)
g. MWR El Prado Renovation project (Dec 06-Jun 07), ($1.2M est)
h. ForceNet Server, HVAC project, B07 Glasgow SCIF/STBL (GSOIS), (Feb 07 – Jul 07), ($250K est)
i. Removal of old Golf Course clubhouse, B-199 (Dec 06-May 07), ($75K est)
j. PSD move from former Ft Ord to NPS, building 300 (Jan 07 – Aug 07) ($500K est)
k. Qtrs B renovation; (GSBPP, CEE), (Dec 06- Jan 07) ($50K est)

l. Temporary Global Center room expansion in HH VQ room (SIGS), (Dec 06-Jan 07), ($25K est, incl 2 yr room lease)
m. Bali Mural project, NPSF, (Jan-Jun 07), ($10K)
n. Bathroom Renovation Program, (Jul 07 – Mar 08), ($400K est)
o. Nano/MEMS lab (GSEAS) to be built into Watkins Hall (May 07 – Oct 08), ($500K est)
p. Electrical and Computer Engineering (ECE) (GSEAS) moves into Spanagel Hall 4th and 5th floors from 2nd floor Bullard Hall and Spanagel Hall 3rd floor (Apr 07 – Dec 07), ($700K est)
q. SSAG machine shop consolidates with MAE machine shop (HA 101), to make room for new Space optics lab in Ha 102 (Oct 07 – Jun 08), ($120K est).
r. Clean room lab for Space Systems Optics MAE (GSEAS) to be built into Halligan Hall (Apr 08 – Mar 09), ($900K est)
s. MAE / Space optics lab (Agrawal) to locate new large scale satellite test facility in basement of HA. This lab will be shared with components of the SSAG small satellite lab test equipment (Jun 07 – May 09), ($150K est)
t. Wind Tunnels Removal (GSEAS), (Jan-Jun 07), ($750K est)
u. AUV / Unmanned Sys Lab Center for MAE (GSEAS) to be moved from Golf Course lab building 230, and built into Halligan Hall old Wind-Tunnel lab (Aug 07 – Jan 09), ($1.2M est)
v. Hydrodynamics lab to be expanded into the MAE machine shop (Oct 07 – Sep 08), ($100K est)
w. Oceanography (Ocean Acoustics) (GSEAS) lab and offices move from Root Hall 1st floor to Spanagel Hall, 3rd floor and basement/loading dock area. PH woodshop required to move to a new location (Jul 07 – Apr 08), ($150K est). Root Hall vacated spaces go to GSOIS to fill Information Sciences (IS), and Defense Analysis (DA) priorities.
x. Electronic Key Lock project, (Dec 06 – Jan 09), ($1.164M)
y. Explosives Materials Magazine project for Golf Course Explosive Materials and Rocketry lab (GSEAS), (Apr 07 – Sep 07), ($500K est)
z. Defense Resource Management Institute (DRMI) (SIGS) 60 person classroom space is built in separate building adjacent to/vicinity of Watkins Hall, and Halligan Hall (Nov 06 – Oct 07), ($1M). Spanagel Hall room 400 is released to central classroom scheduling (Oct 07).
aa. Spanagel Exterior Terra Cotta Painting project (Apr 07 Nov 07), ($500K)

bb. Steam Project laterals for Halligan and Ingersoll Halls, (Apr 07 – Aug 07), ($250K est)

cc. DelMonte Lake dredging project, (Sep 07 – Jan 08), ($500K)

dd. Systems Engineering (GSEAS) moves into Bullard Hall 2nd floor. (Aug 07 – Mar 08), ($100K est)

ee. Space Systems moves from 2nd floor Bu to 1st floor Bu (Mar 07 – Sep 07), ($50K est)

ff. Free Electron Laser (FEL) lab constructed at Golf Course lab building 216; funding TBD; estimated time period (Aug 07 – Nov 08), ($6M est)

gg. Math Dept to occupy Sp 256 and transforms vacated space into offices. This brings math faculty/admin offices to rough parity of faculty and staff across campus (Sep 07 – Mar 08) ($100K est)

hh. SSAG student study space and former large study area in King Hall basement to be assigned as GSEAS spaces.

ii. Dean GSEAS moves his administrative offices to Spanagel Hall 5th floor into old Cebrowski Institute spaces from 1st floor. (Jan 07), ($50K est)

jj. P-205, construction (design-build) contract for new wing to Glasgow Hall was awarded in Sep 06. Construction ongoing with estimated completion in Jul 08, ($8M). Intent at this time is to provide additional space for GSOIS priorities.

kk. Special Project ($8.3M) for renovation of Ingersoll Hall to be awarded by Mar 07, with construction period of 18 -24 months; estimated date of start and completion, Aug 07 – Aug 09. GSBPP and Information Technology Directorate affected.

ll. Herrmann Hall West Wing 4th floor office conversion for Global Center (SIGS); 2007 International Students/IMET funding. Estimated Sep 07 contract award with 12 month construction period; estimated date of completion Oct 08, ($750K est).

mm. P-197, Ingersoll MILCON, presently FYDP 2012; seeking funding approval through Congressional Insert for FY 2008 with tentative Sep 08 contract award, and 18-24 month construction period; tentative estimated completion Apr- Sep 2010, ($10M est).

nn. Special Project ($14.4M) for major systems upgrades, and minor renovation for Spanagel Hall; seeking funding approval through Commander Naval Installations Command (CNIC) FY 08/09 Integrated Priority List (IPL) process. (Sep 08 – Apr 10)

oo. P-208, SIGS MILCON, presently un- programmed, seeking FYDP prioritization through CNIC PR09 MILCON IPL process and

subsequent funding approval through Congressional Insert for FY 2009; tentative Sep 09 contract award with 18-24 month construction period and tentative estimated completion date Apr-Sep 2011, ($10-12M est).

Space Allocation Request Form

Date:_____

1. NPS Department:_____

2. Type of Request, Permanent or Temporary (<30days)?

3. Space Required:

   a. Type:_____

   b. Size:_____

   c. Purpose:_____

   d. Est. date space is needed?_____

4. Other requirements/possible solutions:_____

_____

_____

_____

An internal space evaluation was conducted by my departmental leadership finding no additional space sufficient for this request.

_____
VP / School Dean Signature

_____
Print VP / School Dean Name

Naval Postgraduate School

EXECUTIVE MEETING STRUCTURE

GOAL: Accomplish the mission of NPS. Allow President and Provost to focus on strategic issues including:

- development and maintenance of relationships with stakeholders
- resource support and advocacy, including development of new streams of revenue
- communication about the relevance and quality of NPS
- achieving the goals of the strategic plan
- communication about the strategic plan with internal and external constituents

In general, we keep meetings to a minimum but make them sufficient in length to accomplish significant objectives. These are the standing meetings. Other meetings on significant issues would be scheduled as required.

1. STRATEGIC PLANNING COUNCIL

- Meets quarterly for half to full day to discuss the progress of the NPS Strategic Plan. Updates initiatives, ensures resources are aligned with plan, prioritizes POM issues, measures success.

Membership

President, Chair
Provost, Co-chair
Chief of Staff
Deans of Schools (4)
Dean of Research
Dean of Students
Associate Provost for Academic Affairs
Associate Provost for Information Resources and CIO
Special Assistant to the Provost
Chair of the Faculty Council
Executive Associate to the Provost

Others will be asked to provide updates on plans and briefs.

Action: Strategic Plan Action Team
Membership: Dean Boger, Julie Filizetti, Christine Cermak (responsibilities to be shared with the Strategic Planning Council on a rotating basis)

2. EXECUTIVE ASSEMBLY

- Meets monthly. Purpose is information sharing primarily by President and Provost.

Membership:
President, Chair
Provost, Co-Chair
Chief of Staff
Deans of Schools (4)
Dean of Research
Associate Provost for Academic Affairs
Dean of Students
Executive Associate to the Provost
Associate Provost for Information Resources and CIO
Special Assistant to the Provost
Institutional Advancement
Sponsored Programs
Programs
Office of Continuous Learning
Associate Deans (or as alternates)
Facilities
Library
Faculty Chair
Institutional Research
Human Resources Officer
Comptroller

Action: Chief of Staff/Executive Associate to the Provost

3. ACADEMIC POLICIES AND PLANNING COMMITTEE (AP&P)
Develops academic plans and policies in support of strategic plan. Deals with operational issues and develops academic resource requirements and budgets.

Meets as required. Weekly to start. (Replaces Provost Council)

Membership
Provost
Deans of Schools (4)
Dean of Research
Associate Provost for Academic Affairs
Special Assistant to the Provost
Executive Associate to the Provost
University Librarian (as required)
Associate Provost for Information Resources and CIO (as required)
Director of Academic Planning (as required)
Chief of Staff (as required)

Others to be invited as required depending on issues.

Action: Associate Provost for Academic Affairs

4. BUSINESS PROCESSES, FACILITIES AND INFRASTRUCTURE COMMITTEE

Ensures that the business processes, facilities, HR plans and policies, space plans, IT and other infrastructure issues support the academic mission.

Meets monthly.

Membership

President (Chair)
Provost
Chief of Staff
Director, Base Operations
Associate Provost for Information Resources and CIO
University Librarian
Comptroller
Human Resources Officer
Chair of Business Processes Implementation Task Force
Director, Sponsored Programs
Special Assistant to the Provost
Executive Associate for the Provost

Action: Chief of Staff/Executive Associate for the Provost

5. RESOURCE ADVISORY COMMITTEE

Monitors NPS resources. Develops recommendations for discussion by Strategic Planning Committee and/or Academic POPR.

Meets with President, Provost, COS monthly or as required.

Membership:

Comptroller
Deputy Comptroller
Special Assistant to the Provost
Academic Planning
Associate Provost for Academic Affairs

Action: Comptroller and Associate Provost for Academic Affairs

6. DEANS AND CHAIRS

Informational meeting. Provost and /or President shares information on academic issues with Deans and Chairs. Meets twice per month. Will be chaired by the Provost or President depending on topics.

Note: This has been a standing Provost meeting for at least a decade. Given the new organization, the Meeting Chair should be shared by the President and Provost.

7. ACADEMIC COUNCIL

Council establishes, monitors, reviews, certifies, and advises on policies and procedures which will ensure high and consistent academic standards of graduate education (for detailed description refer to the Academic Policy Manual).

Meets monthly.

Membership:
Provost
Associate Provost for Academic Affairs
Dean of Students
Director of Programs
Chair of Faculty Scholarship Committee
Officers from Departments and Academic Groups

Action: Chair and Secretary of the Council

8. FACULTY COUNCIL

NPS Faculty Council

The Faculty Council functions as a primary faculty input advisory vehicle to the Provost and Superintendent. The mission of the faculty organization is to promote understanding and communication between members of the faculty and members of the administrative staff, to protect and promote the professional stature of the members, and to assist the administration in accomplishing the goals of the Naval Postgraduate School.

The Faculty Council meets monthly.

Membership: The Faculty is organized with the following elected representative bodies:
- The Faculty Council
- The Faculty Executive Board
- The Standing Committees of the Faculty

Action:
Faculty Executive Board

NPS Strategic Plans

All Sites | Advanced Search

NPS Strategic Plans | Strategic Plans Report Center

View All Site Content

Documents
- NPS Strategic Planning
- Organization Charts
- School/Dept Strategic Plan
- Position Descriptions

Lists
- Calendar
- Tasks

Discussions
- Team Discussion

Sites

People and Groups

Announcements

WASC Preparation Docs now available 9/28/2010 9:59 AM
by Horvath, R (Fran) (CIV)
The WASC Preparation documents distributed at the SPC meeting on Monday, September 27, 2010 are now available on the NPS Strategic Planning page.

Calendar

There are currently no upcoming events.

Links

- NPS Intranet
- nps.edu
- NPS Enterprise SharePoint

ABET, Inc.
111 Market Place, Suite 1050
Baltimore, MD 21202
Phone: 410-347-7700
Fax: 410-625-2238
www.abet.org
accreditation@abet.org

Applied Science Accreditation Commission
Computing Accreditation Commission
Engineering Accreditation Commission
Technology Accreditation Commission

August 15, 2008

James L. Kays
Dean, Graduate School of Engineering and Applied Sciences
Naval Postgraduate School
Bldg 232, Suite 103
833 Dyer Road
Monterey CA 93943-5117

Dear Dr. Kays :

Engineering Accreditation Commission (EAC) of ABET recently held its 2008 Summer Meeting to act on the program evaluations conducted during 2007-2008. Each evaluation was summarized in a report to the Commission and was considered by the full Commission before a vote was taken on the accreditation action. The results of the evaluation for Naval Postgraduate School are included in the enclosed Summary of Accreditation Actions. The Final Statement to your institution that discusses the findings on which each action was based is also enclosed.

The policy of ABET is to grant accreditation for a limited number of years, not to exceed six, in all cases. The period of accreditation is not an indication of program quality. Any restriction of the period of accreditation is based upon conditions indicating that compliance with the applicable accreditation criteria must be strengthened. Continuation of accreditation beyond the time specified requires a reevaluation of the program at the request of the institution as noted in the accreditation action. ABET policy prohibits public disclosure of the period for which a program is accredited. For further guidance concerning the public release of accreditation information, please refer to Section II.L. of the 2007-2008 Accreditation Policy and Procedure Manual (available at www.abet.org).

A list of accredited programs is published annually by ABET. Information about ABET accredited programs at your institution will be listed in the forthcoming ABET Accreditation Yearbook and on the ABET web site (www.abet.org).

It is the obligation of the officer responsible for ABET accredited programs at your institution to notify ABET of any significant changes in program title, personnel, curriculum, or other factors which could affect the accreditation status of a program during the period of accreditation.

Please note that appeals are allowed only in the case of Not to Accredit actions. Also, such appeals may be based only on the conditions stated in Section II.G. of the 2007-2008 Accreditation Policy and Procedure Manual (available at www.abet.org).

Sincerely,

Mary Leigh Wolfe

Mary Leigh Wolfe, Chair
Engineering Accreditation Commission

Enclosure: Summary of Accreditation Action
Final Statement

cc: Leonard A. Ferrari, Provost/Dean/Acting President

Steve Coe, Visit Team Chair

ABET, Inc.

Engineering Accreditation Commission

Summary of Accreditation Actions
for the
2007-2008 Accreditation Cycle

Naval Postgraduate School
Monterey, CA

Astronautical Engineering (MS)

Electrical Engineering (MS)

Mechanical Engineering (MS)

Accredit to September 30, 2014. A request to ABET by January 31, 2013 will be required to initiate a reaccreditation evaluation list. In preparation for the visit, a Self-Study Report must be submitted to ABET by July 01, 2013. The reaccreditation evaluation will be a comprehensive general review.

ABET, Inc.
ENGINEERING ACCREDITATION COMMISSION

NAVAL POSTGRADUATE SCHOOL

Monterey, CA

FINAL STATEMENT
Visit Dates: October 21-23, 2007
Accreditation Cycle Criteria: 2007-2008

Introduction and Discussion of Statement Construct

The Engineering Accreditation Commission (EAC) of ABET, Inc. has evaluated the astronautical, electrical, and mechanical engineering programs of the Naval Postgraduate School.

This statement is the final summary of the EAC evaluation, at the institutional and engineering-program levels. This statement consists of two parts: the first deals with the overall institution and its engineering operation, and the second deals with the individual engineering programs. It is constructed in a format that allows the reader to discern both the original visit findings and subsequent progress made during due process.

A program's accreditation action is based upon the findings summarized in this statement. Actions depend on the program's range of compliance or non-compliance with the criteria. This range can be construed from the following terminology:

- Deficiency: A deficiency indicates that a criterion, policy, or procedure is not satisfied. Therefore, the program is not in compliance with the criterion, policy, or procedure.

- Weakness: A weakness indicates that a program lacks the strength of compliance with a criterion, policy, or procedure to ensure that the quality of the program will not be compromised. Therefore, remedial action is required to strengthen compliance with the criterion, policy, or procedure prior to the next evaluation.

- Concern: A concern indicates that a program currently satisfies a criterion, policy, or procedure; however, the potential exists for the situation to change such that the criterion, policy, or procedure may not be satisfied.

- Observation: An observation is a comment or suggestion that does not relate directly to the accreditation action but is offered to assist the institution in its continuing efforts to improve its programs.

The Naval Postgraduate School (NPS) is a defense–oriented, research university, operating as a geographically distributed educational system, providing tailored graduate education in support of national and international security. It is a federal institution, owned and operated by the United States Navy and provides education primarily at the master's degree level. The typical students are mid-career military officers seeking education directly relevant to their military careers. Current enrollment is over 1700 resident and more than 600 non-resident students, an increase of more than 400 resident students over the last six years. About 25 percent of the students are enrolled in accredited engineering or related programs. Approximately 43 percent of the students are from the US Navy, with another 41 percent coming from the other branches of the US Armed Forces. The remaining 16 percent of the student population is comprised of nearly 270 international participants from 48 countries, providing a culturally rich learning environment.

Funding has seen a steady increase over the six years since the last accreditation visit. However, more than half of the budget comes in the form of "reimbursable" funds for research from both Navy and non-Navy clients. Faculty members typically depend on research funds to cover part of their salary. Direct funding is projected to decline somewhat in FY 2008, while reimbursable funding is expected to continue to increase significantly.

A distinctive feature of the educational programs at the Naval Postgraduate School is the grouping of programs of study into military-relevant "curricula" as distinct from degree programs. Curricula are specific educational programs established and monitored by the Navy to meet Navy needs. The curricula are broader than traditional academic disciplines (aeronautical engineering, electrical engineering, etc.) in that they include specific topics relevant to the

military objectives. By properly choosing curricula and degree programs, students can meet their military career goals and also obtain traditional master's degrees. The curricula are reviewed every two years and adjusted to meet Navy needs. The assessment of the academic programs is very well developed and is being considered as a model process for the entire institution.

The following units were reviewed and found to adequately support the engineering programs: library, dean of students, information resources/CIO, institutional research, academic planning, academic affairs, and facilities.

Institutional Strengths

1. Recent efforts to establish NPS as a "Flagship" institution are expected to have significant positive effects relative to governance and funding.

2. The identification of Flag Officer-level curriculum sponsors for the three engineering degree programs has served to provide a direct and authoritative connection between what is needed by the principal constituent and the material taught.

Institutional Concern

1. Policies and Procedures Section II.L. of the ABET Policy and Procedure Manual, Public Release of Accreditation Information, requires institutions to represent the accreditation status of programs accurately and without ambiguity. A review of degrees offered by NPS reveals that there are degrees with "engineering" in their title that are being awarded by schools other than the Graduate School of Engineering and Applied Science (GSEAS). This can lead to confusion for graduates and future employers relative to whether or not those degrees are ABET accredited.

    - Due-process response: The institution did not provide a response to this shortcoming.

    - The concern remains unresolved.

Institutional Observation

1. NPS intends to apply for accreditation of a master's degree program in systems engineering when a sufficient number of students have graduated. A non-ABET accredited MSSE degree has been offered since the early 1990's through the Department of Information Sciences. Responsibility for that degree has recently been transferred to the newly established Department of Systems Engineering within the GSEAS. However, a high percentage of core systems engineering topics continue to be taught by non-engineering faculty members who have no direct reporting relationship to the Department of Systems Engineering. In preparation for ABET accreditation, consideration should be given to establishing a more direct relationship between the Department of Systems Engineering and faculty members responsible for defining and teaching core courses.

Astronautical Engineering
Program

Introduction

The Master of Science in Astronautical Engineering (MSAE) program is part of a new Department of Mechanical and Astronautical Engineering (MAE) that was created in 2003 after the aeronautical engineering program was moved to the Air Force Institute of Technology. The MAE department is responsible for the astronautical engineering program; however, the Space Systems Academic Group (SSAG), an interdisciplinary association of faculty responsible for the space systems engineering curriculum, provides support in meeting some educational objectives. Students in the space systems program have an option of earning a degree in astronautical engineering, electrical engineering, physics, or computer science; however, a large majority of these students pursue the MSAE degree. At the time of the visit, there were 29 students enrolled in the MSAE program. Annually, 8 to 15 students graduate with the MSAE.

The majority of courses in the MSAE program are taught by the five FTE MAE faculty members, but several courses, such as space environment, remote sensing, electric power, microprocessors, and communications engineering, are taught by faculty members from other departments. The SSAG plays an important role in facilitating interaction between the eight academic departments that teach courses for the astronautical engineering program.

Note that in addition to the following program findings, there is an institutional concern as previously presented in the institutional section.

Program Strengths

1. The interdisciplinary nature of the SSAG faculty insures excellent coverage of the broad range of topics required in astronautical engineering.

2. Design plays an important role in the program and projects benefit from extensive input from government and industry. Theses and reports are of a very high quality.

3. The program of each student is of major interest to the agency or command that will employ that individual upon graduation. This insures that the program is relevant to the needs of the Services.

Observations

1. Programmatic support depends to some extent on sources such as reimbursable research funds. Declines in such funding could negatively impact the program.

2. Students indicate that they would like more flexibility in some course requirements and are concerned that some elective courses have not been offered as frequently as they would like.

3. The material on the departmental web site should provide clearer descriptions of the MSAE, MSES (astronautical), and the astronautical engineer options offered by the department.

Electrical Engineering
Program

Introduction

The electrical engineering (MSEE) program is tightly coupled to the electronic systems engineering curriculum and is designed to supply the needs of the constituents. The Navy is the primary stakeholder along with other associated agencies such as the Space & Naval Warfare Systems Command, Naval Sea Systems Command, and Naval Air Systems Command. The program has 30 faculty members and 85 resident students, most of who are from the Navy and the Marine Corps, with a few from the Army and Coast Guard. There are also international students from countries such as Korea, Greece, and Portugal.

Note that in addition to the following program findings, there is an institutional concern as previously presented in the institutional section.

Program Strengths

1. The students are dedicated to their study and highly motivated, with a broad perspective from their work experience before coming to NPS.

2. The faculty is academically strong and shows real concern for students' learning. There is strong interaction between the faculty and the students.

Program Concern

1. Criterion 1. Students This criterion requires that the program have and enforce procedures to assure that all students meet all program requirements. The self-study states that the program is offered to non-resident students through "distance learning." While this did not happen during the accreditation period, it may be done in the near future. The program must assure that all program activities for non-residents are fully equivalent to those provided for resident students.

- Due-process response: The program did not provide a response to this shortcoming.

- The concern remains unresolved.

Mechanical Engineering
Program

Introduction

The mechanical engineering program is offered by the Department of Mechanical and Astronautical Engineering. The program has 16 full-time, tenure-track faculty members and approximately 17 adjunct and other faculty members. For the four quarters of 2007, the average enrollment in the program was 55, with 18 students entering the program and 45 students graduating.

Note that in addition to the following program findings, there is an institutional concern as previously presented in the institutional section.

Program Strengths

1. The student body is universally recognized by the faculty to be a major program strength. Students are confident, capable, personable, mature, professional, disciplined, and determined.

2. Faculty members are competent and concerned teachers and are readily available to students. In research, the faculty is appropriately balanced between fundamental and applied areas and between engineering fundamentals and Navy needs.

3. The program provides a wide range of interesting and useful thesis topics. This is complemented by many laboratory facilities that offer exciting research environments not usually found at other universities.

Observations

1. Precipitously declining enrollments in the program challenge the near- and long-term health of the program. In 2007, the number of graduating students exceeded the number of entering students by a factor of two and one-half. Declining enrollments have both budgetary and

programmatic implications. Although students enjoy the small classes that this situation creates, the viability of courses with small enrollments is threatened. Furthermore, the situation also has the potential for severe dislocations in faculty responsibilities and workloads. The mechanical engineering leadership has been working aggressively to add new sources of students and to maintain traditional sources; however, resolving this issue is likely to require attention at levels above that of the department.

2. The program currently has a very effective assessment process; with further refinements, the assessment process has the potential to be an exemplary model.

Program Self-Study Report

For Review of

Degree Program

Master of Science in Mechanical Engineering

Submitted by

Department of Mechanical and Astronautical Engineering
Naval Postgraduate School
700 Dyer Road
Monterey, CA 93943-5146

To

Engineering Accreditation Commission
Accreditation Board for Engineering and Technology
111 Market Place, Suite 1050
Baltimore, Maryland 21202

May 22, 2007

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Self-Study Report
Mechanical Engineering

DRAFT

Program Self-Study Report
Mechanical and Astronautical Engineering Department

A. Background Information

1. Degree Title: Master of Science in Mechanical Engineering

2. Program Mode: Residence program

3. Actions to Correct Previous Shortcomings

The last initial ABET visit was performed on fall of 2001 and the Draft Statement on dated March 4, 2002 pointed out three deficiencies and two weaknesses as below:

1. Criterion 1: Students
   Students with BS/BA degrees from non ABET accredited programs do not meet all program requirements (Deficiency)
2. Criterion 3: Program Outcomes and Assessment
   a) No documented assessment process, b) have not provided evidence that demonstrates graduates have met program outcomes, c) the faculty have not established metrics for each of program outcomes, and d) have no documented feedback process in place to improve the program (Deficiency)
3. Criterion 2: Program Educational Objectives
   Objectives need to be published. (Weakness)
4. Criterion 4: Professional Components
   a) Weakness in providing a major design experience for students with BS/BA from a non-ABET accredited program (weakness), b) Students with BS/BA from a non-ABET accredited program may not satisfy one and one-half years of engineering topics and courses (Deficiency)
5. Criterion 8: Program Criteria
   Students from non-ABET accredited engineering programs may not have a sufficient background in statistics (weakness)

Corrective Actions were taken at the request of the Engineering Accreditation Commission, and the report for response the Draft Statements was sent to the Engineering Accreditation Commission. Then, the Engineering Accreditation Commission sent Summary of Accreditation Actions stating accreditation of the Master of Science in Mechanical Engineering Program to September 30, 2004 with a requirement of a reaccredidation evaluation visit during fall of 2003. The Summary of Accreditation Actions dated August 15, 2002 stated that previous deficiencies and weaknesses were reduced to weaknesses and concerns, respectively, as below:

Criterion 1: Students (weakness)

1. Criterion 1: Students (Reduced to Weakness)
2. Criterion 3: Program Outcomes and Assessment (Reduced to Weakness)
3. Criterion 2: Program Educational Objectives (Reduced to Concern)

4. Criterion 4: Professional Components (Reduced to Concern)
5. Criterion 8: Program Criteria (Reduced to Concern)

Furthermore, the evaluation visit during fall of 2003 would be a focused visit to evaluate the corrected actions. As a result, the *Self-Study Report for Focused Visit* was submitted to the Engineering Accreditation Commission on June of 2003, and there was another focused ABET visit on fall of 2003 to address and correct those deficiencies and weaknesses. After the second visit, all weakness and concerns were completed resolved as shown in the Draft Statement dated February 24, 2004. The Draft Statement is provided below.

4. Draft Statement from the Most Recent Accreditation for Mechanical Engineering Program

Introduction

The mechanical engineering program is in the Department of Mechanical and Astronautical Engineering. There are 14 mechanical engineering faculty members and 70 declared MSME majors in Fall 2003. There were about 30 graduates in the last year. The program has a new chair as of the summer of 2003.

Program Strengths

1. The students appear to be well-qualified and highly-motivated, mid-career professionals.
2. Communications with the chair before the visit were efficient and friendly.
3. The current students are very supportive of the mechanical engineering program and the faculty.

Program Weaknesses

1. Criterion 1. Students The *previous review noted that students entering the program with BA/BS from non-ABET accredited programs did not meet all program requirements. This was due to some students from non-ABET accredited programs (about 1/3 of the students were in the non-ABET category) not meeting all BSME equivalency program requirements.*

   The faculty made changes to try to ensure this BSME equivalency. New checklists were created and are being used effectively. Greater flexibility is provided in the MSME program by allowing more courses to be used to meet the EAC BSME equivalency. In addition, a new capstone design course ME 3172 (discussed below) has been created. An examination of transcripts and supporting checklists by the reviewer showed that this issue had been addressed satisfactorily.

   - The weakness is resolved.

2. Criterion 3. Program Outcomes and Assessment In *the previous review it was noted that outcomes had been defined, a set of assessment tools had been defined, and metrics had been identified. An assessment committee had been established and*

performance was to be reviewed quarterly. However a weakness remained pending demonstration that the process and tools work effectively.

A constituency group has been identified. An examination of questionnaire results and minutes of faculty meetings demonstrated that an improvement process is in place and working. Program outcomes have been defined and mapped against the program objectives. A set of tools to evaluate the outcomes has been developed. Assessment data has been gathered and utilized to improve the program.

- This weakness is resolved.

Program Concerns

1. Criterion 2: Program Educational Objectives During *the last visit, there was a concern that the educational objectives were not published in the catalog or in other publicly available media.*
The objectives are now published in the latest catalog shown on the website and on the department's website.

- This concern is resolved.

2. Criterion 4. Professional Component *In the previous review there was a concern about demonstration of the mechanical engineering program criteria. The General Criteria requires that the program must have a major design experience. The mechanical engineering program criteria require that all graduates demonstrate "the ability to work professionally in both thermal and mechanical systems areas including the design and realization of such systems." For students from EAC-accredited mechanical engineering programs, this requirement is satisfied in their BSME programs. A significant number of these students have undergraduate degrees from non-EAC accredited BSME programs. For these students, additional course work is required to bring them up to an EAC equivalency. The ability to work in both stems is usually demonstrated in a capstone design experience. At the last General Review, major design experience was being met by the ME 3711 (Machine Design) and MS 3202 (Failure Analysis) classes.*

A new capstone design class ME3712, Capstone Design Project, was established. It is taken at about the sixth quarter of the eight-quarter program. Examination of the ME 3712 course outline and a number of recent senior design reports did not indicate that students demonstrated the ability to work in the thermal systems courses such as ME3240, Marine Power and Propulsion. The Department is urged to be mindful of this two-stem requirement as the implement curricular improvements.

- This concern is resolved.

3. Criterion 8. Program Criteria *Criterion 8 of the mechanical engineering program criteria requires that each graduate demonstrate a familiarity with linear algebra and statistics. In the last visit, the EAC noted that the program relied on ME 3410*

(Instrumentation and Measurement) to provide this background for the non-EAC accredited students; the EAC team cited this as marginal.

After July 2002, a statistics course became mandatory for those who do not have an EAC-accredited BSME degree. The Reviewer examined the statistics course materials, and found the course to be satisfactory. In addition, the faculty strengthened the linear algebra competence of the students by requiring MA 2043, Introduction to Matrix and Linear Algebra, for those students who had not taken a similar course as an undergraduate.

- This concern is resolved.

5. Contact Information:

Prof. Anthony J. Healey, Chair
Department of Mechanical and Astronautical Engineering
Naval Postgraduate School
700 Dyer Road
Monterey, CA 93943
Tel) 831-656-3462
Fax) 831-656-2238
E-mail) healey@nps.edu

B. Accreditation Summary

In this report, the following definitions are used, which are consistent with the standard definitions as used by ABET

Objectives: Statements that describe the expected accomplishments of our graduates during first several years following their graduations.

Outcomes: Knowledge, skills, and abilities that are derived from the objectives and measurable at the time of graduation.

Assessment: Processes that identify, collect, and analyze data for the purpose of determining achievements of objectives and outcomes.

Evaluation: Process of reviewing the results of data collection and analysis, and making determination of the value of findings and action to be taken.

Action: Implementation of new or revised objectives, outcomes, assessment and evaluation procedures, degree requirements, policies, etc. to improve the program.

Constituents: Group of people that affect or are affected by the program, including students, faculty, administrators, program sponsor, alumni, their supervisors, etc.

The complete loop to meet the ABET requirement to improve our degree program is sketched in Figure 1.1. The detailed explanations will be provided in later sections as necessary.

1. Students

Students generally enter the **M**echanical and **A**stronautical **E**ngineering Department through the Navy military channels and are selected based on outstanding professional performance, promotion potential, and academic background. Academic thresholds are based on a three point code called an APC – Academic Profile Code. The ME degree program requires an APC of at least 3-2-3, meaning a Quality Point Rating (QPR) at least 2.2-2.59 in undergraduate work at a recognized institution, the calculus sequence completed with at least an average between C+ and B, and completion of a calculus based Physics sequence with at least an average between C+ and B.

Entering students are initially advised by a Program Officer (currently LCDR James Melvin) and given a matrix of courses that would be required both to fulfill the degree requirements and their military educational skill requirements. During the course of study the students meet with both their program officer and a faculty member designated as a curriculum academic associate. The Academic Associate, currently Professor Josh Gordis, assists the student in the selection of electives, and coursework sequences designed, and sometimes tailored, to meet the requirements of ABET when it is established that the student does not

come from an ABET accredited undergraduate program and significant additional preparation is needed.

Students' progress is closely monitored by the program officer to ensure that the student does not fall behind in class work. Research progress is monitored closely by the supervising professor. In the event that a student fails to maintain a 3.0 QPR after any quarter, he is put on academic probation and given a program plan designed to lead to recovery, monitored closely by the Program Officer.

In the ME degree program, we rarely encounter a need for transfer of credits. In cases where it is needed, we allow the transfer of up to 12 hours of graduate level credit from another institution towards the MSME degree. In special cases permission to transfer a particular course for credit towards a degree requirement may be granted by the Department Chairman.

Validation of required degree courses is allowed where necessary and approved by the Academic Associate and the Department Chairman after a thorough review of the students prior background, prior courses, texts studied, syllabi covered, and sometimes an oral examination.

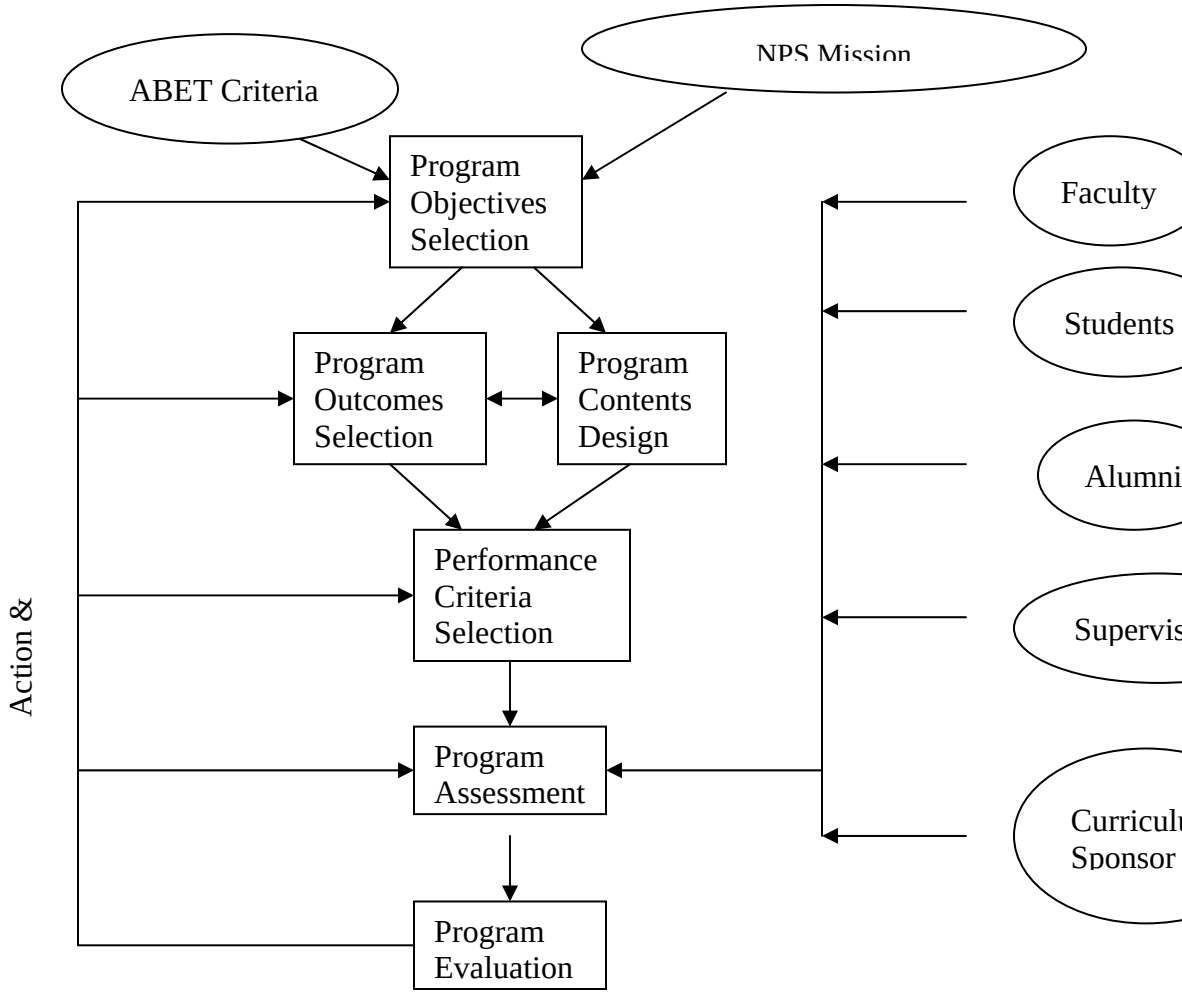

Figure 1.1. Closed-Loop Process for Improvement of MSME Program

2. Program Educational Objectives

2.1 Summary

This section describes the Program Educational Objectives of the MSME degree program at Naval Postgraduate School. Furthermore, it is discussed how the Program Educational Objectives are set, assessed, and evaluated by proper stakeholders of the program. Finally, ongoing process for improvement is also presented.

2.2 Description of Program Educational Objectives

Based on the Naval Postgraduate School (NPS) mission and ABET criteria, the Program Educational Objectives were determined by the ME faculty with input from GSEAS Dean and Provost. The Program Educational Objectives were reviewed by multiple constituents of the program and revised as necessary.

The NPS Mission Statement, as well as the Program Educational Objectives, are provided below:

NPS Mission

Provide relevant and unique advanced education and research programs in order to increase the combat effectiveness of U.S. and Allied armed forces and enhance the security of the United States.

Program Educational Objectives

The overall educational objective of the Mechanical Engineering program is to support the NPS mission by producing graduates who have knowledge and technical competence, at the advanced level in Mechanical Engineering, to support national security.

In order to achieve this goal, the specific objectives are to produce graduates who have:

1. The ability to identify, formulate, and solve technical and engineering problems in Mechanical Engineering and related disciplines using the techniques, skills and tools of modern practice, including modeling and simulation. These problems may include issues of research, design, development, procurement, operation, maintenance or disposal of engineering components and systems for military applications.
2. The ability to provide leadership in the specification of military requirements, in the organization and performance of research, design, testing, procurement and operation of technically advanced militarily effective systems. The graduate must be able to interact with personnel from other services, industry, laboratories and academic institutions, and be able to understand the role that engineering and technology have in military operations, and in the broader national and global environment.

3. The ability to communicate advanced technical information effectively in both oral and written form.

These objectives were published in the school Catalog and the MAE departmental website (http://www.nps.navy.mil/mae/objectives.htm).

2.3 Process for Identifying and Revising Program Educational Objectives

The Program Educational Objectives have been reviewed by the stakeholders to revise them as necessary in order to improve the program. The stakeholders for identifying and revising the Program Educational Objectives are

- Faculty
- Curriculum sponsor
- Supervisors of our alumni
- Alumni
- Students

Surveys and personal interviews have been conducted to assess and evaluate the appropriateness as well as achievement of our Program Educational Objectives. Each survey and interview results were summarized by a responsible faculty member, and the results were presented at a faculty meeting for discussion. If there was any change needed from the discussion, the Educational Program Objectives were revised to reflect the concerns from the data. The revised Objectives were assessed and evaluated in the following cycles as sketched in Figure 1.1.

2.4 Process of Assessing and Evaluating Program Educational Objectives

Surveys were conducted for various constituents including alumni, supervisors of our alumni, Engineering Duty Officer (EDO) school survey, curriculum sponsor, and students. In addition, personal interviews were performed with alumni and supervisors of our alumni.

Most of our students in the program are engineering duty officers in the US Navy. The engineering duty officers should attend the EDO School twice. They attend the school just after graduation from our program for the junior officers program, and several years later for the senior officers program. As a result, we visited the EDO school regularly to survey and interview our alumni there. Sometimes, we had teleconferences with our alumni in cases we could not visit the school or a direct visit was not deemed necessary. On the average, we contacted direct visits or teleconferences at least once a year and very often twice. We also surveyed and interviewed supervisors of our alumni. In many cases, our senior alumni were the supervisors of our junior alumni. In such cases, they were surveyed and interviewed in two different capacities.

For the supervisors of our alumni, we asked a question whether the Program Educational Objectives served their need. The blank survey form is attached for your review in Appendix I-D-1. During the interviews, more elaborate input was provided regarding the appropriateness of the Objectives. For the survey of our alumni, the same question as stated in Appendix I-D-1 was asked, and personal interviews were followed. In general, during these interviews we realized that it is rather difficult to efficiently target a large number of

alumni and alumni supervisors. This is evident by the limited responses that we were able to collect to-date. Specific steps taken to remedy this problem are outlined in Section 2.5.

For the graduating students, we also asked whether the Program Educational Objectives seemed to be appropriate. The primary reason we decided to ask the students these questions is that, typically, they already work in the Navy or Department of Defense communities for some time before they enroll to our degree program. Therefore, they have enough work experience to respond to the question.

Every graduating student indicated that the Program Educational Objectives serve well for their jobs. Out of three specific Objectives, almost everyone stated the Objective #1 was well met from our degree program. In other words, our graduates were well prepared for technical knowledge and skills from our degree program.

As far as Objective #2 is concerned, the surveys and interviews showed overall satisfaction. However, some suggestions proposed by our alumni were to introduce a couple of courses like *Product Lifetime Maintenance*, *Risk/Benefit Cost Analysis*, etc. So far, these requests were rather sporadic and consistent. Therefore, it was decided in the faculty meeting to analyze more input from the future before we took any action for revising our curriculum because our curriculum does not have a room to add a course without sacrificing an existing course with a very tight work schedule of our students. As one possible solution, we decided to add an elective course on Risk and Cost Benefit Analysis, which is discussed later in this report. In addition, we made sure that such concepts are reinforced in our design-related courses.

There were also some concerns regarding Objective #3. Our alumni stated that their thesis experiences were very useful in terms of both written and oral technical communication skills but they would like to have more opportunities to practice them during the degree program. Such opportunities exist but there is some variation with regards to student exposure. Many of our 4000 level courses require that students turn in term projects that are accompanied by oral presentations at the end of the quarter. However, other courses do not require them. Since 4000 level courses are elective, student experience with regards to communication skills would vary depending on their choices of elective courses. Considering this, the faculty passed a resolution to provide a seminar to all students for them to learn how to communicate technical information verbally or in writing.

The initial part of the form asks that students rate the program on a scale of 0 – 5 with respect to each the three stated program objectives. A high numerical rating implies strong agreement that the program meets the objective. The ratings did not appear to vary significantly with time from 2002 – 2006. For this reason, the data are summarized in Figure 2.1 as average student response for each of the objectives.

Overall, the highest numerical response, 4.39, is for Objective 1 (The ability to identify, formulate and solve technical and engineering problems …); the next highest, 4.31, is for Objective 3 (The ability to communicate …). The lowest response, 4.08, is for Objective 2 (The ability to provide leadership in the specification of military requirements …).

The form also solicits written comments regarding the appropriateness of the program objectives; however, few of the students offered any comments and those who did tended to be individuals having non-ME undergraduate backgrounds. Two comments in this respect are given below.

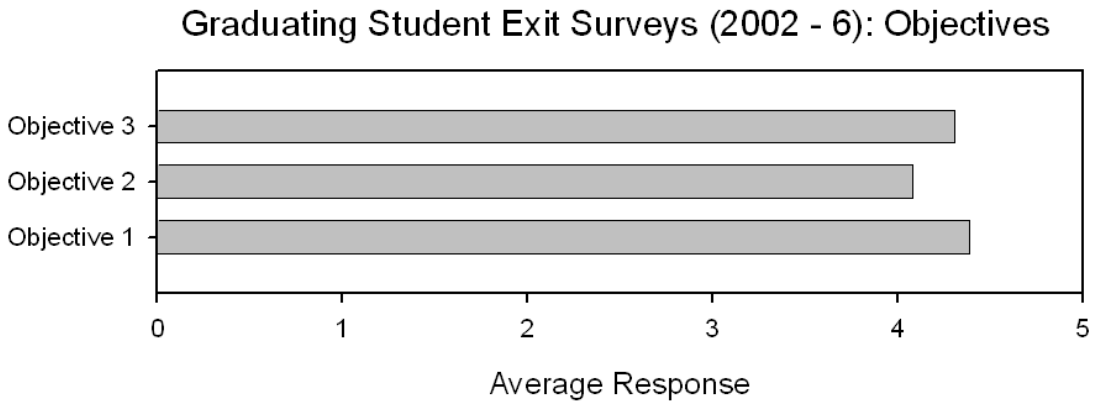

Figure 2.1. Average student responses in respect of the program objectives.

- The challenge to accomplish a BSME undergraduate and complete the MSME, the 2.5 years was a rapid pace and it is hard to say that I reached a proficient level of engineering technical understanding. Although my previous experience of practical application and work in an engineering environment the education at NPS has more than complemented my previous engineering exposure and will be beneficial in my future professional career with the Navy.

- Too many 'check the box' requirements and not enough 4000 level classes to say advanced level for the objectives.

2.5 Ongoing Improvement of the Effectiveness of the Program

Based on the feedback from our alumni and supervisors of our alumni, we identified several issues that called for corrective actions. These are outlined as follows:

- The need for a seminar on technical presentation was identified in our department. This was discussed in several departmental meetings and as a result several courses were either added and/or revised. We also explored the option of inviting outside speakers to give talks to our students on technical presentation skills. More detailed actions are provided in the next section of Program Outcomes because the Outcomes were derived in order to meet the Objectives.
- The difficult which we experienced in efficiently identifying and targeting sufficient numbers of our alumni supervisors was brought up during a teleconference with our curriculum sponsor at NAVSEA (Naval Sea Systems Command) in January 2007. We solicited the sponsor's help in solving this problem. It was decided that the sponsor would grant us access to a scheduled nationwide conference of our alumni

supervisors and we would circulate our questionnaires. The first such occurrence will take place during the summer of 2007.

- An elective Risk and Cost Benefit Analysis course was introduced and was offered first during 2006. The course is also taught this year. So far, student responses have been very positive. In addition, relevant lecture notes from the course have been made available to students during their design projects.

3. Program Outcomes and Assessment

3.1 Summary

This section describes Program Outcomes established to achieve Program Educational Objectives stated in the previous section. The relationship between Program Outcomes and Program Educational Objectives is also discussed. Then, the process to identity as well as to revise Program Outcomes is presented.

Furthermore, the process is also described for assessing and evaluating Program Outcomes in detail. In particular, the developed Assessment Criteria are discussed, and the evaluation of the criteria is presented for each criterion. This section also describes the continuous improvement process for Program Outcomes emphasizing action items for improvement. Finally, a description of relation of Courses to Program Outcomes is presented.

3.2 Description of Program Outcomes and their Relation with Program Educational Objectives

The Program Outcomes are stated below:

1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME.
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.
3. Graduating students will have high level of communication skills including technical writing and oral presentation.
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.

The Program Outcomes are published in the university catalog as well as the current departmental website.

Those Program Outcomes were established from the Program Educational Objectives as shown in Table 3.1. For example, Program Outcomes #1, #2 and #4 were derived from Objective #1 while Outcomes #2 and #5 were established from Objective #2. Finally, Outcome #3 is related to Objective #3.

3.3 Process of Identifying and Revising Program Outcomes

The Program Objectives have been reviewed by the various constituency groups to revise them as necessary in order to improve the program. The stakeholders for identifying and revising the Program Objectives are

- Faculty
- Curriculum sponsor
- Supervisors of our alumni

- Alumni
- Student

Surveys and personal interviews have been conducted to assess and evaluate the appropriateness of the Program Outcomes. For example, the survey form for the supervisor, as attached in Appendix I-D-1, contains the question asking for the appropriateness of the Program Outcomes.

Each survey and interview results were summarized by a responsible faculty member, and the results were presented at a faculty meeting for discussion. If there was any change needed from the discussion, the Educational Program Objectives were revised to reflect the concerns from the data.

Table 3.1. Relationship between Program Objectives and Outcomes

	Outcome #1	Outcome #2	Outcome #3	Outcome #4	Outcome #5
Objective #1	X	X		X	
Objective #2		X			X
Objective #3			X		

X indicates the Outcome is derived from the Objective.

3.4 Process of Assessing and Evaluating Program Outcomes

In order to assess the Program Outcomes, several Assessment Criteria (AC) were established by the faculty, and the relationship between the Assessment Criteria and the Program Outcomes are shown in Table 3.2. There are eight Assessment Criteria as listed below, and each one is to measure the related Program Outcome(s).

Assessment Criteria (AC)

1. Graduating students will meet ABET-accredited BSME equivalence. All students will complete the BSME equivalency checklist form that must be approved.
2. Graduating students will complete one year of study beyond the basic level and follow a specialization track in one of the available disciplines of Mechanical Engineering. All students will complete the MSME degree checklist that must be approved.
3. All MSME degree recipients will complete and present a thesis. Thesis evaluation consists of the thesis signature page, the thesis distribution statement, and the thesis evaluation and rating form.
4. PE exams and success rates.
5. Survey results from the Engineering Duty School.
6. Survey results from the graduating student exit survey.
7. Survey results from recent graduates and their supervisors.
8. Sponsor evaluation.

Table 3.2. Assessment Criteria (AC) to Measure Outcomes

	AC 1. BSME Equivalency	AC 2. MSME Checklist	AC 3. Thesis Evaluation	AC 4. PE Exams	AC 5. ED School Presentation and Report	AC 6. Exit Survey	AC 7. Alumni & Supervisor Survey	AC 8. Program Sponsor Evaluation
Outcome #1: ABET-BSME Equivalency	X					X		
Outcome #2: Advanced Study		X				X	X	X
Outcomes #3: Communication Skill			X		X	X	X	X
Outcomes #4: Identify, Formulate, and Solve Technical & Engineering Problems			X	X		X	X	X
Outcomes #5: Apply technical Knowledge in Leadership & National Security					X	X	X	X

3.4.1. Assessment Criterion # 1 - BSME Equivalency Checklist

Assessment Criterion #1 was established to assess Program Outcome #1 as shown in Table 3.2. In order to assess the Outcome, a form called *BSME Equivalency Checklist* was devised and has been used to guide each student's educational progress. (The blank form is attached in Appendix I-D-2.) The form is prepared by student with a guidance by the student advisor (called Academic Associate) and reviewed and approved by Program Officer (an active Navy officer who oversees students in military affair), Academic Associate (a faculty member, who guides students to meet the degree requirements), and the Department Chair Person.

The form first checked whether a new student has an ABET accredited BSME degree or not from his or her undergraduate study. If the student has the BSME degree from an ABET accredited institution, the person checks the corresponding check box and the form is complete. On the other hand, unless the student received an ABET accredited BSME degree, he or she needs to check the remaining sections of the form.

The *BSME Equivalency* form contains four sections. The first section is to check the Mathematics requirements. This section requires a minimum of 24 quarter credit hours (or 16 semester credit hours) of college level mathematics. In addition to check the total mathematics credit hours, the form also checks individual topic courses like Multivariable Calculus, Differential Equations, Linear Algebra, and Statistics as stated in the ABET Curriculum Description.

The second section of the *BSME Equivalency* form checks the requirements for Basic Sciences like chemistry and calculus-based physics. The minimum 24 quarter credit hours (or 16 semester credit hours) of college-level basic science is required.

The third section checks General Education. A minimum of 24-quarter credit hours (or 16 semester credit hours) is required in subjects other than mathematics, basic science, computer science, and engineering. These general education courses should complement the technical content of the curriculum.

The last section checks Engineering courses including Engineering Design. A minimum of 72 quarter credit hours (or 48 semester credit hours) of engineering science and design are required. Of those 54 quarter credit hours or 36 of the semester hours must be specifically in Mechanical Engineering and include both Thermal and Mechanical Systems. The checklist separates all Mechanical Engineering courses from other engineering courses. In addition, the form includes the check for a major design experience at the advanced undergraduate level.

The approved *BSME Equivalency* forms for the past graduates have been stored in the department.

3.4.2. Assessment Criterion # 2 -MSME Equivalency Checklist

Assessment Criterion #2 was established to assess Program Outcome #2 as shown in Table 3.2. In order to assess the Outcome, a form called *MSME Checklist* was devised and has been used to guide each student's educational progress. (The blank form is attached in Appendix I-D-3.) The form is prepared by student with a guidance by the student Thesis Advisor and Academic Associate, and reviewed and approved by Program Officer, Academic Associate, and the Department Chair.

The form checks the overall credit requirements for the MSME degree which was established at NPS. The requirement is at least 32-quarter hours of graduate level credits. At least 12-quarter hours must be at the 4000 level and at least 24 quarter hours must be in courses offered by the Mechanical Engineering Department. When the credits were counted for the MSME degree, it was made sure that there was no dual count of any 3000 or 4000 level course between the MSME requirement and the BSME equivalency requirement.

In addition, the *MSME Checklist* requires students to check their competency in the advanced level by checking required courses in each specialization track offered by the department. This requirement states two 4000 level courses in the specialty track. Furthermore, the form also records the thesis title and thesis advisor name because the thesis is one of the requirements for the MSME degree.

The complete forms for the past graduates are kept in file.

3.4.3. Assessment Criterion # 3- Thesis Evaluation

Assessment Criterion #3 is also a direct assessment technique and it was established to assess Program Outcomes #3 and #4 as shown in Table 3.2. In order to assess the Outcome, the *Thesis Evaluation and Rating Form* has been used. (The blank form is attached in Appendix I-D-4.) Each student selects his or her thesis topic after discussion with various faculty members. Once the thesis topic is selected, a thesis proposal form is filled out by the student, and the form is approved by Thesis Advisor, Academic Associate, Program Officer, and Department Chair.

After completion of the thesis work, the student writes a written thesis and presents his findings in the department in front of students, faculty, and other guests. The written thesis is approved by Thesis Advisor and Department Chair.

Finally, the Thesis Advisor evaluates the student thesis in terms of (1) Academic level competence, (2) Scientific or technical merit of the thesis, (3) Defense relevance, (4) Written communication, and (5) Oral communication. This evaluation is confidential to students.

At the end of each quarter, this form is collected from all thesis advisors. In order to make sure no one will miss the form, the faculty approved that the department Chair would not sign off each student thesis unless the form is filled out and submitted with the thesis.

The collected assessment forms have been summarized by one responsible faculty member, and presented at the faculty meetings for evaluation and improvement. The summarized results of the collected data are shown in Table 3.3.

The assessment results show that there are variations of the ratings from quarter to quarter. The weighted sum average is shown in the last row of Table 3.3. As the data indicate, communication skills have the lowest rating. In order to improve the communication skills, the faculty decided to invite an expert to present a seminar to our students on better communication skills, on a regular basis so that every student has an opportunity to improve their skills.

Table 3.3 Complied Data from Thesis Evaluation Assessment

	AVERAGE					
Graduation Date	**Adv. Level Competence**	**Sci/Tech Tech**	**Defense Relevance**	**Written Comm.**	**Oral Comm.**	**# Students**
03-Sep	**3**	**3**	**4**	**3**	**3**	**1**
03-Dec	**3.5**	**3.88**	**3.88**	**3.5**	**4.14**	**8**
04-Mar	**2.75**	**4**	**4**	**3**	**3**	**4**
04-Jun	**4.45**	**4.36**	**4.18**	**4.09**	**4.18**	**11**
04-Sep	**4.2**	**3.8**	**4**	**3.9**	**4**	**10**
04-Dec	**4**	**3.5**	**4.5**	**4.5**	**5**	**2**
05-Sep	**3.38**	**3.25**	**3.63**	**3.25**	**3.38**	**8**
05-Dec	**4**	**4.25**	**4.38**	**3.88**	**3.63**	**8**
06-Mar	**4**	**3.8**	**4**	**3.8**	**3.8**	**5**
06-Jun	**4**	**4**	**4.12**	**3.59**	**3.65**	**17**
06-Sep	**3.83**	**4.17**	**4**	**3.5**	**3.67**	**6**
Avg	**3.89**	**3.94**	**4.05**	**3.68**	**3.79**	**7.27**

3.4.4. Assessment Criterion # 4 - PE Exam Success Rate

Assessment Criterion #4 was established to assess Program Outcome #4 as shown in Table 3.2. Taking the PE Exam is not a requirement of the degree program. However, having the license is beneficial to the students. Therefore, many students took the exams voluntarily. It was thought that the PE passing rate would provide an objective indication for assessing Program Outcome #4 (Identify, Formulate, and Solve Technical & Engineering Problems).

The MAE Department offers a course, ME1000, Preparation for the Professional Engineers Exam as a means to encourage and facilitate our students in obtaining Registration as a

Professional Engineer. ME1000 is offered on a regular basis as student demand has warranted. Prof. Matt Kelleher, a registered PE, conducts seminars on the process and helps students apply and prepare for the exam. The last time it was taught was Summer 2006 to eight students.

Historically the success rate on the ME PE Exam for NPS Students has been on the order of 80% or better. Since Fall 2002, 8 of the 11 students that took the PE Exam passed it, a rate of 81%. This compares to the national passing rate on the ME test of 70%. This is an indication that our students are successful in knowing the disciplines on Mechanical Engineering.

In an effort to accumulate data on our student's PE success rate in the future, a procedure has been initiated whereby the students taking ME1000 who will also be taking the PE Exam have agreed to inform the Curricular Officer or the Instructor of ME1000 as to their success on the PE Exam. Although it is not required, the students have provided their personal email addresses so that they can be queried at the appropriate time after the PE Exam as to the outcome.

The Department also encourages students who have not taken the FE (or EIT) to take the FE Exam so that they can subsequently pursue PE Registration. The detailed results on the component subjects from our student's FEs are evaluated by Department faculty for indications of potential problems. As an example, last year only one (1) student took the FE and he did not do well on statistics. While this was a limited sample, our professor in charge of overseeing the statistics content of our program, Prof. Morris Driels, reviewed the statistics course content and textbook. This course is taught by the Operations Research (OR) Department. Prof. Driels worked collaboratively with the faculty member in OR in charge of this course and has made some recommendations on how they can improve the engineering applicability of that course. We will evaluate the results of this action with the next set of FE results.

3.4.5. Assessment Criterion # 5 – ED (Engineering Duty Officers) School Report and Presentation

The Engineering Duty Officers School ("ED School") is a significant source of information and feedback for the MSME graduates enrolled in the 570 Curriculum. The 570 Curriculum is called Naval/Mechanical Engineering. The 570 Curriculum is related to the MSME degree program but the two are not the same. Any incoming student to NPS is assigned to a Curriculum, and the 570 Curriculum is one of them. Then, the student takes courses toward a degree program which is allowed for the Curriculum. Nearly 100% students in the 570 Curriculum pursue the MSME degree. However, there are students who enrolled in the MSME degree from other Curriculum, even though the number of students from outside of the 570 Curriculum is much less than that from the 570 Curriculum.

Engineering Duty Officers (ED's) constitute about 30% to 50% of the total graduates of the 570 Curriculum. (see Figure 3.1.) Almost all of the ED officers receive the MSME degree. Upon graduation, all ED's have to attend a short course (6 week duration) at the ED School

in order to prepare them for the practical aspects of their job. As part of that preparation they have to prepare and deliver to their peers an oral presentation. In addition, they have to prepare a technical paper related to their job. Successful completion of both is necessary in order to qualify as Engineering Duty Officers. Therefore, visiting the ED School, attending presentations delivered by our graduates and reading their technical reports, would provide us with input on Outcome #3 ("Graduating students will have a high level of communication skills including technical writing and oral presentation") and Outcome #5 ("Graduating students will have the ability to apply technical knowledge in a leadership role related to national security").

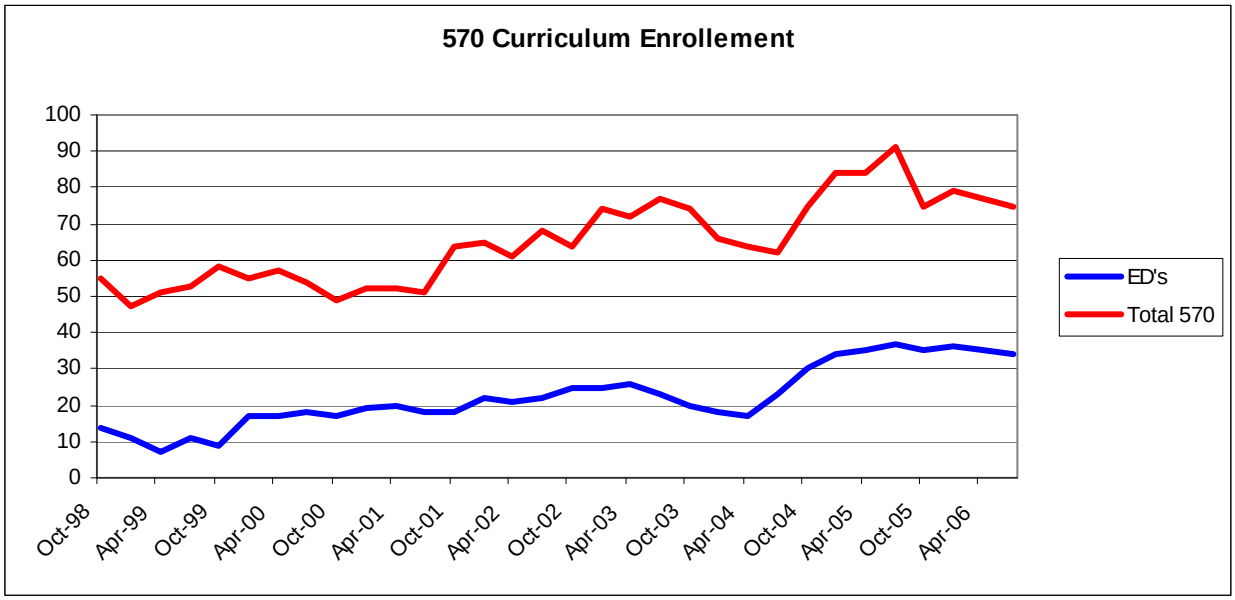

Figure 3.1. No. of Engineering Duty Officers and the total students in 570 Curriculum

In January 2003, an initial familiarization visit to the ED School took place. Profs. Millsaps and Papoulias and Program Officer CDR Cunningham participated and several items were reviewed. We were able to listen to presentations given by recent graduates of the program and also review several technical papers written also by recent graduates. Both the presentations and the technical papers were satisfactory. We did not see the need for major program changes. It was also felt that continuing visits to the ED School are very helpful but they are also difficult to coordinate. The best time to visit is June and it takes an average of two days per visit. Therefore, we asked the ED School if we could get a copy of the graduates' technical reports and review them. Although the ED School leadership was very supportive of this need, they pointed out some potential distribution limitations since the graduates prepare the reports under the assumption that they would be reviewed only by the ED Qualifying Board and not by third parties such as NPS. They promised that they would look into that.

Following this initial visit we have had several phone conversations and interviews with the ED School. Although we did not listen to graduates' presentations, we did talk to their

instructors and received positive feedback. Some technical papers were also transmitted to us. We kept up our inquiries with regards to perpetual access to the graduates' technical reports, and we were assured that the request is under review.

In September 2004, Prof. Millsaps conducted a follow-up visit to the ED School, the trip report is included as Attachment B. The overall feedback was positive; the only potential issue was inadequate preparation with regards to oral presentation skills and writing.

During the Spring of 2006, the ED School was able to post the technical papers of our graduates in a secure web site and provide us access to it. Profs. Papoulias and Millsaps reviewed a sample of the papers and found them satisfactory.

A third visit to the ED School took place during June 2006. Profs. Millsaps, Kwon, Gordis, and Program Officer CDR Plott attended. The nature of the visit and its findings were consistent with the original visit.

From each visit or phone conversations, a trip report has been generated and presented to the faculty. During the discussion it was noted that larger faculty participation was required for adequate review of the technical papers produced by our graduates. The following steps were recommended:

- Collect the technical papers and post them in a secure site under Departmental control. That way, it will be easier for faculty members to access.
- Assign specific papers to be reviewed by faculty members that are in the right area of expertise. Provide a standard form for review and evaluation.
- Keep track of the statistics of the reviews and take corrective actions as necessary.

In addition, there seems to be an issue with regards to oral presentation skills. This is consistent with findings from other Assessment Criteria. Proper actions were taken for improvement. The summary of actions taken to improve the Program is provided in the next section.

3.4.6. Assessment Criterion # 6 – Graduating Student Exit Survey

This Assessment Criterion was established to assess all program Outcomes in terms of graduating students' perspective because students are one of the most important constituencies.

The Department maintained a Graduating Student Exit Survey for many years prior to the merger of the Mechanical and Aero into Mechanical and Astronautical Engineering Departments. As a result of the ABET visit in 2001 the Exit Survey was modified to align it better with the Program Educational Objectives and Outcomes. The Exit Survey was modified again following the merger of the Astronautical Engineering program and faculty to form the Department of Mechanical and Astronautical Engineering in 2004. This second modification did not involve substantive changes. Rather, the Exit Survey form was redesigned so that it could be distributed, completed and returned electronically; furthermore, this Exit Survey is still designed to elicit comments only from students in the program leading to the MSME. The current form is attached as Appendix I-D-5.

The form then states the intended Program Outcomes and asks the students to rate the program on the same 0 – 5 scale with respect to each of the Outcomes. The first three Outcomes are broken down further into more specific questions. Again, the responses did not appear to vary with time and so the response data are summarized in Figures 3.2 through 3.6 as average student response. The data for Outcome #1 (Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME) are given in Figure 3.2.

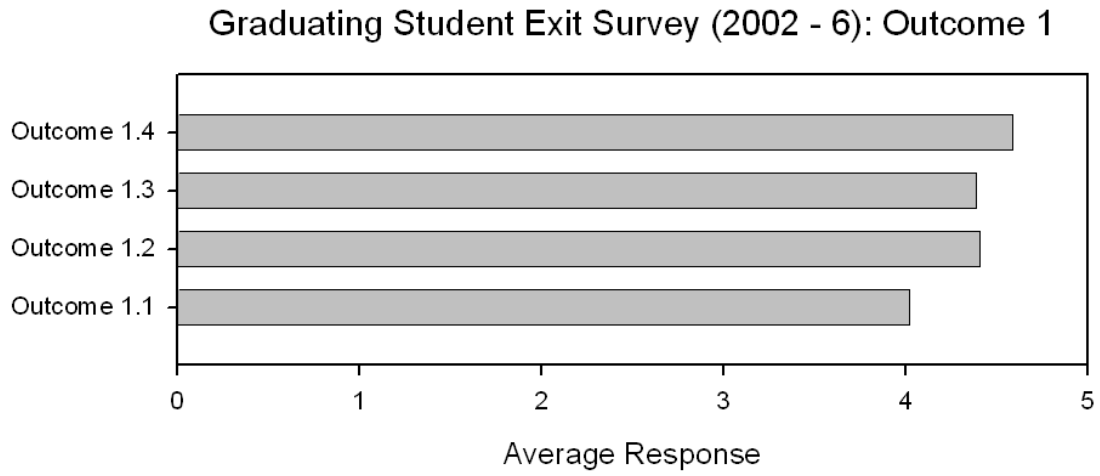

Figure 3.2. Average student responses for Outcome #1.

The lowest numerical response was 4.02 for Outcome #1.1 (Have a solid grasp on statistics) and the highest, 4.59, was for Outcome 1.4 (Apply knowledge of mathematics science and engineering). This latter response was the highest among all of the ratings for the program objectives and outcomes.

The data for Outcome #2 (Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering) are provided in Fig. 3.3. The numerical values for Outcomes 2.1 (Advanced Competence …) and 2.2 (Advanced knowledge of analytical/numerical tools …) were 4.37 and 4.22, respectively. In contrast, the response value for Outcome 2.3 (Achieve advanced knowledge of modern laboratory techniques) was 3.73, the lowest among all of the responses to this survey. From the written comments (summarize at the end of this section) this low value reflects the poor state of many of the course-specific laboratories, or, in many cases, the absence of laboratories in areas where laboratory work should be included.

The responses for Outcome #3 (Graduating students will have a high level of communication skills including technical writing and oral presentation) are summarized in Figure 3.4. The lowest value, 4.04, was for Outcome 3.1 (Make a contribution to the scientific or technical literature) while the remaining responses were from 4.29 – 4.47. Of particular note is that the students rated the program highly on Outcome 3.3 (Do an effective and clear technical presentation), at 4.47, although numerous faculty comments suggest that this is an area in which improvement in student performance is needed.

Finally, the data for Outcomes #4 (Graduating students will have the ability to independently identify …) and #5 (Graduating students will have the ability to apply technical knowledge in a leadership role related to national security) are given in Figs. 3.5 and 3.6. The Survey called for only a single response for each outcome. Student responses were 4.35 and 4.24, respectively.

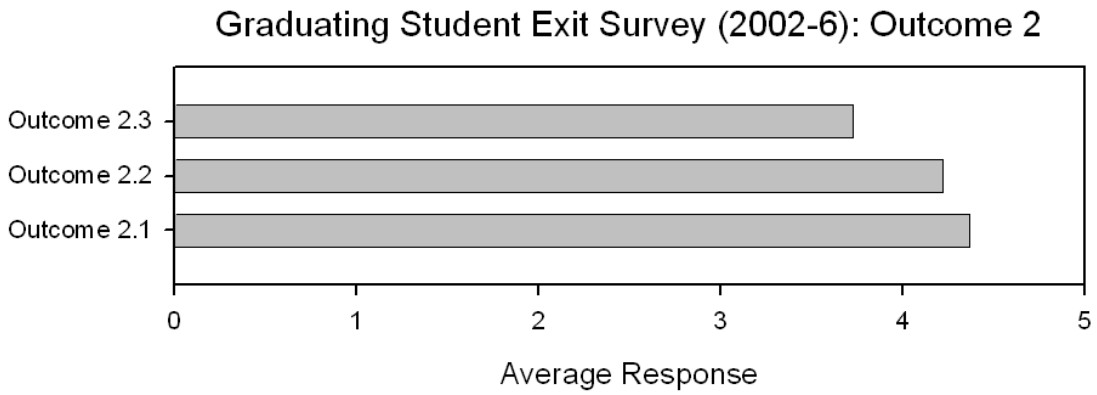

Figure 3.1. Average student responses for Outcome #2

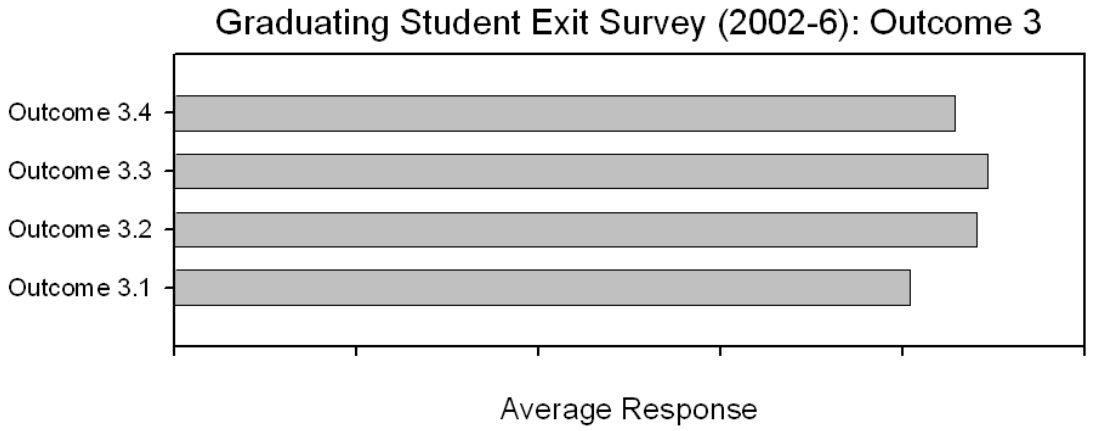

Figure 3.4. Average student responses for Outcome #3

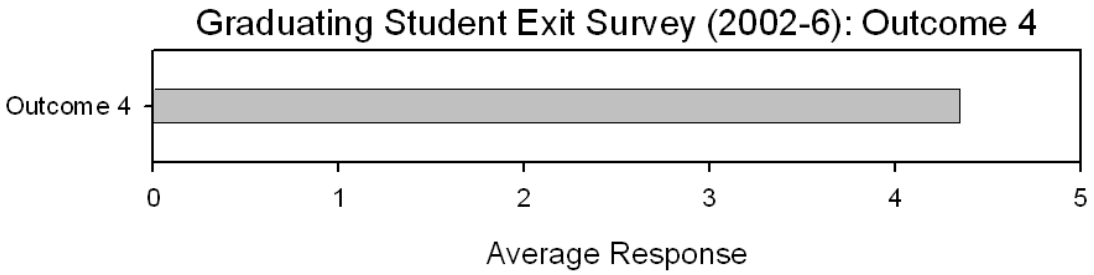

Figure 3.5. Average student responses for Outcome #4

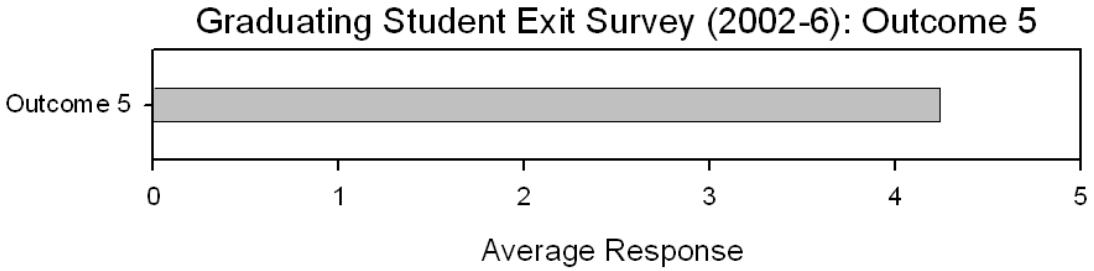

Figure 3.6. Average student responses for Outcome #5

Students generally did not comment on the Outcomes per se; this likely reflects the layout of the form. Instead, pertinent comments were often found in the section on 'Additional questions'. These questions are often related to the Program Outcomes. In addition, a meeting was arranged between graduating students and program Officer and Academic Associates to discuss for any improvement of the educational program. Selected responses are summarized below.

- The controls track needs more classes on intermediate topics to aid in the transition from 3000 to 4000 level.
- More math focused on engineering topics.
- We need more 4000 level courses and specialization.
- Course labs are run down and dirty
- Some of the labs seemed to be lacking in basic supplies and equipment. Maybe due to a lack of funds.
- Computer lab always seems crowded. Systems are outdated.
- Update lab equipment to put the graduate level student on the same level as industry. This is the course-specific labs, not the computer lab.
- Statics and dynamics together is too much for non-ME undergraduates.
- Recommend a MATLAB introduction specialized for engineers
- A better introduction to MATLAB. The six week course that is currently offered is poorly organized and makes use of some advanced examples that student with limited engineering background cannot grasp.
- The laboratories in most classes that you would assume would have labs are pretty much none existent, which really takes away from the learning experience.

- Focus the calculus courses more on the tools that ME students need for the advanced courses.
- Split up Statics and Dynamics courses. The break neck speed of the combined class leaves no time to reflect and absorb. This is a problem in some of the follow on courses like vibrations and controls.
- Improve the bridge between what Math teaches and ME expects.
- The laboratories especially the materials laboratories need work.
- Laboratories were not used in most classes. As a result there is little hands on experience in labs which to me is an important aspect of and engineering education.
- The library and computing facilities were great. The laboratories were not well integrated into the courses. A lot of educational benefit could be gained from incorporating them.
- More laboratory experiences. I think that a course in experimental methods would advance student's understanding of the physics of the phenomena that we study. Computational methods are nice, but I think something is lost when only the computational methods are studied or similarly if only experimental methods are studied.
- Restructure course scheduling to make similar subject areas more grouped and not so disjointed, especially when several quarters pass between opportunities to take related classes. A lot of refreshing is needed to get back into that subject.
- Some of the labs seem dated or in need of repair to equipment, but they generally accomplished their purpose. Computing facilities are more than ample.
- There are very few labs since the classes have been reduced and combined in order to get students through the program faster.

Based on the above, and many more similar responses, we can identify several areas that come up consistently:

- Better labs, both physical and computational.
- Split-up ME2503 (combined Statics and Dynamics course).
- Better introduction to MATLAB.

These concerns were prioritized. Specific actions taken to address the ones that appeared to be more critical to the program and also were under our control are outlined in Section 3.5.

3.4.7. Assessment Criterion # 7 – Alumni & Supervisor Survey

Alumni and supervisor surveys are required in order to assess Program Outcomes #2 ("Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering"), #3 ("Graduating students will have high level of communication skills including technical writing and oral presentation"), #4 (Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering), and #5 (Graduating students will have the ability to apply technical knowledge in a leadership role related to national security). A number of past alumni and supervisors attend the Senior ED Course at the ED School. Therefore, interviews

with these will provide us direct measures of the corresponding program outcomes. Such interviews may be combined with planned visits to the ED School for Assessment Criterion 3.

Profs. Millsaps and Papoulias along with Program Officer CDR Plott conducted a phone interview with four supervisors (CDR Gunze - PSNSY, CDR Christensen – SW Regional Maintenance Center, San Diego, CDR Reck – Strategic Systems Program, and LCDR Sexton – EDO Senior Course coordinator) of our graduates on September 2005. All four supervisors were at the ED School at the time of the interview. They communicated to us not only their opinions but also the opinions of their peers who were not present during the interview.

The general feeling was that the program objectives and outcomes serve them well. This was particularly true for Program Outcomes #2, #4, and #5. There were three issues that were identified during the interview as needing further study:

- Program may not prepare its graduates with adequate oral presentation skills.
- Program may not prepare its graduates adequately so they can conduct cost, benefit, and risk analysis of technology decisions that they often face.
- Program should provide knowledge on JCIDS, FORCEnet, and global information grid processes.

A second interview with supervisors was conducted in March 2006. Three supervisors were directly interviewed, CDR's Anderson, Smith, and Maldonado. In addition to the phone interview, they were also asked to provide us with their written evaluation. On a scale from 0 to 5, they rated the Program Objectives as 4.67, and the four program outcomes as 4.33.

There were two possible issues that were identified during the interview as needing further study:

- There is room for improvement with regards to oral presentation skills.
- It is not clear how the program addresses Objective #2 especially with regards to specification of military requirements.

There seems to be an issue with regards to oral presentation skills. Some suggestions for remedy are:

1. One option would be to make the faculty members aware of the issue and see if they can ask the students to give short presentations as part of their course assignments. In a way, this is already happening since all of the non-BSME students are required to take either ME3712 or TSSE and both programs require oral presentations as part of standard course requirements.
2. Another possible solution would be to invite external speakers to give to the students presentations on oral presentation skills. For example, Senior Lecturer George Lober from the Defense Analysis Dept. at NPS has extensive expertise on oral presentation skills.

3.4.8. Assessment Criterion # 8 – Program Sponsor Evaluation

NAVSEA (Naval Sea Systems Command) 08 is the Program Sponsor of our Curriculum called Naval/Mechanical Engineering. (The subtle difference between the Curriculum and the MSME degree program was described in AC #5 previously.) They provide us with their input regarding the education of Engineering Duty Officers. In order words, NAVSEA 08 specifies what technical knowledge and skills are needed for those officers to perform their jobs. Based on the input, the department sets course works for ED officers. Those educational requirements for ED officers are beyond the requirements for the MSME degree. The ED officers need more breadth of knowledge than the degree requirement.

In order to better educate the ED officers, there have been biannual meetings between NAVSEA 08 and the department. At the meetings, the educational requirements for ED officers were reviewed and updated. Then, the department either created or revised course work depending on the new requirement.

Even though the Program Sponsor does not dictate the MSME degree program itself, the degree requirement is a subset of the ED officer educational requirement. Therefore, an input was solicited from the Program Sponsor for the MSME degree Program Educational Objectives and Outcomes whether they are appropriate. The Program Sponsor indicated general satisfaction with the Objectives and Outcomes.

3.5 Continuous Improvement Process for Program Outcomes

Based on the assessment of the program Outcomes as discussed above, some actions have been taken to improve the program. Those actions are summarized below.

Actions Taken To Improve the Degree Program

- Some courses have implemented a written term report even at 2000 or 3000 levels to provide opportunities to students to practice their written communication skills in technical contents. Along similar lines, in many of our courses we require that the students give short presentations.
- Previously, Engineering Statics and Dynamics were combined into a single course to meet the requirement of the reduced residency of the program. However, based on the graduating students exit survey as well as the course instructors' assessment, it was determined that the combined course did not serve the purpose well. Students learning was not satisfactory. As a result, a course committee was formed, which included Profs. Shin, Kwon and Gordis, to review the situation. The committee proposed in the faculty meeting to split the course into two separate courses as Statics and Dynamics. The proposal was approved by the faculty, and the new split courses were introduced to students from the Spring Quarter of 2007.
- Some of alumni expressed that they wanted to be prepared during the educational Program so that they can conduct cost, benefit, and risk analysis of technology decisions that they often face even with not enough data available. In order to meet those requests, an elective course ME4702 – Engineering Systems Risk Benefit Analysis has been offered to the students.
- It was decided that the Thesis Evaluation form must be filed before the Chairman can sign-off on a thesis. This policy has been implemented for about a year. As a result, availability of data has greatly improved.

- A very aggressive lab recapitalization plan is in progress. A department committee solicited input from all faculty members with regards to their priorities and justification. These were further prioritized by the Department Chair and forwarded to the Dean for funding.

There were other concerns and inputs for potential improvement of the educational program as noted previously. However, in order to maintain stability of the educational program, the faculty decided to watch out for a longer period before any further action could be taken.

3.6 Relation of Courses to Program Outcomes

The course contents were reviewed to meet the program Outcomes. In general, 2000 and 3000 level courses offered in the department are used to meet the BSME equivalency. As a result, those courses were reviewed and checked against the ABET BSME requirements (a) to as stated below. Table 3.4 gives the relationship between the courses and the BSME requirements.

(a) Apply knowledge of mathematics, science and engineering.
(b) Design and conduct experiments as well as analyze and interpret data.
(c) Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
(d) Function on multidisciplinary teams.
(e) Identify, formulate, and solve engineering problems.
(f) Understand professional and ethical responsibilities
(g) Communicate effectively
(h) Understand the impact of engineering solutions in a global, economic, environmental, and social context.
(i) Recognize the need for and be able to engage in life long learning.
(j) Understand contemporary issues.
(k) Use the techniques, skills, and modern engineering tools necessary for engineering practice.

For the MSME degree requirements, students take 3000 and 4000 levels courses on top of the BSME equivalency requirement, depending on their selected specialty areas. The course syllabi are provided in Appendix I-B, and the course journals including exemplary student works will be provided when there is the onsite visit.

Table 3.4 Course Matrix to Support ABET Requirement of BSME

		< Courses in the Generic ME curriculum >																												
		ME0952	ME1000	EC1010	MA1118	OS3104	MA2139	MA1042	EO2102	ME2501	ME2502	MA2049	ME2601	MS2201	ME2201	ME2801	ME2101	MA3132	ME3611	MA3232	ME3521	ME3201	ME3150	MS3202	ME3711	ME3712	ME3450	ME3801	ME3240
1	Chemistry and calc-based phys. (depth in 1)	< SEE NOTE 1 >																												
2	Apply advanced math thru multivariate calculus and differential equations				H		H		H			L				M		H	M	H	H	H	H					H	M
3	Familiarity with statistics…..					H																			L				
	…..and linear algebra							H		L	L					M					M						L		
4	Ability in thermal AND mech systems.incl design and realization		M							M	M		M								M	M	M	M	M	H			M
a	Ability to apply knowledge of math, science and engineering		H	H	H		H		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
b	Ability design & conduct experiments, and analyze and interpret data													M							M	L					L		H
c	Ability to design a system, component or process to meet desired ends		H						M				M		M	L	L							H	H	H	L	L	M
d	Ability to function on multi-disciplinary teams															M								L					L
e	Ability to idenfify, formulate and solve engineering problems		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
f	Understand prof'l & ethical responsibility	M	M																											
g	Ability to communicate effectively																				H			H	H	H	H		M
h	Broad understanding impact of eng'g solutions in global & societal context	H	M																											
I	Recognition of the need for, and an ability to engage in lifelong learning	< SEE NOTE 2 >																												
j	Knowledge of contemporary issues	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
k	Ability use techniques, skills and modern eng'g tools for eng'g practice		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H

Note 1: Achieved through courses in Physics Dept or at MPC, as arranged by Curriculum Officer
Note 2: Achieved via seminars; encouragement to participated in PE exams and post-graduation contacts

4 Professional Component

At the basic level the professional component is satisfied by assuring that the incoming students either have an ABET-accredited undergraduate engineering degree or that they will meet the equivalent of such a degree through a combination of their undergraduate experience and their course matrix at NPS. The advanced-level part of the program includes graduate-level mathematics; additional engineering science and design; and one general course, NS3230, Strategy and Policy: the American Experience.

Our students are unique in respect of the requirements for an adequate design experience. From their Naval experience, they often have had experience in oral and written communication of technical ideas, and in the detailed specifications of equipment that is in need of maintenance, repair or replacement. In addition, our program includes design experience in the several courses. In ME3150 students explore the conceptual design of some form of heat exchanger device. In ME3711, students are asked to design a component such as a helical reduction gear system to a minimum weight criterion for a naval vessel. For those students who have not graduated from an ABET accredited undergraduate program, we especially provide a capstone design experience in the course ME 3712. This course covers system design principles, requirements, concept evaluation, standards and constraints, and though project work, the students are involved in a system design to the conceptual level. The ME3801 control systems course includes a design requirement. Students have been asked to design a compensation system for stabilizing the roll response of a marine vehicle such as a roll stabilizer fin system in which constraints are articulated and evaluated through simulation. The MS3202 course considers failure analysis as the feedback in the iterative process of design. Students are required to identify a failed component and conduct a failure analysis of it. A recommendation regarding how to prevent future failures is part of the required report.

The optional TSSE program covers the organization of a design project as well as the trade-offs necessary in performing the design of a major engineering system such as a warship. The TSSE program includes TS3002, Principles of Ship Design and Case Studies. This course is a systems-oriented course that focuses on needs identification, setting of requirements, feasibility determination, risk reduction, contracts and detail design. The TSSE program concludes with a two-course sequence (TS4002 and 4003) that focuses on the design of a warship as a single engineering system. A major component of this sequence is the integration of the combat system with the hull and propulsion systems.

Mathematical considerations including coverage of probability and statistics are covered through specific focused courses given in the Mathematics and Operations Research Department. Such as MA XXXX MA

Basic Science work, if needed, may be provided by taking selected courses at nearby community colleges such as Monterey Penninsular College.

5 Faculty

The Mechanical Engineering Department prior to September 2003, housed 13 tenure track faculty members. In That month, the Aeronautics program at NPS was closed by a deal between the Air Force and Navy Service Secretaries, and it was decided to combine the Faculty in the Astronautical Engineering part of the AA Engineering Department with the ME Faculty into the new MAE Department. At this time, the Department now houses 16 tenure track faculty and services both the students from the 570 Curriculum (Naval and Mechanical Engineering) and the 591 (Space Systems Engineering) curriculum.

The Mechanical and Astronautical Engineering Department currently is divided into 6 specialization tracks as shown in the Table 5-1 below. Associate Professor Ashok Gopinath is on leave in India working for General Motors, Professors Kaminer and Agrawal have recently completed a Sabbatical year. Recent hires have included Assistant Professor Marcello Romano (Space Craft Dynamics and Control) who is completing his third year and will be recommended for continuation. Additionally the Department houses 17 Non Tenure Track and Visiting Faculty who variously support both the Teaching program as needed and the overall Research program.

The decrease in the number of tenure track faculty from much earlier levels of 17 is consistent with the general decline in student enrollment in the 570 curriculum and the current ratio of resident students (570 and 591) to tenure-track faculty members is about 4.5. With several retirements from both the old Aeronautics and Astronautics Department, and the ME Department, we have both gained and lost Faculty. Table I-4 in the Appendix I lists current Tenure Track faculty covering the 6 major subdivisions of the Department, while the table 5-1 below shows how the faculty align with the specialization areas.

Table 5-1 Faculty and Specialization Areas.

Area	*Faculty Members*
Thermal/Fluid Sciences	Prof. K. T. Millsaps; Assoc. Prof. Gopinath Professor G Hobson, Associate Prof. C. Brophy,
Solid Mechanics, Shock and Vibration	Distinguished Prof. Y. Shin; Prof. Y. Kwon; Assoc. Prof. J. Gordis
Dynamics, Control and Autonomous Systems	Distinguished Prof. A. J. Healey; Prof. I. Kaminer, Prof. M. Driels;
Materials Science and Engineering	Distinguished Prof. T. McNelley; Prof. I. Dutta
Total Ship Systems Engineering	Prof. F. Papoulias
Space Craft Engineering	Distinguished Prof. B. Agrawal, Prof. I M. Ross, Assist. Prof. M. Romano

The backgrounds of the current faculty are well balanced across these discipline areas and the faculty size is sufficient to cover the Mechanical Engineering ESRs as specified for the program. Any future departures will be met with recruitment to stabilize the total number of Tenure track faculty. However, the current enrollment places the Department well below the School's average resident-student to tenure-track faculty ratio (currently about 5.9) and this will be a factor in gaining approval to go forward with a tenure-track recruiting action. Also, the projected reductions in student enrollment will limit our ability to hire. Our strategic plan calls for faculty size to be maintained, but not to grow.

As is noted in Table I-3, Faculty Workload, the Tenure Track Faculty cannot teach the total number of required courses in the program, and we rely on adjunct faculty with specialty area expertise to cover the remainder of classes. For example, we expect to teach 79 total sections in the 2007 year, 45 of which will be taught by Tenure Track faculty and 34 of which will be taught by contract specialists and adjunct faculty. While there is a downside to this from the student perspective, and our own sense of professionalism, the use of contract teaching faculty provides a cushion in the event of reductions in student enrollment which we do not control. We also use this to provide special expertise from outside where it is not with the resident tenure track faculty. This year 43% of our classes will be taught by adjunct, contract, and visiting faculty.

Detailed information pertaining to faculty competency is provided in Table I-4 of Appendix I and the Curriculum Vitae in Part C of Appendix I. All of the faculty have been involved in a wide range of reimbursably funded Navy, DoD, NSF and other research projects. These projects cover a wide range of Navy-relevant topics across the fields of Mechanical, Materials and Naval Engineering.

The annual reimbursable research funding expenditures were $2,899,520 in FY04; $4,681,894 in FY05; $3,309,991 in FY06; and $4,624,251 is planned for expenditure in FY07. There is a difference between planned and expended as some projects carry over across fiscal years. These projects have enabled students to interact directly with research sponsors from the Navy and other agencies in order to see major trends and issues that will emerge in the future. On average, the planned expenditure is $289,015 per faculty member for FY 07.

Altogether, Mechanical Engineering faculty members have published 109 papers in journals and more than 245 papers in conference proceedings over the last five years averaging 1.36 /3.06 faculty member per year.

In addition, three Mechanical Engineering faculty members are authors or co-authors or contributors to textbooks in the field.

M.R. Driels, "Robot Kinematics Tutorial" (and associated software package, MATMAN – A Symbolic Matrix Manipulation Package), Kern International, 1986

M.R. Driels (with Mooring and Roth), "Fundamentals of Robot Calibration", Wiley, 1991

M.R. Driels, “Linear Control Systems Engineering”, McGraw-Hill, 1995

M. R. Driels “Weaponeering”,

Y. W. Kwon (with H. C. Bang), “Finite Element Method Using MATLAB”, CRC Press, 1997; and “Finite Element Method Using MATLAB”, Second Edition, CRC Press, 2000

T. Sarpkaya (with M. Issacson), “Mechanics of Wave Forces on Offshore Structures”, Van Nostrand Reinhold-Wiley, 1981

The following faculty members have received professional society recognition by being named fellows of their professional societies.

M.R. Driels, Fellow of the Inst. Mech. E. (U.K.)
A.J. Healey, Fellow of ASME
Y. W. Kwon, Fellow of ASME
T. R. McNelley, Fellow of ASMI
Y. S. Shin, Fellow of ASME

Recently, three of our faculty have been recognized recently with the award of Distinguished Professor, Distinguished Professors Healey (2003), McNelley (2006) and Shin (2006), in addition to Distinguished Professor Brig Agrawal.

The Department has also been fortunate to have a large number of distinguished visiting and adjunct faculty members from all over the world. These individuals are named below and have participated in both teaching and research activities, and they have contributed a rich diversity to the academic experiences of the students. Several of these individuals have contributed in both a teaching and research capacity as tenure-track faculty members have reduced their teaching load through use of reimbursable funds. A number of National Research Council (NRC) postdoctoral associates have also been affiliated with the Department as well and they have helped maintain a strong, high-level research effort in the program. This has been especially true in the materials area, wherein the NRC postdocs have interacted strongly with the students during the course of their thesis research activities as well as with the faculty.
Current Non Tenure Track faculty members are as follows:

Distinguished Visiting Professor J Lloyd
Dr. J. Sinibaldi, Associate Research Professor
Mr. D. P. Horner, Assistant Research Professor
Dr. K. Jones, Associate Research Professor
Dr. V. Dobrokhodov, Research Assistant Professor
Mr. S. P Kragelund, Research Associate

Dr. Chanrashekhara, Research Professor
Dr. Terry Alfriend, Research Professor
Mr. J. Didoszak, Research Assistant Professor
Dr. O. Yakemenko, Research Associate Professor

Most faculty interactions outside of the institution are with various Navy and Government agencies and laboratories. In many instances, however, faculty members have developed contacts and collaborations with faculty members from other universities as well as with industrial partners through vehicles such as Cooperative Research and Development Agreements (CRADAs). Professor A. J. Healey has developed an international collaboration with IST-Lisbon through a memorandum of understanding between IST and NPS. The Office of Naval Research and NATO has assisted in arrangements; Professor Antonio Pascoal of the Electrical Engineering Department at IST has represented that institution. Sabbatical leave has been another vehicle. For example, Professor A. Gopinath has been on sabbatical leave in Germany and now, India. Professor Kaminer and Agrawal have been on leave at Berkeley and Industry respectively, during FY 2006. Professor Dutta's earlier leave at Motorola has provide renewed insights for his research program in micro soldering materials issues.

6. Facilities

The Department moved into a new building just prior to the last ABET Accreditation visit in 1995. The project budget included $4M to support the acquisition of extensive new laboratory equipment. The Department had been spread out in three different buildings prior to 1995 and the consolidation of facilities largely under one roof has greatly improved interactions and collaborations among the faculty and between faculty and students.

Instructional facilities in the new building included four large, new classrooms, a fully equipped computer laboratory and dedicated laboratories for both instruction and research. The classrooms are due for upgrading and installation of computers and projectors to use existing network connections and bring them fully online. It is anticipated that this will be accomplished with institutional funds rather than Departmental funds.

The original computer laboratory included 24 Silicon Graphics workstations and peripherals. Institutional funds have been used on subsequent occasions to upgrade this laboratory with new servers, Windows NT workstations and selected peripherals have most recently been instituted. This computer laboratory is available at all times to the students and is consistently the most heavily used facility in the building.

Other new facilities acquired with the original building project allowed extensive upgrading of both the instructional and research laboratories in the Department and the Department participates in both a Laboratory Recapitalization Program at NPS as well as special program plus up funds coming from requests to the Navy claimant, NETC through the POM process. For example, we have participated in additional funds through POM 06 for laboratory equipment in "Plus UP" areas defined by the GSEAS Dean for the Unmanned Systems Laboratory and the installation of a "clean room" for the "Nano Mems" activities at NPS in which our Materials faculty will share.

In addition to POM 06 funds, the Center for AUV Research has benefited from the annual DURIP (Defense University Research Instrumentation Program) for the purchase of a REMUS Autonomous Underwater Vehicle ($304K), and two Scan Eagle Unmanned Aerial Vehicles ($350K) as well as a Sea Fox Autonomous RHIB boat from other Navy funds.

In view of diminishing funds for the hiring and use of supporting staff, the degree program as a whole has recently a lessened reliance on formal physical laboratory work. In response to our Navy sponsor, we have included specifically a course in finite element analysis of structures and fluids. Also, computer simulation is widely used in our Dynamics and Control classes with Matlab, and Simulink projects being given. However, especially in the Propulsion and Materials groups, the following courses have associated physical laboratories wherein students conduct experiments and submit reports: ***ME2201, Fluid Mechanics; ME2601, Solids I; MS2201, Introduction to Materials; ME3240, Power and Propulsion; ME3521, Vibrations; MS3202, Failure Analysis***.

Funds for the ongoing maintenance and upgrading of the Department's laboratory facilities have been provided through both laboratory and research recapitalization budgets (Table II-5). Also, substantial support for maintaining and improving these laboratories has come from reimbursable research funding raised by the faculty. The ongoing maintenance and further upgrading of these has been hindered more by lack of support staff and absence of institutional support for faculty labor for these purposes than by lack of funds for the equipment itself.

The Department's laboratory facilities are organized into seventeen major areas for the purpose of oversight by the faculty. These facilities and the responsible faculty members are listed below.

<u>Autonomous Underwater Vehicles (AUV) Laboratory and Unmanned Systems Center</u>
(Distinguished Prof. Healey / Horner / Kaminer)
The centerpiece of this laboratory are the unmanned vehicles, ARIES, and REMUS(2) AUVs, the two Scan Eagle UAVs, several RAVEN UAVs, and a Sea Fox 5 meter RHIB USV. The Unmanned Vehicles program focuses on Command and Control of Autonomous Systems for Mine Hunting and Intelligence gathering and is funded by the Office of Naval Research. The Center has contributed to the evolution of the AUV concept from theory to employment with operational Navy elements in Fleet Battle Exercises (FBXs) and Navy Demonstrations.

<u>CAD/CAE Laboratory</u> ; the laboratory currently houses 35 Dell windows XP workstations and has over 50 major software applications and licenses installed. Included, for example, are Matlab, SolidWorks, Ideas, GeoVRML, STK, Nastran, Dytran, Patran, AutoCad, Ansys, among many others. NPS also has access to mainframe computers and a developing cluster for large-scale processing is available.

Fluid Mechanics and Hydrodynamics Laboratories:
The fluid mechanics laboratory supports instruction in basic courses in fluid mechanics. It is equipped with a small wind tunnel for specific instructional purposes. The hydrodynamics laboratory includes a unique U-shaped oscillating water tunnel for the study of a wide range of phenomena, such as flow about stationary and oscillating bodies, vortex-induced vibrations, stability of submarines and boundary layers, and vortex-free-surface interactions. The hydrodynamics laboratory also houses a re-circulating water tunnel for numerous flow-separation and vibration phenomena and a vortex-breakdown facility for the investigation of the stability of swirling flows. These facilities are supported by a 3-beam Laser-Doppler-Velocimeter, numerous other lasers, high-speed motion analyzers, data-acquisition systems, and dedicated computers for numerical simulations.

Marine Propulsion Laboratory:
This laboratory has gas turbine (Allison C-250) and diesel (Detroit 3-53) engines connected to water brake dynamometers, located in separate, isolated engine test cells. These engines are instrumented to obtain steady-state performance and high-frequency, time-resolved measurements. Aerothermodynamic, acoustic, and vibration phenomena in turbo-machinery and reciprocating engines are being investigated, particularly relating to non-uniform flow and condition-based maintenance (CBM) in naval machinery. These engines are used for both instructional and applied research programs in the area of marine power and propulsion. In addition, this lab has bench-top rotordynamics experiments for demonstrating high-speed machinery balancing and investigating rotordynamic instabilities. The lab has sub-scale flow facilities for developing and testing low observable (stealth) technologies for engine inlets and exhausts.

Rocket Propulsion Laboratory:
This lab conducts research on advanced concepts in solid, liquid, and combined mode propellants. Experimental and computational research is conducted in the areas of propellant mixing, combustion, pulse detonation, thrust control, and plume mixing. A full range of mechanical and optical diagnostic techniques are used on small and subscale experiments.

Turbo-Propulsion Laboratory:
The Turbo Propulsion Laboratory houses a unique collection of experimental facilities for research and development related to compressors, turbines, and advanced air-breathing propulsion engine concepts. In a complex of specially designed concrete structures, one building, powered by a 750 HP compressor, contains 10 by 60 inch rectilinear and 4 to 8-foot diameter radial cascade wind tunnels, and a large 3-stage axial research compressor for low speed studies. A two-component, automated traverse, LDV system is available for CFD code verification experiments. A second building, powered by a 1250 HP compressed air plant, contains fully instrumented transonic turbine and compressor rigs in explosion-proof test cells. A spin-pit for structural testing of rotors to 50,000 RPM and 1,800 degrees Fahrenheit is provided. Model experiments and equipment for instrumentation development are located in a separate laboratory. Data acquisition from 400 channels of steady state and 32 channels of non-steady measurements, at up to 200 kHz, is controlled by the laboratory's Pentium workstations. A third building houses a 600 HP radial and 150 HP boost compressor capable of delivering 2000 scfm of air at 10 and 20 atmospheres respectively. These charge four

tanks for blow-down to a supersonic wind tunnel (4 x 4 inches), a transonic cascade wind tunnel (2 x 3 inches), and two free jets (one 6-inch and one 1-inch in diameter). The large free jet is equipped with an instrumented thrust stand for the testing of small gas turbine engines. The building also houses a 3-inch diameter shock tube. Pressure measurements are made with a 96-channel Scani-valve ZOC system and pressure sensitive paint, and Schlieren and shadowgraph techniques are used routinely.

Thermal Engineering Labs:
These labs are used mainly for instruction in heat transfer to investigate convection phenomena of single and multi-phase flows and include facilities for measurement of temperature change and fluid motion in a range of systems. The lab also includes equipment/instrumentation for measurements in microelectronics and micro-heat exchanger systems.

Machine Shop and Electronics Support; the Department maintains a machining facility and electronics shop for support of both instruction and research.

Materials Characterization Laboratory; (McNelley); major facilities include a Topcon 002B 200KV transmission electron microscope; Topcon S510 scanning electron microscope; Perkin ElmerAuger spectrometer; Philips X-ray diffractometer; and additional optical microscopy and physical characterization equipment. There is a plan in the POM 08 cycle for an $850K purchase of a new SEM to replace the existing machine.

Materials Processing Laboratory; (McNelley); facilities include heat treatment, deformation processing and deposition facilities.

Mechanical Testing Laboratory; (Dutta); this laboratory is equipped with a selection of electro-mechanical and servo-hydraulic testing machines and other equipment for tension, compression, fatigue and creep testing of metals, composites and microelectronic components.

Solid/Structures and Vibrations Laboratory; This laboratory is equipped with an isolation pad, anechoic tank and SGI and HP workstations for data acquisition and analysis.

Ship Shock Simulation Laboratory (Distinguished Professor Shin); this is equipped to conduct shock and vibration analysis, modeling and simulations for hardware and software. We have conducted naval ship shock simulations including DDG53, DDG81, LPD19, and the current work is for LCS-1 & LCS-2. This computational laboratory has been functional to develop and validate modeling and simulation capabilities to improve the survivability of ships subjected to realistic underwater explosions.

TSSE Design and Computer Laboratory (Papoulias); this is a dedicated facility for the Total Ship Systems Engineering program and is set up to facilitate interaction among large groups of students working on various ship design projects.

Space Craft Design and Engineering Center

(Distinguished Prof. Brij Agrawal)

Optical Relay Mirror Laboratory

A new joint NPS and AFRL laboratory, the NPS-AFRL Optical Relay Spacecraft Laboratory, was dedicated on June 5, 2002. This laboratory is used for both instruction and research on acquisition, tracking and pointing of flexible military spacecraft. Three-axis simulator 1 can simulate spacecraft three-axis motion as well as the optical system of a space telescope. The spacecraft simulator has three reaction wheels and thrusters as actuators; rate gyros and sun sensors as sensors; an on-board processor and batteries; and is supported on a spherical air bearing. The optical system consists of a laser source, a fast steering mirror, jitter sensor, and a video camera as a tracking sensor.

Three-Axis Simulator 2
The three-axis simulator 2 can be divided into three modules: spherical air bearing, spacecraft bus module and optical payload module. The spacecraft bus has three variable speed control moment gyros (CMGs), a Northrop Grumman - Litton LN-200 IMU consisting of three fiber optics rate gyroscopes, sun sensors, magnetometers, inclinometer, a fine sensor, batteries, power switching and control electronics, and an automatic balancing system. The optical payload consists of a receive telescope and associated optical equipment on the upper platform and a transmit telescope and associated optical equipment on the lower platform.

Laser Jitter Control Testbed
The purpose of the testbed is to investigate control methods to reduce optical jitter and mitigate disturbances to optical beams and structures. Emphasis is placed on Adaptive Control methods due to the expected changing environment.

Adaptive Optics Test Bed.

The purpose of this test bed is to develop improve control techniques for adaptive optics. The current application is controlling surface of large flexible mirrors in space. The test bed has two adaptive optics systems (two deformable mirrors and two wave front sensors). One system corrects the surface of flexible mirror and the other system correct the aberration in imaging object beam. The test bed also has fast steering mirror for correcting jitter. The test bed has two beams: reference beam and object beam. The reference beam is used by the sensors and actuators to correct flexible mirror surface and beam jitter introduced in the spacecraft.

Smart Structure Laboratory

NPS Space Truss
The overall dimension of the NPS space truss is 3.76 m long, 0.35 m wide and 0.7 m tall. Two piezo-ceramic struts are installed as actuators near the base of the truss. The output force for the actuator is 0-100 N and the displacement range is 0-90m. A linear Proof Mass Actuator, located at the left end of the truss, generates the disturbance.

Precision Pointing Hexapod

The Positioning Hexapod is used for testing control algorithms for both vibration isolation of an imaging payload and fine steering. It is based on an arrangement of six self-supporting electromagnetic voice coil actuators with in-line accelerometers that could enable control of high vibration. Lower frequency steering and vibration isolation is provided by the use of a laser-photo-diode based on a 2-axis position detecting system and eddy current position sensors. The system can deliver over 5.7 mm of axial/position travel, 20 mm of lateral motion, 2.5 deg. of tilt motion and 10 deg. of twist.

Flexible Spacecraft Simulator (FSS)

The FSS, as shown in the figure, simulates attitude motion in the pitch axis of a flexible spacecraft. It consists of a central rigid body representing the spacecraft central body and a flexible appendage representing a reflector with a flexible support structure. This system is floated on air pads over a granite table to simulate a micro-gravity environment. The actuators are thrusters with air supplied by a compressed air bottle and a momentum wheel.

FLTSATCOM Laboratory

This laboratory, as shown in the figure, consists of a qualification model of the Navy FLTSATCOM communications satellite, the associated ground support equipment for testing the satellite, and the FLTSATCOM Attitude Control Simulator, which provides a graphical display of the spacecraft's attitude and rotational motion in response to commands similar to the commands required for flight model FLTSATCOM spacecraft.

Spacecraft Design Laboratory

This laboratory houses computer–aided design tools for spacecraft design and a spacecraft design library. It has GENSAT, a general-purpose software application for satellite design, and Conceptual Design Center (CDC) software from Aerospace. In addition, it has several subsystem design software packages, such as STK, NASTRAN, IDEAS and Matlab/Simulink. Using these unique design tools, students can perform collaborative spacecraft design.

Spacecraft Robotics Laboratory
(Prof. Marcello Romano)

The Autonomous Docking & Spacecraft Servicing (AUDASS) test-bed at the NPS Spacecraft Robotics Lab consists of two spacecraft simulators floating via air-pads on a flat floor in order to recreate in 2D the weightlessness and frictionless conditions of orbital space flight. The test-bed is used to validate Guidance, Navigation and Control Algorithms for spacecraft proximity operations. This test-bed has been developed under AFRL and NPS sponsorship.

Nonlinear Control Systems Laboratory

The laboratory contains two nonlinear control stations. At one station is a flexible robotic link manipulator system that is used for exploring and demonstrating new nonlinear feedback control laws for fast dynamical systems. The second station is a magnetically actuated

spacecraft bus floating on an airbearing assembly that is used to demonstrate nonlinear control laws based on traditional and pseudospectral (PS) techniques. Both stations employ an unscented Kalman filter (UKF) for nonlinear estimation. The PS-UKF framework forms the basis of exploring autonomous operations for generic nonlinear systems.

7. Institutional Support

The Department receives budget allocations from the GSEAS Dean in two main categories: labor and operating target (OPTAR). For a given year, the labor allocation is determined by two factors. These are the numbers of courses taught in the preceding year and the number of thesis students advised. The algorithm for this process resides in the Office of Academic Planning. There is no longer any allocation reflecting the number of faculty in a department, nor are any funds identified directly in the Department allocation as in support of faculty or program development. This situation reflects, as noted earlier, the difficult budget climate in the Department of Defense in general and at the School in particular. It is up to individual Chairs to determine the allocation of labor budget to individual faculty members. In Mechanical and Astronautical Engineering, essentially the entire budget is being consumed in support of faculty labor to teach the program for which it is systematically insufficient. The following tabular summary shows how the current situation has evolved in recent years. The budget is expressed in direct support dollars at the accelerated rate. The H funds are for workload relief and were provided to relieve the burden on faculty raising reimbursable funds which were becoming excessive. The number of course sections taught in each year are also shown for comparison.

Fiscal Year	*TT Faculty*	*Faculty Labor Budget**	*Workload Relief, H funds***	*Course Sections Taught*
'05	17	$1,905,139	$415,144	88
'06	16	$1,959,474	$308,213	83
'07	16	$1,731,065	$213,460	79

* Does not include budget for Distance Learning Programs which are separate
** Additional to Labor Budget

Clearly the institutional budget allocation in support of the program has decreased significantly in recent years. The budget has been balanced each year by use of reimbursable research funds, by use of reimbursable funds for teaching new programs (e.g., the 571 Curriculum a DL program for Naval Reactors), and by other means. These other means include relying on funds held back by the administration to cover short falls in the labor budget.

Funds to support faculty development are not generally available and with the exception of sabbatical funds, the institution relies more and more on the reimbursable research program to support the immediate needs of faculty.

The Department OPTAR account is mainly used to support ongoing operations and routine office and laboratory supply items. The OPTAR account may also be used for limited travel. Mostly, travel is supported by reimbursable funds and the Chair is very limited in available support for faculty travel to conferences where no reimbursable money is available.

The OPTAR for Mechanical Engineering has varied around $40K in recent years and is $46K for Fiscal Year 2007. Additional money is provided as reimbursable indirect funds, which may be used to support both faculty and staff labor (related to research) and faculty

travel for various purposes including fund raising. The amount of these funds has also varied from $36K to $45K each year. It has not been possible to support all faculty requests for travel to see prospective research sponsors and to attend and participate in research conferences, workshops and symposia even in the absence of a funded research program in the area. The research indirect accounts are managed by individual faculty according to their own generation.

In recent years, NPS has allocated funds for recapitalization of both instructional laboratories and for the research infrastructure. The recent funding levels are provided in Table I-5. Since many facilities were new in 1995, these funds have been adequate to maintain the facilities but have not been sufficient to fund significant new initiatives in either the instructional laboratories or research. Faculty members have been able to arrange transfer of equipment from other Navy facilities or been able, in one instance, to secure donations of equipment from industry. In addition, In 2006, the Dean was able to institute Laboratory Support for New Initiatives. There were 5 areas named, Unmanned Systems and the Nano Mems initiative which resulted in the availability of funds to furbish a clean room for the materials group, and reequip the unmanned vehicles center with instrumentation for the Autonomous Underwater vehicle program. The AUV center has been successful in winning awards through the DURIP (Defense University Research Instrumentation Program) for $300K and $350K in the 04 and 06 years.

The division of Institutional recapitalization funds between laboratories supporting the MSME and the MSAstroE degree programs is roughly 178K and 83K respectively for 2007. Items are requested by the faculty annually and are prioritized by the Chair. These requests are justified at an NPS wide committee meeting, following which, cuts are made according to the estimated funds available. Purchase requests are then made and forwarded to the Dean's office, and depending on the availability of funds at the end of the year, some of the requested items are purchased. Unfortunately, this process leads to late purchasing and sometimes items are not even purchased.

The budget allocation from the institution for technical support staff labor has been reduced even more than the faculty labor budget. In 1995, the Department had funding in support of six engineering technicians and three model maker machinists. Several of these individuals have left or retired in the intervening years and most of them have not been replaced. In 2001, there were only two engineering technicians and a recruiting action in place to hire a third, while there were two model maker machinists in support of Mechanical Engineering in a consolidated machine shop. The reductions in faculty labor support and the decline in number of engineering technicians remain the most serious impediments to maintenance and improvement of the instructional laboratories in this Department.

Recently with the help of shared funds with reimbursable funds we have been able to hire more staff in duties that cut across the Department and relate mostly to shared efforts between research programs and teaching support.

Mardo Blanco 50% Time Mechanic
Tom Christian, Electronics Engineer 100% Time

Michael Doherty, 100% Time
John Gibson, Technician 100% Time
George Hegman, Technician 50% Time
Don Meeks Technician, 75% Time
Ben Wring, 20% Time
Aurelio Monarez, 100% Time
Matt Goldman Engineer, 50% Time

8. Program Criteria

Additional program criteria applicable to the program for the 570 Curriculum include the following:

> The graduate must have knowledge of chemistry and calculus-based physics; the ability to apply advanced mathematics through multivariable calculus and differential equations; familiarity with statistics and linear algebra; and the ability to work professionally in both thermal and mechanical systems areas, including design and the realization of such systems.

All of these requirements are factored into the certification procedure that has been established to ensure that individuals accepted into the 570 Curriculum will meet both the basic and advanced level ABET criteria by completion of the program.

Briefly, the Curriculum Officer and the Academic Associate review the transcript of each incoming student to determine whether or not the student has an ABET accredited undergraduate degree. For those who do not have such a degree, the pertinent mathematics, science and humanities courses are entered into a database and coupled with a prospective matrix of courses to be taken at NPS. An iterative process then ensues, involving modification of the matrix of courses, until all of these program requirements are met. In the event that the student has not had chemistry (a rare circumstance), the requirement can be met using local colleges. The program requires students to study mathematics to the level of partial differential equations and numerical analysis. Statistics appears specifically through a course in Operations Research and the design content of the program is met through ME courses.

Table 4 in Appendix I provides a faculty analysis, and current curriculum vitae for the Mechanical Engineering faculty appear in Appendix I, Part C. All faculty members in Mechanical Engineering have earned doctorates. All are from highly regarded doctoral programs. The faculty brings a variety of professional experiences to the program, including purely academic, mixtures of industry and academic, and government or national laboratory experience. All faculty members are active in professional organizations, including ASME, ASNE, TMS and ASMI, and AIAA. Levels of involvement vary, but range from attendance at national meetings to leadership in various society activities. Several faculty members maintain well-funded research programs and a high level of research output in the form of reports, papers and presentations in conference proceedings, and publications in archival journals.

9. General Advanced-Level Program

The certification procedure that has been established to ensure that individuals accepted into the 570 Curriculum will meet the basic level ABET criteria by completion of the program has been long established in this program. Briefly, the Curriculum Officer and the Academic Associate review the transcript of each incoming student to determine whether or not the student has an ABET accredited undergraduate degree. For those who do not have such a degree, the pertinent mathematics, science and humanities courses are entered into a database and coupled with a prospective matrix of courses to be taken at NPS. A matrix of coursework is then established for each such student taking into account qualifying coursework from the Batchelor's Degree program and adding to it such additional classes as may be needed to meet ABET basic level accreditation requirements. The Department chair certifies on a form, prior to the student graduation, that the student's individual program meets the ABET requirements.

The certification procedure is designed to assure that the basic and advanced level program requirements are separately and completely satisfied. The advanced level criteria may be satisfied by completion of the core graduate course sequence, plus a sequence of at least three advanced graduate (4XXX) level courses as approved by the Curricular Officer, Academic Associate and Department Chairman, and a thesis. The thesis must represent an original investigation on a topic that must be approved by the Curricular Officer, Academic Associate and Department Chairman prior to commencement. Finally, the results of the thesis investigation must be presented in written form, presented in oral form to the Department, and finally approved by the thesis advisor and Department Chairman. The Department keeps a record of selected presentation on VHS video tape.

APPENDIX I A

Table 1. Basic-Level Curriculum

(Master of Science in Mechanical Engineering)

Year; Semester or Quarter	Course (Department, Number, Title)	Category (Credit Hours)			
		Math & Basic Sciences	Engineering Topics Check if Contains Design (✓)	General Education.	Other

ABET B.S.M.E. Equivalency

All students who enter the ABET-accredited M.S.M.E. degree program must satisfy the requirements of an ABET-accredited B.S.M.E. degree (ABET B.S.M.E. Equivalency). This can be accomplished in one of two ways:

1. Student has earned an B.S. degree from an ABET-accredited Mechanical Engineering undergraduate program; or,
2. Student takes sufficient additional preparatory courses at NPS to meet the ABET B.S.M.E. Equivalency requirements.

This ABET equivalency is documented for every student in the B.S.M.E. equivalency Checklist (See Section D.2.) This checklist is signed by the Program Officer, the Associate Chair for Academics, and the Chair.

(continued on next page)

Table 1. Basic-Level Curriculum (continued)

(Master of Science of Mechanical Engineering)

Year; Semester or Quarter	Course (Department, Number, Title)	Category (Credit Hours)			
		Math & Basic Science	Engineering Topics Check if Contains Design (✓)	General Education	Other
TOTALS-ABET BASIC-LEVEL REQUIREMENTS					
OVERALL TOTAL FOR DEGREE					
PERCENT OF TOTAL					
Totals must satisfy one set	Minimum semester credit hours	32 hrs	48 hrs		
	Minimum percentage	25%	37.5 %		

Note that instructional material and student work verifying course compliance with ABET criteria for the categories indicated above will be required during the campus visit.

Table 1A. Advanced-Level Curriculum

(Master of Science of Mechanical Engineering)

Year; Semester or Quarter	Course (Department, Number, Title)	Category (Credit Hours)			
		Math & Basic Sciences	Engineering Topics Check if Contains Design (✓)	General Education.	Other
Q1	NW3230 Strategy and Policy: The American Experience			4.0	
Q3	MA3132 Partial Diff. Eqns. and Integral Transforms	**4.0**			
*	ME 3611 Mechanics of Solids II		**4.0** (✓)		
Q4	MA 3232 Numerical Analysis	**4.5**			
*	ME 3521 Mechanical Vibration		**4.0** (✓)		
*	ME 3201 Applied Fluid Mechanics		**4.5** (✓)		
*	ME 3150 Heat Transfer		**4.5** (✓)		
Q5 *	ME3711 Design Of Machine Elements		**4.5** (✓)		
	ME3450 Computational Methods in Mechanical Engineering		**4.0** (✓)		
*	MS3202 Properties, Performance & Failure of Engineering Materials		**4.0** (✓)		
**	ME 4xxx Elective		**4.0** (✓)		
Q6 *	ME3801 Autonomous Systems		**4.0** (✓)		

	and Vehicle Control I					
	ME3240 Marine Power and Propulsion		**5.0**	(✓)		
	ME3712 Capstone Design Project		**4.0**	(✓)		
**	ME 4xxx Elective			**4.0** (✓)		
Q7	TS3001 Fundamental Principles of Naval Architecture		**4.0**	(✓)		
	MS3304 Corrosion and Marine Environmental Deterioration OR MS3606 Introduction to Welding and Joining Metallurgy		**4.0**	(✓)		
	ME 0810 Thesis			**4.0** (✓)		
	ME 0810 Thesis			**4.0** (✓)		

(continued on next page)

Table 1A. Advanced-Level Curriculum (continued)

(Master of Science in Mechanical Engineering)

Year; Semester or Quarter	Course (Department, Number, Title)	Category (Credit Hours)			
		Math & Basic Science	Engineering Topics Check if Contains Design (✓)	General Education	Other
Q8	TS 3001 Naval Architecture		**4.0** (✓)		
**	ME 4xxx Elective		**4.0** (✓)		
	ME 0810 Thesis		**4.0** (✓)		
	ME 0810 Thesis		**4.0** (✓)		
TOTALS-ABET BASIC-LEVEL REQUIREMENTS					
OVERALL TOTAL FOR DEGREE					
PERCENT OF TOTAL					
Totals must satisfy one set	Minimum semester credit hours	32 hrs	48 hrs		
	Minimum percentage	25%	37.5 %		

Note that instructional material and student work verifying course compliance with ABET criteria for the categories indicated above will be required during the campus visit.

Table 2. Course and Section Size Summary

(Master of Science in Mechanical Engineering)

Course No.	Title	No. of Sections offered in Current Year	Avg. Section Enrollment	Type of Class (1)			
				Lecture	Laboratory	Recitation	Other
ME 1000	Preparation for PE	1	7	100%			
ME 2101	Engng. Thermodynamics	2	13	80%		20%	
ME 2201	Intro. Fluid Mechanics	2	14	75%	25%		
ME 2503	Statics and Dynamics	2	16	100%			
ME 2601	Mech. of Solids I	2	16	75%	25%		
ME 2801	Inrto. Engng. System Dynamics	2	13	75%	25%		
ME 3150	Heat Transfer	2	11	89%		11%	
ME 3201	Appl. Fluid Mechanics	2	14	89%		11%	
ME 3240	Marine Power & Propulsion	2	14	80%	20%		
ME 3410	Instrumentation & Measurement	2	11	50%	50%		
ME 3450	Comput. Meth. in Mech. Engng.	2	11	75%	25%		
ME 3521	Mechanical Vibration	2	10	75%	25%		
ME 3611	Mechanics of Solids II	2	15	100%			

1. Enter the appropriate percent for each type of class for each course (e.g., 75% lecture, 25% recitation). This percentage is based on credit hours.

Table 2. Course and Section Size Summary (cont.)

(Master of Science in Mechanical Engineering)

Course No.	Title	No. of Sections offered in Current Year	Avg. Section Enrollment	Type of Class (1)			
				Lecture	Laboratory	Recitation	Other
ME 3711	Design of Machine Elements	2	16	89%		11%	
ME 3801	Control of Naval Engng. System	2	14	75%		25%	
ME 4160	Application of Heat Transfer	1	4	100%			
ME 4161	Conduction Heat Transfer	1	24*	100%			
ME 4162	Convection Heat Transfer	1	20*	100%			
ME 4163	Radiation Heat Transfer	1	6	100%			
ME 4202	Compressible Flow	0	0	100%			
ME 4211	Appl. Hydrodynamics	0	0	100%			
ME 4220	Viscous Flow	0	0	100%			
ME 4240	Adv. Topics in Fluid Dynamics	0	0	100%			
ME 4300	Weaponeering	1	10	75%		25%	
ME 4420	Marine Gas Turbine	1	7	100%			
ME 4522	FEM in Structural Dynamics	1	17*	100%			

1. Enter the appropriate percent for each type of class for each course (e.g., 75% lecture, 25% recitation). This percentage is based on credit hours.

* Includes distance learning students

Table 2. Course and Section Size Summary (cont.)

(Master of Science in Mechanical Engineering)

Course No.	Title	No. of Sections offered in Current Year	Avg. Section Enrollment	Type of Class (1)			
				Lecture	Laboratory	Recitation	Other
ME 4525	Naval Ship Shock	1	6*	100%			
ME 4550	Random Vib. & Spectral Analy.	0	0	100%			
ME 4612	Adv. Mechanics of Solids	1	15*	100%			
ME 4613	Finite Element Methods	1	24*	100%			
ME 4620	Theory of Continuous Media	0	0	100%			
ME 4731	Engng. Design Optimization	1	24*	100%			
ME 4811	Multivariable Contr. Ship System	1	9	75%		25%	
ME 4812	Fluid Power Control	0	0	75%	25%		
ME 4821	Advanced Dynamics	1	5	75%		25%	
ME 4823	Dynamics of Marine Vehicles	1	11	100%			
ME 4825	Marine Propulsion Control	0	0	75%	25%		
ME 4902	Adv. Study in Mech. Engng	5	1	100%			
MS 2201	Intro. Mater. Science & Engng	2	13	75%	25%		

1. Enter the appropriate percent for each type of class for each course (e.g., 75% lecture, 25% recitation). This percentage is based on credit hours.

* Includes distance learning students

Table 2. Course and Section Size Summary (cont.)

(Master of Science in Mechanical Engineering)

Course No.	Title	No. of Sections offered in Current Year	Avg. Section Enrollment	Type of Class (1)			
				Lecture	Laboratory	Recitation	Other
MS 3202	Failure of Engng Materials	2	7	75%	25%		
MS 3214	Intermediate Mat. Sci. & Engng	0	0	100%			
MS 3304	Corrosion	1	8	75%	25%		
MS 3606	Welding and Joining Metallurgy	1	10	75%	25%		
MS 4215	Phase Transformation	0	0	75%	25%		
MS 4312	Characterization of Adv. Mater.	1	0	75%	25%		
MS 4811	Mech. Behavior Engng Material	1	8	100%			
MS 4822	Composite Materials	1	6	100%			
MS 4902	Special Topics in Mater. Science	0	0	100%			
TS 3000	Electrical Power Engineering	1	11	75%	25%		
TS 3001	Naval Architecture	2	21	75%	25%		
TS 3002	Adv. Study in Mech. Engng	1	8	75%	25%		
TS 3003	Naval Combat System Elements	2	11	75%	25%		

1. Enter the appropriate percent for each type of class for each course (e.g., 75% lecture, 25% recitation). This percentage is based on credit hours.

Table 2. Course and Section Size Summary (cont.)

(Master of Science in Mechanical Engineering)

Course No.	Title	No. of Sections offered in Current Year	Avg. Section Enrollment	Type of Class (1)			
				Lecture	Laboratory	Recitation	Other
TS 4000	Naval Combat System Engng	2	11	75%	25%		
TS 4001	Integration Naval Engng. System	1	9	75%	25%		
TS 4002	Ship Design Integration	1	8	50%	50%		
TS 4003	Total Ship Systems Engineering	1	5	50%	50%		

1. Enter the appropriate percent for each type of class for each course (e.g., 75% lecture, 25% recitation). This percentage is based on credit hours.

Table 3. Faculty Workload Summary for Fiscal Year 2007

(Mechanical Engineering)

Faculty Member (Name)	FT	Classes Taught (Course No./Credit Hrs.) Quarter in the 07 year	Total Activity Distribution[2]		
			Teaching	Research	Other
Brig Agrawal	FT	Win :AE 3870(3-2); Sp: AE3811(3-2);AE 4816 (4-1) Sum: AE4871(3-2)	45%	45%	10%
Chris Brophy	FT	Fall:ME4704(3-2);Sp: ME4902(4-0);Sum: AE4452(4-1)	30%	70%	
M.R. Driels	F	Fall: ME2801(3-2); Sp: ME4700(4-0)	25%	70%	5%
I. Dutta	FT	Fall: MS4811(4-0), MS3202(3-2); Win: MS2201Sp: MS3304(3-2);	50%	45%	5%
A. Gopinath	F	Leave of Absence	0%	0%	0%
J. Gordis	FT	Win: ME3521(3-2); Sp: ME4731/DL (4-0); Su: ME4522(4-0)	45%	45%	10%
A. Healey	FT	Win: ME4823(4-0)	10%	10%	80% (Administration)
Garth Hobson	FT	Fall:ME3450(3-2)Win:ME3240(4-2) Sum:ME3240(4-2)	30%	70%	0%
Isaac Kaminer	FT	Fall:ME4811(3-2);Sp:ME4821(3-2) ME4902(4-0);	30%	70%	0%
Y. Kwon	FT	Fall:ME4613(4-0)/DL;Win:ME2601(4-1) Sp:ME3611(4-0)	30%	60%	10%
T. McNelley	FT	Fall:MS3606(3-2);Sp:MS3202(3-2), Sum:MS4215(3-2), MS2201(3-2)	50%	50%	0%
K. Millsaps	FT	Sum: ME4161(4-0)/DL	20%	40%	40%
F. Papoulias	FT	Fall: TS4003(2-4) Win: TS3001(3-2) Sp:TS4001(3-2) Sum:TS4002(2-4)	50%	40%	10% Administration
Marcello Romano	FT	Fall: AE3818(3-2) AE3820(3-2) Sp: AE3815(3-2)	30%	70%	0%

Isaac M. Ross	FT	Fall: AE4850(3-2) Sp: AE3830(3-2) Sum: AE4860(2-2)	30%	70%	0%
Y. Shin	FT	Win: ME3712(1-6) Sum: ME3521(3-2)	25%	75%	0%

Table I-4. Faculty Analysis

Master of Science in Mechanical Engineering

Name	Rank	FT or PT	Highest Degree	Institution from which Highest Degree Earned & Year	Years of Experience			State in which Registered	Level of Activity (high, med, low, none)		
					Govt./ Industry Practice	Total Faculty	This Institution		Professional Society (Indicate Society)	Research	Consulting/ Summer Work in Industry
Brig Agrawal	DP	FT	PH.D	Syracuse University, 1970	20	21	17	-	Med	High	Med
Christopher M. Brophy	Assoc. Prof.	FT	PH.D	University of Alabama, Huntsville, 1977	4	9	9	-	Med	High	Med
Morris R. Driels	Prof	FT	PH.D	City University of London, U.K., 1973	2	34	18	-	Low-AMSE	Med	High
Indranath Dutta	Prof	FT	PH.D	University of Texas- Austin, 1988	-	19	19	-	Med-TMS, MRS	High	High
Ashok Gopinath	Assoc. Prof.	FT	PH.D	UCLA, 1992	-	13	12	California	Med-ASME, IEEE	High	Low
Joshua H. Gordis	Assoc. Prof.	FT	PH.D	Rensselaer Polytechnic Inst., 1990	2	16	15	-	Med-ASME, SEM	High	Low
Anthony J. Healey	Prof	FT	PH.D	University of Sheffield, U.K., 1966	8	34	21	Texas	Med-ASME, IEEE	High	Med
Garth V. Hobson	Prof	FT	PH.D	Penn State, 1990	22	20	20	-	Med, AIAA	High	None
Isaac I. Kaminer	Prof	FT	PH.D	University of Michigan, 1992	4	15	15	-	Med	High	Low
Young Kwon	Prof	FT	PH.D	Rice University, 1985	2	20	14	-	High-ASME,SPE	High	None
Terry R. McNelley	Prof	FT	PH.D	Stanford University, 1973	-	35	31	-	Med-TMS, ASMI	Med	Low
Knox T. Millsaps	Prof	FT	PH.D	MIT, 1991	-	16	15	-	Med-ASME, SAE	Med	High
Fotis A. Papoulias	Prof	FT	PH.D	University of Michigan, 1987	-	20	18	-	Low-ASNE, ASME	Med	None

.

Table I-4. Faculty Analysis (Continued)

Marcello Romano	**Asst. Prof.**	**FT**	**PH.D**	**Milan Polytech University, 2001**	**4**	**3**	**3**	**-**	**AIAA, IEEE**	**High**	**Low**
Isaac M. Ross	**Prof**	**FT**	**PH.D**	**Penn State, 1990**	**11**	**16**	**16**	**-**	**High**	**High**	**Low**
Young Shin	**Prof**	**FT**	**PH.D**	**Case Western University, 1971**	**10**	**26**	**26**	**Ohio & California**	**High-ASME**	**High**	**Med**

Instructions: Complete table for each member of the faculty of the program. Use additional sheets if necessary. Updated information is to be provided at the time of the visit. The level of activity should reflect an average over the current year (year prior to visit) plus the two previous years

Table I-5. Support Expenditures

Master of Science in Mechanical Engineering

Fiscal Year	1	2	3	4
	2005	2006	2007	(year of visit)
Expenditure Category				
Operations[1] (not including staff)	$34,653.00	$35,424.66	$34,068.86	
Travel[2]	$2,791.21	$8,486.00	$12,170.00	
Equipment[3]				
Institutional Funds	$269,000.00	$341,000.00	$259,000.00	
Grants and Gifts[4]	-	-	-	-
Graduate Teaching Assistants	-	-	-	-
Part-time Assistance[5] (other than teaching)	-	-	-	-

Appendix I-B

Course Syllabi

This Appendix contains abbreviated course syllabi. The following two tables summarize the results of this Appendix with regards to course mapping to the professional component and program outcomes.

	Relationship of Course to Required Professional Components				
	A	B	C	D	E
ME0952			X		X
ME1000		X	X		
ME2102		X			
ME2201		X			
ME2501	X				
ME2502	X		X		
ME2601		X			
ME3150	X	X			
ME3201	X	X			
ME3410		X	X	X	X
ME3450	X	X	X		
ME3521		X			
ME3611		X			
ME3711		X		X	
ME3712	X	X	X	X	X
ME3750		X		X	X
ME3801	X	X	X		
ME4101		X			X
ME4161		X	X		X
ME4162	X	X			X
ME4163	X	X	X		X
ME4211		X			X
ME4220	X	X			X
ME4225	X	X	X		X
ME4240		X			X
ME4420		X		X	X
ME4522		X			X
ME4525		X			X
ME4550		X			X
ME4611		X			X
ME4613		X			X
ME4731		X			X
ME4751		X		X	X
ME4811		X			X
ME4821		X			X
MS2201		X			
MS3202		X			
MS3304		X			X
MS3606		X			X
MS4215					X
MS4312					X
MS4811					X
MS4822		X			X
TS3001	X	X	X	X	
TS3003					X
TS4000					X
TS4001		X			X
TS4002				X	
TS4003				X	X
TOTAL	12	39	11	9	32

	Relationship of Course to Program Outcomes				
	1	2	3	4	5
ME0952	X	X		X	
ME1000	X			X	
ME2102	X			X	
ME2201	X				
ME2501	X			X	
ME2502	X			X	
ME2601	X		X	X	
ME3150	X	X		X	
ME3201	X	X		X	
ME3410	X		X	X	X
ME3450	X	X	X	X	
ME3521	X				
ME3611	X	X	X	X	
ME3711	X	X	X	X	X
ME3712	X	X	X	X	X
ME3750		X		X	X
ME3801	X	X	X	X	
ME4101	X	X		X	
ME4161	X	X		X	X
ME4162	X	X		X	
ME4163	X	X		X	
ME4211	X	X		X	
ME4220	X	X		X	X
ME4225	X	X	X	X	
ME4240		X		X	
ME4420		X	X	X	X
ME4522	X	X	X	X	
ME4525	X	X	X	X	
ME4550	X	X	X	X	
ME4611		X	X	X	
ME4613		X	X	X	
ME4731		X	X	X	
ME4751		X		X	X
ME4811	X	X	X	X	
ME4821	X	X	X	X	
MS2201	X				
MS3202		X	X	X	
MS3304		X	X		
MS3606		X		X	
MS4215		X	X		
MS4312		X	X		
MS4811		X	X		
MS4822		X	X		
TS3001	X	X		X	
TS3003					X
TS4000					X
TS4001		X		X	X
TS4002			X		X
TS4003		X	X	X	X
TOTAL	30	37	25	38	13

AE2440 INTRODUCTION TO DIGITAL COMPUTATION
(3 - 2)

Required or Elective Required (Astronautical Program)

Course (Catalog) Description
Introduction to system operations and program development on the department UNIX workstations and the NPS computer facilities. High-level programming languages, including C, MATLAB, and FORTRAN. Development of computer programs, subroutine organization, input and output. Applications of programming techniques to the solution of selected problems in engineering.

Prerequisites and Co-requisites
MA 1115.

Textbook(s) and/or other Required Material
Text: "Introduction to MATLAB 7 for Engineers," 2nd Edition by William J. Palm III, McGraw-Hill, 2005.

Course Objectives
The course teaches students how to: use the MATLAB and Simulink development environment effectively for writing professional-level scripts, solving applied engineering problems, developing and running models of Naval engineering systems; choose wisely and apply correctly different numerical methods; analyze limitations, advantages, and disadvantages of the chosen numerical method; and use interactive and graphical capabilities of MATLAB and Simulink to make user-developed models universal and easy-to-understand (analyze).

Topics Covered
1. Introduction to MATLAB/Simulink - Technical Computing Language
2. MATLAB's Development Environment and Basic Operations
3. Arrays and Array Operations
4. Data Structures, Types of Files, Managing Input/Output Data
5. Programming with MATLAB and Debugging Tools
6. Two- and Three-Dimensional Plotting and Animation
7. Accuracy of Digital Computations
8. Matrix Algebra and Eigenvalue Problems
9. Root Finding and Optimization
10. Curve Fitting to Measured Data
11. Numerical Differentiation
12. Numerical Integration
13. MATLAB's Symbolic Math Toolbox
14. Initial-Value Problem
15. Simulink Basics
16. Introduction to Mathematical Modeling of System's Dynamics

Class/Laboratory Schedule

This course meets 3 times per week for lectures of 50 minutes with additional 2 times per week for laboratory. The course is also available on-line (students usually use its 'blackboard' version to work on numerous interactive media elements).

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Midterm and final projects are assigned to students to find a real world engineering problem in the military application (spacecraft, satellites, aircraft, UAVs, armored vehicles) related to the course contents, and to present the simplified solution and discussion of the solution in a written report.

Prepared by
Oleg A. Yakimenko

AE3804 Thermal Control of Spacecraft
(3- 0)

Required or Elective: Required (Astronautical Program)

Course (Catalog) Description:

Conduction, radiation, thermal analysis, isothermal space radiator, lumped parameter analytical modeling, Spacecraft passive and active thermal control design, heat pipes, and louvers.

Prerequisites and Co-requisites: None

Textbook(s) and/or other Required Material:

1. Design of Geosynchronous Spacecraft, B.N. Agrawal, Prentice Hall, 1986 (out of print)
2. Instructors Handouts/notes

Course Objectives:

To introduce the students to the fundamental concepts and basic principles of heat transfer relevant to the spacecraft environment and thermal control. To provide "building blocks" for thermal analysis/design of spacecraft.

Topics Covered:

1. Conduction and radiation heat transfer modes.
2. Thermal analysis of spacecraft devices and processes including isothermal space radiators.
3. The use of lumped parameter analytic models.
4. Spacecraft passive and active thermal control.
5. Heat pipes and louvers.
6. Thermal design and testing.

Class/Laboratory Schedule:

This course meets 3 times per week for lectures of 50 minutes.

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Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Astronautical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Astronautical Engineering and competence in one of the available specialized disciplines of Astronautical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Astronautical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
John R. Lloyd
February 23, 2007

ME0952 SPECIAL TOPICS IN MECHANICAL ENGINEERING (1-0)

Required or Elective Required

Course (Catalog) Description
This course provides students with essential computer knowledge and topics of current research interest in mechanical engineering and materials science. PREREQUISITES: None. This is a Pass/Fail course required to all students in the curriculum.

Prerequisites and Co-requisites
None

Textbook(s) and/or other Required Material
None

Course Objectives
This is a seminar course where students are exposed to current topics of interests in both military and mechanical engineering subjects.

Topics Covered
N/A

Class/Laboratory Schedule
This course meets once per week for lectures and seminars, typically of 50 minutes, but some events can be up to 2 hours.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X**

* In this course students listen and interact with speakers.

** Most of the topics treated are both technical and related to national security.

Prepared by
Knox Millsaps

ME 1000 Preparation for Professional Engineers Registration (3-0)

Required or Elective Elective

Course (Catalog) Description

The course will cover the topics from the 8-hour Professional Examination given by the State of California for Professional Engineer. Discussion will involve applicable engineering techniques, including design and analysis of mechanical systems and components. Graded on Pass/Fail basis. Course may be taken as an overload only

Prerequisites and Co-requisites

Consent of instructor..

Textbook(s) and/or other Required Material

Required Text: Mechanical Engineering Reference Manual for the PE Exam, Michael R. Lindeburg, 12th Edition, Professional Publications Inc. (PPI), 2006.

Optional Reference Matl.: Practice Problems for the Mechanical Engineering PE Exam, Lindeburg, 10th Edition, PPI, 2000; Quick Reference for the Mechanical Engineering PE Exam, Lindeburg, 3rd Edition, PPI, 2000; Mechanical Engineering Sample Examination, Lindeburg, 3rd Edition, PPI, 1998

Course Objectives

(1) The student will understand the Professional Engineer (PE) licensing process (in particular the application process), the use of a PE license, transferability of the PE from California to other states, and its application to a military career.
(2) Within the guidelines of required experience to pursue a PE license, the student will understand the content of the Engineer In Training / Fundamental Engineering exam and its application process.
(3) The student will become familiar with the types of questions that will appear on the PE exam, the reference materials allowed to take the exam, and the conduct of the PE exam itself. The student will work multiple examples of each category of exam question in preparation to take the PE exam.

Topics Covered

(1) Fundamental mathematics required for answering Mechanical Engineering questions of the caliber found on the PE exam.
(2) Fluid Mechanics
(3) Thermodynamics
(4) Power Cycles
(5) Heat Transfer
(6) HVAC
(7) Machine Design
(8) Dynamics & Vibrations
(9) Control Systems
(10) Plant Engineering
(11) Engineering Economics
(12) Law & Ethics

Class/Laboratory Schedule

This course meets 3 times per week for lectures of 50 minutes. Majority of the classes will be student led, focusing on problem solving.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by

Matthew D. Kelleher

ME2101 Engineering Thermodynamics
(4- 2)

Required or Elective Required

Course (Catalog) Description

A comprehensive coverage of the fundamental laws of thermodynamics, with insight toward microscopic phenomena. The laws of thermodynamics. Equations of state. Thermodynamic properties of substances. Entropy, irreversibility and availability. Cycles analysis, gas-vapor mixtures and combustion.

Prerequisites and Co-requisites: M**A1118**

Textbook(s) and/or other Required Material

3. Sonntag, R. E., Borgnakke, C., Van Wylen, G. J., Fundamentals of Thermodynamics, 5th Edition, John Wiley.
4. Engineering Equation Solver (EES) software. F-Chart Software.

Course Objectives

For the student to obtain a fundamental understanding of the concepts, definitions and laws of thermodynamics. To apply this knowledge to be capable of analyzing and designing practical energy conversion devices, such as power plants and refrigeration systems.

Topics Covered

Definitions of terms and introduction to concepts. Temperature, pressure, system, state, interaction, heat, work, energy. First law for a simple system. Properties of a pure substance. Measurable and immeasurable properties. State principle. Property data for ideal gases, incompressible media and steam and refrigerant data. Control mass and control volume formulations of First Law. Second law and entropy. Reversible and irreversible processes and thermodynamic availability. Cycle analysis for vapor and gas power systems. Refrigeration and heat pump cycles. Analysis of ideal gas mixtures both for reacting (combustion) and non-reacting systems.

Class/Laboratory Schedule

This course generally meets 4 times per week for lectures of 50 minutes and once a week for 1 hour and 50 minutes. This longer, double period is typically used for problem working secessions, a power plant tour or a quiz.

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Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
John R. Lloyd
February 23, 2007

ME2201 INTRODUCTION TO FLUID MECHANICS
(3 - 2)

Required or Elective Required

Course (Catalog) Description

Properties of fluids, hydrostatics and stability of floating and submerged bodies. Fluid flow concepts and basic equations in steady flows: mass, momentum, and energy considerations. Dimensional analysis and dynamic similitude. Viscous effects and fluid resistance. Drag and separated flow over simple bluff bodies. PREREQUISITE: ME2503.

Prerequisites and Co-requisites
ME2503

Textbook(s) and/or other Required Material
Text: "Fluid Mechanics", Frank M. White,, 5th ed., McGraw Hill, 2003.

Course Objectives
Obtain a deep understanding of fundamental fluid mechanics principles. This will be achieved through a physical and insightful study of fluid properties, fluid flow concepts, and their governing equations and solutions. The course will prepare the students for the follow-on courses such as ME 3201, ME 3150, ME 4220 and such in the Fluid and Thermal Propulsion track. Students completing the course will acquire sufficient basic fluid mechanics knowledge to solve many simple, but practical engineering fluid mechanics problems.

Topics Covered
1. Review of basic concepts and fluid properties.
2. Fluid statics, concept of pressure, hydrostatic pressure distribution, application to manometry and forces on submerged surfaces.
3. Buoyancy and stability of floating bodies.
4. The control volume, system, Reynolds transport theorem, conservation of mass, momentum and energy in integral form.
5. Frictionless flow, Bernoulli theorem and equation.
6. Dimensional analysis, principle of dimensional homogeneity, Buckingham π-theorem, principle of similarity.
7. Reynolds number, regimes of flow, internal and external flows, flow in a circular pipe and the Moody diagram.
8. Pipe flow problems, non-circular ducts, hydraulic diameter, losses in piping systems.
9. The boundary layer, momentum integral solutions.
10. Types of drag, drag of immersed bodies, flow past a specific shapes and drag on ships.

Class/Laboratory Schedule
This course meets 5 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Muguru S. Chandrasekhara

ME2501: STATICS (3 – 0)

Required or Elective Required

Course (Catalog) Description
Forces and moments, particles and rigid bodies in equilibrium. Simple structures, friction, first moments and centroids.

Prerequisites and Co-requisites
MA1116 (may be taken concurrently)

Textbook(s) and/or other Required Material
Text: STATICS by J. L. Meriam, Wiley

Course Objectives
Students are expected building a foundation of analytical capability for the solution of a variety of engineering problems. The primary purpose is to develop capacity to predict the effects of force and motion in the course of carrying out the creative design function of engineering. In the process, certain concepts and definitions should be understood at the outset; space, time, mass, force, particle and rigid body. Students completing this course will have understanding how to apply forces/moment to simple structures in equilibrium.

Topics Covered
1. Introduction to basic concepts, scalars and vectors, Newton's laws, and units (mass, length & time).
2. Force System: 2-D/3-D force system, rectangular components, moment/couple, resultants
3. Equilibrium: equilibrium in 2-D/3-D, and equilibrium conditions
4. Structures: plane trusses, method of joints, method of sections, space trusses, frames and machines
5. Distributed Forces: center of mass, centroids, composite bodies, beams, flexible cables, fluid statics.
6. Frictional Phenomena: types of friction, and dry friction
7. Application of Friction in Machines: wedges, screws, journal bearings, thrust bearings, flexible belts, rolling resistance

Class/Laboratory Schedule
No lab required.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME.	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Young S. Shin

ME2502: DYNAMICS (4 – 1)

Required or Elective Required

Course (Catalog) Description
Kinematics and kinetics of particles and rigid bodies. Rectilinear, plane curvilinear and space curvilinear motion. Newton's laws, work and energy, impulse and momentum and impact. Plane motion of rigid bodies and introduction to gyroscopic motion.

Prerequisites and Co-requisites
ME2501

Textbook(s) and/or other Required Material
Text: DYNAMICS by J. L. Meriam, Wiley

Course Objectives
Students are expected building a foundation of analytical capability for the solution of a variety of engineering problems. The primary purpose is to develop capacity to predict the effects of force and motion in the course of carrying out the creative design function of engineering. In the process, kinematics of particles and kinetics of particles, and kinetics of systems of particles are expected to understand. In addition, students will be fully exposed to plane kinematics and plane kinetics of rigid bodies, and 3-D dynamics of rigid bodies.

Topics Covered
1. Kinematics of Particles: rectilinear motion, plane curvilinear motion, rectangular/cylindrical/polar coordinates, space curvilinear motion, relative motion
2. Kinetics of Particles: Newton's 2nd law, equation of motion, rectilinear/curvilinear motion, work and kinetic energy, potential energy, impulse and momentum, conservation of momentum
3. Kinetics of Systems of Particles: steady mass flow and variable mass flow
4. Plane Kinematics of Rigid Bodies: rotation, absolute motion, relative velocity, relative acceleration, motion relative to rotating axes
5. Plane Kinetics of Rigid Bodies: general equations of motion, translation, fixed-axis rotation, general plane motion, work-energy relation, virtual work, impulse-momentum equation
6. 3-D dynamics of Rigid Bodies: Translation, fixed-axis rotation, parallel-plane motion, rotation about a fixed point, angular momentum, kinetic energy, momentum and energy equations of motion, parallel-plane motion, gyroscopic motion

Class/Laboratory Schedule
One hour per week problem solving session.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME.	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Young S. Shin

ME2601 MECHANICS OF SOLIDS I
(3 - 2)

Required or Elective Required

Course (Catalog) Description
Stress-strain. Plane stress and plane strain, principal stresses, maximum shear stress, thermal stress, Mohr's circle, axial loading, indeterminate members, pressure vessels, elastic torsion, indeterminate torsion, shear moment diagram, elastic bending, beam deflection, combined loading, theory of failure. Supporting laboratory work.

Prerequisites and Co-requisites
MA 1118 and ME2501 or ME2503

Textbook(s) and/or other Required Material
Text: "Mechanics of Materials", Roy R. Craig, Jr., 2nd ed., John Wiley & Sons, 2000.

Course Objectives
Students are expected to understand the basic action-displacement relationships, and the basic stress distribution relationships for linear mechanical elements (bars, shafts, beams) subjected to various actions (forces and moments). Inherent in this understanding is an understanding of basic stress-strain relationships for linear elastic materials. Students completing this course will have the rudiments of how to apply this understanding to the design of those elements.

Topics Covered
1. Introduction to and definition of stress and strain, elasticity and plasticity, and Hooke's law. Allowable stresses and factors of safety are introduced for purposes of design
2. Axially load members. Displacements of axially loaded members. Analysis of statically indeterminate members including temperature effects and pre-strain.
3. Torsion of circular shafts. Displacements of shafts and stress distributions in shafts subjected to torsion. Analysis of statically indeterminate shafts.
4. Stress in beams. Shear force and bending moment diagrams for beams. Relationship between load, shear force, and bending moment. Normal strain and normal stress in beams.

Class/Laboratory Schedule
This course meets 5 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A project was assigned to students to find a real world engineering problem in the military application related to the course contents, and to present the simplified solution and discussion of the solution in a written report.

Prepared by
Young W. Kwon

ME3150 Heat Transfer
(4- 1)

Required or Elective: Required (may be waived based on individual circumstances)

Course (Catalog) Description:

Introduction to the various modes of heat transfer and their engineering applications. Steady and unsteady conduction involving the use of thermal circuit analogs, analytical, and numerical techniques. Introduction to conservation of mass, momentum, and energy. External and internal forced convection fundamentals and correlations. External natural convection. Boiling and condensation heat transfer. Heat exchanger analysis. Fundamentals of thermal radiation.

Prerequisites and Co-requisites: ME 2101, ME 2201, MA 3132 (may be taken concurrently).

Textbook(s) and/or other Required Material:
Introduction to Heat Transfer, F.P. Incropera & D.W. DeWitt, John Wiley & Sons (Latest edition)

Course Objectives:
To introduce the fundamental modes of heat transfer: conduction, convection and radiation. To provide analytical and numerical tools to analyze the basic mechanisms of heat transfer. To apply the basic knowledge of the fundamentals to the design of heat transfer equipment and processes.

Topics Covered:
1. Introduction to definitions of fundamental modes of heat transfer
2. Equation of conservation of energy
3. One dimensional steady conduction heat transfer
4. Two dimensional steady conduction heat transfer
5. Transient conduction heat transfer
6. Introduction to convection heat transfer
7. Conservation laws of mass, momentum, and energy
8. External flow convection heat transfer
9. Internal flow convection heat transfer
10. Natural convection heat transfer
11. Boiling and convection heat transfer
12. Fundamentals of thermal radiation heat transfer
13. Thermal radiation heat transfer between surfaces
14. Heat exchanger analysis

Class/Laboratory Schedule:
This course meets 4 times per week for lectures of 50 minutes and once a week for 1 hour for problem working, or a quiz.
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Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
John R. Lloyd
February 23, 2007

ME3201 APPLIED FLUID MECHANICS
(4 - 1)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
Steady one-dimensional compressible flow. Fundamentals of ideal-fluid flow, potential function, stream function. Analysis of viscous flows, velocity distribution in laminar and turbulent flows, introduction to the elements of the Navier-Stokes equations, solution of classical viscous laminar flow problems. Applications to Naval Engineering.

Prerequisites and Co-requisites
ME2101, ME2201, MA3132 (may be taken concurrently)

Textbook(s) and/or other Required Material
Text: "Fluid Mechanics", Frank M. White,, 5th ed., McGraw Hill, 2003.

Course Objectives
This is a graduate level fluids course. With its ability to quantitatively describe such diverse engineering applications, the primary goals of this course are 1) to provide the students with a fundamental understanding of the concepts and 2) to enable them to solve practical problems from first principles. It is also a prerequisite for ME 3150, ME 4220 and such in the Fluid and Thermal Propulsion track. Upon successful completion of the course, the students will be able to simplify the basic governing equations to solve specific problems by identifying and applying appropriate boundary conditions to solve the resulting differential equations. separate the viscous and inviscid regions of the flow to apply suitable solution methods, use the boundary layer solutions for a practical problem to derive a reasonable estimate of the viscous drag and solve one-dimensional gas dynamics problems.

Topics Covered
1. Derivation of the differential equations of motion (mass, momentum (Navier-Stokes) and energy), example problems.
2. Ideal fluid (inviscid) flow, singularities, rotational and irrotational flows, Principle of superposition, potential flow past closed bodies, example problems
3. Viscous flow in circular and non-circular ducts, effects of viscosity, Reynolds number.
4. Laminar and turbulent boundary layers, Reynolds averaging, external flows, example problems
5. Speed of sound, one-dimensional compressible fluid flow, isentropic flow relations, shock waves, Prandtl-Meyer flow, Flows with friction-Fanno flow, Frictionless flow with heat transfer-Rayleigh flow, choking, example problems.

Class/Laboratory Schedule
This course meets 5 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Muguru S. Chandrasekhara

ME3410 MISSILE AERODYNAMICS (2-4)

Required or Elective Elective (Not currently offered)

Course (Catalog) Description
Introduction to measurement systems, statistical analysis of data, error analysis, uncertainty analysis, manipulation of data including electrical readout and processing, data acquisition fundamentals and Fourier decomposition and dynamic signals. Measurements of temperature, pressure , velocity, flow rates. Energy balances, surface temperature visualization, flow visualization. Measurement of motion using accelerometers and encoders. Measurement of strain and force. Operational amplifiers, analog computers, filters. PREREQUISITES: ME3601, ME2801, ME3150, ME3521 (ME3150 and ME3521 may be taken concurrently).

Prerequisites and Co-requisites
ME3601, ME2801, ME3150, ME3521

Textbook(s) and/or other Required Material
Text: "Mechanical Measurements", Thomas G. Beckwith, Roy D. Marangoni, John H. Lienhard, 6th Edition, Addison Wesley, 2002.

Course Objectives
Students are expected to gain a fundamental understanding of the principles of measurements, and the process for specifying requirements, designing, and utilizing basic and advanced measurements techniques. Students completing this course are expected to be able to understand how to create and use experimental data, and understand the value and limitations of measurements, and be able to quantify uncertainty, and present data in written laboratory reports.

Topics Covered
1. Review of statistics, including central measures and variability.
2. Use of statistics to determine confidence intervals, and measurement uncertainty.
3. Standards
4. Physical principles of measurements and transducer theory.
5. Amplifiers, filters, and digitizers.
6. Computer data acquisition, A/D converters, and Nyquist criterion.
7. Thermal and fluid measurements.
8. Solids and structure measurement applications.
9. Optical measurements.
10. GPS and navigation theory.

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 50 minutes and once a week for 2 hours for laboratory work.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	X*
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X**
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

* Students are required to create a preliminary design of a measurement system.
** Students are required to write laboratory reports.

Prepared by
Knox Millsaps

ME3450 Computational Methods in Mechanical Engineering
(3 - 2)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
The course introduces students to the basic methods of numerical modeling for typical physical problems encountered in solid mechanics and the thermal/fluid sciences. Problems that can be solved analytically will be chosen initially and solutions will be obtained by appropriate discrete methods. Basic concepts in numerical methods, such as convergence, stability and accuracy, will be introduced. Various computational tools will then be applied to more complex problems, with emphasis on finite element and finite difference methods, finite volume techniques, boundary element methods and gridless Lagrangian methods. Methods of modeling convective non-linearities, such as upwind differencing and the Simpler method, will be introduced. Discussion and structural mechanics, internal and external fluid flows, and conduction and convection heat transfer. Steady state, transient and eigenvalue problems will be addressed.

Prerequisites and Co-requisites
ME3150, ME3201, ME3601.

Textbook(s) and/or other Required Material
Versteeg, H. K. and Malalasekera, W., "An Introduction to Computational Fluid Dynamics – The Finite Volume Method" Prentice Hall
Kwon, Y. W. and Bang, H., "The Finite Element Method Using MATLAB," CRC Press 2000.

Course Objectives
The course will progress along roughly two parallel paths. On the one hand, students will first briefly go over the underlying governing equations of structural analysis and fluid flow, followed by a detailed development of the finite element and finite volume methods and their application to these equations. And on the other hand, they will also simultaneously get hands-on experience in the computer lab by working with a typical commercially available FEM and CFD package. One of the goals of the course is to synthesize these two approaches.

Topics Covered
1. Finite Difference/Finite Volume Methods. Boundary Value Problem with MATLAB for Diffusion Problems (BVM). Lab on the BVM.
2. Finite Element/Variational Methods. Lab on the MATLAB Finite Element Toolbox
3 Truss Analysis. Patran and Nastran Laboratory 1
4 FEM of BVM Problems. Patran and Nastran Laboratory 2
5 FEM of Elliptic Partial Differential Equations. **First Quiz**
6 Conservation Laws of Fluid Motion -Viscous Incompressible Flows. Patran and Nastran Laboratory 3
7 Finite Volume Methods for Convection-Diffusion Problems. CFD-ACE Laboratory 1
8 Numerical Diffusion & Higher Order Schemes **Second Quiz**
9 Source Term Linearization. CFD-ACE Laboratory 2

10 Pressure-Velocity Coupling – SIMPLE Algorithm. CFD-ACE Laboratory 3
11 Boundary Condition Implementation. Advanced Topics – Turbulence models

Class/Laboratory Schedule
This course meets 3 times per week for lectures of 50 minutes and once for a 2-hour lab.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Garth V. Hobson

ME3521 MECHANICAL VIBRATIONS
(3 - 2)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
Elements of analytical dynamics, free and forced response of single degree and multi-degree of freedom systems. Dynamic response using modal superposition method. Properties of stiffness and inertia matrices, orthogonality of modal vectors, eigenvalue problem, modal truncation, vibration isolation and suppression. Vibration of bars, shafts, and beams. Supporting laboratory work.

Prerequisites and Co-requisites
ME2503, ME3601; MA2121 or equivalent (may be taken concurrently)

Textbook(s) and/or other Required Material
Text: "Theory of Vibration with Applications", Thomson, W. T. and Dahleh, M. D., 5th ed., Prentice Hall.

Course Objectives
(1) Modeling of simple mechanical and structural systems: The class emphasizes the modeling of mechanical and structural systems as simple single and multi-degree of freedom systems. Discussed are real world examples where complex systems exhibiting undesirable vibration characteristics are modeled and analyzed as low dimensional systems. Students are presented with techniques for modeling simple single and multi-degree of freedom systems. Newtonian and analytic (Lagrangian) methods for deriving the governing differential equations of motion are covered. Linear and nonlinear systems and equations are contrasted.
(2) Solution of governing differential equations: General methods for obtaining the solution to the various governing differential equations are presented. The physics of vibration is discussed with respect to these solutions. The relationship of vibration theory to linear system theory and control theory is discussed.
(3) Applications: Various real world applications of the theory are examined, including the critical speed of rotating shafts, vibration isolation, measurement of vibration (transducer theory), frequency response analysis. Various examples from civil, structural, mechanical, naval, and aerospace engineering are discussed.

Topics Covered
1. Undamped free vibration, basic definitions, ..Differential equation description and solution
2. Single degree-of-freedom systems - simple harmonic oscillator/motion
3. Distributed systems - Rayleigh's method for frequency estimation
4. Vector analysis of motion- velocity, acceleration in moving reference frame, linear vs. nonlinear systems/equations, stable vs. unstable systems
5. Damped free vibration - viscous damping, basic definitions, Single degree-of-freedom systems
6. Damped Forced Vibration, General periodic excitation, Solution to differential equation, Rotating shafts, critical speeds, Frequency response
7. Applications, Absolute vs. relative generalized coordinates, vibration isolation, transducer theory, velocimeter, accelerometer, load cells

8. Energy methods, kinetic and potential energies, Lagrange's equation.
9. Multi-degree-of-freedom systems, matrix differential equations - basic linear algebra, eigenvalue problems, mode shapes, Orthogonality, modal decomposition

Class/Laboratory Schedule
This course meets 4 times per week for four lectures of 50 minutes, with several two-hour labs.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A project was assigned to students to find a real world engineering problem in the military application related to the course contents, and to present the simplified solution and discussion of the solution in a written report.

Prepared by
Joshua H. Gordis

ME3611 MECHANICS OF SOLIDS II
(4-0)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
Differential equations of bars, shafts and beams with Macauley functions. Unsymmetric bending. Curved beams. Shear flow in thin walled sections. Shear center. Torsion of thin walled open sections. Thick walled cylinders. Energy including Castigliano and unit dummy load methods for displacements. Statically indeterminate systems including beams, frames, trusses, arches and combined structures.

Prerequisites and Co-requisites
ME2601

Textbook(s) and/or other Required Material
Text: Advanced Strength and Applied Elasticity, (A. C. Ugural and S. K. Fenster), 4th edition, Prentice Hall 2003.

Course Objectives
It is the objective of this course to complete the introduction (with Mechanics of Solids I) to solid mechanics for all elementary structural elements. It is also the goal of the course to introduce students to advanced theories and methods of analysis in solid mechanics.

Topics Covered
1. Topics in beams: beam deflection, curved beam behavior, composite beam, non-symmetric beam, shear stress and shear center, statically indeterminate beam, energy method
2. Torsion of thin-walled members: open section, closed section, multiple sections
3. Axially load members: thick walled cylinders with internal and external pressure, compound cylinders
4. Beams on elastic foundation, infinite beams, semi-infinite beams, beams supported by equally spaced elastic elements, and application problems
5. Energy method: Catigliano's theorem, statically indeterminate systems
   Elastic stability: critical load, Euler buckling, effects of boundary condition, eigenvalue problem

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A project was assigned to students to find a real world engineering problem in the military application related to the course contents, and to present the simplified solution and discussion of the solution in a written report.

Prepared by
Young W. Kwon

ME3711: DESIGN OF MACHINE ELEMENTS (4-1)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description

Design of representative machine elements with consideration given to materials selection, tolerances, stress concentrations, fatigue, factor of safety, reliability, and maintainability. Typical elements to be designed include fasteners, columns, shafts, journal bearings, spur and helical gears, and clutches and brakes. In addition to traditional design using factor of safety against failure, particular emphasis is placed on design for specified reliability using probabilistic design methods.

Prerequisites and Co-requisites

ME2601

Textbook(s) and/or other Required Material

Shigley's Mechanical Engineering Design by R. G. Budynas and J. K. Nisbett, 8th Ed. McGraw-Hill

Course Objectives

The course objective Is to Introduce the students to the design process by sizing various ma components to meet specified design criteria. Students apply previously learned analysis techniques to the design of machine elements.

Topics Covered

(1) Screws, fasteners and connections
(2) Design for static strength-steady loading
(3) Design for fatigue strength-variable loading
(4) Design of shafts, axles, and spindles
(5) Spur and helical gear design
(6) Design of rolling-contact bearing
(7) Design of journal bearing
(8) Design of clutches and brakes
(9) Welded joint design
(10) Column design
(11) Probabilistic concept of design and its applications
(12) Factor of safety vs. probabilistic design

Class and Laboratory Schedule

Four one hour (50 minutes) lecture periods each week. One hour (50 minutes) problem session each week. Term project is also assigned to design naval reduction gear system which includes double helical pinion gear, shaft and journal bearing.

Contribution of Course to Meeting Professional Component

Required Professional Components	Components Satisfied by ME 3711
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience incorporating engineering standards and realistic constraints including most of the following: economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political.	X

Relationship of Course to Program Outcomes:

Mechanical Engineering Program Objectives	Program Objectives Satisfied by ME 3711
1. Ability to identify, formulate and solve technical and engineering problems in areas related to mechanical engineering	X
2. Ability to apply the tools of modern mechanical engineering practice	X
3. Ability to apply knowledge acquired in academic study	X
4. Ability to communicate effectively in oral and written form	X
5. Ability to understand the broader societal impacts	X

Prepared by

Young S. Shin

ME 3712: Capstone Design (1-6)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description

Design teams apply integrated and systematic design processes to real multifunctional and multidisciplinary problems in mechanical systems. Students develop process concepts, planning, design methodology, material selection, manufacturing and engineering analysis. Capstone design projects include projects provided by industry partners as well as DoD sponsors. The scope of design problems ranges across both engineering and non-engineering issues in the integrated design process.

Prerequisites and Co-requisites

ME2801, ME3150, ME3201, ME3450, ME3521, ME3711, MS3202, OS3104.

Reference Materials

Mark N. Horenstein, "Design Concepts for Engineers," 2nd Ed., Prentice Hall
Barry Hyman, "Fundamentals of Engineering Design," 2nd Ed., Prentice Hall
Gerard Voland, "Engineering by Design," Addison Wesley
K. Otto & K. Wood, "Product Design," Prentice Hall
Mark's Mechanical Engineering Handbook
Rothbart, H., Mechanical Design and Systems Handbook, McGraw Hill
Dieter, G. E., Engineering Design: A Materials Processing Approach

Course Objectives

1. To enable students to synthesize the knowledge and skills acquired in the context of a realistic design project.
2. To develop in students the ability to address a broad range of requirements, including most of the following: performance, economic, marketing, environmental, manufacturing, ethical, safety, social, and political issues.
3. To prepare for the professional design environment by learning how to learn, by working in teams, and by enhancing communications skills.

Topics Covered in Lecture

1. ENGINEERING DESIGN: What is "Engineering Design"? ; The Difference Between Design, Analysis, and Reproduction; Good Design vs. Bad Design
2. The Design Cycle: Define the Overall Objective; Gather Information; Choose a Design Strategy; Make a First Cut at the Design; Build, Document, and Test; Revise and Revise Again; Thoroughly Test the Finished Product

3. WORKING IN TEAMS: Teamwork Skills; Brainstorming; Documentation; Project Management
4. ENGINEERING DESIGN TOOLS; MATLAB, SOLID WORKS, ABAQUS, NASTRAN, ETC.
5. THE HUMAN-MACHINE INTERFACE: Ergonomics: Science of how the human interacts with machines (i.e. key board); Cognition: The way a user learns abut the device and masters its features fast; Case Studies
6. ENGINEERS AND REAL WORLD; Society's View of Engineering; How Engineers Learn from Mistakes; The Role of Failure in Engineering Design: Case Studies
7. LEARNING TO SPEAK, WRITE, AND MAKE PRESENTATION

Evaluation

1. Final Report and Presentation/Show.
2. Weekly/Regular Presentations/Deliverables.
3. Prototypes, where possible.

Course Outcomes

1. Students will be able to identify relevant topics from earlier courses, then apply them to their design project.
2. Students will be able to critically evaluate designs using engineering criteria and predictive usage.
3. Students will demonstrate an ability to identify and specify design requirements from general problem descriptions.
4. Students will be able to systematically develop a design from concept to prototype.
5. Students will be able to clearly communicate design ideas and information.
6. Students will be able to work collaboratively and responsibly as members of a team.
7. Students will demonstrate the ability to facilitate their learning by identifying design issues and questions that require additional investigation, and then formulating appropriate courses of action.

Example Design Project on Autonomous Underwater Vehicle (AUV)

1. Produce a concept level design for the next generation mine-hunting robot submarine.

   Background: The navy needs small smart submarines to perform autonomous mine-hunting missions in shallow water. These vehicles carry a side-scan sonar to produce images of the ocean bottom from which mines can be identified. Their sweep rates need to be fast enough to permit in stride mine hunting, and identification and classification. At the same time, the vehicles need to travel slow enough to produce high-resolution imagery.

2. Requirements: An autonomous submarine vehicle (with respect to power and control) that will have a range of 50 nmiles at a cruising speed of 3 knots , able to cruise at 3(+/-0.5) meters above the ocean bottom and record side scan sonar images out to a swath of 150m each side. The vehicle should be structurally capable of operating in up to 150m

of water depth. The vehicle should be self navigating using inertial means with GPS correction when surfaced. Navigational accuracy should be within 0.1% of distance traveled.

The computer system should be capable of reading data from all onboard sensors and computing all required functions for the automatic control of speed heading, depth and or altitude above bottom. Failure detection means should be built in to protect against propeller failure, leaks, and low battery conditions.

Consideration shall be given to

1. Design of the propulsion system
2. Design of the energy storage system (high energy density batteries are preferred, but consideration to charging and replenishment is critical. Fuel cells may be an option)
3. Design of the hull form for minimal drag
4. Design of the control surfaces and their drive motors.
5. Modular mechanical design is preferred to accommodate a wide range of sensor payloads (Optical Back Scatter, CTD, Forward Look Sonar, Video Camera, Acoustic Camera), (Details of sensors can be provided)
6. Thermal Control inside the hull.
7. Design of the Electrical Power Distribution System
8 Transportation , Costs, and Lifetime Maintenance
9. Acoustic Modem Communications Link.

The following items would be nice to consider if time permits:

10. GPS , Radio Communications Antennas
11. Navigational Performance with an Acoustic Doppler Aided Inertial Navigation System
12. Computer Hardware and Software Architecture integration.
13. Data Display.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	X
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME.	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

Prepared by
Young S. Shin

ME3750 PLATFORM SURVIVABILITY (4-0)

Required or Elective Elective

Course (Catalog) Description
This course introduces the concepts and analytical tools used in designing and testing survivable combat platforms and weapon systems. The applications are to a broad range of platforms and weapons, including submarines, surface ships, fixed and rotary wing aircraft, cruise missiles, and satellites in a hostile (non-nuclear) environment. The technology for increasing survivability and the methodology for assessing the probability of surviving hostile environments are presented. Topics covered include: current and future threat descriptions; the mission/threat analysis; combat analysis of SEA, vulnerability reduction technology for the major systems and subsystems; susceptibility reduction concepts, including stealth; vulnerability, susceptibility, and survivability assessment; and trade-off methodology. PREREQUISITES: None.

Prerequisites and Co-requisites
None

Textbook(s) and/or other Required Material
Text: "Fundamentals of Aircraft Survivability Analysis and Design" Robert. E. Ball, 2nd Edition, AIAA Education Series, 2002.

Course Objectives
Students are expected to gain a fundamental understanding of the principles of platform survivability and be able to use this knowledge in improving system survivability and improve operations to limit losses due to hostile actions.

Topics Covered
1. Introduction to statistical analysis and methods.
2. Definitions of terminology of the kill chain.
3. Platform layout and systems interconnections.
4. Physical principles of detection, tracking and engagement.
5. Mechanics of damage and kill mechanisms.
6. Design of survivability.

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes and a separate computer laboratory period is used to perform calculations and have design discussions.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	X*
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

* This course teaches both design tolls and process.

Prepared by
Knox Millsaps

ME3801 Autonomous Systems and Vehicle Control I

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
The course will focus on the part of the classical control theory, which implies the frequency-domain analysis. This approach is still widely used and has many practical applications; analysis tools learned here will be used in your follow-on controls and dynamics courses. Modern control theory - state-space analysis working in the time domain - will also be introduced to provide a smooth transition between the two methods.

Prerequisites and Co-requisites
ME 2801

Textbook(s) and/or other Required Material
Text:

1. "Linear Control Systems Engineering", by Morris Driels ISBN: 0-07-249361-5, McGraw-Hill, Inc., 2000.
2. "Modern Control Engineering, 4th edition", by Katsuhiko Ogata, ISBN: 0-13-060907-2, Prentice-Hall, Inc., 2002

Course Objectives
Students are expected to understand and practice how to:

1. Develop a mathematical model and represent it using different frequency response methods;
2. Analyze stability and performance of any Naval engineering system in the frequency domain;
3. Design a feedback controller/compensator to meet the stability and performance requirements.

Students completing this course will have the fundamentals of how to apply these techniques to the analysis and design of control systems. Upon successful completion of this course, they will be able to:

1. Describe the behavior of a linear system by its time history response to various inputs or by a frequency-domain analysis (response to steady sinusoidal input);
2. Recognize the problems a naval engineering system might have in terms of accuracy, relative stability, speed of response;
3. Model simple systems by differential equations, block diagrams, and transfer functions;
4. Understand the basic principles of feedback stabilization via a frequency-domain analysis;
5. Produce a root-locus plot of a system in the complex plane, and examine its stability;
6. Analyze the frequency response of a system and construct a Bode diagram for a stability analysis;
7. Employ Nyquist stability theory and the concepts of gain and phase margin for a stability analysis;
8. Apply the concepts of lead, lag, and lag-lead compensation for stabilizing or improving the dynamics of a system and estimate the increase of system's performance;

Topics Covered

7. BODE DIAGRAM
   - Bode Diagrams of Simple Transfer Functions

- Bode Diagrams of Compound Transfer Functions
- Elemental Bode Diagrams

8. BODE ANALYSIS, STABILITY, AND GAIN AND PHASE MARGINS
   - Conditional Stability
   - Gain and Phase Margins in the Bode Diagram
   - System Type and Steady-State Error from Bode Diagrams
   - Further Discussion of Gain and Phase Margins
9. FREQUENCY RESPONSE AND NYQUIST DIAGRAMS
   - Frequency Response
   - Nyquist Diagrams from Transfer Functions
10. NYQUIST STABILITY CRITERION
    - Conformal Mapping: Cauchy's Theorem
    - Application to Stability
    - Some Comments on Nyquist Stability
    - Alternative Approach to Nyquist Stability Criterion
11. NYQUIST ANALYSIS AND RELATIVE STABILITY
    - Conditional Stability
    - Gain and Phase Margins
12. FREQUENCY-DOMAIN SPECIFICATIONS AND CLOSED-LOOP FREQUENCY RESPONSE
    - Frequency-Domain Specifications
    - Closed-Loop Frequency Response from Nyquist Diagram
    - Closed-Loop Frequency Response from Bode Diagram
    - Gain for a Desired Mp from the Nyquist Diagram
    - Gain For a Desired Mp from the Nichols Chart
    - Non-Unity-Feedback Gain Systems
13. PHASE LEAD COMPENSATION
    - Multiple-Design Constraints
    - Transfer Function of Phase Lead Element
    - Phase Lead Compensation Process
    - Comments on the Applicability and Results of Phase Lead Compensation
14. PHASE LAG AND LAG-LEAD COMPENSATION
    - Transfer Function of Phase Lag Element
    - Phase Lag Compensation Process
    - Comments on Phase Lag Compensation
    - Lag-lead Compensation
    - Transfer Function of a Lag-lead Element
    - Lag-lead Compensation Process
15. LOOP SHAPING
    - Disturbance attenuation
    - Reference following
    - Noise reduction
    - Sensitivity to plant uncertainty
    - Actuator limits
    - Loop shaping design examples
    - Intrinsic limitations on achievable performance

10. INTRODUCTION TO STATE-SPACE DESIGN
- Advantages of state space
- Analysis of the state equations
- Block diagrams and canonical forms

Class/Laboratory Schedule
This course requires 3 Lecture hours and 2 Lab hours per week.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A project was assigned to students to find a real world engineering problem in the military application related to the course contents, and to present the simplified solution and discussion of the solution in a written report.

Prepared by
Vladimir N. Dobrokhodov

ME4101 ADVANCED THERMODYNAMICS (4-0)

Required or Elective Elective

Course (Catalog) Description
This course reviews elementary definitions, concepts and laws of thermodynamics and then extends these to cover general thermodynamics and advanced topics. The concepts of availability, exergy, irreversibility, and general equilibrium conditions in single and multi-component systems are presented. Ideal and non-ideal solutions and chemical potential are treated along with an introduction to statistical thermodynamics and non-equilibrium concepts such as Osager's reciprocal relations. PREREQUISITE: ME2101.

Prerequisites and Co-requisites
ME2101

Textbook(s) and/or other Required Material
Text: J. W. Tester and M. Modell, "Thermodynamics and its Applications," 3rd Edition, Prentice-Hall, 1996.

References:

1. J.M. Prausnitz et al., "Molecular Thermodynamics of Fluid-Phase Equilibria", 2d ed., Prentice-Hall, 1986.
2. D. Chandler, "Introduction to Modern Statistical Mechanics" Oxford University Press, 1987.
3. H.B. Callen, "Thermodynamics and an Introduction to Thermostatistics," 2d ed., Wiley, 1985.

Course Objectives
Students are expected to gain a deeper understanding of thermodynamics and extend a students grasp on multi-component and reacting systems and general equilibrium, and well as the statistical foundations of macroscopic thermodynamic quantities. Students completing this course are expected to be able to calculate thermodynamics properties of complex mixtures, and be able to use general thermodynamic relationships to relate changes in properties. Students should also be able to analyze and design complex thermodynamics systems for engineering applications.

Topics Covered

1. Review of first and second laws of thermodynamics along with combined formulations – Gibbs Equations.
2. General thermodynamic relationships – Maxwell's relationships.
3. Thermodynamic properties of mixtures of non-reacting systems.
4. Thermodynamics of chemically reacting systems.
5. General equilibrium conditions for systems – Gibbs and Helmholtz free energies.
6. Introduction to statistical thermodynamics.
7. Introduction to non-equilibrium thermodynamics – Onsager's relations.

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Knox Millsaps

ME4161 CONDUCTION HEAT TRANSFER (4-0)

Required or Elective Elective

Course (Catalog) Description
Steady-state heat conduction in multi-dimensions with and without heat sources. Transient conduction. Numerical methods for heat conduction. Mechanical Engineering applications. PREREQUISITE: ME3150.

Prerequisites and Co-requisites
ME3150

Textbook(s) and/or other Required Material
Texts:

1. Jiji, L. M., Heat Conduction, Begell House, 2nd Edition, 2003.
2. Millsaps, K. T., Conduction Heat Transfer", ME4161 Courses Notes, 2005.

Additional References:

1. Carslaw, H. S., Jaeger, J. C., Conduction of Heat in Solids, Oxford University Press, Second Edition.
2. Arpaci, V. S., Conduction Heat Transfer, Addison Wesley, 1966.
3. Ozisik, M. N., Boundary Value Problems of Heat Conduction, Dover.
4. Farlow, S. J., Partial Differential Equations for Scientist and Engineers, Dover. (A good introduction to PDEs at the undergraduate level.)
5. Generally, two or three Journal articles are provided as required reading.

Course Objectives
Students are expected to have a fundamental understanding of the physics and mathematics of steady and transient conduction problems. Students should be able to use standard analytical and computational methods to calculate temperature fields and heat fluxes in solids and stationary fluids. Students should also be able to analyze and design complex thermal systems typical of engineering applications involving both thermal and thermal induced stress considerations.

Topics Covered

1. Physics of conduction process in solids and gases.
2. Formulation of fundamental equations and boundary conditions for conduction problems.
3. Mathematical solutions to steady conduction in one, two and three dimensions in finite and unbounded regions in a variety of coordinate systems.
4. Mathematical solutions to transient conduction in one, two and three dimensions in finite and unbounded regions in a variety of coordinate systems.
5. Problems with short time or distance scales. Non –Fourier conductions.
6. Approximate and asymptotic solutions to linear and non-linear problems.
7. Engineering design applications: contact resistance, coupled thermal-stress problems, etc.

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

Prepared by
Knox Millsaps

ME4162 CONVECTION HEAT TRANSFER
(4 - 0)

Required or Elective Elective

Course (Catalog) Description
Fundamental principles of forced and free convection. Laminar and turbulent duct flows and external flows. Dimensionless correlations. Heat transfer during phase changes. Heat exchanger analysis with Mechanical Engineering applications.

Prerequisites and Co-requisites
Prerequisites: ME 3150, ME 3201, ME4220, or consent of instructor.

Textbook(s) and/or other Required Material
Text: "Convective Heat and Mass Transfer", W.M. Kays, M.E. Crawford and B. Weigand, 4th Ed., McGraw Hill, 2005 and Instructor's Class Notes.

Course Objectives
This is a graduate level heat transfer course. The major objective of the course is to enable the students a deep physical understanding of the subject of Convective Heat Transfer through a physical and insightful study. It also prepares the students to solve practical convective heat transfer problems that involve a variety of boundary conditions and apply the knowledge to heat exchanger design. Various closed form and approximate solutions are taught so that the students can apply these to solve the multitude of open ended engineering problems in their work related situations. It is offered as a VTC course in the Distance Learning environment to the Navy Nuclear Reactors students from Washington, D.C. to participate and earn their graduate degrees.

Topics Covered
1. Review of basic concepts.
2. Derivation of governing equations.
3. Solutions of the governing equations for specific cases:
    a. Laminar internal flows: Momentum and heat transfer.
    b. Laminar external flows: Momentum and heat transfer.
4. Turbulent internal and external flows.
5. Natural convection.
6. Two phase flows: boiling, condensing flows.

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 100 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Muguru S. Chandrasekhara

ME4163 Radiation Heat Transfer
(4- 0)

Required or Elective: Elective

Course (Catalog) Description:
Basic laws and definitions. Radiation properties of surfaces. Radiant interchange among diffusely emitting and reflecting surfaces. Applications and solutions of the equations of radiant interchange. Radiant interchange through participating media. Combined conduction and radiation.

Prerequisites and Co-requisites: ME 3150

Textbook(s) and/or other Required Material:
Radiative Heat Transfer, M.F. Modest, McGraw-Hill, 2nd edition

Course Objectives:
The student will learn about:

- Basic concepts of electromagnetic radiation, the Planck distribution, definition of black body, concept of radiation intensity
- Directional and Spectral radiative properties of real surfaces and their predictions from electromagnetic theory
- View factors and grey, diffuse body heat transfer
- Radiative heat transfer between gray, diffuse surfaces under both diffuse & specular conditions
- Applications to solar collectors, radiation shields, and selective surfaces
- Radiative transfer in participating media including absorption, emission, and scattering
- Spectral radiative properties of molecular gases and the use of various band models in calculating heat transfer
- Radiative heat transfer in particulate media, with emphasis on small and large particle limits, as well as soot properties
- Radiative Transport Equation and it application in gray media
- Approximate methods for optically thick and thin gases
- Combined mode problems where conduction and/or convection are coupled to radiation
- Applications such as furnace gas heat transfer, IR thermometry, and IR signature reduction issues.

Topics Covered:

1. Fundamentals of thermal radiation
2. Radiative properties of real surfaces and their prediction from electromagnetic wave theory
3. View factors for diffuse surface exchange
4. Radiative exchange in enclosures of grey diffuse surfaces as well as specular surfaces
5. Radiation transport equation
6. Molecular gas radiation properties and processes
7. Radiative transport in particulate media
8. Exact solutions of the Radiative Transport Equation in 1-D media and comparison with total gas property approach
9. Combined mode heat transfer: Conduction and/or convection with radiation

Class/Laboratory Schedule:

This course meets 4 times per week for lectures of 50 minutes.
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Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
John R. Lloyd
February 23, 2007

ME4211 APPLIED HYDRODYNAMICS (4-0)

Required or Elective Elective

Course (Catalog) Description
Fundamental principles of hydrodynamics. Brief review of the equations of motion and types of fluid motion. Standard potential flows: source, sink, doublet, and vortex motion. Flow about two-dimensional bodies. Flow about axisymmetric bodies. Added mass of various bodies and the added-mass moment of inertia. Complex variables approach to flow about two-dimensional bodies. Conformal transformations. Flow about hydro and aerofoils. Special topics such as dynamic response of submerged bodies, hydroelastic oscillations, etc. Course emphasizes the use of various numerical techniques and the relationship between the predictions of hydrodynamics and viscous flow methods. PREREQUISITE: ME3201.

Prerequisites and Co-requisites
ME3201

Textbook(s) and/or other Required Material
Text: "An Introduction to Fluid Dynamics", George K. Batchelor, Cambridge University Press, 1967.

References:
1. "Hydrodynamics" Horace Lamb, 1st Edition, Cambridge University Press, 2000.
2. "Fluid Mechanics", Landau and Lifshitz, Addison-Wsley, 1959.

Course Objectives
Students are expected to gain a fundamental understanding of the classical solutions and phenomena of potential flow and vortex methods. Various exact and approximate methods are provided as well as experimental data. Students completing this course are expected to be able to calculate the hydrodynamic coefficients and free surface flows associated with typical naval systems.

Topics Covered
1. Review of the fundamentals equations of fluid mechanics.
2. Potential flow calculations and pressure distributions for incompressible flow.
3. Classical solution methods of potential equations, including sources, sinks, distributed vortex, and image methods. Aerodynamics and hydrodynamics of bodies of revolution.
4. Free surface and stratified flow.
5. Vortex and panel methods.
6. Numerical methods and solutions.

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Knox Millsaps

ME4220 ME4220 VISCOUS FLOW
(4 - 0)

Required or Elective Elective

Course (Catalog) Description
Development of continuity and Navier-Stokes equations. Exact solutions of steady and unsteady viscous flow problems. Development of the boundary-layer equations. Similarity variables, numerical and integral techniques. Separation, boundary-layer control. Time-dependent boundary layers. Origin and nature of turbulence, phenomenological theories, calculation of turbulent flows with emphasis on naval engineering applications, and numerical models and CFD.

Prerequisites and Co-requisites
ME3201 and instructor's permission.

Textbook(s) and/or other Required Material
Text: "Boundary Layer Theory", H. Schlichting, 7th Ed., McGraw Hill, 1979 and Instructor's Class Notes.

Course Objectives
This is a graduate level fluids course. The major objective of the course is to give the students a deep physical understanding of viscous flows through a physical and insightful study of viscous fluid flows, and solutions of their governing equations. It also prepares the students for the follow-on course on convective heat transfer. Upon completion of the course, the students will be able to see the order in and develop a "quantitative feel" for the chaos known as turbulence. Significant viscous fluid flow knowledge is imparted to enable the students to solve a multitude of open ended engineering fluid mechanics problems. It is offered as a VTC course in the Distance Learning environment to the Navy Nuclear Reactors students from Washington, D.C. to participate and earn their graduate degrees.

Topics Covered
1. Review of basic concepts.
2. Derivation of governing (continuity and Navier-Stokes) equations.
3. Solutions of Navier-Stokes equations for specific cases.
4. Laminar boundary layers: Derivations of Prandtl boundary layer equations, properties, Blasius solution, Falkner-Skan solution, approximate methods, flow separation and its control.
5. Instability, origins of turbulence, Orr-Sommerfeld equation.
6. Turbulent flows, Reynolds averaging, Closure problem, gradient transport, law of the wall and related topics on turbulent boundary layers, turbulent kinetic energy, energy spectrum.
7. Turbulent pipe and flat plate flows.
8. Turbulence modeling.
9. Separation and its control

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 100 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Muguru S. Chandrasekhara

ME4225 Computational Fluid Dynamics and Heat transfer
(3 - 2)

Required or Elective Elective

Course (Catalog) Description
This course presents numerical solution of sets, of partial differential equations, that describe fluid flow and heat transfer. The governing equations for fluid dynamics are reviewed and turbulence modeling is introduced. Discretization techniques are applied to selected model equations and numerical methods are developed for inviscid and viscous, compressible and incompressible flows. Individual term projects include application of CFD to thesis research and to current military problems.

Prerequisites and Co-requisites
ME3201, ME3450, MA4243

Textbook(s) and/or other Required Material
Instructors Notes

Course Objectives
The emphasis will be on the numerical solution of sets, of partial differential equations, that describe fluid flow. The philosophy used throughout the course, is the construction and use of computer programs, leading to an understanding of the various algorithms

Topics Covered
INTRODUCTION
- Computational trends and historical perspective

GOVERNING EQUATIONS OF FLUID DYNAMICS (Inviscid)
SOLUTION OF THE STEADY ONE-DIMENSIONAL EULER EQUATIONS
- Implicit and Explicit schemes for the one-dimensional Euler equations
- Flux splitting and upwind differencing
- Implementation of boundary conditions

STEADY STATE SOLUTIONS OF THE TWO-DIMENSIONAL EULER EQUATIONS
- Explicit algorithms for the two-dimensional Euler equations
- Implicit methods for the solution of the Euler equations

NUMERICAL METHODS FOR THE NAVIER-STOKES EQUATIONS
- Tensors
- Reynolds equations for turbulent flow
- Introduction to turbulence modeling
- Turbulent flows, two-equation turbulence models
- Unsteady two-dimensional N-S calculations
- Selected topics (dependant on the selection of term projects)
. Advanced Topics – Turbulence models

Class/Laboratory Schedule
This course meets 3 times per week for lectures of 50 minutes and once for a 2-hour lab.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Garth V. Hobson

ME4240 ADVANCED TOPICS IN FLUID DYNAMICS (4-0)

Required or Elective Elective

Course (Catalog) Description
Topics selected in accordance with the current interests of the students and faculty. Examples include fluid-structure interactions, cable strumming, wave forces on structures, free-streamline analysis of jets, wakes, and cavities with emphasis on computational fluid dynamics. PREREQUISITES: ME4220 and ME4211.

Prerequisites and Co-requisites
ME4220 and ME4211

Textbook(s) and/or other Required Material
Text: Various.

Course Objectives
This is a second level graduate course that treats topics of mutual interest of the faculty and students.

Topics Covered
No fixed set of topics.

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Knox Millsaps

ME4420 ADVANCED POWER AND PROPULSION (4-0)

Required or Elective Elective

Course (Catalog) Description
This course presents an advanced treatment of power and propulsion topics, primarily for naval applications. Thermodynamic analysis of simple, advanced and complex cycles, such as combined and augmented cycles (e.g., RACER and STIG) are presented along with new and direct energy conversion concepts. Design integration of single and multi-type (CODAG, CODOG, etc.) power and propulsion systems with vehicles. Engine installation considerations, including the design of auxiliary equipment and inlet/exhaust systems, are presented. Design and current research topics in fluid mechanics and rotordynamics of turbomachinery are presented. Repair, condition-based maintenance and machinery operation, including balancing techniques, are discussed. PREREQUISITE: ME3240.

Prerequisites and Co-requisites
ME3240

Textbook(s) and/or other Required Material
Texts:
1. "Handbook of Gas Turbines", Meherwan P. Boyce, 2nd Edition, Gulf Publishing, 2000.
2. "Instillations Design Manual for the General Electric LM2500", GE, 2001.
3. "Manual for Allison 501-K34", Rolls Royce, 1992.

Course Objectives
This course presents both advanced special topics in gas turbines and Diesel engines, along with design related topics, useful for understanding modern naval power and propulsion platforms and weapons. Students are expected to gain an advanced level understanding of the aerothermodynamics gas turbine components, such as inlets, compressors, combustors, turbines and exhausts. Design and integration of engines into naval platforms and weapon systems for power and propulsion is covered. Students are expected to demonstrate competence in preliminary design of warship power and propulsion, through a comprehensive design project.

Topics Covered
1. Review of the fundamentals of thermodynamic cycles.
2. Advanced gas turbine cycles, including intercooling, reheat, and regeneration.
3. Steam injected cycles.
4. Mission and platform requirements.
5. Analysis and design of inlets and exhausts.
6. Auxiliary systems.
7. Gears and shafting.
8. Propeller and propulsor systems
9. Analysis of mechanical and electrical drive.

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	X*
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X**
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X***

* This course requires a substantial preliminary design project.
** Oral presentations and written reports are required.
*** The process for creating and satisfying military requirements are treated and students must submit engineering design that satisfy the requirements.

Prepared by
Knox Millsaps

ME4522 FINITE ELEMENT METHODS IN STRUCTURAL DYNAMICS
(4 - 0)

Required or Elective Elective

Course (Catalog) Description
This course provides an introduction to the principles and methods of computational structural dynamics and vibration analysis. Modern computational methods make use of the matrix structural models provided by finite element analysis. Therefore, this course provides an introduction to dynamic analysis using the finite element method, and introduces concepts and methods in the calculation of modal parameters, dynamic response via mode superposition, frequency response, model reduction, and structural synthesis techniques. Experimental modal identification techniques will be introduced.

Prerequisites and Co-requisites
ME3521

Textbook(s) and/or other Required Material
"Structural Dynamics: An Introduction to Computer Methods", Craig, Roy R., John Wiley & Sons.

Course Objectives
(1) Finite Element Modeling for Structural Dynamics: Provide students with an introduction to computer-based modeling of structural dynamic systems. Such computer modeling is the way real world complex vibration problems are modeled, analyzed, and solved. Students learn the basic theory of the finite element method for structural dynamics, and each student writes his/her own simple finite element program for analyzing structural dynamics problems.
(2) Advanced Theory of Dynamics and Vibration: Provide students with an understanding of the mathematical theory of multi-degree of freedom systems. The underlying theory of linear systems, and the associated mathematical concepts in ordinary differential equations and linear algebra are presented in a manner that facilitates the use of these concepts to solve problems in structural dynamics. Several homeworks reinforce mathematical ideas discussed in class.
(3) Computational Techniques: Each student uses his/her finite element program written as part of the course requirements to solve simple but representative problems in structural dynamics, including the calculation of dynamic response, frequency response, and reduced order models.

Topics Covered
Review: Lagrange's Equations, Derivation of Equations of Motion
Coordinate Coupling.
Finite Element Formulation for Beam Dynamic Bending, System matrices
Modal Decomposition Solution to NDOF Equation of Motion, Orthogonality
Transient Vibration - Non-periodic excitation, Impulse Response, Convolution
Calculation of Dynamic Response - Mode Superposition
Frequency Response (Transfer Functions).

Model reduction, Structural Synthesis Techniques: An Introduction

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 1 hour 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Joshua H. Gordis

ME4525: NAVAL SHIP SHOCK DESIGN AND ANALYSIS (4-0)

Required or Elective Elective

Course (Catalog) Description

Characteristics of underwater phenomena, including shock wave, bubble behavior and bubble pulse loading, and bulk cavitation. Surface ship/submarine bodily response to shock loading. Application of shock spectra to component design. Dynamic Design Analysis Method (DDAM) and applications to shipboard equipment design. Fluid-structure interaction (FSI) analysis, including Doubly Asymptotic Approximation and surface ship FSI. Current design requirements for shipboard equipment.

Prerequisites and Co-requisites

ME3521 or equivalent.

Textbook(s) and/or other Required Material

Text: Response of Marine Structure to Underwater Explosions by Y. S. Shin (Instructor's N
References: (1) R. H. Cole, "Underwater Explosions', Princeton University, 1948.
(2) A. H. Keil, "Introduction to Underwater Explosion Research", UERD Report 19-56 (Confidential)

Course Objectives

The course objective is to provide full understanding of fundamentals of underwater explos and their effects to the responses of surface ships and submarines.

Topics Covered

(1) Sequence of underwater explosion events and hydrodynamic relations
(2) Plane and spherical shock wave: air-water interface problem
(3) Shock wave parameters, bubble loading, scaling laws
(4) Taylor plate theory and its applications, bodily responses, shock spectra
(5) Fluid-structure interaction: doubly asymptotic approximation, hull cavitation
(6) Dynamic design analysis method and its application to shipboard equipment design
(7) Current design requirement for shipboard equipment design
(8) Ship/submarine vulnerability and sruvivability

Class and Laboratory Schedule

Two 2-hour (100 minutes) lecture periods each week.

Contribution of Course to Meeting Professional Component

Required Professional Components	Components Satisfied by ME 4525
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes:

Mechanical Engineering Program Objectives	Program Objectives Satisfied by ME 4525
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

ME4550: RANDOM VIBRATION AND SPECTRAL ANALYSIS (3-2)

Required or Elective Elective

Course (Catalog) Description

Engineering application of spectral analysis techniques to characterize system responses under a random vibration environment. The topics include: characteristics of physical random data and physical system responses, applications of probability concepts to random data and response analysis, correlations and spectral density functions, transmission of random vibration, and failure due to random vibration. The supporting labs are included. PREREQUISITE: ME3521 or equivalent.

Prerequisites and Co-requisites

ME3521 or equivalent

Text and References

Text Book: Julius S. Bendat and Allan G. Piersol, "Engineering Applications of Correlation and Spectral Analysis," 2nd Edition, John Wiley & Sons, 1993; ISBN: 0471570559

References: D. E. Newland, "An Introduction to Random Vibration, Spectral and Wavelet Analysis," 3rd Edition, Addison-Wesley Pub. Co., ISBN: 0582215846, 1993

Julius S. Bendat and Allan G. Piersol, "Random Data: Analysis and Measurement Procedures," 3rd Edition, John Wiley & Sons, 1993; ISBN: 0471317330

Course Objectives

The course objective is to provide full understanding of random vibration and spectral anal and their applications to engineering analysis and design.

Topics Covered

1. Introduction: Characteristics of Random Data
2. Physical System Response
3. Probability Functions
4. Correlations
5. Spectral Density Function
6. Excitation-response Relations for Linear System: Single Input / Single Output Relations
7. Frequency Response Function Measurements and Error Analysis
8. Single Input/Multiple Output Relationships
9. System Identification and Response Prediction
10. Identification of Propagation Paths and Velocities5
11. Source Location and System Estimation
12. Multiple Input/Multiple Output Relationships
13. Procedures for Solving Multiple Input/Output Problems
14. Multiple Input/Output Applications
15. Identification of Energy Sources
16. Applications to Condition Monitoring

Class and Laboratory Schedule

Three one hour (50 minutes) lecture periods each week. Two hour (100 minutes)

laboratory session each week. 3~4 laboratory random vibration and spectral analysis experiments

Contribution of Course to Meeting Professional Component

Required Professional Components	Components Satisfied by ME 4550
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Objectives:

Mechanical Engineering Program Objectives	Program Objectives Satisfied by ME 4550
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by

Young S. Shin

ME4611 ADVANCED MECHANICS OF SOLIDS
(4-0)

Required or Elective Elective

Course (Catalog) Description
Selected topics from advanced mechanics of materials and elasticity. Stress and strain tensors. Governing equations such as equations of equilibrium, constitutive equations, kinematic equations and compatibility equations. Two-dimensional elasticity problems in rectangular and polar coordinate systems. Airy stress function and semi-inverse technique. Energy methods with approximate solution techniques including Rayleigh-Ritz method. Buckling of imperfect columns. Introduction to plate and shell bending theory.

Prerequisites and Co-requisites
ME3611

Textbook(s) and/or other Required Material
Text: Advanced Strength and Applied Elasticity, (A. C. Ugural and S. K. Fenster), 4th edition, Prentice Hall 2003.

Course Objectives
Students are expected to understand theory of elasticity, structural instability, energy methods, and plate bending as well as proper solution techniques. Students are also expected to understand the engineering modeling (or mathematical modeling) of real world solid/structure problems as well as various important factors to be considered in designing structures. Skill for literature review in the related subject is expected for students.

Topics Covered
1. Stress tensor, transformation of stresses and Mohr's circle in three-dimension, Stress invariant, deviatoric stresses, equations of equilibrium, principal stresses in three-dimension, octahedral plane, and traction boundary condition.
2. Strain tensor, kinematic equations for finite and infinitesimal strains, equations of compatibility, strain transformation, deviatoric strain, constitutive equations, strain energy, and Saint-Venant's principle.
3. Two-dimensional elasticity problems in Cartesian and polar coordinate systems, Airy stress function, semi-inverse technique to determine the solutions, stress concentration factors, and elasticity solutions for beam bending
4. Energy methods including principle of virtual work and principle of minimum potential energy, trigonometric series solution technique, Rayleigh-Ritz method
5. Buckling of Imperfect columns including initial curvature and eccentricity, and energy method for buckling analyses.
6. Introduction of plate bending theory, biharmonic governing equations, various boundary conditions, and Navier solution technique.

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 100 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Projects are assigned throughout the class so that students have to analyze the given problems and submit written reports.

Prepared by
Young W. Kwon

ME4613 FINITE ELEMENT METHODS
(4-0)

Required or Elective Elective

Course (Catalog) Description
Introduction to the fundamental concepts of the finite element method. Weighted residual methods and weak formulation. Element discretization concept and shape functions. Generation of element matrices and vectors, and their assembly into the matrix equation. Application of boundary and initial conditions. Isoparametric elements and numerical integration techniques. Computer programming and application to engineering problems such as boundary value, initial value and eigenvalue problems.

Prerequisites and Co-requisites
ME3611, ME3450, or Consent of Instructor

Textbook(s) and/or other Required Material
Text: Finite Element Method Using MATLAB, (Y. W. Kwon and H.-C. Bang), 2nd edition, CRC Press, 2000.

Course Objectives
The student is expected to understand the basic formulation and programming structure of the finite element method. The fundamental concepts will be understood including weighted residual methods; piecewise continuous functions; shape functions; construction of element matrices and vectors for ordinary and partial differential equations; assembly into the system of equations; application of boundary conditions; and solution techniques. The student is also expected to understand both static (or steady-state) or transient problems along with the computer programming techniques. Understanding design process will be expected of students by undertaking design projects.

Topics Covered
1. Introduction of weighted residual methods including collocation method, least squares method and Galerkin's method as well as concepts of residual, trial functions and test functions. Weak formulation. Direct approach for finite element methods using one-dimensional spring, bar, torsion, heat conduction, laminar pipe flow and electric circuit.
2. Introduction of piecewise continuous functions and shape functions for one-dimensional, two-dimensional and three-dimensional elements for various shape of elements. Emphasis is placed on the basic characteristics of the shape functions. Continuity requirement of shape functions.
3. Element discretization concept, computation of element matrices and vectors as well as their assembly into a system of equations. Evaluation of boundary integrals and application of boundary conditions to the system of equations.
4. Mathematical mapping, isoparametric elements and numerical integration techniques.
5. Introduction of common program structures for the finite element analyses and programming techniques. Application of the finite element method for design process.
6. Both static (or steady-state) and dynamic (or transient) problems are selected for application problems including beam bending, elasticity, eigenvalue problems, transient dynamics, and Laplace equation.

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 100 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A term design project is assigned. Students present their report orally in class as well as submit written reports.

Prepared by
Young W. Kwon

ME4731 ENGINEERING DESIGN OPTIMIZATION
(4 - 0)

Required or Elective Elective

Course (Catalog) Description
Application of automated numerical optimization techniques to design of engineering systems. Algorithms for solution of nonlinear constrained design problems. Familiarization with available design optimization programs. State-of-the-art applications. Solution of a variety of design problems in mechanical engineering, using numerical optimization techniques.

Prerequisites and Co-requisites
ME3450, ME3150, ME3201, ME3611

Textbook(s) and/or other Required Material
Text: "Optimization Concepts and Applications in Engineering", Belegundu and Chandrupatla, Prentice-Hall.

Course Objectives
(1) Formulation of Engineering Problems as Optimization Problems: Students are expected to be able to translate an engineering problem into the standard form of a general linear or nonlinear, constrained or unconstrained, optimization problem. Not only is this required in order to actually solve a problem as an optimization problem, but it forces students to identify the dependent and independent variables in a problem, and to identify what quantity is to be minimized/maximized, and what constraints are important.
(2) Understanding and Implementing Algorithms for Numerical Optimization: Provide students with an understanding of the mathematical theory of unconstrained and constrained linear and nonlinear optimization. The underlying theory and the associated mathematical concepts are presented in a manner that facilitates the use of these concepts to develop optimization strategies. Several programming projects reinforce mathematical ideas discussed in class, and familiarize students with the structure of optimization programs.
(3) Engineering Design and Analysis: The students consider a variety of problems in engineering design, and economics in studying and applying the optimization techniques covered. In addition to the concepts in optimization, general consideration of fundamental issues in design are discussed. Most importantly among them is the prediction and subsequent modeling of failure modes.

Topics Covered

(1) Introduction, Sample engineering problems, Basic notation, Problem formulation Optimum design concepts, case studies
(2) Unconstrained problems, Single variable functions - Properties and optimality, Region elimination methods, Line searching, Functions of several variables, Properties and optimality
(3) Gradient based methods - Cauchy's, Newton's, Conjugate gradient, Quasi-Newton

(4) Constrained problems: Linear programming,Problem definition, canonical form, Graphical solution, Simplex method, Sample problems
(5) Constrained problems: Nonlinear Constrained optimality conditions, Lagrange multipliers, Karush-Kuhn-Tucker conditions, Successive linear programming, Generalized reduced gradient method, Multi-objective problems, Sensitivity analysis, Mechanism optimization 10. beams.

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 1 hour m50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A project was assigned to students to find a real world engineering problem in the military application related to the course contents, and to present the simplified solution and discussion of the solution in a written report.

Prepared by
Joshua H. Gordis

ME4751 COMBAT SURVIVABILITY, RELIABILTY, AND SYSTEMS SAFTEY ENGINEERING (4-1)

Required or Elective Elective

Course (Catalog) Description
Description:
This course provides the student with an understanding of the essential elements in the study of survivability, reliability and systems safety engineering for military platforms including submarines, surface ships, fixed-wing and rotary wing aircraft, as well as missiles, unmanned vehicles and satellites. Technologies for increasing survivability and methodologies for assessing the probability of survival in a hostile (non-nuclear) environment from conventional and directed energy weapons will be presented. Several in-depth studies of the survivability various vehicles will give the student practical knowledge in the design of battle-ready platforms and weapons. An introduction to reliability and system safety engineering examines system and subsystem failure in a non-hostile environment. Safety analyses (hazard analysis, fault-tree analysis, and component redundancy design), safety criteria and life cycle considerations are presented with applications to aircraft maintenance, repair and retirement strategies, along with the mathematical foundations of statistical sampling, set theory, probability modeling and probability distribution functions. PREREQUISITES: Consent of Instructor.

Prerequisites and Co-requisites
Consent of Instructor.

Textbook(s) and/or other Required Material
Text: "Fundamentals of Aircraft Survivability Analysis and Design" Robert. E. Ball, 2nd Edition, AIAA Education Series, 2002.

Course Objectives
Students are expected to gain a fundamental understanding of the principles of platform survivability and be able to use this knowledge in improving system survivability and improve operations to limit losses due to hostile actions.

Topics Covered
1. Introduction to statistical analysis and methods.
2. Definitions of terminology of the kill chain.
3. Platform layout and systems interconnections.
4. Physical principles of detection, tracking and engagement.
5. Mechanics of damage and kill mechanisms.
6. Design of survivability.

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes and a separate computer laboratory period is used to perform calculations and have design discussions.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	X*
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

* This course teaches both design tools and process.

Prepared by
Knox Millsaps

ME4811 MULTIVARIABLE CONTROL OF SHIP SYSTEMS
(3 - 2)

Required or Elective Elective

Course (Catalog) Description
Multivariable analysis and control concepts for MIMO systems. State Observers. Disturbances and tracking systems. Linear Optimal Control. The linear Quadratic Gaussian compensator. Introduction to non-linear system analysis. Limit cycle behavior.

Prerequisites and Co-requisites
Me3801

Textbook(s) and/or other Required Material
Web-based notes by F. Papoulias

Course Objectives
Students are expect to know how to design a compensator (controller and observer) for a linear system and verify its response using simulations, design a disturbance estimation and compensation control law, perform an integral control design in state space, set up the LQR/LQG optimization problems and solve using MATLAB/SIMULINK, utilize Lyapunov functions to analyze simple nonlinear control systems and limit cycle behavior

Topics Covered

1. State Feedback Control Law Design.
2. Observer Design.
3. Tracking Systems.
4. Disturbance Estimation.
5. Optimal/Sliding Mode Control.
6. Discrete Time Control.
7. Effects of Noise.
8. Robust Control.
9. Nonlinear Systems

Class/Laboratory Schedule
This course meets 4 times per week for 3 lectures of 50 minutes and 2 hours of lab

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X*
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A project was assigned to students to develop an integrated guidance and control algorithms that guides an Autonomous Underwater Vehicle through a mine filed to a rendezvous point and back to the mother ship and test it in the Simulink environment. The discussion of the developed solution is presented in a written report.

Prepared by
Isaac Kaminer

ME4821 MARINE NAVIGATION
(3 - 2)

Required or Elective Elective

Course (Catalog) Description
This course presents the fundamentals of inertial navigation, principles of inertial accelerometers, and gyroscopes. Derivation of gimbaled and strapdown navigation equations and corresponding error analysis. Navigation using external navigation aids (navaids): LORAN, TACAN, and GPS. Introduction to Kalman filtering as a means of integrating data from navaids and inertial sensors...

Prerequisites and Co-requisites
ME3801

Textbook(s) and/or other Required Material
Lecture Notes Provided by instructor

Course Objectives
Students are expected to be able to:
1. Explain principles of operation of inertial sensors such a fiber optic gyros and accelerometers
2. Define typical coordinate systems and derive transformations between them
3. Derive inertial navigation equations
4. Derive inertial navigation error equations
6. Derive navigation aids models including bearings, GPS and vision.
7. Design complementary and Kalman filters that integrate inertial sensors with navaids

Topics Covered
Coordinate Systems and Transformations, Earth Models, Terrestrial Navigation, Navigation Sensor Models, Navigation Aids, Complementary and Kalman Filtering, navigation systems modeling using nonlinear simulation environment

Class/Laboratory Schedule
This course meets 4 times per week for 3 lectures of 50 minutes and 2 hours of lab

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X*
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X*
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* A project is assigned to students to develop an integrated GPS/INS system, test it in Simulink environment and to present the solution and discussion of the solution in a written report.

Prepared by
Isaac Kaminer

MS2201 INTRODUCTION TO MATERIALS SCIENCE & ENGINEERING (3 - 2)

Required or Elective Required

Course (Catalog) Description

This is a first course in Materials Science and Engineering and emphasizes the basic principles of microstructure-property relationships in materials of engineering and Naval relevance. Topics include crystalline structure and bonding, defects, thermodynamics and kinetics of reactions in solids, deformation, strengthening mechanisms and heat treatment. Students will acquire a working vocabulary and conceptual understanding necessary for advance study and for communication with materials experts.

Prerequisites and Co-requisites

Undergraduate courses in calculus, physics and chemistry.

Textbook(s) and/or other Required Material

Text: "Materials Science & Engineering: An Introduction", W. D. Callister., 6th ed., John Wiley & Sons, 2005.

Course Objectives

To understand the correlation between microstructure, property and processing of materials, based on the following areas.

1 Structure of materials - including atomic structure, bonding in the solid state and crystal structure;
2 Defects in structure - including point, line, interfacial and bulk defects, and how these affect material properties such as strength, ductility and toughness;
3 Mechanical behavior - the role of microstructure in determining mechanical response;
4 Phase transformations - the principal means for controlling alloy microstructure and thus mechanical and other material properties.

The overall objective of the course is that the students learn to understand the observed characteristics of engineering materials in terms of structure-property-processing correlations. The specific goals of the course are to: (1) enable students to appreciate how the service properties of materials depend on both fabrication history and service environment, and (2) provide a foundation for subsequent Materials Science courses.

Topics Covered

1. Introduction
2. Atomic Structure/Bonding
3. Crystalline Solids
4. Imperfections in Solids
5. Diffusion
6. Mechanical Behavior
7. Phase Diagrams
8. Dislocations and Strengthening Mechanisms
9. Phase Transformations in Metals
10. Thermal Processing of Metals

Class/Laboratory Schedule

This course meets 3 times per week for lectures of 50 minutes, plus once a week for a 2 hour laboratory.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Indranath Dutta

MS3202 Properties, Performance and Failure of Engineering Materials (3-2)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
The purpose of this course is to advance the students' understanding of the fundamentals of materials science, while putting that understanding in the context of the behavior of materials in engineering applications. Contemporary developments in engineering materials such as composites, ceramics and polymers are considered, as well as traditional engineering alloys such as steels and aluminum alloys. Performance and failure histories of materials in service will be studied, as well as conventional textbook subjects. Examples pertinent to Naval, Aero and Combat Systems Science are emphasized. Topics include mechanical properties, fracture, fatigue, failure analysis and corrosion.

Prerequisites and Co-requisites
MS2201 or equivalent or consent of instructor.

Textbook(s) and/or other Required Material
Text: "Materials Science and Engineering: An Introduction", 7th Ed., William D. Callister, J. Wiley & Sons, 2007; "Failure Analysis and Prevention", Metals Handbook Vol. 11, 10th Ed., ASMI (Amer. Soc. Mater. International), Metals Park, OH, 2000.

Course Objectives
Upon completion of MS3202, students are expected to understand the mechanisms governing strength, ductility, fracture toughness, fatigue and creep, as well as the mechanisms controlling the environmental degradation of materials, and to understand the procedures for analyzing service failures related to materials issues. Students will complete a failure analysis project on a failed component from an engineering system and report the results of the analysis orally and in written form.

Topics Covered
8. Review of selected topics in basic materials science
9. Mechanical behavior and mechanical failure modes.
10. Corrosion and corrosion failure modes.
11. Combined failure modes: stress corrosion cracking and hydrogen embrittlement.
12. Fractography.
13. Failure analysis.
14. Applications of failure analysis to components of naval systems.

Class/Laboratory Schedule
This course meets 3 times per week for lectures of 50 minutes and once per week for laboratory sessions of 110 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X*
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 1 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Students must identify a failed component from an engineering systems of military relevance and conduct a laboratory failure analysis on it; the results of the analysis will be reported in both oral and written form.

Prepared by
Terry R McNelley

MS3304: CORROSION AND MARINE ENVIRONMENTAL DETERIORATION (3 - 2)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
The fundamentals of corrosion science and the practice of corrosion engineering are discussed. The objectives include an appreciation of the varied causes, mechanisms and effects of corrosion. Fundamental topics such as basic electrochemistry, polarization and passivity are covered. A primary goal of the course is the development of skill in the recognition and prevention of a wide variety of types of corrosion. Standard methods of corrosion control are discussed, including cathodic protection, coatings, alloy selection and inhibitors.

Prerequisites and Co-requisites
MS2201 or equivalent or consent of instructor

Textbook(s) and/or other Required Material

Text: Denny A. Jones, "Principles and Prevention of Corrosion", Prentice Hall, 2nd Edition, 1996.
Ref.: Mars G. Fontana, "Corrosion Engineering", McGraw-Hill, 3rd Edition, 1986.

Course Objectives
The fundamentals of corrosion science and the practice of corrosion engineering are discussed. The objectives include an appreciation of the varied causes, mechanisms and effects of corrosion. Fundamental topics such as basic electrochemistry, polarization and passivity are covered. A primary goal of the course is the development of skill in the recognition and prevention of a wide variety of types of corrosion. Standard methods of corrosion control are discussed, including cathodic protection, coatings, alloy selection and inhibitors.

Topics Covered
1. Modes of Corrosion
2. Corrosion Rates
3. Electrochemical Thermodynamics
4. Pourbaix Diagram
5. Electrochemical Potentials
6. Electrochemical Kinetics
7. Experimental Polarization Measurement
8. Passivity
9. Galvanic & Conc. Cell Corrosion
10. Pitting & Crevice Corrosion
11. Environmentally Assited Cracking
12. Intergranular Attack & De-alloying
13. Cathodic Protection
14. Coatings
15. Inhibitors
17. Materials Selection

Class/Laboratory Schedule
This course meets 2 times per week for lectures of 50 minutes, plus one 2-hour laboratory session.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Students are required to write a critical review of a published archival journal paper, including a summary of the principal findings and a review of associated literature.

Prepared by
Indranath Dutta

MS3606 Introduction to Welding and Joining Metallurgy (3-2)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
Welding and joining are presented from the point of view of metallurgy. Topics include the nature and applications of welding and joining processes; the welding thermal cycle; metallurgical effects of the welding thermal cycle; welding and joining of steels, aluminum alloys, stainless steels and heat-resistant alloys. Also, weldment inspection and quality assurance are introduced.

Prerequisites and Co-requisites
MS2201 and MS3202 or consent of instructor.

Textbook(s) and/or other Required Material
Text: "Welding Metallurgy", 2nd Edition, S. Kou, J. Wiley & Sons, 2003

Course Objectives
Upon completion of MS3606, students are expected to know the basic vocabulary of welding and welding metallurgy, especially for fusion welding processes; to be able to explain the advantages and limitations of the more common welding processes; to understand heat flow in fusion welding and the effect of the welding thermal cycle in welded materials; to understand gas-metal interactions and their implications in fusion welding; to understand the effect of solidification processes on microstructures in various regions of a weldment; to recognize the origin of various welding defects and how to prevent their occurrence; to be able to apply the physical metallurgy principles which were presented in MS2201 and further developed in MS3202; and, finally, to recognize the limitations on structural performance due to welding

Topics Covered
1. Introduction to welding and joining processes.
2. Allied processes
3. The molten zone in fusion welding processes.
4. The heat affected zone.
5. Recent developments in welding and joining processes.

Class/Laboratory Schedule
This course meets 3 times per week for lectures of 50 minutes and once per week for laboratory sessions of 110 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Terry R McNelley

MS4215: PHASE TRANSFORMATIONS (3-2)

Required or Elective Elective

Course (Catalog) Description
The mechanisms and kinetics of structural changes in solid materials are considered in detail. A wide variety of transformation mechanisms are studied, including solidification, recrystallization, precipitation and martensitic transformation. The basic principles which govern these reactions are developed, including principles of nucleation and growth, diffusion and lattice distortion. The relevance of various transformations to practical heat treatment, thermomechanical processing, and technological advances is discussed. Microstructural recognition and methods of monitoring phase transformations are included. Changes in properties which result from phase transformations are given limited attention. Prerequisites: MS3214 or equivalent or consent of instructor.

Prerequisites and Co-requisites
MS3202, and MS3214 or consent of the instructor

Textbook(s) and/or other Required Material
Required:

"Phase Transformations in Metals and Alloys", D.A. Porter and K.E. Easterling, 2nd Ed., CRC – Taylor and Francis, 2004

"Transformations in Metals", P.G. Shewmon, J. Williams & Co, 1981.

References:

"An Introduction to Solid State Diffusion", R.J. Borg and C.J. Dienes , Academic Press, 1988

"Phase Transformations in Materials", G. Kostorz, Ed., Wiley – VCH, 2001

Course Objectives
This course is concerned with the thermodynamics and kinetics of phase transformations in metallic materials of naval interest for structural and functional applications. Upon completion of MS4215, students will be able to describe the temperature, pressure and composition dependence of the Gibbs free energy in single and two-component systems and calculate unary and binary phase diagrams from free energy data; to understand diffusion mechanisms and to apply solutions to diffusion equations for steady-state and non-steady-state problems in phase transformations; to state the roles of interfacial energies in transformation processes; and to apply concepts of diffusional and diffusionless transformations to problems of materials processing

Topics Covered

1. Thermodyndamics and phase diagrams
2. Diffusion
3. Microstructure and interfaces
4. Solidification
5. Diffusional transformations in solids: nucleation and growth processes
6. Diffusionless transformations: martensitic transformations

Class/Laboratory Schedule
This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Students are required to write a critical review of a published archival journal paper, including a summary of the principal findings and a review of associated literature.

Prepared by
Terry R. McNelley

MS4312: CHARACTERIZATION OF ADVANCED MATERIALS (3-2)

Required or Elective Elective

Course (Catalog) Description
This course is structured to provide an insight into the various tools available for advanced physical examination of engineering materials. Topics covered include X-ray diffraction and optical, scanning, transmission and scanning transmission electron microscopy methods.

Prerequisites and Co-requisites
MS3202 or consent of the instructor

Textbook(s) and/or other Required Material
Required:

"Modern Physical Techniques in Materials Technology", T. Mulvey and R.K. Webster, Eds., Oxford University Press, 1974
"Modern Physical Metallurgy and Materials Engineering" R.E. Smallman and R.J. Bishop, Butterworth-Heinemann, 1999
"Elements of X-ray Diffraction", B.D. Cullity and S.R. Stock, Prentice Hall, 2001

References:

"Transmission Electron Microscopy", D.B. Williams and C.B. Carter, Plenum Press, 1996
"Optical Microscopy of Metals", R.C. Gifkins, Pitman House, 1970
"Practical Scanning Electron Microscopy", J.I. Goldstein and H. Yakowitz, 3rd Ed., Plenum Press, 1994

Course Objectives
This course is concerned with the theories of modern methods of materials characterization and the experimental evaluation of material microstructure by optical microscopy, x-ray diffraction and electron diffraction methods. At the conclusion of MS4312, students will be able to explain the applications and resolution limits of light microscopy, x-ray diffraction and electron diffraction methods. Also, students will be able to prepare samples for these techniques and obtain and interpret data, including structural, imaging and composition data, from typical naval materials of structural and functional interest.

Topics Covered

1. Atom structure, crystallography and diffraction
2. Defects in crystals
3. X-ray diffraction
4. Neutron diffraction
5. Electron diffraction
6. Optical microscopy and interferometry
7. Transmission electron microscopy
8. Scanning electron microscopy
9. Microanalysis

Class/Laboratory Schedule
This course meets 3 times per week for lectures of 50 minutes and once per week for a 110 minute laboratory.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Students are required to write a critical review of a published archival journal paper, including a summary of the principal findings and a review of associated literature.

Prepared by
Terry R. McNelley

MS4811: MECHANICAL BEHAVIOR OF ENGINEERING MATERIALS (4 - 0)

Required or Elective Elective

Course (Catalog) Description

The response of structural materials to stress is discussed, including elastic and plastic deformation and fracture. Topics include elastic response and the modules of elasticity; plasticity; deformation mechanisms and dislocation theory; strengthening mechanisms; and fatigue and fracture. Application to materials development is also considered.

Prerequisites and Co-requisites

MS3202, and MS3214 or consent of the instructor

Textbook(s) and/or other Required Material

Required: R.W. Hertzberg, "Deformation and Fracture Mechanics of Engineering Materials", 4th Edition, John Wiley & Sons, 1996.

References :

- G. E. Dieter, "Mechanical Metallurgy", McGraw-Hill, 1976
- F. Garofalo, "Fundamentals of Creep and Creep Rupture in Metals", MacMillan, 1966
- T. H. Courtney, "Mechanical Behavior of Materials", McGraw-Hill, 1989

Course Objectives

This course is concerned with strength, deformation and fracture of crystalline solids, and can be divided broadly into three parts. The first part deals with elastic and plastic deformation of crystalline materials, with particular emphasis on low temperature plastic deformation, including dislocation theory and strengthening mechanisms. The second part deals with high temperature deformation (creep), and develops a mechanistic approach based on available analytical formulations. The third part addresses failure in materials, where a fracture-mechanics based approach is adopted to supplement the fracture mode / mechanism based approach of MS 3202. The failure of materials via fatigue is also addressed.

Topics Covered

1. Tensile Response
2. Dislocations
3. Strengthening Mechanisms
4. Elevated Temperature Deformation (Creep, Stress relaxation)
5. Fracture
6. Fatigue

Class/Laboratory Schedule

This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Students are required to write a critical review of a published archival journal paper, including a summary of the principal findings and a review of associated literature.

Prepared by
Indranath Dutta

MS4822 THE ENGINEERING AND SCIENCE OF COMPOSITE MATERIALS (4 - 0)

Required or Elective Elective

Course (Catalog) Description

This course focuses on the structure-property correlation in composites utilizing a multi-disciplinary approach, covering the areas of materials science and engineering and solid mechanics. Emphasis is given to the theoretical constitutive behavior at the micro- and macro-levels, as well as on how such behavior can be altered by processing and service variables. The course is divided into three broad parts: (1) Theoretical predictions of composite properties; (2) Materials issues (including processing) complicating accurate performance prediction; and (3) Thermo-mechanical behavior in actual service conditions.

Prerequisites and Co-requisites

ME3611, MS3202 or equivalent

Textbook(s) and/or other Required Material

Required :

1. KC: K. K. Chawla, "Composite Materials - Science and Engineering", Springer-Verlag, New York 2nd Edition (1999).
2. TA: M. Taya and R. J. Arsenault, "Metal-Matrix Composites-Thermo-Mechanical Behavior", Pergamon Press, New York (1989).

References :

1. Handouts based on selected journal papers.
2. P. K. Mallick, "Fiber-Reinforced Composites - Materials, Manufacturing and Design", Marcel Dekker, New York (1988).

Course Objectives

To yield an understanding of the design, performance and fabrication of composites, based on :

(1) Theoretical predictions of composite properties
(2) Materials issues complicating accurate performance prediction
(3) Suitability of different types of composites to different applications
(4) Methods of fabrication of different types of composites
(5) Performance under service conditions as different from predicted performance, with creep and fatigue as specific examples

Topics Covered

1. Introduction and Definitions
2. Elasticity, Plasticity and Visco-Plasticity - Constitutive Relations
3. Constitutive Thermo-Mechanical Behavior of Composites - Micro-level
4. Constitutive Thermo-Mechanical Behavior of Composites - Macro-level
5 Materials and Fabrication : Polymer, Metal and Ceramic Matrix Composites
6. Design of Reinforcement-Matrix Interfaces - Chemical and Mechanical
7. Behavior under Service Conditions - Effect of Material and Design Parameters on Creep and Fatigue

Class/Laboratory Schedule

This course meets 4 times per week for lectures of 50 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X*
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

* Students are required to write a critical review of a published archival journal paper, including a summary of the principal findings and a review of associated literature.

Prepared by
Indranath Dutta

TS3001 FUNDAMENTAL PRINCIPLES OF NAVAL ARCHITECTURE
(3 - 2)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
The geometry, hydrostatics and hydrodynamics of monohull and other floating and submerged bodies; Froude similarity; wave and skin friction resistance; powering determination. Longitudinal and transverse stability of floating bodies. Hull girder strength. Introduction to seakeeping and passive survivability principles.

Prerequisites and Co-requisites
ME2201, ME2601

Textbook(s) and/or other Required Material
Text: "Applied Naval Architecture", Robert B. Zubaly, Cornell Press, 1996. Other notes by the instructor.

Course Objectives
Students are expected to understand the fundamental principles of ship hydrostatics, damage stability, structures, and powering principles. Students completing this course will have the rudiments of how to apply this understanding to the analysis of ships.

Topics Covered
1. Ships and ship types.
2. Hull form, geometry, and definitions.
3. Static equilibrium and stability. Stability at large angles.
4. Trim and longitudinal stability.
5. Flooding and subdivision.
6. Ship strength. Calculation of bending moments and primary hull girder stresses.
7. Ship powering.

Class/Laboratory Schedule
This course meets 3 times per week for lectures of 50 minutes. A lab meeting of 90 minutes per week is primarily used for projects and recitation sessions.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	X
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	X
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	X
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	

Prepared by
Fotis A. Papoulias

TS3003 NAVAL COMBAT SYSTEM ELEMENTS
(3 - 2)

Required or Elective Required (may be waived based on individual circumstances)

Course (Catalog) Description
This course will cover combat system detection and engagement elements. This includes radar, ESM, active and passive sonar, infrared, warheads, guns, missiles, torpedoes, fire control and countermeasures. The emphasis will be on what the elements contribute to a combat system, their basic principles of operation, their performance limitations, and their interfaces with the rest of the combat system. Details on specific elements and systems will be limited to those needed to illustrate basic principles of operation and interactions affecting systems engineering.

Prerequisites and Co-requisites
ME2503 or equivalent or consent of instructor.

Textbook(s) and/or other Required Material
Text: "Combat Systems. Vols. I, II, and III", Robert C. Harney, not yet published.

Course Objectives
Students are expected to understand the basic organization and implementation, principles of operation, and limitations of the principal detection and engagement elements of naval combat systems. Students completing this course will have the rudiments of how to apply this understanding to the design of those elements.

Topics Covered
1. Properties electromagnetic radiation. Propagation of electromagnetic radiation. Effects of weather-related attenuation. Ducting and multipath phenomena.
2. Properties of acoustic radiation. Propagation of acoustic radiation.
3. Radiometry and radiometric analysis of sensor systems.
4. Detection theory. Noise and false alarms. Receiver operating characteristics. Clutter.
5. Parameter estimation theory. Sensor resolution. Pattern recognition.
6. Imaging systems and image-based perception.
7. Tracking systems and tracking filters.
8. Microwave and laser radar systems. Synthetic aperture radar, bistatic radar, and over-the-horizon radar.
9. Infrared and electro-optical imaging systems.
10. Passive microwave detection systems.
11. Active and passive sonar systems.
12. Warheads and fuzing. Explosives and shock waves. Armor penetration.
13. Projectile weapons. Propulsion technologies and launching systems. Ballistics and aerodynamics. Guidance and control.
14. Electromagnetic weapons. Information warfare and electronic warfare. Directed energy weapons.

Class/Laboratory Schedule
This course meets 5 times per week for lectures of 50 minutes. A laboratory component is being developed but inauguration of that component cannot begin before Winter Quarter 2007.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

Prepared by
Robert C. Harney

TS4000 NAVAL COMBAT SYSTEM ENGINEERING
(3 - 2)

Required or Elective Elective

Course (Catalog) Description
Covers the definition and integration of naval combat systems. The emphasis will be on how the various detection, engagement, and control elements interact with each other and on how to combine them into an efficient and survivable combat system. Also addressed will be topside arrangements, signature reduction, readiness assessment, embedded training, and support system interfaces.

Prerequisites and Co-requisites
TS3000 and TS3003.

Textbook(s) and/or other Required Material
Text: Lecture notes prepared by instructor.

Course Objectives
Students are expected to understand the basic process of systems engineering as specifically applied to combat systems. Students completing this course will have the rudiments of how to apply this understanding to the design and integration of complete combat systems.

Topics Covered
1. Command and control elements. Computers and communication systems and networks. Navigation systems.
2. Combat systems engineering process.
3. Combat systems element selection.
4. Topside design and internal combat systems arrangements. Sensor selection priorities.
5. Combat system performance evaluation. Coverage and blockage analysis models. Engagement models and operations analysis.
6. Principles of survivability and survivability enhancement.
7. Signature (observables) prediction, reduction, and control.
8. Electromagnetic interference analysis, prevention, and elimination.
9. CBRN survivability. Agent detection. Collective protection. Decontamination.
10. The system environment. Environmental effects in design.
11. System safety considerations and design.
12. Embedded training.
13. Supportability considerations.
14. Readiness assessment.

Class/Laboratory Schedule
This course meets 5 times per week for lectures of 50 minutes. A laboratory component is being developed but inauguration of that component cannot begin before Spring Quarter 2007.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

Prepared by
Robert C. Harney

TS4001 INTEGRATION OF NAVAL ENGINEERING SYSTEMS
(3 - 2)

Required or Elective Elective

Course (Catalog) Description
A system-oriented approach to integrating the principles of Naval Architecture and Marine Engineering in the design of ship subsystems. Lectures and projects exploring engineering design tools and analysis methods to meet specified systems requirements are used. Projects on hull, mechanical and electrical ship systems design are emphasized. The impact of systems design on other systems and subsystems and on the ship, including affordability, military effectiveness and survivability at the whole ship level are considered.

Prerequisites and Co-requisites
TS3000, TS3001

Textbook(s) and/or other Required Material
Text: Lecture notes and other material prepared and assembled by the instructor.

Course Objectives
Students are expected to understand the process of systems engineering and integration as applied to naval ships with particular emphasis on hull, mechanical, and electrical systems. Students completing this course will have the rudiments of how to apply this understanding to the design and integration of complete naval ship systems.

Topics Covered
1. Introduction to Systems Engineering. The Systems Engineering process.
2. Cost considerations, optimization, and parametric methods.
3. The US Navy ship design environment. Naval ship design considerations and design impacts.
4. Resistance, powering, and propeller selection. Prime movers and propeller, hull, engine matching.
5. Introduction to electric drive and integrated power systems.
6. Maneuvering and seakeeping considerations in design.
7. Risk analysis and decision making methodologies.
8. Naval tactics and ship design implications.
9. Ship survivability principles.
10. Ship production, CAD, and topside design.
11. Systems Engineering management.

Class/Laboratory Schedule
This course meets 3 times per week for lectures of 50 minutes and once per week for lab exercises for 90 minutes.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	X
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	X
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

* A project was assigned to students to find a real world engineering problem in the military application related to the course contents, and to present the simplified solution and discussion of the solution in a written report.

Prepared by
Fotis A. Papoulias

TS4002 SHIP DESIGN INTEGRATION
(2 - 4)

Required or Elective Elective

Course (Catalog) Description
The ship-impact of requirements/cost/performance tradeoffs within technical and acquisition constraints. Conversion of broad military requirements to mission-based ship requirements and specific tasks resulting from those requirements. Exploration of alternative methods of satisfying requirements, leading to combat systems (payload) definition. Conduct of feasibility studies to investigate whole-ship alternatives which meet requirements. Selection of a best design approach. Design considerations for unusual ship types and an assessment of future Navy ship and combat systems needs and trends.

Prerequisites and Co-requisites
TS4001/TS4000

Textbook(s) and/or other Required Material
Instructor notes and other material.

Course Objectives
Students are expected to understand the basic principles and process of converting broad customer requirements into ship design requirements. Students completing this course will have the rudiments of how to apply this understanding to the design of naval ship systems.

Topics Covered
1. Requirement traceability and functional decomposition.
2. Feasibility studies.
3. Design selection.

Class/Laboratory Schedule
This course nominally meets 2 times per week for lectures of 50 minutes and two times per week for lab exercises of 90 minutes. It is primarily done in a group (design oriented) environment.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	X
(e) At least one academic year of advanced level knowledge	

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

Prepared by
Fotis A. Papoulias

TS4003 TOTAL SHIP SYSTEMS ENGINEERING
(2 - 4)

Required or Elective Elective

Course (Catalog) Description
The design of a Naval vessel as a single engineering system satisfying mission requirements, with emphasis on affordability and survivability. The interaction and interfacing of various subsystems such as hull, propulsion, and combat systems will be explored through a joint ship "preliminary design" project to produce a balanced ship design based on the alternative chosen from feasibility studies conducted in TS4002. Concepts of design optimization within constraints.

Prerequisites and Co-requisites
TS4002

Textbook(s) and/or other Required Material
Instructor notes and other material.

Course Objectives
Students are expected to understand the process of converting ship design requirements into a balanced ship design. Students completing this course will have the rudiments of how to apply this understanding to the design of naval ships.

Topics Covered
1. Naval ship design spiral.
2. Ship hydrostatics, structures, powering, survivability, and arrangement trade-off studies.
3. Design selection.

Class/Laboratory Schedule
This course nominally meets 2 times per week for lectures of 50 minutes and two times per week for lab exercises of 90 minutes. It is primarily done in a group (design oriented) environment.

Contribution of Course to Meeting the Professional Component

Required Professional Components	Relationship
(a) One year of a combination of college level math and basic sciences (some with experimental experience) appropriate to the discipline	
(b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study	
(c) A general education component that complements the technical contents of the curriculum and is consistent with the program and institution objectives.	
(d) A major design experience	X
(e) At least one academic year of advanced level knowledge	X

Relationship of Course to Program Outcomes

Mechanical Engineering Program Outcomes	Relationship
1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME. (Table 3.4 shows the course matrix to support the ABET requirement of BSME.)	
2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.	X
3. Graduating students will have high level of communication skills including technical writing and oral presentation.	X
4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.	X
5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.	X

Prepared by
Fotis A. Papoulias

Appendix I-C

Faculty Resumes

Brij N. Agrawal
Distinguished Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Mechanical Engineering	Banares University	1964
M.E.	Mechanical Engineering	IIT, Roorkee	1966
M.S.	Mechanical Engineering	McMaster University	1968
Ph.D.	Mechanical Engineering	Syracuse University	1970

NPS Experience

Employment details:
Distinguished Professor, 1989--Present,
Director, Spacecraft Research and Design Center. *www.aa.nps.navy.mil/~agrawal/srdc/*

Areas of research:
Acquisition, tracking, and pointing of Bifocal Relay Mirror Spacecraft. Vibration isolation, optical beam jitter control, and active structural control. Structural, control, and optics interaction for large flexible space mirrors. Adaptive optics and adaptive control. Space system design.

Areas of teaching:
Dynamics and Control of Flexible Spacecraft, Spacecraft Design, Acquisition, Tracking, and Pointing of Military systems, and Spacecraft Testing.

Other Related Work Experience

1969-1989, conducted research in spacecraft attitude dynamics and control, spacecraft structures, spacecraft system design, and spacecraft testing and participated in the development of communications satellites at Communications Satellite Corporation (COMSAT) and International Telecommunications Satellite Corporation (INTELSAT). Consulting Professor, Stanford University, Adjunct Professor at George Washington University and University of Maryland.

Consulting and Patents

Consulted INTELSAT and Space Systems Loral. Consulted DoD on several classified space programs.

Patent:
Attitude Pointing Error Correction System and Methods for Geosynchronous Satellites, US patent No. 4,911,385, March 27, 1990

Book:
Design of Geosynchronous

Professional Registration
P.E., State of Maryland

Principal Publications of Last Five Years
Kim, J. and Agrawal, B. "Experiments on Jerk-Limited Slew Maneuvers of a Flexible Spacecraft", Accepted for AIAA Guidance, Navigation, and Control Conference and Exhibit, August 21-24, 2006

Kim, J. and Agrawal, B., "Acquisition, Tracking, and Pointing of Bifocal Relay Mirror Spacecraft," Proceedings of Beam Control Conference, Directed Energy Professional Society, Monterey, CA, March 21-24, 2006

Sugathevan, S. and Agrawal, B. "Optical Laser Pointing and Jitter Suppression using Adaptive and Feedback Control Methods," Proceedings of Beam Control Conference, Directed Energy Professional Society, Monterey, CA, March 21-24, 2006

Lau, J., Joshi, S., Agrawal, B. and Kim J., "Investigation of periodic Disturbance Identification and Rejection in Spacecraft," AIAA Journal of Guidance, Control, and Dynamics, 2006

Scientific and Professional Society Memberships
Associate Fellow, American Institute of Aeronautics and Astronautics, Member of Directed Energy Professional Society, Member of International Society for Optical Engineering.

Honors and Awards
INTELSAT award for Inventiveness and Technological Contribution-1990
NPS top performance Award-1990
NPS Outstanding Teaching Award-1993, 1994, and 2000
NPS Outstanding Research Award-1992 and 1997
AIAA the Lockheed Graduate Team Space design Competition Award- 1993 and 1994
Distinguished Professor Award 2002
Richard Hamming Award for Interdisciplinary Innovation, 2007

Institutional and Professional Service in Last Five Years
Associate Chairman, Dept. of Aeronautics and Astronautics; Chairman Ph.D. Committee, Department of Aeronautics and Astronautics; Chairman, Astronautics Oversight Committee; Associate Editor, AIAA Journal of Guidance, Control and Dynamics; Member, International Astronautical Federation (IAF) Technical Committee.

Professional Development Activities in Last Five Years
Developed laboratory and research program in optical beam control and adaptive optics. Attended several national and international conferences and presented papers.

Christopher M. Brophy
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Aerospace Engineering	The Pennsylvania State University	1991
M.S.	Aerospace Engineering	The Pennsylvania State University	1993
Ph.D.	Mechanical Engineering	The University of Alabama in Huntsville	1997

NPS Experience

Employment details:

Research Associate Professor, 2005-Present, term appointment. Research Assistant Professor, 1999-2004, term appointment. NRC Postdoctoral Associate, 1997-1999.

Academic Associate, Space Systems Engineering, 2006-Present

Areas of research:

Rocket propulsion, air-breathing propulsion, combustion, and optical diagnostics.

Areas of teaching:

Thermodynamics, Fluid Dynamics, Propulsion, and Design

Other Related Work Experience

Director, NPS Rocket Propulsion Laboratory, 2000-Present

Consulting and Patents

None

Professional Registration

None

Principal Publications of Last Five Years

Brophy, C.M. and Schauer, F.S., "Efficient Hydrocarbon-Air Initiation Through Dynamic Backpressurization Conditions," *Submitted to AIAA Journal of Propulsion and Power,* February 2007.

Brophy, C.M. and Hanson, R.K., "Fuel Distribution Effects on Pulse Detonation Engine Operation and Performance," *AIAA Journal of Propulsion and Power*, Vol. 19, No. 4, pp. 568-572, 2006.

Wang, F., Liu, J., Sinibaldi, J., Brophy, C., Kuthi, A., Jiang, C., Ronney, P., and Gunderson, M., "Transient Plasma Ignition of Quiescent and Flowing Fuel Mixtures," *IEEE Transactions On Plasma Science*, Vol. 33, No. 2, 2005.

Brophy, C.M., Sinibaldi, J.O., Wang, F., Jiang, C., and Gundersen, M.A., "Transient Plasma Ignition of a Hydrocarbon-Air Initiator for Pulse Detonation Engines," **Application of Detonation to Propulsion**, Eds. G. Roy, S. Frolov, and J. Shepherd, pp. 212-218, Moscow: Torus Press, 2004.

Mattison, D., Brophy, C.M., Sanders, S., Ma, L., Hinckley, K., Jeffries, J., and Hanson, R.K., "Pulse Detonation Engine Characterization and Control Using Tunable Diode-Laser Sensors", *AIAA Journal of Propulsion and Power*, Vol. 19, no. 4, 2003, pp. 568-572.

Brophy, C.M., Sinibaldi, J.O., Netzer, D.W., and Kailasanath, K., "Initiator Diffraction Limits in a Pulse Detonation Engine," **Advances in Confined Detonations**, Eds.: G.D. Roy, S.M. Frolov, R.J. Santoro, and S.A. Tsyganov. Moscow: Torus Press Ltd., pp. 59-72, 2002.

Scientific and Professional Society Memberships
Member of the American Society of Mechanical Engineers, 1997-present.
Senior Member of the American Institute of Aeronautics and Astronautics, 1993-present.

Honors and Awards
None.

Institutional and Professional Service in Last Five Years
JANNAF Pulse Detonation Working Group Co-Chair, 2005-present
AIAA Propellants and Combustion Technical Committee Member, 2005-present
Reviewer for AIAA Journal of Propulsion and Power
Academic Advisor, NPS, 2006-present

Professional Development Activities in Last Five Years
None.

Muguru S. Chandrasekhara
Research Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.E.	Mechanical Engineering	Bangalore University	1974
M.E.	Mechanical Engineering	Indian Institute. of Science	1976
Ph.D.	Mechanical Engineering	University of Iowa	1983

NPS Experience

Employment details:

Research Professor, 6/2003 – Present, MAE Department; Research Professor & *Acting Director*, *Navy-NASA Joint Institute of Aerospace Sciences;* 7/95 – 6/2003, Aeronautics and Astronautics department, Research Associate Professor, 1991-1995, Research Adjunct Professor, 1987-1991.

Areas of research:

Unsteady aerodynamics, fluid mechanics of compressible dynamic stall and control

Areas of teaching:

Fluid Dynamics and Convective Heat Transfer

Other Related Work Experience

Associate Director, Navy-NASA Joint Institute of Aerospace Sciences, 1989-2003.

Consulting and Patents

None

Professional Registration

None

Principal Publications of Last Five Years

1. M.S. Chandrasekhara, "Compressible Dynamic Stall Vorticity Flux Control Using A Dynamic Camber Airfoil" **Invited Paper** (*To appear in*) *Sadhana*, Indian Academy of Sciences journal special issue on *Flow Diagnostics and Control*.
2. M.S. Chandrasekhara, P.B. Martin and C. Tung, "Compressible Dynamic Stall Performance of a Variable Droop Leading Edge Airfoil with a Gurney Flap", AIAA Paper No. 2004-0041, Reno, NV, Jan. 2004 *(To appear in The AHS Journal.)*
3. Chandrasekhara, M.S., Tung, C., and Martin, P.B., "Aerodynamic Flow Control using a Variable Droop Leading Edge Airfoil", *Specialists Meeting* (RSM) on "Enhancement of Military Flight Vehicle Performance by Management of Interacting Boundary Layer Transition and Separation", RTO-MP-AVT-111; www.rti.nato.int, Prague, Czech Republic, Oct. 4-7, 2004.
4. M.S. Chandrasekhara, P.B. Martin and C. Tung, "Compressible Dynamic Stall Control using a Variable Droop Leading Edge Airfoil", (AIAA Paper 2003-0048), *Journal of Aircraft*, Vol. 41, No. 4, pp. 862-969, Jul. – Aug. 2004.
5. M.S.Chandrasekhara, and M.C. Wilder, "Heat Flux Gage Studies of Compressible Dynamic Stall", (AIAA Paper 2002-0291) *AIAA Journal*, Vol.41, No. 5, pp. 757-762, May 2003.
6. M. Sahin, N.L. Sankar, M. S. Chandrasekhara and C. Tung, "Dynamic Stall Alleviation Using a Deformable Leading Edge Concept - A Numerical Study", (AIAA Paper No. 00-0520), *Journal of Aircraft,* Vol. 40, No.1, Jan. - Feb., 2003, pp. 77-85

7. M.S.Chandrasekhara, M.C. Wilder and L.W.Carr, "Compressible Dynamic Stall Control Using Dynamic Shape Adaptation", (AIAA Paper 99-0655), *AIAA Journal*, Vol. 39, No. 10, pp. 2021-2024, Oct. 2001.
8. M.S.Chandrasekhara, M.C. Wilder and L.W.Carr, "Compressible Dynamic Stall Control: Comparison of Two Approaches", (Invited AIAA Paper 99-3122), *Journal of Aircraft*, Vol. 38, No. 3, pp. 448-453, May-Jun. 2001.
9. L.W.Carr, M.S.Chandrasekhara, M.C.Wilder, and K.W.Noonan, "Effect of Compressibility on Suppression of Dynamic Stall Using a Slotted Airfoil", (AIAA Paper 98-0332), *Journal of Aircraft*, Vol. 38, No. 2, pp.296-309, Mar-Apr. 2001
10. M.S.Chandrasekhara, "A Review Of Issues In Compressible Dynamic Stall Control", **Special Invited Paper**, the 11th Asian Fluid Mechanics Conference, Kuala Lumpur, Malaysia, 2006.
11. J.A. Ekaterinaris, M.S. Chandrasekhara, and M.F. Platzer, "Recent Developments in Dynamic Stall Measurements and Control", AIAA-Paper-No 2005-1296, Reno, NV, 2005.
12. M.S.Chandrasekhara, "A Review of Compressible Dynamic Stall Principles and Methods", Asian Congress of Fluid Mechanics, Sri Lanka, , 2004.
13. C. Shih, J. Beahn, A. Krothapalli and M.S. Chandrasekhara, "Control of Compressible Dynamic Stall Using Microjets", ASME Fluids Engineering Meeting, Honolulu, HI, 2003.
14. P.B. Martin, C. Tung, M.S. Chandrasekhara and E. Arad, "Active Separation Control Measurements and Computations for a NACA 0036 Airfoil", AIAA-03-3516, Orlando, FL, 2003.
15. P.B. Martin, K.W. McAlister, M.S. Chandrasekhara, and W. Geissler, "Dynamic Stall Measurements and Computations for a VR-12 Airfoil with a Variable Droop Leading Edge", presented at the AHS Forum 59, Phoenix, AZ, 2003
16. C. Tung and M.S. Chandrasekhara, "Review of Compressible Dynamic Stall Control Methods" AHS Heli Japan Conference, Tochigi, Japan, 2002

Scientific and Professional Society Memberships

1. Fellow of the American Society of Mechanical Engineers , 2003-Present, Member since 1984
2. Associate Fellow of the American Institute of Aeronautics and Astronautics, 1989-Present, Member and Senior Member (1981-1989)

Honors and Awards

American Helicopter Society, BEST PAPER Award 2003
NASA Ames Fluid Dynamics Division, BEST PAPER Award 1994
NPS ,OUTSTANDING RESEARCH ACHIEVEMENT Award 1992
NASA, TECHNICAL BRIEF Award 1992
NASA, GROUP ACHIEVEMENT Award 1989
Bangalore University, BEST STUDENT Award 1974

Institutional and Professional Service in Last Five Years

Mentor, NASA Ames Research Center/ US Army AeroFlightDynamics DirectorateSummer Intern Program, 2001

Professional Development Activities in Last Five Years

ASME 34d Annual MEMS Technology Seminar, ASME Continuing Education Institute, Los Angeles, May 2003.

Jarema M. Didoszak
Research Assistant Professor, Department of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Naval Architecture & Marine Engineering	University of Michigan	1994
M.S.	Mechanical Engineering	Naval Postgraduate School	1992

NPS Experience

Employment details:

Research Assistant Professor, 2005-present, full-time appointment.
Research Assistant, 2004-2005, full-time appointment.

Areas of research:

Underwater Explosions, Shock and Vibrations, Modeling and Simulation

Areas of teaching:

Naval Architecture, Shock and Vibrations

Other Related Work Experience

Engineering Duty Officer, US Navy Reserve, NAVSEA Reserve Unit Alameda, 2004-present
Indoctrination Training Officer, US Navy, Recruit Training Command Great Lakes, 1999-2001
Navigation/Administration Department Head, US Navy, USS RENTZ, FFG 46, 1997-1999
Strike Warfare Officer, US Navy, USS KINKAID, DD 965, 1995-1997

Consulting and Patents

None to report.

Professional Registration

E.I.T., State of California, No. 117627

Principal Publications of Last Five Years

Didoszak, J. M., Shin, Y. S., "Modeling & Simulation of Ship Shock Trials: Comparison of DYSMAS, LS-DYNA/USA and Beam Code Simulations with Live Fire Test Results", Technical Report NPS-MAE-07-001, Naval Postgraduate School, Monterey, California, 2007.

Shin, Y.S., Didoszak, J. M., Bollock, L. M. and Lepe, J. J., "Modeling & Simulation Approach for LPD 17 Class Ship Shock Trials," Technical Report NPS-MAE-06-001, Naval Postgraduate School, Monterey, California, 2006.

Shin, Y. S., Didoszak, J. M., "Influencing Design: Ship Survivability against Underwater Explosion," presented at 7th International Symposium on Technology and the Mine Problem, Monterey, California, 2006.

Didoszak, J. M., Bollock, L. H., Shin, Y. S., "LPD-17 Shock Response Predictions Using Fully Coupled Fluid-Island Approach," proceedings of the 77th Shock and Vibration Symposium, Monterey, California, 2006.

Avcu, M., Didoszak, J. M., Shin, Y. S., "Fluid-Structure Interaction Effects Resulting From Hull Appendage Coupling," proceedings of the 76th Shock and Vibration Symposium, Destin, Florida, 2005.

Didoszak, J. M., Lepe, J. J., Bollock, L. H., and Shin, Y. S., "LPD-17 Pretrial Ship Shock Response Predictions: Preliminary Ship System Response," proceedings of the 76th Shock and Vibration Symposium, Destin, Florida, 2005.

Didoszak, J. M., Bollock, L. H., Lepe, J. J., and Shin, Y. S., "LPD-17 Class Pretrial Ship Shock Response Predictions: Coupled Ship-Fluid Model Generation," proceedings of the 76th Shock and Vibration Symposium, Destin, Florida, 2005.

Petrusa, D. C., Shin, Y. S., and Didoszak, J. M., "Evaluation and Analysis of DDG-81 Simulated Athwartship Shock Response," proceedings of the 75th Shock and Vibrations Symposium, Virginia Beach, Virginia, 2004.

Didoszak, J. M., Shin, Y. S., and Lewis, D. H., "Shock Trial Simulation for Naval Ships, Technical Paper, ASNE Day 2004 Symposium, Washington, District of Columbia, 2004.

Didoszak, J. M., "Parametric Studies of DDG 81 Ship Shock Trial Simulations," Master's Thesis, Naval Postgraduate School, Monterey, California, 2004.

Ashton, R., Calvano, C., Green, J., Harney, R., Papoulias, F., Cabezas, R., Didoszak, J., Echols, R., Elcin, Z., Fernandez, C., Kurltaty, A., Lunt, W., Santos, W., "Sea Swat --- A Littoral Combat Ship for Sea Base Defense," Total Ship Systems Engineering Technical Report, Meyer Institute of Systems Engineering, Naval Postgraduate School, Monterey, California, 2003.

Scientific and Professional Society Memberships

Member of the Society of Naval Architects and Marine Engineers, 1994-present.
Member of the American Society of Naval Engineers, 2001-present.
Member of the Ukrainian Engineering Society of America, currently inactive.

Honors and Awards

None to Report

Institutional and Professional Service in Last Five Years

None to Report

Professional Development Activities in Last Five Years

Doctoral Study in Mechanical Engineering

Vladimir N. Dobrokhodov
Assistant Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Computer Science	Moscow State Aviation Institute	1989
M.S.	Aerospace Engineering	Moscow State Aviation Institute	1991
M.S.	Operations Research	Air Force Engineering Academy	1993
Ph.D.	Aerospace Engineering	Air Force Engineering Academy	1999

NPS Experience

Employment details:

Research Assistant Professor, 2004-Present, full-time appointment.

Areas of research:

Flight Mechanics and Trajectory Optimization
Guidance, Navigation and Control of Unmanned Aerial Systems
Cooperative Control of Multi-Vehicle Formations and their Effectiveness
Integration of Vision into Guidance and Control
Multidimensional Vector Optimization and Systems Identification
Real-Time Avionics and Flight Control
Modeling and Simulation of Mechanical Systems

Areas of teaching:

Flight Mechanics
Flight Dynamics and Control
Classical and Modern Control, Optimal Control
Modeling and Simulation
Numerical Methods and Digital Computations
Operations Research and Applied Optimization
Real Time Embedded Control Systems

Other Related Work Experience

Post-Doctoral Researcher, Dept. of Electrical & Computer Eng of University of California at Santa-Barbara, CA, USA. August 2004 - December 2004

National Research Council (NRC) Research Associate, Department of Aeronautics and Astronautics, Naval Postgraduate School, Monterey, CA, USA, February 2001 - August 2004

Senior Research Associate, Zhukovskiy Air Force Engineering Academy, Moscow, Russia,1997-1999

Research Associate, Zhukovskiy Air Force Engineering Academy, Moscow, Russia, 1995-1997.

Senior Engineer, Zhukovskiy Air Force Engineering Academy, Moscow, Russia, 1991-1995.

Principal Publications of Last Five Years

Dobrokhodov V.N, Kaminer I.I, Jones K.D. and Gabcheloo R., “Design of Vision Based target Tracking and Range Estimation Algorithms for Small UAVs,” AIAA Journal of Guidance, Control and Dynamics, 2006.

Dobrokhodov V.N, Kaminer I.I, Wang I.H , Jones K.D., "Vision-Based Tracking and Position Estimation for Moving targets using Small UAVs," American Control Conference (ACC 2006), Minneapolis , Minnesota , June 16, 2006 .

Dobrokhodov V.N, Kaminer I.I, Jones K.D., Ghabcheloo R.. "Vision-Based Moving Target Tracking Using Mini UAVs," AIAA Guidance, Navigation, and Control Conference, Keystone, Colorado , August 21-24, 2006 .

Yakimenko O., Dobrokhodov V., Kaminer I., "Autonomous Video Scoring and Dynamic Attitude Measurement," Proceedings of 18th AIAA Aerodynamic Decelerator Systems Technology Conference and Seminar, 23 - 26 May 2005, Munich, Germany, AIAA-2005-1614.

Yakimenko O., Dobrokhodov V., Kaminer I., S. and H. Dellicker, "Synthesis of Optimal Control and Flight Testing of Autonomous Circular Parachute," AIAA Journal of Guidance, Control, and Dynamics, Vol.27, №.1, 2004, pp.29-40.

Dobrokhodov, V.N., Yakimenko O.A, and Junge, C.J., "Six-Degrees-of-Freedom Model of a Controlled Circular Parachute," AIAA Journal of Aircraft, Vol.40, №.3, 2003, pp.482-493.

Dobrokhodov V., Statnikov R., Statnikov A., and Yanushkevich I., "Modeling and Simulation Framework for Multi-objective Identification of a Controllable Descending System," First International Conference on Adaptive Modeling and Simulation ,International Center for Numerical Methods in Engineering (CIMNE), Geteborg, Sweden, 29 September- 1 October, 2003.

Dobrokhodov, V, Yakimenko, O., and Junge, C., "Six-Degree-of-Freedom Model of a Controllable Circular Parachute," Proceedings of AIAA Atmospheric Flight Mechanics Conference, Monterey, CA, August 5-8, 2002.

Dobrokhodov V.N., Yakimenko O.A., "Synthesis of Trajectorial Control Algorithms at the Stage of Rendezvous of an Airplane with a Maneuvering Object," Journal of Computer and Systems Sciences International, Vol.38, №.2, pp.262-277.

Scientific and Professional Society Memberships

Senior Member, American Institute of Aeronautics and Astronautics (AIAA), 2001-present.

Honors and Awards

- National Research Council Postdoctoral Fellowships for Scientific and Technological Exchange, Awarded in 2001, 2002, 2003, and 2004.
- Mikojan Design Bureau Certificate of Recognition, 1999.

Professional Development Activities in Last Five Years

Every year I serve as a reviewer for the multiple conferences and technical (peer review) journals including:

- Journal of Guidance, Control, and Dynamics
- International Committee on Electronic letters, The Institution of Engineering and Technology (IEE)
- International Program Committee of the annual American Control Conference (ACC)
- International Committee of the annual AIAA 2006-07 GNC and MST conferences
-

Every year I attend number of training courses and seminars in my areas of interest including:

- Robust and Adaptive Control Theory, 2006

- Computing and Control in RTLinux environment, 2006.

Morris R. Driels
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Mechanical Engineering	University of Surrey	1969
Ph.D.	Mechanical Engineering	City University, London	1973

NPS Experience

Employment details:
Professor, 1989-Present, full-time appointment.
Areas of research:
Conventional Weapons Effects (Weaponeering)
Areas of teaching:
Weaponeering, Controls

Other Related Work Experience

1. Professor, Mechanical Engineering Department,Texas A&M University 1985-1989
2. Associate Professor, Mechanical Engineering Department, University of Rhode Island 1982-1985
3. Lecturer, Edinburgh University, Scotland, 1973-1982

Consulting and Patents

1. Miniature Lightweight Digital Camera for Robotic Vision System Applications. US patent 4,727,471 (with E. Collins), Feb 23 1988
2. Computer Controlled Adaptive Compliance Assembly Workstation. US patent 4,842,475, June 27 1989

Professional Registration

Chartered Engineer, UK

Principal Publications of Last Five Years

1. "Weaponeering: Conventional Weapon System Effectiveness", AIAA Education Series, 2004.
2. Several classified manuals and computer programs in conventional weapons effects.

Scientific and Professional Society Memberships

- Fellow, Institution of Mechanical Engineers. Chartered Engineer (I Mech E).
- Member, American Society of Mechanical Engineers (ASME).
- Member, Institute of Electrical & Electronic Engineers (IEEE).

Honors and Awards

- Halliburton Professor of Mechanical Engineering, Texas A&M University, 1987.
- Senior Research Fellow, ONR/ASEE Summer Faculty Research Program, 1989.
- Outstanding Instructional Contribution Award, Naval Postgraduate School, 1991.

Institutional and Professional Service in Last Five Years

Provided Weaponeering short course to military and civilian audiences about twice/year since 2000, in the US and overseas

Professional Development Activities in Last Five Years

Developed the subject of Weaponeering into an academic discipline.

INDRANATH DUTTA

Professor, Department of Mechanical Engineering
Center for Materials Science and Engineering
Naval Postgraduate School, Monterey, CA 93943
Ph : 831-656-2851 ; Fax : 831-656-2238 ; E-mail : idutta@nps.edu
Web: web.nps.navy.mil/~me/dutta.html

EDUCATION

- Ph.D., Materials Science and Engineering, University of Texas at Austin, December 1988
- M.S., Metallurgy and Materials Science, Case Western Reserve University, August 1985
- B. Tech., Metallurgical Engineering, Indian Institute of Technology, Kharagpur, July 1983

NPS EXPERIENCE

- Professor of Mechanical Engineering, Naval Postgraduate School, April 2001-present
- Associate Professor, Naval Postgraduate School, 1993-2001
- Assistant Professor, Naval Postgraduate School, 1988-1993

  Areas of research: *Materials Science and Micro-mechanics of Thermo-Mechanical Effects in Multi-Component Materials Systems (supported by NSF, ARO, ONR, SRC, industry)*
  Areas of teaching: *Materials Science*

OTHER PROFESSIONAL EXPERIENCE

- Visiting Faculty, Assembly Tech. Dev., Intel Corporation, Chandler, AZ, Apr'01-June-'01
- Visiting Consultant, Interconnect Systems Lab, Motorola, Tempe, Aug'00-Mar'01
- Visiting Fellow, Corpus Christi College / Dept. of Materials, Oxford University (U.K.), 1996
- AFOSR Summer Faculty Fellow, Wright Patterson Air Force Base, May-July 1995

AWARDS & HONORS

- Exemplary Service Award, Electronic, Magnetic and Photonic Materials Division, TMS, 2005
- Fellow, ASM International, 2004
- Who's Who in America (Marquis Who's Who), 2003-present
- Who's Who in the World (Marquis Who's Who), 2002-present
- Who's Who in Science and Engineering (Marquis Who's Who), 2003-present
- Carl E. and Jessie W. Menneken Award for Excellence in Scientific Research, NPS, 1998
- Outstanding Research Achievement Award, Naval Postgraduate School, 1997

JOURNAL PUBLICATIONS (last 5 years)

1. I. Dutta, M.W. Chen, K. Peterson and T. Shultz, "Plastic Deformation and Interfacial Sliding in Al and Cu Thin Film:Si Substrate Systems Due to Thermal Cycling", **J. Electronic Mater.**, 30 (2001) pp. 1537-1548.
2. R. Nagarajan and I. Dutta, "A novel approach for optimizing the fracture toughness of precipitation-hardenable Al-SiCp composites", **Metall. Mater. Trans A**, 32 (2001) pp. 433-436.
3. M. W. Chen, I. Dutta, A. Inoue, T. Zhang and T. Sakurai, "Kinetic Evidence for the Structural Similarity between a Supercooled Liquid and an Icosahedral Phase in a $Zr_{65}Al_{7.5}Ni_{10}Cu_{7.5}Ag_{10}$ Bulk Metallic Glass", **Appl. Phys. Lett.**, 79 (2001) pp.42-44.

4. I. Dutta, A. Gopinath and C. Marshall, "Underfill Constraint effects during Thermo-Mechanical Cycling of Flip Chip Solder Joints", **J. Electronic Mater.**, 31 (2002) p. 253.
5. K. A. Peterson, I. Dutta and M.W. Chen, "Measurement of Creep Kinetics at Al-Si Interfaces", **Scripta Mater**., 47 (2002) p. 649.
6. I. Dutta, "Creep in Multi-Component Materials Systems : Commentary", **JOM**, 55 (2003) 14.
7. K. A. Peterson, I. Dutta and C. Park, "Interfacial Creep in Multi-Component Material Systems", **J. Metals, Minerals and Materials Soc. (JOM)**, 55, no. 1 (2003) pp. 37-43.

PATENTS

1. I. Dutta and D. P. Lascurain, "A Constant-Depth Scratch Test for the Quantification of Interfacial Shear Strength of Film-Substrate Systems", U.S. Patent # 5,546,797 (1996).
2. I. Dutta and E.S.K. Menon, "Surface Modification of CVD Diamond Substrates for Producing Adherent Thick and Thin Film Metallizations for Electronics Packaging", U.S. Patent # 5,853,888 (1998).

CONSULTING (last 5 years)

- Freescale Semiconductor, Tempe, AZ, September 2005-present
- Intel Corporation, Chandler, AZ, 2003-present
- Motorola, Tempe, AZ, 2000-2001

INSTITUTIONAL AND ROFESSIONAL SERVICE (last 5 years)

- Reviewer: NSF, AFOSR, ONR, ARO, Acta Mater., Thin Solid Films, J. Electronic Mater., J. Mater. Research, Mater. Trans. A , Mater. Sci. Engng., J. Am. Ceram. Soc., IEEE-CPT, MRS, ASME
- Editorial Board Member, Key Engineering Materials series
- EMPMD (Electronic, Magnetic and Photonic Materials Division) Council Representative on society-wide Membership Development Committee, TMS, 2002-2005.
- Chair, Gilbert Chin Scholarship committee, Electronic, Magnetic and Photonic Materials Division (EMPMD) Council, The Minerals, Metals and Materials Society, 2005,2006.

PROFESSIONAL AFFILIATIONS

- Member, ASM International, TMS, MRS

Joshua H. Gordis
Associate Professor of Mechanical Engineering
Naval Postgraduate School

Education

B.S.	Mechanical Engineering	University of Vermont	1983
M.S.	Mechanical Engineering	Rensselaer Polytechnic Institute	1987
Ph.D.	Mechanical Engineering	Rensselaer Polytechnic Institute	1990

NPS Experience

Employment details:

Associate Professor, 1998-Present, full-time appointment.
Assistant Professor, 1992-1998, full-time appointment.
Associate Chair for Academics, 2006-Present

Areas of research:

Vibrations & Structural Dynamics, Ballistics,

Areas of teaching:

Vibrations & Structural Dynamics, Design Optimization,

Other Related Work Experience

Developer of motorcycle chassis geometry measurement and analysis system.

Consulting and Patents

Lansmont Corporation, Monterey CA 2002
Pagos Corp. Cambria, CA 2001
Indian Motorcycle Company, Gilroy CA. 2000

Professional Registration

EIT (1983)

Principal Publications of Last Five Years

Gordis, J. H., Papoulias, F.A., and Bauer, J. 2005 "Modeling and Simulation of Unmanned Vehicle Launch from the Littoral Combat Ship (LCS)." Proceedings of the ASNE Launch & Recovery of Manned and Unmanned Vehicles from Surface Platforms: Current and Future Trends Conference. Annapolis, MD. November 8-9.

Williams, N. A., Gordis, J. H., & Letherwood, M. 2004 "Drag Optimization of Light Trucks Using Computational Fluid Dynamics." Accepted, 2004 Commercial Vehicle Engineering Congress & Exhibition.

Brock, G. N., Gordis, J.H., & Papoulias, F.A. "Dynamics and Control Of The Roll-On/Roll-Off Stern Ramp Support System." Report prepared for NSWC/Carderock Div. March, 2004.

Christensen, J.A., Echols, R.E., & Gordis, J.H. "Design Analysis of Under-Ramp Support Arm System for the Light, Medium Ship Roll-on/Roll-off (LMSR) Ramp." Report prepared for NSWC/Carderock Div. August, 2003.

Haigh, J. J. and Gordis, J. H., "Motion Compensator Analysis." Report prepared for NSWC/Carderock Div. Mar. 2002.

Gordis, J. H. and Neta, B. 2001. "Fast Transient Analysis for Locally Nonlinear Structures by Recursive Block Convolution." ASME Journal of Vibration and Acoustics, Vol. 123, No. 4. pp. 545-547.

Scientific and Professional Society Memberships
Member of the American Society of Mechanical Engineers, 1990-present.

Honors and Awards
NPS Outstanding Instructional Performance Award, 2001
NPS Outstanding Research Achievement Award, 1997
Recognition of Excellence, Naval Surface Warfare Center, 1993
American Helicopter Society Robert L. Lichten Award, 1990

Institutional and Professional Service in Last Five Years
Academic Associate, NPS, 2006-present
Faculty Council (alternate) 2005-Present

Professional Development Activities in Last Five Years

Robert C. Harney
Associate Professor of Systems Engineering
Naval Postgraduate School

Education

B.S.	Chemistry and Physics	Harvey Mudd College	1971
M.S.	Engineering – Applied Science	University of California, Davis	1972
Ph.D.	Engineering – Applied Science	University of California, Davis	1976

NPS Experience

Employment details:

Associate Professor, Physics Department, 1995-2001, full-time appointment.

Naval Sea Systems Command Faculty Chair of Total Ship Systems Engineering (Combat Systems), 1995-present.

Senior Lecturer, Wayne E. Meyer Institute of Systems Engineering, 2001-2002, full-time appointment.

Associate Professor, Department of Systems Engineering, 2002-present, full-time appointment.

Associate Chair for Research, Department of Systems Engineering, 2003-present.

Areas of research:

Total Ship Systems Engineering, Counter-proliferation of Weapons of Mass Destruction (WMD), Unconventional WMD

Areas of teaching:

Combat Systems (Sensors, Weapons, Weapons Effects, and Systems Integration), Technical Aspects of WMD Proliferation

Other Related Work Experience

Consultant, Orlando, Florida, 1993-1995.

Senior Professional Staff, Martin Marietta Electronics and Missiles Group, Orlando, Florida, 1982-1993.

Staff Scientist, MIT Lincoln Laboratory, Lexington, Massachusetts, 1976-1982.

Guest Physicist, Lawrence Livermore National Laboratory, Livermore, California, 1971-1976.

Consulting and Patents

Harney, R. C. "Method and Apparatus for Pulse Stacking," U. S. Patent 4,053,763, Issued: November 11, 1977.

Harney, R. C. and Schipper, J. F. "Improved Passive and Active Pulse Stacking Schemes for Pulse Shaping," U. S. Patent 4,059,759, Issued: November 22, 1977.

Harney, R. C. and Bloom, S. D. "Raman Scattering Method and Apparatus for Measuring Isotope Ratios and Isotopic Abundances," U. S. Patent 4,068,953, Issued: January 17, 1978.

Harney, R. C. "Infrared Radar System," U. S. Patent 4,298,290, Issued: November 3, 1981.

Harney, R. C. "Display System," U. S. Patent 4,352,105, Issued: September 28, 1982.

Professional Registration

None

Principal Publications of Last Five Years

Harney, R. C., Brown, G., Carlyle, M., Skroch, E., and Wood, K., "Anatomy of a Project to Produce a First Nuclear Weapon", *Science and Global Security*, 14, 163-182 (2006).

Scientific and Professional Society Memberships

Member of the American Chemical Society, 1970-present.
Member of the American Association of Physics Teachers, 1971-present.
Member of the Optical Society of America, 1972-present.
Vice President, Florida Section, 1984-1985
President, Florida Section, 1985-1986
Technical Member of the Astronomical Society of the Pacific, 1975-present.
Life Member of Sigma Xi, 1980-present.
Member of the Society of Photo-Optical Instrumentation Engineers, 1980-present
Life Member of the Association of Old Crows, 1985-present.
Member of the American Society of Naval Engineers, 1999-present.
Member of the Military Operations Research Society, 2004-present.

Honors and Awards

President's [of the United States] Executive Intern, 1969.
Fannie and John Hertz Foundation Fellow, 1972.
Meritorious Technical Achievement Award, Martin Marietta Corporation, 1985 and 1989.
Outstanding Engineer, IEEE Orlando Section and Florida Council, 1990.
Northrop Grumman Award for Excellence in Systems Engineering and Integration, NPS, 2000 and 2001.
Wayne E. Meyer Award for Excellence in Systems Engineering, NPS, 2006.

Institutional and Professional Service in Last Five Years

Research Board, NPS, 2003-present.
Faculty Council, NPS, 2003-2004.
Academic Council, NPS, 2004-present.
Systems Engineering & Analysis Curriculum Committee, NPS, 2001-2003, 2007-present.

Professional Development Activities in Last Five Years

Video Tele-Education (VTE) Faculty Training, Office of Continuous Learning, NPS, September 2006.

Anthony J. Healey
Distinguished Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Mechanical Engineering	University of London, UK	1961
Ph.D.	Mechanical Engineering	University of Sheffield, UK	1966

NPS Experience

Professor, 1986-2003, full-time appointment. Distinguished Professor 2003-present
Chairman, ME Department, 1986-1992, Chairman, MAE Department 2003-present

Other Related Work Experience

Penn State University, Assistant Professor Mechanical Engineering, 1967-71
M.I.T., Visiting Assistant Professor, Mechanical Engineering, 1970
The University of Texas at Austin, Associate Professor Mechanical Engineering, 1971-74
The University of Texas at Austin, Professor Mechanical Engineering, 1974-81
Cambridge University, Visiting Professor, 1978
Director, Center for Autonomous Underwater Vehicle Research, NPS 1995-present

Teaching : Dynamics, Analysis, Vibration, Automatic Control, Non-Linear Systems and Control Theory,, Random Data and Stochastic Processes, Digital Systems, Similitude and Simulation in Engineering, Fluid Power Control, Dynamic System Modeling, Marine Vehicle Dynamics and Underwater Vehicle Control

Consulting and Patents

Several

Professional Registration
P.E., State of Texas, #41281

Principal Publications of Last Five Years

2006

Healey, A. J., Horner, D. P., "Collaborative Vehicles in Future Naval Missions, Obstacle Detection and Avoidance ", Keynote Paper, Proceedings of the IFAC Conference on Modeling and Control of Marine Craft, MCMC, 2006, Lisbon, Portugal, September 20-23, 2006
http://web.nps.navy.mil/~me/healey/papers/MCMC06.pdf

Healey, A. J., Horner, D. P., "Tactical Decision Aids: High Bandwidth Links Using Autonomous Vehicles ", ONR End of Year Report 2006, September 30, 2006
http://web.nps.navy.mil/~me/healey/papers/MWHealey1.doc

Healey, A. J., Horner, D. P., "Obstacle Detection and Avoidance Using Blazed Array Forward Look Sonar ", End of Year Report, 2006 ONR, September 30, 2006
http://web.nps.navy.mil/~me/healey/papers/MWHealey2.doc

Healey, A. J., "Guidance Laws, Obstacle Avoidance , Artificial Potential Functions", Chapter 3, Advances in Unmanned Marine Vehicles, IEE Control Series 69, Eds. Roberts and Sutton, March, 2006
http://web.nps.navy.mil/~me/healey/papers/IEEBOOKCHPT.pdf

Scientific and Professional Society Memberships

Dynamic Systems and Control Division, Member, 1967-Present
Associate Editor, ASME Transactions Journal of System Dynamics, Measurement and Control, 1971-74,
Secretary, Dynamic Systems and Control Division, 1973-76
Executive Committee, Dynamic Systems and Control Division,, 1976-81
Chairman, Dynamic Systems and Control Division, 1979-80
Past Chairman, Dynamic Systems and Control Division,, 1980-81
Technical Chairman, IEEE AUV'94 Symposium on Autonomous Underwater Vehicle Technology, 1994
Executive Chairman, IEEE AUV'96 Symposium on Autonomous Underwater Vehicle Technology, 1996
IEEE Robotics and Automation Society, Underwater Robotics Committee, 1995-present
Editorial Board: International Journal of Autonomous Systems (IJAVS)

Honors and Awards

American Society of Mechanical Engineers, Distinguished Service Award 1994
American Society of Mechanical Engineers, Fellow
Faculty Teaching Award, University of Texas at Austin, 1975
Pi Tau Sigma, Honorary Member
Elected to IEEE Oceanic Engineering Society Administrative Committee, 1995-present
Research Achievement Award, Naval Postgraduate School, 1995

Institutional and Professional Service in Last Five Years
None

Professional Development Activities in Last Five Years
None

Sheshagiri K. Hebbar
Senior Lecturer of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.E.	Mechanical Engineering	University of Mysore	1963
M.E	Aeronautical Engineering	Indian Institute of Science	1965
Ph.D.	Aerospace Engineering	University of Maryland	1976

NPS Experience

Employment details:

Senior Lecturer, 1997-present, full-time appointment. Adjunct Professor, 1988-1995, full-time appointment.

Areas of research:

Basic and applied research and developmental work in experimental fluid mechanics and aerodynamics, Wind tunnel and water tunnel testing, Vortical flows at high angles of attack, and Fluid flow instrumentation.

Areas of teaching:

Fluid mechanics, Thermodynamics, Heat transfer, Missile aerodynamics, Statics and dynamics, Solid mechanics, Machine design, Spacecraft structures, Spacecraft thermal control, and Spacecraft propulsion.

Other Related Work Experience

Associate Professor, Department of Aerospace Engineering Science, Tuskegee University, Tuskegee, AL, 1985-1987.
Senior NRC-NASA Research Associate, Experimental Fluid Dynamics Branch, NASA Ames Research Center, Moffett Field, CA, 1983-1985.
Scientist/Assistant Director, Aerodynamics and Propulsion Divisions, National Aerospace Laboratories (NAL), Bangalore, India, 1965-1983.
Research Assistant/Research Associate, Department of Aerospace Engineering, University of Maryland, College Park, MD, 1971-1976.
German Academic Exchange Service Scholar, Technical University, Braunschweig, Germany, 1966-1967.

Consulting and Patents

None

Professional Registration

None

Principal Publications of Last Five Years

None

Scientific and Professional Society Memberships

Member, ASME, 1993-present.
Associate Fellow, AIAA, 1988-present.

Honors and Awards

German Academic Exchange Service Scholar Award, 1966-1967.

Minta-Martin Pre-doctoral Fellowship Award, University of Maryland, 1975.
Senior NRC-NASA Research Associate Award, 1983-1985.
Tuskegee University Most Outstanding Aerospace Engineering Professor Award, 1987.
NASA Technical Brief Award and the Innovator Certificate, 1991.
NASA Group Achievement Award,1993.
NPS Outstanding Research Achievement Award, 1994.
Who's Who in Science and Engineering, 4th edition, Marquis Who's Who, New Providence, NJ, 1998-1999.

Institutional and Professional Service in Last Five Years
Reviewer for Journal of Aircraft and AIAA Journal.

Professional Development Activities in Last Five Years
None

Garth V. Hobson
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.Sc.M.E., Aeronautical Option; University of the Witwatersrand, Johannesburg (1979)
M.Sc.M.E. University of the Witwatersrand, Johannesburg, South Africa (1983)
Ph.D. in Aerospace Engineering; Penn State University (1990)

NPS Experience

Employment details:
2003 – Date, Professor, Department of Mechanical and Astronautical Engineering, Director – Turbopropulsion Laboratory
2001 – 2003, Professor, Deptartment of Aeronautics and Astronautics,
Associate Director – Turbopropulsion Laboratory
1990 – 2001, Associate Professor, Deptartment of Aeronautics and Astronautics,
Areas of research:

Propulsion and Energy Conversion, Aerospace Propulsion and Power,
Propulsion Computational Fluid Dynamics

Areas of teaching:

Gas Dynamics, Propulsion and Power, Computational Methods,
Computational Fluid Dynamics, Fluid Mechanics Measurements

Other Related Work Experience

1980 - 1990, Council for Scientific and Industrial Research (CSIR), Pretoria,

Engineer, Section Head, Facility Head (Aero-Thermodynamic Facility)

Consulting and Patents

Consulting; NAVAIR, ADENA (Duke Energy)

Professional Registration

Principal Publications of Last Five Years

1. Hobson, G. V., Carlson, J. and Caruso, T., "Three-Component Measurements of the Flow Aft of a Cascade of Controlled-Diffusion Compressor Blades", ASME *Journal of Turbomachinery*, to appear in 2007.

2. Elmstrom, M. E., Millsaps, K. T., Hobson, G. V. and Patterson, J. S., “Impact of Non-Uniform Leading Edge Coatings on the Aerodynamic Performance of Compressor Airfoils,” Accepted for publication in the ASME *Journal of Turbomachinery*, 2007.

3. Gannon, A. J., Hobson, G.V., Shreeve, R. P. and Villescas, I. J., “Experimental Investigation during stall and surge in a Transonic fan stage & Rotor-only Configuration,” ASME IGTI Turbo Expo, Barcelona, Spain, June 2006.

4. Gannon, A. J., Utschig, J. M., Hobson, G. V. and Platzer, M. F.,” Experimental Investigation Of A Small-Scale Cross-Flow Fan For Aircraft Propulsion”ISROMAC Honolulu, Hawaii, February, 2006.

5. Gannon, A. J., Hobson, G. V. and Shreeve, R. P., "Measurement of the Unsteady Casewall Pressures Over the Rotor of a Transonic Fan and Comparison with Numerical Predictions," 2005-1099 to be presented at the 17th International Symposium on Airbreating Engines, Munich, September 2005

6. Gannon, A. J., Hobson, G. V. and Shreeve, R. P., "A Transonic Compressor Stage: Part 1 Experimental Results," ASME GT2004-53923, Turbo Expo 2004, Vienna, Austria.

7. Hobson, G. V., Gannon, A. J. and Shreeve, R. P., "A Transonic Compressor Stage: Part 2 CFD Simulation," ASME GT2004-53927, Turbo Expo 2004, Vienna, Austria.

8. Hobson, G. V., Cheng, W. T., Seaton, M. S., Gannon, A. J. and Platzer, M., "Experimental and Computational Investigation of Cross-Flow Fan Propulsion for Lightweight VTOL Aircraft," ASME GT2004-53468, Turbo Expo 2004, Vienna, Austria.

9. Shreeve, R. P., Seivwright, D. L. and Hobson, G. V., "HCF Spin-Testing with Oil-Jet Excitation," 9th HCF Conference, 2004.

10. Shreeve, R. P., Hobson, G. V., Seivwright, D. L. and Mansisidor, M. R., "Turbine Rotor Spin Tests Using Eddy-Current and Air-Jet Excitation Techniques", 7th National Turbine Engine High-Cycle Fatigue (HCF) Conference, W. Palm Beach, FL, May 14-17, 2002.

11. Shreeve, R. P., Hobson, G. V. and Seivwright, D. L., Pickering, R., "Navy HCF/Spin Test Program", 2002 Passive Damping Action Team Meeting, Cincinnati, OH, July 30, 2002.

Scientific and Professional Society Memberships

1. Member, American Institute of Aeronautics and Astronautics (AIAA)
2. Member, American Society of Mechanical Engineers (ASME)

Honors and Awards

1. Certificate of Recognition for Outstanding Performance in Instruction, Naval Postgraduate School
2. Director's Award for Innovative Engineering, CSIR

Institutional and Professional Service in Last Five Years

1. Vanguard Chair for the sessions on Viscous Effects in Turbomachinery for the 2001 IGTI Conference in New Orleans.
2. Chaired two sessions on Unsteady Effects in Axial Flow Compressors at the 2005 Turbo Expo and Conference, in Reno, NV.

Professional Development Activities in Last Five Years

Isaac I Kaminer
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Electrical Engineering	U of Minnesota	1983
M.S.	Electrical Engineering	U of Minnesota	1985
Ph.D.	Electrical Engineering	U of Michigan	1992

NPS Experience

Employment details:

Professor, 2006-Present, full-time appointment.
Associate Professor, 1998-2006, full-time appointment.
Assistant Professor, 1992-1998, full-time appointment

Areas of research:

Control Systems

Areas of teaching:

Control Systems, Navigation

Principal Publications of Last Five Years

1. I. I. Kaminer, A. M. Pascoal, W. Kang, O. Yakimenko,`` Integrated Vision/Inertial Navigation Systems Design Using Nonlinear Filtering", January 2001 issue of *IEEE Transactions on Aerospace and Electronics, vol. 37 No.1 pp. 158-172*
2. C. Silvestre, A. Pascoal, and I. Kaminer, "On the Design of Trajectory Tracking Gain-Scheduled Controllers for Autonomous Underwater Vehicles, " *International Journal of Robust and Nonlinear Control, special issue on Gain-Scheduling,* 2002, 12:797-839
3. Yakimenko, O.A., Kaminer, I.I., Lentz, W.J., and Ghyzel, P.A."Unmanned Aircraft Navigation for Shipboard Landing using Infrared Vision," *IEEE Transactions on Aerospace and Electronic Systems, October 2002, vol. 38 no. 4, pp. 1181-1200.*
4. Hespanha J., Yakimenko O., Kaminer I., Pascoal A., "Linear Parametrically Varying Systems with Brief Instabilities: An Application to Integrated Vision / IMU Navigation", *IEEE Transactions on Aerospace and Electronic Systems Technology, July 2004.*
5. Yakimenko O., Dobrokhodov V., Kaminer I., Dellicker, S., "Synthesis of Optimal Control and Flight Testing of Autonomous Circular Parachute," *AIAA Journal of Guidance, Control, and Dynamics*, vol.40(1), 2004, pp.29-41.
6. Ghabcheloo R., A. Pascoal, C. Silvestre and I. Kaminer, "Nonlinear Coordinated Path Following Control of Multiple Wheeled Robots with Bidirectional Communication Constraints," Journal of Adaptive Control and Signal Processing, in press.
7. Ghabcheloo R., A. Pascoal, C. Silvestre, I. Kaminer, "Coordinated path following control of multiple wheeled robots using linearization techniques," International Journal of Systems Science. Taylor & Francis. Vol. 37, N. 6. May 2006. pp. 399 – 414.

Scientific and Professional Society Memberships

Member of the American Institute of Aeronautics and Astronautics, 1992-present.

Honors and Awards

1.NASA Certificate of Recognition for the Creative Development of a Technical Innovation, October 1991.
2. 1994 NATO Fellowship for Scientific and Technological Exchange.
3. 1994 Excellence in Research Award, Naval Postgraduate School.
4. 1995 ASEE/NASA Summer Faculty Fellowship.
5. 1995 NATO Fellowship for Scientific and Technological Exchange.
6. 1999 AIAA Outstanding Service Award.
7. 1999 NPS Menneken Annual Faculty Award for Excellence in Scientific Research.

Institutional and Professional Service in Last Five Years

1. Member, Editorial Board, Journal of Autonomous Systems
2. Reviewer for the following American and international scientific journals

IEEE Transactions on Automatic Control
IEEE Transactions on Control Technology
IFAC Automatica
AIAA Journal of Guidance, Control and Dynamics
International Journal of Nonlinear and Robust Control
Mathematics of Control, Signals and Systems

2. Reviewer for the following American and international conferences

American Control Conference
European Control Conference
AIAA Conference on Guidance, Navigation and Control
IEEE Conference on Decision and Control

3. Organizer and Chairman of the Invited Session *Motion Control of Autonomous Vehicles* at 1995 American Control Conference, June 1995, Seattle, WA
4. Co-Chair of *Guidance, Navigation, and Control II* Session at 1997 AIAA GNC conference, New Orleans, August 1997.
5. Organizer with Prof. H. McClamroch of University of Michigan an invited session on UAVs at 1998 American Control Conference
6. Topic Chair, 1999 *AIAA Navigation, and Control Conference*
7. Member NSF CAREER Award panel, October 20-21, 2005.

Professional Development Activities in Last Five Years

None

Ramesh Kolar
Research Assistant Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S. Mechanical Engineering, University of Mysore, India
M.S. Aeronautical Engineering, Indian Institute of Science, India
Ph.D. Engineering Mechanics, University of Arizona

NPS Experience

Employment details:
Research Assistant Professor, 1997-Present, full-time appointment, Research Assistant Professor (1989-1993), Assistant Professor, 1985-1988, full-time appointment.
Areas of research:

Solid and Structural Mechanics – Classical and Numerical Methods, Composite mechanics/dynamics, Probabilistic Methods, Multidisciplinary Coupled Analysis, Nonlinear Dynamical Systems and Applications

Areas of teaching:

Structural Mechanics, Dynamics, Composite Mechanics, Risk Benefit Analysis, Computational Methods, Vibrations, and Design

Other Related Work Experience

Hindusthan Aeronautics Limited, Design Engineer, Vibrations, Aeroelasticity and Flight Testing, 1978-1980

Consulting and Patents

<"None">

Professional Registration

< "None">

Principal Publications of Last Five Years

[1] *Dynamic Characteristics of Layered Metal-Fiber-Composites Including Transverse Shear Deformation,* SPIE International Symposium on Smart Materials, Nano-, and Micro-Smart Systems, 16-18th December 2002, Melbourne, Australia

[2] *An Approach to Dynamic Modeling of Aircraft Landing on Moving Ships*, IMAC-XXI, the XXI International Modal Analysis Conference, Society for Experimental Mechanics Inc, February 3-6, 2003, Kissimmee, Florida.

[3] *Dynamics of Shear Deformable Laminated Composites using Raleigh Ritz Method*, IMAC-XXI, the XXI International Modal Analysis Conference, Society for Experimental Mechanics Inc, February 3-6, 2003, Kissimmee, Florida.

[4] *Modal Analysis and Damage Assessment of Cracked Plates***,** IMAC-XXI, the XXI International Modal Analysis Conference (IMAC), Society for Experimental Mechanics Inc, February 3-6, 2003, Kissimmee, Florida.

[5] *On a Probabilistic Strain-based Fatigue Life Estimation*, 44th AIAA/ASME/ASCE/AHS Structures, Structural Dynamics, and Materials Conference - 5th AIAA Non-Deterministic Approaches Forum, April, 2003, Norfolk, VA (Co-author: Major T. Heffern)

[6] *Damage Assessment Analysis of Cracked Plates Using Principal Response Functions*, IMAC-XXII Conference & Exposition on Structural Dynamics, Dearborn, Michigan, January 26-29, 2004
[7] *Flutter Behavior of Shear Deformable Laminated Composite Plates Including Thermal Effects*, 9th ASCE Aerospace Division International Conference on Engineering, Construction and Operations in Challenging Environments (Earth and Space 2004) League City/Houston, TX, U.S.A. during March 07-10, 2004
[8] *Dynamic Characteristics of piezoelectric shear deformable composite plates,* Smart Structures and Materials –Active Materials: Behavior and Mechanics, 14-18 March 2004, San Diego, CA
[9] *Reliability of Unidirectional Composites Using Genetic Algorithms*, Paper AIAA-2006-2155, 47th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics & Materials Conference, May, 2006, Newport, R.I.

Scientific and Professional Society Memberships

Member of the American Society of Mechanical Engineers
Member of the American Institute of Aeronautics and Astronautics

Honors and Awards

< "None">

Institutional and Professional Service in Last Five Years

Session Chair, SPIE Active Materials: Behavior and Mechanics – Smart Structures and Materials Conference, San Diego, March 2004
Session Chair, 45th AIAA/ASME/ASCE/AHS Structures, Dynamics & Materials and Non-Deterministic Approaches Forum, Palm Springs, CA 2004
Session Chair, International Modal Analysis Conference, St. Louis, Mo, January 2006.
Session Chair, SPIE Active Materials: Behavior and Mechanics – Smart Structures and Materials Conference, San Diego, March 2006
Session Chair, 47th AIAA/ASME/ASCE/AHS Structures, Dynamics & Materials and 1st AIAA Non-Deterministic Approaches Conference, Newport, RI, May 2006
Reviewer for AIAA 6th Non-Deterministic Approaches Forum, Co-hosted by ASME/ASCE/AHS, Palm Springs, CA, 2004
Reviewer for AIAA Structures Technical Committee, Co-hosted by AIAA/ASME/ASCE/AHS, Newport, RI, 2006

Professional Development Activities in Last Five Years

Courses in Project Management, Earned Value Program Management, Six Sigma: Concepts and Processes, Lean Six Sigma, Introduction to Lean Enterprise Concepts (Defense Acquisition University)

Young W. Kwon
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Mechanical Engineering	Seoul National University	1981
M.S.	Mechanical Engineering	Oklahoma State University	1983
Ph.D.	Mechanical Engineering	Rice University	1985

NPS Experience

Professor, 2000-present; Associate Professor, 1993-2000; Assistant Professor, 1990-1993; Chair, 2002-2003; Associate Chair, 1999-2002

Areas of research:

Multiscale and Multilevel Computational Methods, Solid and Structures, Composite Materials, Biomechanics

Areas of teaching:

Statics, Dynamics, Solid Mechanics, Finite Element Method

Other Related Work Experience

Professor and Chair, Dept. of Mechanical Engineering and Energy Processes, Southern Illinois University, 2003-2005; Assistant Professor, Dept. of Mechanical and Aerospace Engineering, University of Missouri-Rolla, 1987-1990; Senior Engineer, Oil Technology Services, Inc., 1985-1986.

Consulting and Patents

Consultant on L^3 Communications

Y. W. Kwon, "Fatigue Measurement Device and Method", US Patent # 6983660.

Professional Registration

None

Principal Publications of Last Five Years

Y. W. Kwon, "Chapter 18: Nanomechanics", Nanoengineering of Structural, Functional and Smart Materials, (ed. by M. J. Schulz, A. Kelkar, and M. J. Sundaresan), CRC Press, Boca Raton, Florida, 2005.

Y. W. Kwon, "Chapter 7: Multi-scale Computational Modeling and Simulation", Progress in Engineering Computational Technology, (ed. by B.H.V. Topping and C. A. Mota Soares), Saxe-Coburg Publication, Stirling, Scotland, 2004.

Y. W. Kwon, "Chapter 4: Multiscale and Multilevel Modelling of Composites", Multiscale Modeling and Simulation of Composite Materials and Structures, (ed. By Y. W. Kwon, D. H. Allen, and R. Talreja,), Springer, 2007

Y. W. Kwon, R. E. Cooke, and C. Park, "Representative Unit-Cell Models for Open-Cell Metal Foams with or without Elastic Fillers", Materials Science and Engineering A, Vol. 343, 2003, pp. 63-70.

Y. W. Kwon and C. T. Liu, "Microstructural Effects on Damage Behavior in Particle Reinforced Composites", Polymers & Polymer Composites, Vol. 11, No. 1, 2003, pp. 1-8.

Y. W. Kwon, "Discrete Atomic and Smeared Continuum Modeling for Static Analysis", Engineering Computations, Vol. 20, No. 8, 2003, pp. 964-978.

Y. W. Kwon and K. Roach, "Unit-Cell Model of 2/2-Twill Woven Fabric Composites for Multi-Scale Analysis", Computer Modeling in Engineering & Sciences, Vol. 5, No. 1, 2004, pp. 63-72. (Invited Paper).

Y. W. Kwon and W. M. Cho, "Multi-Scale Thermal Stress Analysis of Woven Fabric Composite", Journal of Thermal Stresses, Vol. 27, No. 1, 2004, pp.59-73.

Y. W. Kwon and S. H. Jung, "Atomic Model and Coupling with Continuum Model for Static Equilibrium Problems", Computers and Structures, Vol. 82, No. 23-26, 2004, pp. 1993-2000.

Y. W. Kwon and A. F. Harrell, "How Many Monomer Repeat Units Are Necessary for Reliable Molecular Dynamics Simulation?", Polymers & Polymer Composites, Vol. 12, No. 6, 2004, pp.483-489.
Y. W. Kwon, "Multi-scale Modeling of mechanical Behavior of Polycrystalline Materials", Journal of Computer-Aided Materials Design, Vol. 11, No. 1, 2004, pp. 43-57.
Y. W. Kwon, "Micromechanical, Thermomechanical Study of a Refractory Fiber/Matrix/Coating System", Journal of Thermal Stresses, Vol. 28, No. 4, 2005, pp. 439-453.
Y. W. Kwon, C. Manthena, J. J. Oh, and D. Srivastava, "Vibrational Characteristics of Carbon Nanotubes as Nanomechanical Resonators", Journal of Nanoscience and Nanotechnology, Vol. 5, No. 5, May 2005, pp. 703-712.
Y. W. Kwon and C. Manthena, "Homogenization Technique of Discrete Atoms into Smeared Continuum", Internal Journal of Mechanical Sciences, Vol. 48, 2006, pp. 1352-1359. (Invited Paper)

Scientific and Professional Society Memberships

Fellow of American Society of Mechanical Engineers

Honors and Awards

Honorary Theme Editor of "Pressure Vessels and Piping Systems" of ELOSS (Encyclopedia of Life Support Systems) under the auspices of UNESCO, 2006-2008.
American Society of Mechanical Engineers, Pressure Vessel and Piping Division Outstanding Service Award, 2004
Guest Editor, Special Issue on Fluid-Solid Interaction Problems, ASME Journal of Pressure Vessel Technology, Nov. 2001
Excellence in Research Award, American Orthopaedic Society of Sports Medicine, 1997
Menneken Faculty Award for Excellence in Scientific Research, NPS, 1995
Cedric K. Ferguson Medal (the Best Paper Award), Society of Petroleum Engineers, 1989

Institutional and Professional Service in Last Five Years

ASME PVPD – Division Chair: 2010-2011
ASME PVPD – Conference Chair: 2009 – 2010, Division Chair: 2010-2011
ASME PVPD – Conference Technical Program Chair 2008 – 2009
ASME PVPD – Executive Committee Publication Chair: 2005 – 2009,
University Policy Committee of Center for Advanced Friction Studies, SIUC, 2003-2005
National Science Foundation Review Panelist, Division of Materials Research
Associate Editor of *ASME Transaction, Journal of Pressure Vessel Technology*: 1996-2002
ASME IMECE 2005 & 2006 Pressure Technology Group Representative
ASME PVPD – Administrative Committee (Chair of Membership Committee): 2003-2005
ASME PVPD - Fluid Structure Interaction Committee (Chairman): 1998-2002

Professional Development Activities in Last Five Years

Attended ASME Leadership Conference, 2006.

John R. Lloyd
Distinguished Visiting Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Mechanical Engineering	U. Minnesota	1964
M.S.	Mechanical Engineering	U. Minnesota	1966

Ph.D.	Mechanical Engineering	U. Minnesota	1971

NPS Experience

Employment details:
Visiting Professor, 1990, Distinguished Visiting Professor, 2007-present
Areas of research: Nanotechnology, Heat Transfer, Distributed Team Function
Areas of teaching: Thermodynamics, Heat Transfer

Other Related Work Experience

June 1966 to September 1967 - Development Engineer, The Procter and Gamble Company, Cincinnati, Ohio.

September 1970 to January 1984 - Assistant Professor, September 1970 - September 1974, Associate Professor, September 1974 - September 1977, Professor, September 1977 - January 1984 Aerospace and Mechanical Engineering, University of Notre Dame, Notre Dame, Indiana

Michigan State University, East Lansing, Michigan October 1983 to 1992 -Professor and Chairperson, Department of Mechanical Engineering,

July 1990 to Present -University Distinguished Professor, Department of Mechanical Engineering, Michigan State University, East Lansing, Michigan

October 1994 to present - Guest Professor, Department of Engineering Mechanics, Tsinghua University, Beijing, China

July 1997 to December 2000 - Director, The Institute for Global Engineering Education, College of Engineering, Michigan State University, East Lansing, Michigan

January 2003 – May 2003, Visiting Scholar, Department of Mechanical Engineering, the University of California at Berkeley, Berkeley, California

Consulting and Patents

C.J. Radcliffe and J.R. Lloyd, "Feedback Control of Electrorheological Fluid Response," Patent No. 5,493,127, Issued Feb. 20, 1996.

J.R. Lloyd, T. Grotjohn, A. Weber, F. Rosenbaum, G. Goodall, “Implantable Micro-Scale Pressure Sensor System for Glaucoma Monitoring and Management,” Patent #6,890,300, Issued 05/10/05.

Professional Registration

None

Principal Publications of Last Five Years

N. Aitcheson, D. Fickes and J.R. Lloyd, (2002), “Fundamental Effects of Boundary Structure on Nano-Scale Conductive Heat Transfer”, ASME IMECE, November 2002

J.B. Hargrove, J.R. Lloyd, and C.J. Radcliffe, “Radiation Heat Transfer in Electrorheological Fluids” 2003, ASME Journal of Heat Transfer, December, Vol. 125, No. 6, pp. 1058-1064.

K.A. David and J.R. Lloyd, 2003, “Learning and Communication about Collaboration in Dispersed Teams,” Chapter 20 – The Collaborative Work Systems Fieldbook: Strategies, Tools, and Techniques, ed. M.B. Beyerlein, C. McGhee, G.D. Klein, J.E. Nemiro, L. Broedling, Jossey-Bass/Pfiefer A Wiley imprint, ISBN: 0-7879-6375-5, pp. 349-374.

J.R. Lloyd, 2004, “Discussion of Thermal Energy Transport Across Material Interfaces: A Molecular Perspective”, Proceedings European Academy of Sciences NANOMAT Conference.

J..R. Lloyd, T.J. Hinds, K.A. David, M.J. Chung, M.A. Gonzalez, D. Timmer, 2004, “INTEnD: A Dispersed Design Team Approach for the Globalization of Engineering Education” ASME International Mechanical Engineering Congress and Exposition”, Curriculum Award Paper.

S.Ngai, J.R. Lloyd, A.I. Leontiev, S.P. Malyshenko, 2004, “Creation of Nano-Scaled Surface Structure for the Enhancement of Boiling Heat Transfer”, Proceedings ASME International Mechanical Engineering Congress and Exposition, IMECE2004-61295, 9pgs.

K.Y. Xu and J.R. Lloyd, 2005, "Pool Boiling of FC-72: A Comparison of two Thin Porous Coatings on Heat Transfer Enhancement", Proceedings ASME IMECE 2005-81230, 9pgs. (Nominated for Best Paper Award)

K.A. David, J..R. Lloyd, T.J. Hinds, 2005, "Power and Communication: Solving Power Problems for Collaboration in Globally Distributed Engineering design Teams", ASME IMECE-80060.

W. Kim, M.J. Chung, J.R. Lloyd, 2006, "Automated Outsourcing Partnership Management", Book Chapter of CSCW 2005, LCNS 3865, pp.184-193, 2006

Y. Zhang, R.J. Enbody, and J.R. Lloyd, Proactive, Content-Aware, Sensitive Data Protection Framework for Enterprises, 2006, Proceedings International Conference on Communication, Network and Information Security, October 9-11, 2006, 7 pgs.

J.R. Lloyd, M.O. Hayes-Michel, C.J. Radcliffe, 2007, "Internal Organizational Measurement for Control of Magnetorheological Fluid Properties", ASME Trans, Jour Fluids Eng, April 2007

Scientific and Professional Society Memberships

Member of the American Society of Mechanical Engineers, 1971-present.

Honors and Awards

1978 ASME Melville Medal for best paper in the field of Mechanical Engineering.
1986 Ralph R. Teetor Educational Award, Society of Automotive Engineers.
1986 Election to Fellow of ASME.
1990 University Distinguished Professor, Michigan State University
1995 ASME Heat Transfer Memorial Award
2000 Doctor of Technical Science Honorus Causa, Russian Academy of Sciences
2002 Elected to Member, European Academy of Sciences
2004 ASME Curriculum Innovation Award, Honorable Mention

Institutional and Professional Service in Last Five Years

Advisory Editor, Journal of Heat Transfer Research, 1997-present
International Advisory Board, Thermophysics and Aeromechanics, International Academic Publishing Company, 1999 – present.
Senior Vice-President of Engineering, ASME International, November 1998- 2002.
Governor, ASME International, June 2002-June 2005.
Member, Executive Committee of Int. Center Heat and Mass Transfer, Turkey, 2002- 2006.
Member, planning committee, Minority Serving Institutions Research Partnerships Conf. 2006
Member,Planning group 14th Intl Heat Transfer Conference, Aug 2010, Washington DC
Member, ASME Board on Research and Technology Development, Nov. 2006 – present.
Member, Board of Directors, ASME Nanotechnology Institute, November 2006-present

Professional Development Activities in Last Five Years

None

Fernand D.S. Marquis
Visiting Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B. S. Chem. Eng., Univ. of Coimbra, 1967
Dipl. Eng. Chem-Industrial Eng., Instituto Superior Tecnico, Univ. of Lisbon, 1970
DIC Metallurgical Eng., Imperial College of Science and Technology, University of London, 1973
Ph.D. Metallurgical Eng., Imperial College of Science and Technology, University of London, 1977
Ph.D. Metallurgy and Materials Science, Univ. of Lisbon, 1977

NPS Experience

January 2006–Present: Visiting/Adjunt Professor, Dept. of Mechanical and Astronautical Engineering, Naval Postgraduate School.

Areas of research:

Nanomaterials; Nanotechnology; Nanotribology; Shock Synthesis and Densification and Combustion Synthesis and Densification of Ceramics, Composites and Intermetallics; Ceramic and Ceramic/Metal Armor; High Strain, High-Strain Rate Deformation Behavior; Airplane and Aerospace Materials and Structures; Failure Analysis and Mechanisms in Structural Components.

Areas of teaching:

Materials Engineering and Science Courses: Advanced Materials Characterization, Composite Materials (PMCs, MMCs and CMCs), Fundamentals of Materials Systems, Fundamentals of Materials Science and Engineering.

Other Related Work Experience

1988-2005 Professor of Materials and Metallurgical Engineering, South Dakota School of Mines and Technology (SDSMT)
1993-1994 Visiting Professor, Dept. of Applied Mechanics and Engineering Science, University of California, San Diego (UCSD)

Consulting and Patents

1. "Carbon Nanoparticle-Containing Lubricant and Grease" Hong, H., Waynick, J.A and Marquis, F.D.S., US 11/332,679.
2. "Carbon Nanoparticle-Containing Hydrophilic Nanofluid" Hong, H. and Marquis, F.D.S., US 11/332,682.

Professional Registration

Registered Metallurgical Engineer (1979); Registered Chemical Engineer (1979); Charted Engineer, Council of Engineering Institutions, United Kingdom (1979).

Principal Publications of Last Five Years

Books

1. "Nanocomposites-Their Science, Technology and Applications", Schneider, J., Marquis, F.D.S., Schadler, L.S., and Simmons, K, TMS, 2006.
2. "The Science and Technology of Powder Materials: Synthesis, Consolidation and Properties", L.L. Shaw, F.D.S. Marquis, E.A. Olevsky, I.E. Anderson, M.G. McKimpson, J.P. Singh and J.H. Adair, ISBN 978-0-87339-601-1, TMS, 2005.
3. "Powder Materials: Current Research and Industrial Practices III", F.D.S. Marquis, ISBN 0-87339-563-8, TMS, 2003.

4. "Rapid Prototyping of Materials", Marquis, F.D.S. and Bourell, D. L., ISBN 0-87339-530-1, TMS, 2002
5. "Powder Materials: Current Research and Industrial Practices II", Marquis, F.D.S., Thadhani, N.N., and Barrera, E. V, ISBN 0-87339-507-7, TMS, 2001.

Papers

1. Marquis, F.D.S. and L.P.F. Chibante "Improving the Heat Transfer of Nanofluids and Nanolubricants with Carbon Nanotubes" *Journal of Materials, 12 (2005) 32-44*.
2. Marquis, F.D.S., Mahajan, A. And Mamalis, A.G."Shock Synthesis and Densification of Tungsten Based heavy Alloys", *J. Mater. Proc. Tech.,* Vol. 161, 1-2(2005), 113-130.
3. Mamalis, A.G., Vottea, I.N., Manolakos, D.E., Szalay, and Marquis, F.D.S., "Explosive Compaction/Cladding of YBCO Discs: a Numerical Approach" *J. Mater. Proc. Tech.* Vol. 161, 1-2(2005) 36-41.
4. Marquis, F.D.S., Chikhradze, N.M., Abasshidze, G.S., Dalakishvili, N.Z. and Peikrishvili, A.B., "Investigation of Sorption Properties of Boron Containing Composite Materials", Powder Materials World Congress, Vienna, 2004, 8 pages.
5. Barrera, E.V., Chibante, L.P.F., Marquis, F.D.S. et al "Nanocomposites: from Space Suits to Spaceships", *Acta Astronautical*, (2003), 14 pages.

Scientific and Professional Society Memberships (Past and Present)

American Society for Metals (ASM); American Institute of Mining, Metallurgical and Petroleum Engineers (AIMME); Sigma Xi; Materials Research Society (MRS); American Society for Testing of Materials (ASTM); Past member Societe Francaise de Metallurgie.

Honors and Awards

Fellow of the Royal Microscopical Society, United Kingdom, 1977; Editorial Advisory Board, Portugaliae Physica, 1978-1986; Chartered Engineer, Council of Engineering Institutions, 1979, UK; Professional Chemical Engineer, Portugal, 1979; Professional Metallurgical Engineer, Portugal, 1979; Member of the Board of Governors of the International Congress on Mechanical Behavior of Materials, 1979-1981; Who's Who in Engineering; Biography International; Outstanding Award for Service, as Organizer of the International Symposium on "In Situ Reactions for Synthesis of Composites, Ceramics and Intermetallics", TMS, 1995; Special Recognition from Entrepeneurs of America, 1998.

Institutional and Professional Service in Last Five Years

1. ABET Program Evaluator for the programs in: (1) Materials Engineering and Science and (2) Metallurgical Engineering. Performed four ABET visits in the last five years.
2. Board of Trustees of Alpha Sigma Mu.
3. Program Representative Materials Processing and Manufacturing Division of TMS 2005-2007.
4. Executive Council of the Materials Processing and Manufacturing Division of TMS
5. Treasurer of the Materials Processing and Manufacturing Division of TMS
6. Mechanical Behavior Committee (ASM/TMS)

Professional Development Activities in Last Five Years

1. ABET Program Evaluator for the programs in: (1) Materials Engineering and Science and (2) Metallurgical Engineering. Performed four ABET visits in the last five years.
2. Board of Trustees of Alpha Sigma Mu
3. Research Director "United Nanotechnologies", 2005-2006.

TERRY R. MCNELLEY

Distinguished Professor of Materials Science
Department of Mechanical and Astronautical Engineering
Naval Postgraduate School
700 Dyer Road
Monterey, CA 93943-5146

EDUCATION

Purdue University, West Lafayette, Indiana; B.S. in Metallurgical Engineering, June 1967

Stanford University, Stanford, CA; Ph.D. in Materials Science and Engineering; dissertation: "The Mechanical Behavior of Powder Metallurgy Zinc-Alumina Particulate Composite Materials" (advised by Professor Emeritus Oleg D. Sherby), January 1973

ACADEMIC EXPERIENCE

1972-1976: Department of Mechanical Engineering, University of Wyoming, Laramie, WY. Appointed as Assistant Professor; Advancement to Tenure: June, 1976

1976-present: Department of Mechanical Engineering, Naval Postgraduate School, Monterey, CA. Original appointment : Assistant Professor, Sept., 1976; Advancement: Associate Professor (with Tenure), June, 1979; Professor, June, 1987; Associate Chairman of Mechanical Engineering, 1992-1995; Chairman of Mechanical Engineering, 1996 – 2002

PROFESSIONAL ACTIVITIES

Scientific and Professional Societies

American Society for Materials International
The Minerals, Metals and Materials Society
Materials Research Society

Distinctions and Awards

Tau Beta Pi; Sigma Xi; American Society for Testing and Materials Achievement Award, 1972
Fellow, American Society for Materials - International (ASMI), elected 2001
Distinction as 'Plank Owner', Reactors/Mechanical Engineering Program, by Naval Reactors (NAVSEA 08), Awarded January, 2002
Distinguished Professor, Awarded September, 2004

Other Appointments

Visiting Professor, Royal Military College of Cranfield Institute, Shrivenham, UK, 1980-81
ONR-London Scientific Liaison (intermittent, 1980-81)
Visiting Professor, Naval Research Laboratory, 1987

Visiting Distinguished Lecturer, Japan National Defense Academy, Yokuska, Japan, October - November 1993

Visiting Professor, Centro Nacional de Investigaciones Metalurgicas (CENIM), Madrid, Spain, August – December, 1999

Consulting (2000 - present)

Failure analysis report "Fuel Oil Fill and Transfer Piping on DDG90, USS Chaffee", T. R. McNelley and C. Park, October 2004

Testimony before the Armed Services Board of Contract Appeals on 11 February 2005, in respect of docket ASBCA No. 54544, Appeal of Bath Iron Works to Denial of Claim. Testimony was on behalf of the Navy Litigation Office, Office of General Council, Washington Navy Yard, in respect of the failure analysis report "Fuel Oil Fill and Transfer Piping on DDG90, USS Chaffee".

ACADEMIC ADMINISTRATION

Departmental

Associate Chairman of Mechanical Engineering, 1992 -95; duties included scheduling and internal administration.

Chairman of Mechanical Engineering, initial appointment1995 - 1999; reappointed 1999 - 2002

University

Member, NPS Academic Council, 1978-80; 89-92
Chair, ad hoc committee on Distance Learning, NPS Academic Council, 1991-2
Search Committee for Chairman of Mechanical Engineering, 1986
Member, NPS Research Council, 1986-89
Member, Total Ship Systems Engineering Program Development Committee, 1989-90
Search Committee for Dean of Engineering, 1993
Search Committee for GSEAS Dean, 2001

Publications (2000 – 2005)

1. T.R. McNelley, "Application of EBSD Methods to Evaluate Grain Boundary Character of Fine-Grained Pure Aluminum", in Ultrafine Grained Materials (R.S. Mishra, S.L. Semiatin, C. Suryanarayana, N.N. Thadhani and T.C. Lowe, eds.), TMS, Warrendale, PA, 2000, pp. 185-194
2. T.R. McNelley, "Processing, Recrystallization and Superplasticity in Aluminum Alloys", in Deformation, Procesing, and Properties of Structural Materials (E.M Taleff, C.K. Syn and D.R. Lesuer, eds.), TMS Warrendale, PA, 2000, pp. 339-352
3. M.T. Pérez-Prado, T.R. McNelley, G. González-Doncel and O.A. Ruano, "Texture, Grain Boundaries and Deformation of Superplastic Aluminum Alloys", in Proceedings of ICSAM 2000 (N. Chandra, ed.), Materials Science Forum, Trans Tech, Zurich, 2001, pp. 255-260
4. T.R. McNelley, "Chapter 22: Continuous Recrystallization and Grain Boundaries in a Superplastic Aluminum Alloy", in Electron Backscatter Diffraction, (A.J. Schwartz, et al., eds), Kluwer Academic/Plenum, New York, 2000, pp.277-290
5. M.T. Pérez-Prado, D.L. Swisher and T.R. McNelley, "Deformation Banding, Grain Boundaries and Continuous Recrystallization in a Superplastic Aluminum Alloy", in Proceedings of THERMEC 2000 (T. Chandra, K. Higashi, C. Suryanarayana and C. Tomé, eds.), Elsevier, London, 2001, Section G2
6. M. Eddahbi, T.R. McNelley and O.A. Ruano, "The Evolution of Grain Boundary Character during Superplastic Deformation of an Al-6 Pct. Cu-0.4 Pct. Zr Alloy", *Metallurgical and Materials Transactions A*, vol. 32A, 2001, pp.1093-1102

Knox T. Millsaps
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Engineering Science/Physics	University of Florida	1983
S.M.	Aeronautics and Astronautics	MIT	1986
Ph.D./Sc.D.	Aeronautics and Astronautics	MIT	1991

NPS Experience

Employment details:

- Professor, 2005-Present, full-time appointment.
- Associate Professor, 1998-2005, full-time appointment.
- Assistant Professor, 1992-1998, full-time appointment.
- Associate Provost for Academic Affairs, 2005
- Associate Provost for Institutional Development, 2006
- Associate Department Chairman, 2002-Present

Areas of research:

Power and propulsion for aircraft, ships, submarines, missiles and spacecraft. Gas turbines and Diesels. Turbomachinery aerodynamics and heat transfer. Rotordynamics. Thermodynamics and energy conversion. Signal processing for condition based maintenance. Platform and weapon system low observable technology.

Areas of teaching:

Thermodynamics, Fluid Dynamics, Heat Transfer, Power and Propulsion. Gas Turbines.

Other Related Work Experience

- ASME Congressional Fellow: Office of Rep. John M. Spratt, Jr. (5th-SC). Chairman, House Budget Committee, and senior member House Armed Services Committee. 2001.
- Brookings Legislative Fellow: Office of Rep. John M. Spratt, Jr. (5th-SC). 2000.
- Visiting Professor: Institute fur Thermische Stromungsmachinen. University of Karlsruhe, Germany. Worked with o.Prof. Sigmar Wittig, currently, Executive Director DLR (equivalent to NASA Administrator) 1997. Also, Post-doctoral Fellow. 1991.
- Senior Staff Engineer: Pratt and Whitney. East Hartford, CT. Turbine Group. 1988
- Staff Engineer: Pratt and Whitney. East Hartford, CT. Aero-Acoustics of Inlets Group. 1986.
- Junior Engineer: Pratt and Whitney. West Palm Beach, FL. Compressor, Turbine, and Structures Groups. 1984.

Consulting and Patents

- United Technologies Research Center, East Hartford, CT
- Electric Power Research Institute, Palo Alto, CA
- Integrated Devices, San Jose, CA
- Kurz Instruments, Monterey, CA
- Northrop-Grumman, Aircraft Division, El Segundo, CA
- Cidra Inc., Hamilton, CT
- Consultants in Engineering Acoustics
- Millsaps, K. T., “Integrated Electric Gas Turbine”, U.S. Patent Application Number 11/086,734; filed on 03/18/2005.

Professional Registration
None

Principal Publications of Last Five Years
1. Millsaps, K. T., Oh, J., Trivilos, E., "Numerical Study of Planar Diffuser Flows with Constant-Area Duct at Low Reynolds Numbers", Transactions of the ASME, Journal of Fluids Engineering, Volume 106, Number 12, July 2005.
2. Elmstrom M. E., Millsaps, K. T., Hobson, G. V., Patterson, J. S., "Impact of Non-Uniform Leading Edge Coatings on the Aerodynamic Performance of Compressor Airfoils", Transactions of the ASME, Journal of Turbomachinery, Volume 86, Number 17, January 2006.
3. Millsaps, K.T., Editor, Proceedings of the Eleventh International Symposium of Rotating Machinery and Transport Phenomena (ISROMAC-11), Honolulu, HI, February 30 - March 3, 2006, ISBN (CSIN) 9999900426.

Scientific and Professional Society Memberships
ASME, Turbomachinery and Marine Committees of IGTI, AIAA and SAE.

Honors and Awards
Sigma Nu, Tau Beta Pi, Phi Beta Kappa. Who's Who in America. Charles Starke Draper Research Fellow (MIT), John and Fanny Hertz Fellowship (MIT, not accepted). University of Florida Presidential Scholar, Air Force Research in Aero-Propulsion Technology Fellow (MIT).

Institutional and Professional Service in Last Five Years
ASME Student Chapter Advisor
Chairman, Marine Committee of IGTI (Gas Turbine Division of ASME)
Chairman, Council of Chairs IGTI
Member Board of Directors IGTI
Executive Chairman and Technical Editor, Eleventh International Symposium of Rotating Machinery and Transport Phenomena (ISROMAC-11).

Professional Development Activities in Last Five Years
None

Fotis A. Papoulias
Associate Professor of Mechanical Engineering
Naval Postgraduate School

Education

B.S.	Mechanical Engineering	National Technical University, Athens, Greece	1983
M.S.	Naval Architecture and Marine Engineering	The University of Michigan, Ann Arbor	1986
M.S.	Aerospace Engineering	The University of Michigan, Ann Arbor	1986
Ph.D.	Naval Architecture and Marine Engineering	The University of Michigan, Ann Arbor	1987

NPS Experience

Employment details:

Associate Professor, 1995-Present, full-time appointment.
Assistant Professor, 1989-1994, full-time appointment.
Associate Chair for Academics, 2005-Present

Areas of research:

Nonlinear Dynamics, Multi-body dynamics, Ship Design

Areas of teaching:

Dynamics and Control, Ship Design

Consulting and Patents

The University of Michigan
CISCO Systems
U.S. Army, DLI

Principal Publications of Last Five Years

Yakimenko, O. and Papoulias, F.A. "On the Development of Interactive Web-based Courses on Classical and Modern Control." Proceedings, MED07 Conference, 2004.

Gordis, J. H., Papoulias, F.A., and Bauer, J. 2005 "Modeling and Simulation of Unmanned Vehicle Launch from the Littoral Combat Ship (LCS)." Proceedings of the ASNE Launch & Recovery of Manned and Unmanned Vehicles from Surface Platforms: Current and Future Trends Conference. Annapolis, MD. November 8-9.

Brock, G. N., Gordis, J.H., & Papoulias, F.A. "Dynamics and Control Of The Roll-On/Roll-Off Stern Ramp Support System." Report prepared for NSWC/Carderock Div. March, 2004.

Haigh, J. J. and Gordis, J. H., "Motion Compensator Analysis." Report prepared for NSWC/Carderock Div. Mar. 2002.

Scientific and Professional Society Memberships

Member of the American Society of Mechanical Engineers, 1990-present.
Member of the Society of Naval Architects and Marine Engineers, 1989-present.

Institutional and Professional Service in Last Five Years

Academic Associate, NPS, 2003-present
Faculty Council (alternate) 2002-2005

Max F. Platzer
Distinguished Professor Emeritus of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

Diploma Engineer	Mechanical Engineering	Technical University of Vienna	1957
Doctor of Technical Sciences		Technical University of Vienna	1964

NPS Experience

Employment details:
Associate Professor of Aeronautics, 1970-1976
Professor of Aeronautics, 1976 -1988
Chairman, Department of Aeronautics, 1978-1988
Professor of Aeronautics and Astronautics, 1988-1995
Distinguished Professor of Aeronautics and Astronautics, 1995-2003
Chairman, Department of Aeronautics and Astronautics, 2000-2003
Chairman, Naval Postgraduate School Faculty, 1993 and 2000
Member of NPS Faculty Executive Board, 1993 – 2003
Distinguished Professor Emeritus of Mechanical & Astronautical Engineering, 2004-

Areas of Research: Fluid and Gas Dynamics, Aeroelasticity, Flight Mechanics, Propulsion
Areas of Teaching: as above

Other Related Work Experience

Aerospace Engineer, NASA Marshall Space Flight Center, 1960-1966
Research Scientist, Lockheed-Georgia Research Center, 1966-1970

Consulting and Patents:

Three US patents

Professional Registration: None

Principal Publications of Last Five Years:

I.H. Tuncer and M.F. Platzer, “Computational Investigation of Flow through a Louvered Inlet Configuration”, Journal of Aircraft, Vol. 39, No. 5, pp. 903-906, 2002

K.D. Jones and M.F. Platzer, “On the Design of Efficient Micro Air Vehicles”, published in “Design and Nature”, WIT Press, pp. 67-76, 2002

B.M. Castro, J.A. Ekaterinaris, M.F. Platzer, “Navier-Stokes Analysis of Wind Tunnel Interference on Transonic Airfoil Flutter”, AIAA Journal, Vol. 40, No. 7, pp. 1269-1276, July 2002

J.C.S. Lai, J. Yue, M.F. Platzer, "Control of Backward-Facing Step Flow Using a Flapping Foil", Experiments in Fluids, Vol. 32, pp. 44-54, 2002

B.M. Castro, J.A. Ekaterinaris, K.D. Jones, S. Weber, M.F. Platzer, "Numerical Investigation of Transonic Flutter and Modeling of Wind Tunnel Interference Effects", Proc. Symposium Transsonicum IV, Goettingen, Germany, September 2002, Kluwer Academic Publishers, pp. 71-78

K.D. Jones,M.F. Platzer, D.L. Rodriguez, G. Guruswamy,"On the Effect of Area Ruling on Transonic Abrupt Wing Stall",
Proc. Symposium Transsonicum IV, Goettingen, Germany, Septembe 2002, Kluwer Academic Publishers, pp. 99-104

K.D. Jones, K. Lindsey, M.F. Platzer, "An Investigation of the Fluid Structure Interaction in an Oscillating Wing Micro Hydropower Generator", published in Fluid Structure Interaction II, WIT Press pp. 73-84, 2003

K.D. Jones, C.J. Bradshaw, J. Papadopoulos, M.F. Platzer "Bio-Inspired Design of Flapping-Wing Micro Air Vehicles", The Aeronautical Journal of the Royal Aeronautical Society, Vol. 109, No. 1098, pp. 385-393, August 2005

Scientific and Professional Society Memberships
American Society of Mechanical Engineers, 1976 - present
American Institute of Aeronautics and Astronautics, 1963 – present

Honors and Awards
NASA Superior Achievement Award, 1965
Fellow, American Society of Mechanical Engineers, 1992
NPS Distinguished Professor Award, 1995
Fellow, American Institute of Aeronautics and Astronautics, 2000

Institutional and Professional Service in Last Five Years
Editor of International Review Journal "Progress in Aerospace Sciences"
Member of Editorial Board of Journal "Design and Nature"
Reviewer for AIAA Journal, Physics of Fluids, Design and Nature

Mark M. Rhoades
Lecturer of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Aerospace Engineering	Univ. of Michigan	1983
M.S.	Aeronautical Engineering	NPS	1990
M.S.	Systems Engineering Management	NPS	2006

NPS Experience

Employment details:

Lecturer, 2005-Present, part-time appointment.
Program Officer, 2001-2005

Areas of research:

Engineering Risk
Unmanned Aerial Systems
Combat Modeling and Simulation

Areas of teaching:

Engineering Risk Benefit Analysis
Space Systems
Unmanned Aerial Systems

Other Related Work Experience

Systems Engineering, Space Systems and Aeronautical Engineering Program Officer 2001-2005
Navy Deputy Program Manager for GPS Joint Program Officer 1998-2001
Mature Aircraft Propulsion and Power Systems, Systems Engineer, NAVAIR, 1995-1998
Adversary Aircraft Class Desk Officer, COMNAVAIRPAC 1993-1995
Field Service Deputy Program Manager, NADEP North Island, 1990-1993

Consulting and Patents

None

Professional Registration

None

Principal Publications of Last Five Years

None

Scientific and Professional Society Memberships

INCOSE 2007

Honors and Awards

Instructor of the Year Leadership award in 2005

Institutional and Professional Service in Last Five Years

Academic Advisor, NPS, MS-Space Systems Operations 2006-present
Program Officer, NPS, Product Development and MS Systems Engineering Distance Learning programs – 2005-present

Professional Development Activities in Last Five Years

Certified Risk Manager by International Institute of Professional Education and Research™ through Real Options, Inc, 2007

Marcello Romano
Assistant Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

M.S.	Aeronautical Engineering	Milan Polytechnic, Milan, Italy	1997
Ph.D.	Astronautical Engineering	Milan Polytechnic, Milan, Italy	2001

NPS Experience

Employment details:

Assistant Professor, 2004-present, full-time appointment. Assistant Research Professor, February-September 2004, full-time appointment.

Areas of research:

Autonomous Spacecraft Dynamics and Control, Robotics

Areas of teaching:

Spacecraft Dynamics and Control

Other Related Work Experience

Milan Polytechnic, Milan, Italy, Tenured Assistant Professor, full-time appointment from January 2004 to February 2004, on-leave from March 2004 to December 2006.

U.S. National Research Council, Research Associate Fellow, Department of Aeronautics and Astronautics, Naval Postgraduate School, Monterey, CA, from July 2001 to December 2003.

Milan Polytechnic, Milan, Italy, Research Associate, from December 2000 to July 2001.

Milan Polytechnic, Milan, Italy, Ph.D. candidate, from 1997 to 2000.

European Centre for Particle Physics (CERN), Geneva, Switzerland, Research Associate, summer 1997.

Scuola Superiore Sant'Anna, Pisa, Italy, Research Associate, spring 1997.

European Space Agency (ESA) Astronaut Centre, Cologne, Germany, Research Associate, fall 1996.

Consulting and Patents

"None"

Professional Registration

Professional Aeronautical Engineer, Italy, 1997

Principal Publications of Last Five Years

R. Bevilacqua, M.Romano, Fuel Optimal Spacecraft Rendezvous with Hybrid On-Off Continuous and Impulsive Thrust. Accepted for publication. To appear on AIAA Journal of Guidance, Control, and Dynamics.

M.Romano, D.A. Friedman, T.J. Shay, Laboratory Experimentation of Autonomous Spacecraft Approach and Docking to a Collaborative Target, AIAA Journal of Spacecraft and Rockets, Vol. 44, No. 1, pp. 164-173, January-February 2007.

M.Romano, B.N.Agrawal, Attitude Dynamics/Control of Dual-Body Spacecraft with Variable-speed Control Moment Gyros, AIAA Journal of Guidance, Control, and Dynamics, Vol. 27, No. 4, pp. 513-525, July-August 2004.

M.Romano, B.N.Agrawal, Acquisition, tracking and pointing control of the Bifocal Relay Mirror Spacecraft, Acta Astronautica, Vol.53, No.4, 2003, pp. 509-519.

M.Romano, B.N.Agrawal, F.Bernelli-Zazzera, Experiments on Command Shaping Control of a Manipulator with Flexible Links, AIAA Journal of Guidance, Control, and Dynamics, Vol. 25, No. 2, 2002, pp. 232-239.

Scientific and Professional Society Memberships

Member of the American Institute of Aeronautics and Astronautics, 1997-present.
Member of the International Institute of Electrical and Electronics Engineers, 2002-present.
Member of the American Astronautics Society, 2002-present.

Honors and Awards

2006 recipient of the Carl E. and Jesse W. Menneken Annual Faculty Award for Excellence in Scientific Research

Institutional and Professional Service in Last Five Years

Member of the AIAA Space Automation and Robotics Technical Committee, since 2004.
Member of the AIAA Guidance Navigation and Control Technical Committee, since 2004.
Founding Member of the IEEE Space Robotics Technical Committee, since 2006.

Professional Development Activities in Last Five Years

IEEE International conference on robotics and automation, 2007.
AIAA Guidance Navigation and Control Conference, 2006.
AIAA Guidance Navigation and Control Conference, 2005.
IEEE Advanced Intelligent Mechatronics Conference, 2005.

I. Michael Ross
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

Ph.D.	Aerospace Engineering	Penn State	1991

NPS Experience

July 2005 - present
Professor of Mechanical and Astronautical Engineering
The Naval Postgraduate School, Monterey, CA
October 2003 – June 2005
Associate Professor of Mechanical and Astronautical Engineering
The Naval Postgraduate School, Monterey, CA
July 1998-September 2003
Associate Professor of Aeronautics and Astronautics
The Naval Postgraduate School, Monterey, CA
April 1992-June 1998
Assistant Professor of Aeronautics and Astronautics
The Naval Postgraduate School, Monterey, CA

Areas of research:
Pseudospectral methods for optimal control and optimal control theory
Areas of teaching:
Guidance, Control and Optimization

Other Related Work Experience

October 1999-June 2001
Visiting Associate Professor of Aeronautics and Astronautics
The Charles Stark Draper Laboratory, Cambridge, MA

Principal Publications of Last Five Years

1. Ross, I. M. and Fahroo, F., "Issues in the Real-Time Computation of Optimal Control," *Mathematical and Computer Modelling*, An International Journal, Vol. 43, Issues 9-10, May 2006, pp.1172-1188. (Special Issue: Optimization and Control for Military Applications)
2. Gong, Q., Kang, W. and Ross, I. M., "A Pseudospectral Method for the Optimal Control of Constrained Feedback Linearizable Systems," *IEEE Transactions on Automatic Control*, Vol.51, No.7,July 2006, pp.1115-1129.
3. Ross, I. M. and D'Souza, C. N., "A Hybrid Optimal Control Framework for Mission Planning," *Journal of Guidance, Control and Dynamics*, Vol. 28, No. 4, July-August 2005, pp.686-697.
4. Ross, I. M., "Space Trajectory Optimization and L^1-Optimal Control Problems," *Modern Astrodynamics*, edited by P. Gurfil, Elsevier, St. Louis, MO, September 2006.
5. Infeld, S. I., Josselyn, S. B., Murray, W. and Ross, I. M., "Design and Control of Libration Point Spacecraft Formations," *Journal of Guidance, Control and Dynamics*, to appear.
6. Ross, I. M., "A Roadmap for Optimal Control: The Right Way to Commute," *New Trends in Astrodynamics and Applications*, edited by E. Belbruno, *Annals of the New York Academy of Sciences*, Vol. 1065, pp. 210-231, January 2006.
7. Ross, I. M. and Fahroo, F., "Legendre Pseudospectral Approximations of Optimal Control Problems," *Lecture Notes in Control and Information Sciences*, Vol. 295, Springer-Verlag, New York, 2003, pp 327-342.
8. Gong, Q., Ross, I. M., Kang, W. and Fahroo, F., "Connections Between the Covector Mapping Theorem and Convergence of Pseudospectral Methods for Optimal Control," to appear in

Computational Optimization and Applications: An International Journal, Springer Science, The Netherlands.

9. Stevens, R. and Ross, I. M., "Preliminary Design of Earth-Mars Cyclers Using Solar Sails," *Journal of Spacecraft and Rockets*, Vol. 41, No. 4, 2004.
10. Ross, I. M. and Fahroo, F., "Pseudospectral Methods for the Optimal Motion Planning of Differentially Flat Systems," *IEEE Transactions on Automatic Control*, Vol.49, No.8, pp.1410-1413, August 2004.
11. Ross, I. M. and Fahroo, F., "Pseudospectral Knotting Methods for Solving Optimal Control Problems," *Journal of Guidance, Control and Dynamics*, Vol. 27, No. 3, pp.397-405, 2004.
12. Ross, I. M., Gong, Q. and Sekhavat, P., "Low-Thrust, High-Accuracy Trajectory Optimization," *Journal of Guidance, Control and Dynamics*, to appear.
13. Kang, W., Gong, Q., Ross, I. M., and Fahroo, F., "On the Convergence of Nonlinear Optimal Control Using PS Methods for Feedback Linearizable Systems," *International Journal of Robust and Nonlinear Control*, to appear.

Scientific and Professional Society Memberships

Book Review Editor, Journal of Guidance, Control and Dynamics, 1996-2003
NASA Peer Review Evaluator, 1998, 2001
Member, AAS Space Flight Mechanics Committee, 1995-2000
Member, AIAA Astrodynamics Technical Committee, 1991-1993, 1995-1998
Member, AIAA Mechanics and Control of Flight Award Committee, 1998
AIAA Technical Chair, AAS/AIAA Astrodynamics Specialist Conference, 1995
Founding Chair, AAS Breakwell Travel Award Committee, 1995-96
Member, AIAA Mechanics and Control of Flight Award Committee, 1992-1994
Chair, AIAA Mechanics and Control of Flight Award Committee, 1992
Member, AIAA Astrodynamics Awards Subcommittee, 1991-1994

Honors and Awards

Carl E. and Jessie W. Menneken Award for Excellence in Research, 2002
Associate Fellow, American Institute of Aeronautics and Astronautics
AIAA Outstanding Leadership Award, 1998
Outstanding Research Award, Space Systems Engineering, NPS, 1998
Provost's Award for Excellence in Course Design, NPS, 1996
Outstanding Research Award, Astronautical Engineering, NPS, 1995
Meritorious Teaching Award, Astronautical Engineering, NPS, 1994
Meritorious Teaching Award, Space Systems Engineering, NPS, 1992

Institutional and Professional Service in Last Five Years

Academic Associate for Space Systems Engineering Curriculum, 2003-2004
Member, Astronautics Curriculum Committee, 1992-present
Member, NPS Academic Council, 1992-1998, 2001-2003
Team Leader, NPS Team for Nonlinear Dynamics and Control, 2002-03
Member, Dissertation Committee (various)

Professional Development Activities in Last Five Years

Classified

Young S. Shin

Distinguished Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education:

Ph.D.	Case Western Reserve University, Cleveland, Ohio; Mechanical Engineering
M.S.	University of Minnesota, Minneapolis, MN; Civil (Structural) Engineering
B.S.	Seoul National University, Seoul, Korea; Civil Engineering

Experiences:

1981 - Present **Naval Postgraduate School**

Distinguished Professor of Mechanical Engineering

Department of Mechanical and Astronautical Engineering

General responsibilities include teaching and research in Navy relevant research projects: (i) underwater explosions / acoustics, shock qualification of shipboard electronic weapon systems, (ii) ship silencing, acoustic/material damping, wave-guide absorbers and tuned damper, (iii) shock and vibration isolation and suppression, (iv) shipboard machinery condition monitoring and diagnostics, (v) finite element techniques, modeling and simulation.

Teaching: I have taught the following courses: Dynamics, Mechanical Vibration, Mechanics of Solid, Design of Machine Elements, Shipboard Vibration and Noise, Naval Ship Shock Design and Analysis, Random Vibration and Spectral Analysis, and Marine Engineering Design.

Developed the graduate courses, ME4525: Naval Ship Shock Analysis and Design, and ME4550: Random Vibration and Spectral Analysis.

Research: Fundamental and applied research in Shock and Vibration: underwater shock response analysis and testing, shock modeling and simulation, shock and vibration isolation and suppression, shipboard machinery condition monitoring and diagnostics, modal testing and acoustic damping measurement, acoustic-structure interaction, noise cancellation, fatigue reliability, joint damping characteristics, and passive vibration control by constrained viscoelastic layers and wave guide absorber.

1981 – Present **Engineering Consultant**

Provides series of lectures and consultancy in “ship shock response to underwater explosions” to Electric Boats Co. of General Dynamics, Newport News Shipbuildings, Bath Iron Works, NWSC-White Oaks, TNO Research Center in Delft, Netherlands, Mishubishi Shipbuilding Research Center in Nagasaki, Japan, National University of Singapore, Seoul National University in Seoul, Korea, IZAR in Spain, EAC in Norway.

1979 - 1981 **General Electric Company, Nuclear Power Systems Engineering,**
San Jose, California

Performed research on fluid-structure interaction effect in Boiling Water Reactor (BWR) for loss of coolant accident (LOCA) situation. New transient loading in LOCA was identified and I was in charge of the research project to assess if this additional dynamic loading is within design boundary.

1974 - 1979 **Argonne National Laboratories**, Components Technology Division, Argonne, Illinois

Performed research on flow-induced vibrations in Fast Breeder Reactor and also steam generator. The design configuration is the bundle of parallel tubes. Both parallel and cross flow-induced vibration problems in tube bundle have to be resolved. The work involved in analysis, design and testing.

Major Honors, Awards & Professional Societies

- Fellow in American Society of Mechanical Engineers since January 1992
- NPS Certificate of Recognition for Outstanding Research Achievement in 1993
- ASME PVP Service Award for Chairman of Fluid-Structure Interaction Technical Committee in 1992
- Director's Award on Developing a Special Session on Ship Shock Modeling and Simulation at the 74th Shock & Vibration Symposium (2003)

Current Research Programs and Sponsors

M&S Education & Training for Life Long Learning,,DoD Washington, DC (2007 - Present)

Naval Sea Systems Command, DD(X), 500P, Washington DC (2005 – Present)
Shock & Vibration Analysis in Support of DD(X) & DDG Shock Follow on Action

Naval Sea Systems Command, LPD-17, PMS327, Washington, DC (2004 - 2006)
Ship Shock Trial Modeling and Simulation, LPD-17 Class Ships

Naval Sea Systems Command, AEGIS, PMS400D5, Washington, DC (1997 – 2004)
Ship Shock Trial Modeling and Simulation, DDG-51 Class Ships

Defense Threat Reduction Agency, Alexandria, VA (2003- 2005)
Force Protection In Threat Environments: Weapons Effects on Target and Damage Models

Selected Recent Publications

1. Shin, Y. S., *"Ship Shock Modeling and Simulation for Far-Field Underwater Explosion,"* Computer & Structure Journal 82(2004) 2211-2219.
2. Scandrett, C. L., Shin, Y. S., et al, *"Cancellation techniques in underwater scattering of acoustic signals,"* Journal of Sound and Vibration, 272 (2004) 513-537.
3. Shin, Y. S. and Schneider, N., *"Ship Shock Trial Simulation of USS Winston S. Churchill (DDG81): Part I: Modeling and Simulation Strategy, Part 2: Surrounding Fluid Volume Effect"* Proceedings of the 74th Shock and Vibration Symposium, San Diego CA, 27-31 October, 2003. (Submitted for publication in Journal of Shock and Vibration)
4. Shin, Y. S. and Ham, I. B. *"Damping Modeling Strategy for Naval Ship System,"* Proceedings of the 74th Shock and Vibration Symposium, San Diego CA, 27-31 October, 2003.

Jose O. Sinibaldi
Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.E.	Mechanical Engineering	Cooper Union	1992
M.E.	Mechanical Engineering	Cooper Union	1995
M.S.	Aerospace Engineering	University of Michigan	1995
Ph.D.	Aerospace Engineering	University of Michigan	1999

NPS Experience

Department of Mechanical and Astronautical Engineering: 3.5 yrs

Research Associate Professor, 2006-Present, full-time appointment. Research Assistant Professor, 2003-2006, full-time appointment. Chair, *nanoMEMS* committee 2003-2005.

Department of Aeronautics and Astronautics: 4 yrs

Research Assistant Professor, 2001-2003, full-time appointment. ONR Postdoctoral Fellow, 1999-2001, full-time appointment.

Areas of research:

Advanced Air Breathing Propulsion, Gasdynamics and Detonation Physics, Imaging Laser Diagnostics for Combustion, and micro-Acoustics

Areas of teaching:

Fluid Dynamics, Heat Transfer, Experimental High-Temperature Gasdynamics

Other Related Work Experience

None

Consulting and Patents

None

Professional Registration

None

Principal Publications of Last Five Years

Pulsed and Continuous Detonations, Edited by G. Roy, S. Frolov, and J. Sinibaldi, Moscow: TORUS PRESS Ltd., ISBN 5-94588-040-X (2006)

Wang, F. Liu, J.B., Sinibaldi, J., Brophy, C., Kuthi, A., Jiang, C., Ronney, P., and Gundersen, M.A., "Transient Plasma Ignition Of Quiescent And Flowing Air/Fuel Mixtures," *IEEE Transactions on Plasma Science*, Volume 33, Issue 2, Page(s):844 – 849 (2005)

Sinibaldi, J.O., Driscoll, J.F., Mueller, C.J., Donbar, J.M., and Carter, C.D., "Propagation Speeds and Stretch Rates Measured Along Wrinkled Flames to Assess the Theory of Flame Stretch," *Combustion and Flame*, 133, 323, (2003)

Scientific and Professional Society Memberships

Member of the American Institute for Aeronautics and Astronautics, 1992-present.
Member of the American Physical Society, 2005-present

Honors and Awards

NPS Outstanding Research Achievement, 2003

Institutional and Professional Service in Last Five Years
None

Professional Development Activities in Last Five Years
None

William A Solitario
Visiting Professor of the Practice of Systems Engineering
Naval Postgraduate School

Education

B.S. Chemical Engineering The City College of New York 1962

Graduate Courses Economics and Systems Engineering UCLA and UC Long Beach 1964

NPS Experience

Visiting Professor 2003 to present
Northrop Grumman Ship Systems Chair

Wayne E. Meyer Institute
Systems Engineering Department

Currently:
Visiting Professor of the Practice of Systems Engineering

Other Related Work Experience

Northrop Grumman Ship Systems/Litton Industries

Director of Technology Development

Engineering
Director of Technology Development

Forty years of shipbuilding experience starting as a Systems Engineer during the LHA, Tarawa and DD963, Spruance proposals and systems design in the late 1960's: *Director of Engineering Test and Trials* and *Director of Design Engineering* during the system and detail design of the Spruance, Kidd and Ticonderoga Class Destroyers and Cruisers. The Design Directorate consisted of 800 professionals in the shipbuilding disciplines of Naval Architecture, Marine Engineering, Electrical Engineering, Combat Systems Integration and Integrated Logistics Support.
Responsible for the System and Detail Design, including the procurement specifications and logistic support package, associated with three major combatant classes built by Ingalls Shipbuilding.

Director of Research and Development during the development and application of composite and integrated topside initiatives, as well as superconducting motor and fuel cell technologies.

Business Development

Marketing Director.

Domestic and international market assignments including new combatant designs as well as floating petrochemical modules.

TRW Systems and **North American Rockwell**

Systems Engineer on aerospace programs ranging from the Apollo Program to the Minuteman Missile Program

Consulting and Patents

none

Professional Registration

none

Principal Publications of Last Five Years

1. Solitario ,W. A., "Advanced Enclosed Mast System, " Signature Management: The Pursuit of Stealth, SMI Conference Proceedings London, 13 March 2003

2. Solitario, W.A., " Integrated Topside Demonstration System, " Stealth Conference Proceedings SMI, London March 2004

3. Solitario, W.A. ,King, J.H., " The Low Observable Stack Project," SMI Stealth Conference Proceedings, London, April 11, 2005

4. Bean, J, Shebalin, P,., Solitario, W. "System Engineering a Naval Railgun" 13th Annual EML Symposium Proceedings, Potsdam,(Berlin) Germany, May 22-25, 2006

Scientific and Professional Society Memberships

The American Society of Naval Engineers ASNE 20 years

The Society of Naval Architects and Marine Engineers SNAME 30 Years, (last year 2003)

International Council on Systems Engineering, INCOSE 2 Years

Honors and Awards

none

Institutional and Professional Service in Last Five Years

none

Professional Development Activities in Last Five Years

none

Oleg A. Yakimenko
Research Associate Professor of Mechanical and Astronautical Engineering
Naval Postgraduate School

Education

B.S.	Computer Science	MIPT*	1983
M.S.	Aeronautical Engineering	MIPT*	1986
M.S.	Operations Research	AFEA&	1988
M.S.	Business Administration	Russian-American University	1995
Ph.D.	Aeronautical Engineering	AFEA&	1991
Ph.D.	Operations Research	Russian Academy of Sciences	1996

* Moscow Institute of Physics and Technology, Moscow Russia
& Air Force Engineering Academy, Moscow Russia

NPS Experience

Employment details:

- Research Associate Professor, 2003-present: Dept. of Mechanical and Astronautical Engineering, NPS, full-time appointment;
- Research Associate Professor, 2001-2003, Dept. of Aeronautics and Astronautics, NPS, full-time appointment;
- National Research Council (NRC) Senior Research Associate, 1998-2001, full-time appointment;
- Full Professor, 1996-1998, full-time appointment, AFEA;
- Associate Professor, 1993-1996, full-time appointment, AFEA;
- Assistant Professor, 1991-1993, full-time appointment, AFEA;
- Lecturer, 1988-1991, full-time appointment, AFEA;
- Senior Engineer, 1986-1988, part-time appointment, AFEA.

Areas of research:

Guidance, Navigation and Control of Unmanned Air Vehicles, Guided Weapons and Parachutes; Cooperative Control and Combat Maneuvering of Multi-Vehicle Formations; Flight Mechanics and Trajectory Optimization; Real-Time Avionics Systems and Flight Controls; Modeling and Simulation of Mechanical Systems; Human Factors.

Areas of teaching:

Flight Mechanics; Systems Dynamics and Control; Classical and Modern Control; Optimal Control; Avionics and Integrated Navigation Systems; Introductory Gas Dynamics; Introductory Hydrodynamics; Applied Aerodynamics; Computer-Aided Design; Digital Computations and Numerical Analysis; Human Factors and Ergonomics; Operations Research and Applied Optimization

Other Related Work Experience

Consultant, Mikojan and Sukhoy Design Bureaus, 1988-1998.

Active Duty, Russian Air Force, made a Colonel in 1998;

Consulting and Patents

Yakimenko O.A., Shangin D.M., Potanin Yu.P., "High G-load maneuvering manner," Russian Patent No.4542314/04725, Issued October 15, 1991.

Yakimenko O.A., Potanin Yu.P., "High G-load maneuvering manner," Russian Patent No.4530958/23, Issued April 9, 1990.

Professional Registration

None

Principal Publications of Last Five Years

- Hespanha J., Yakimenko O., Kaminer I., Pascoal A., "Linear Parametrically Varying Systems with Brief Instabilities: An Application to Integrated Vision / IMU Navigation," IEEE Transactions on Control Systems Technology, vol.40, №3, 2004, pp.889-902.
- Yakimenko O., Dobrokhodov V., Kaminer I., "Synthesis of Optimal Control and Flight Testing of Autonomous Circular Parachute," AIAA Journal of Guidance, Control, and Dynamics, vol.27, №1, 2004, pp.29-40.
- Dobrokhodov, V.N., Yakimenko O.A, Junge, C.J., "Six-Degree-of-Freedom Model of a Controlled Circular Parachute", AIAA Journal of Aircraft, vol.40, №3, 2003, pp.482-493.
- Yakimenko O.A., Kaminer I.I., Lentz W.J., Ghyzel P.A., "Unmanned Aircraft Navigation for Shipboard Landing using Infrared Vision," IEEE Transactions on Aerospace and Electronic Systems, vol.38, №4, 2002, pp.1181-1200.
- Yakimenko O., Berlind R., and Albright C., "Automated Air Drop Video Data Reduction and Air Delivery Payload Position Estimation," Proceedings of the 9th IEEE International Conference on Control, Automation, Robotics and Vision (ICARCV 2006), Singapore, Singapore, December 5-8, 2006.
- Yakimenko O., "Direct Method for Real-Time Prototyping of Optimal Control," Proceedings of the International Conference Control 2006, Glasgow, Scotland, August 30 - September 11, 2006.

Scientific and Professional Society Memberships

Associate Fellow of the American Institute of Aeronautics and Astronautics, 1999-present

Associate Fellow of the Russian Academy of Sciences of Aviation and Aeronautics, 1998-present

Scientific Advisor of the Russian and International Engineering Academy, 1996-present

Honors and Awards

National Research Council, Fellowship for Scientific and Technological Exchange, 2000;

Society of Automotive Engineers, World Aviation Congress Best Paper Award, 2000;

National Research Council, Fellowship for Scientific and Technological Exchange, 1999;

Institute of Electrical and Electronics Engineers, International Training and Education Conference Best Paper Award, 1999;

Mikojan Design Bureau, Certificate of Recognition, 1999;

National Research Council, Fellowship for Scientific and Technological Exchange, 1998;

Institutional and Professional Service in Last Five Years

AIAA Progress in Astronautics and Aeronautics Series Editorial Board member, American Institute of Aeronautics and Astronautics, 2006-present

Aerodynamic Decelerator Systems Technical Committee member, American Institute of Aeronautics and Astronautics, 2006-present

Professional Development Activities in Last Five Years

System Engineering Fundamentals, Instructor: Dr. John Hsu (The Boeing Company), American Institute of Aeronautics and Astronautics, Reno, NV, January 2006;

Modeling of Six Degrees of Freedom: Missile and Aircraft Simulations, Instructor: Dr. Peter Zipfel (University of Florida), American Institute of Aeronautics and Astronautics, Reno NV, January 2006;

AGI's STK 7, Dr. Kevin Flood (AGI), San Jose, CA, January 2006.

Appendix I-D

Evaluation Forms

Appendix I-D-1

NPS MSME Degree Program
Supervisor Survey

Please complete the following survey to help the Mechanical Engineering Department at NPS assess the appropriateness of our Program Objectives and to what degree our graduates meet these objectives and serve your needs.

5 = STRONGLY AGREE
4 = AGREE
3 = NO STRONG OPINION
2 = DISAGREE
1 = STRONGLY DISAGREE

Name of person completing form: _____
Title of person completing form: _____

I. Objectives

The overall educational objective of the Mechanical Engineering program is to support the NPS mission by producing graduates who have knowledge and technical competence, at the advanced level in Mechanical Engineering, in support of national security.

In order to achieve this goal, the specific objectives are to produce graduates who have:

1. The ability to identify, formulate, and solve technical and engineering problems in Mechanical Engineering and related disciplines using the techniques, skills and tools of modern practice, including modeling and simulation. These problems may include issues of research, design, development, procurement, operation, maintenance or disposal of engineering components and systems for military applications.
2. The ability to provide leadership in the specification of military requirements, in the organization and performance of research, design, testing, procurement and operation of technically advanced, militarily effective systems. The graduate must be able to interact with personnel from other services, industry, laboratories and academic institutions, and be able to understand the role that engineering and technology have in military operations, and in the broader national and global environment.
3. The ability to communicate advanced technical information effectively in both oral and written form.

Please help us evaluate the appropriateness of these Program Objectives:

These objectives serve my needs:

Strongly Agree O O O O O Strongly Disagree

Please provide any comments on the appropriateness of these Program Objectives and any changes that would better align our goals with your needs:

II. Program Outcomes

Based on your overall experience with MSME graduates from NPS, please provide your opinion of their preparedness and ability to support your programs. Specifically, rate them in the following four categories:

1. NPS/MSME graduates demonstrate advanced knowledge in Mechanical Engineering and have technical competence over the expected breadth of technical subjects.
   Strongly Agree O O O O O Strongly Disagree

2. NPS/MSME graduates demonstrate the ability to communicate effectively technical information both orally and in written form.
   Strongly Agree O O O O O Strongly Disagree

3. NPS/MSME graduates have the ability to independently identify, formulate, and solve technical and engineering problems in Mechanical Engineering.
   Strongly Agree O O O O O Strongly Disagree

4. NPS/MSME graduates have the ability to apply technical knowledge in a leadership role related to national security.
   Strongly Agree O O O O O Strongly Disagree

5. Please provide any comments about your perceptions of NPS/MSME graduates, particularly with respect to their academic preparation. Comments on the appropriateness of our Program Outcomes and suggestions for improvement are particularly welcomed.

Appendix I-D-2

Checklist for BSME Degree Equivalency

The Department of Mechanical Engineering at the Naval Postgraduate School is accredited at the Master of Science degree level through the Accreditation Board of Engineering and Technology. Students earning a Master of Science in Mechanical Engineering or a Degree of Mechanical Engineer at NPS, must either have attained an ABET accredited undergraduate Mechanical Engineering degree, or earned the equivalency of a Bachelor of Science Degree in Mechanical Engineering. Some courses from the student's undergraduate institution may count toward that equivalency, even though his final undergraduate may not have been in Mechanical Engineering. Some courses taken at NPS may also be applied to meeting this undergraduate equivalency. This checklist is provided to document the completion of that equivalency.

Student Name:
E-mail Address:
Month/year Enrolled:

I certify that the information on this form is correct.

Student Signature: _____

Undergraduate Institutions Attended:

INSTITUTION	DATE		DEGREE EARNED
	From	To	
	From	To	
	From	To	

Do you already have an ABET accredited BSME degree? Check one response only.

☐ **YES - Skip the rest of this form. Go directly to the MSME Checklist form.**
☐ **NO - Complete the rest of this form. Then proceed to the MSME Chacklist.**

We certify that this student has met the minimum requirements for the equivalency of the BSME degree.

_____ _____
ME Program Officer, Date **ME Academic Associate, Date**

_____
ME Department Chair, Date

I. Mathematics

A. A minimum of 24 quarter credit hours or 16 semester credit hours of college-level mathematics is required. List all college-level mathematics courses passed with a grade of C or better. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours.

University	Course Number	Title	Quarter Credit Hours	Semester Credit Hours
		Quarter Credit Hours Sub Total		
		Semester Credit Hours Sub Total		

Total Math Credits (Qtr Credits + (1.5 × Sem Credits)):
(24 required)

B. For each of the following mathematics subjects that has been studied, indicate the college or university where the subject was studied, the course number, and the course title. All courses must have been passed with a grade of C or better.

Subject	University	Course Number	Course Title
Multivariable Calculus			
Differential Equations			
Linear Algebra			
Statistics			

II. Sciences

A. Basic Science

A minimum of 24 quarter credit hours or 16 semester credit hours of college-level basic science is required. Studies must inlcude both general chemistry and calculus based physics. List all college-level basic science courses passed with a grade of C or better. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours.

University	Course Number	Title	Quarter Credit Hours	Semester Credit Hours
		Quarter Credit Hours Sub Total		
		Semester Credit Hours Sub Total		

Total Basic Science Credits (Qtr Credits + (1.5 × Sem Credits)): **(24 required)**

III. General Education

A. A minimum of 24-quarter credit hours or 16 semester credit hours is required in subjects other than mathematics, basic science, computer science, and engineering. These general education courses should complement the technical content of the curriculum. Examples of traditional subjects in these areas are philosophy, religions, history, literature, fine arts, sociology, psychology, political science, anthropology, economics, and foreign language. Examples of non-acceptable courses include accounting, industrial management, finance, personnel administration, engineering economy, physical education and military science and training.

University	Course Number	Title	Quarter Credit Hours	Semester Credit Hours
		Quarter Credit Hours Sub Total		
		Semester Credit Hours Sub Total		

Total General Education Credits (Qtr Credits + (1.5 × Sem Credits)):
(24 required)

IV. Engineering Science and Engineering Design

A minimum of 72 quarter credit hours or 48 semester credit hours of engineering science and design are required. Of those 54 quarter credit hours or 36 of the semester hours must be specifically in Mechanical Engineering and include both Thermal and Mechanical Systems.

A. List all **Mechanical Engineering** courses passed with a grade of C or better. A minimum of 54 quarter hours or 36 semester hours are required. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours (weekly lecture hours plus one half of lab hours). Courses must include Thermal Systems and Mechanical Systems.

University	Course Number	Title	Quarter Credit Hours	Semester Credit Hours
		Quarter Credit Hours Sub Total		
			Semester Credit Hours Sub Total	

Total Mechanical Engr Credits (Qtr Credits + (1.5 × Sem Credits)): **(54 required)**

B. List all engineering courses **not** in Mechanical Engineering passed with a grade of C or better. For each course, indicate the college or university where the course was taken, the course number, the course title, and the number of credit hours. Combined with the above Mechanical Engineering Courses, a minimum of 72 quarter hours or 48 semester hours is required.

University	Course Number	Title	Quarter Credit Hours	Semester Credit Hours
		Quarter Credit Hours Sub Total		
		Semester Credit Hours Sub Total		

Total Non-Mech Engineering Credits (Qtr Credits + (1.5 × Sem Credits)):

C. Also, DoD officers are entitled to certain college credit based on service schools attended (Nuclear Power School, DCA School, MPA School, etc.) If you have attended any technical DoD schools, including in a prior enlisted status, list those service schools by Title. See your Program Officer for evaluation of those courses based on publications by the American Council on Education. If applicaple, the Engineering Science Hours may be added to the total as identified below.

Service School Title	Course Number	Mech Engr Semester Credit Hours	Eng Science Semester Credit Hours
Total Service Related Mechanical Engr Science Credit Hours			
Convert Semester Hours to Quarter Hours (1.5 x Sem Hours): Mech Engr Science Service Qtr Credit Hours			
Total Service Related Engr Science Credit Hours			
Convert Semester Hours to Quarter Hours (1.5 x Sem Hours): Engr Science Service Qtr Credit Hours			

D. Total Engineering Science Credit Hours:

Total Mechanical Engineering Science Credits (Sect IV. A. Previous Pages + Service Related Mechanical Engineering Science Hours Above):

(54 required)

Total Non-Mech Engineering Credits (Sect IV. B. Previous Pages + Service Related Non-Mechanical Engineering Science Hours Above):

Total Engineering Science Credits (sum above):

(72 required)

V. A major design experience at the advanced undergraduate level is required. It shall be based on the knowledge and skills acquired in earlier course work and incorporating engineering standards and realistic constraints. Briefly describe your major design experience. This requirement can be satisfied by completing a course with a major design experience that has been previously approved by the NPS ME department curriculum committee.

Appendix I-D-3

Checklist for MSME Degree

The Department of Mechanical Engineering at the Naval Postgraduate School is accredited at the Master of Science degree level through the Accreditation Board of Engineering and Technology and the Western Association of Schools and Colleges. Those accreditations are based on degree requirements set forth by the Mechanical Engineering Department at NPS and approved by the NPS Academic Council. This checklist is provided to document the completion of those degree requirements.

Student Name:

E-mail Address:

Month/year Enrolled:

I certify that the information on this form is correct.

Student Signature: _____

We certify that this student has met the minimum requirements for the MSME degree.

_____ _____

ME Program Officer, Date **ME Academic Associate, Date**

_____

ME Department Chair, Date

1. BSME Degree / Equivalence Requirement satisfied by (fill in one):

BSME degree from: Month/Year

BSME Equivalence from NPS. Date (from completed checklist)

2. **Thesis Requirement:**

Number of Thesis Credits (16 minimum)

Thesis Advisor:

Thesis Title:

3. **Competancy / Track Requirement:**

In completion of the requirements for a Master of Science Degree in Mechanical Engineering, a specific Specialization Track within the discipline of Mechanical Engineering must be delcared. Identify the specialization track completed below:

☐ **Thermal Fluid Sciences** Must Complete Minimum of Two Courses Listed Below		
Course Number	**Course Title**	**Taken**
ME4160	Applications of Heat Transfer	☐
ME4161	Conduction of Heat Transfer	☐
ME4162	Convection of Heat Transfer	☐
ME4163	Radiation Heat Transfer	☐
ME4202	Compressible Flow	☐
ME4211	Applied Hydrodynamics	☐
ME4220	Viscous Flow	☐
ME4240	Advanced Topics in Fluid Dynamics	☐

☐ **Shock and Vibrations** Must Complete Minimum of Two Courses Listed Below		
Course Number	**Course Title**	**Taken**
ME4522	Finite Element Methods in Structural Dymanics	☐
ME4525	Naval Ship Shock Design and Analysis	☐
ME4731	Engineering Design Optimization	☐
ME4550	Random Vibrations	☐

☐ **Solid Mechanics** Must Complete Minimum of Two Courses Listed Below		
Course Number	**Course Title**	**Taken**
ME4612	Advanced Mechanics of Solids	☐
ME4613	Finite Element Methods	☐
ME4620	Theory of Continuous Media	☐

☐ **Dynamic Systems and Control** Must Complete Minimum of Two Courses Listed Below		
Course Number	**Course Title**	**Taken**
ME4731	Engineering Design Optimization	☐
ME4811	Multivariable Control of Ship Systems	☐
ME4812	Fluid Power Control	☐
ME4821	Advanced Dynamics	☐
ME4823	Dynamics of Marine Vehicles	☐
ME4825	Marine Propulsion Control	☐

☐ **System Design** Must Complete Minimum of Two Courses Listed Below		
Course Number	**Course Title**	**Taken**
TS4001	Integration of Naval Engineering Systems	☐
TS4003	Ship Design Integration	☐
ME4731	Engineering Design Optimization	☐

☐ **Materials Science** Must Complete Minimum of Two Courses Listed Below		
Course Number	**Course Title**	**Taken**
MS4215	Phase Transformation	☐
MS4312	Characterization of Advanced Materials	☐
MS4811	Mechanical Behavior of Engineering Materials	☐
ME4613	Finite Element Methods	☐
MS4822	Engineering and Science of Composite Materials	☐

☐ **Exception Track** Must Include a Minimum of Two Courses in a Specialization Track Approved by both the Department Chairman and Academic Associate		
Course Number	**Course Title**	**Taken**
		☐
		☐
		☐
		☐
		☐
		☐

4. Course Credit Requirements:

The Master of Science degree in Mechanical Engineering requires at least 32-quarter hours of graduate level credits. At least 12-quarter hours must be at the 4000 level and at least 24 quarter hours must be in courses offered by the Mechanical Engineering Department. Identify courses to be counted toward the MSME degree:

NOTE: NO COURSES COUNTED TOWARD A BSME EQUIVALENCY MAY BE COUNTED TOWARD MSME GRADUATION REQUIREMENTS

A. List 4000 Level Courses applied toward MSME degree.

Course Number	**Course Title**	**Quarter Hours**
Total 4000 Level Hours		**(12 required)**

B. List All 3000 and 4000 Mechanical Courses applied toward MSME. Include duplicates of Mechanical Engineering Courses listed above.

Course Number	**Course Title**	**Quarter Hours**

Total Mechanical Engineering 3000 and 4000 level courses		**(24 required)**

C. List all 3000 and 4000 level courses applied toward MSME degree (Mechanical Engineering non-Mechanical Engineering graduate level courses):

Course Number	**Course Title**	**Quarter Hours**
Total ALL MSME degree 3000 and 4000 level courses		**(32 required)**

Appendix I-D-4

MSME Degree Program
Thesis Evaluation and Rating Form

Outcome 3) Thesis: MSME degree recipients will have completed a thesis that demonstrates competence at the advanced level in one of the available disciplines of Mechanical Engineering.

Student		**Advisor**	
Curriculum		**Co-advisor**	
Classification		**Reader**	
Title:			

The ABET accredited MSME Degree Program the above-student is completing requires the student to complete a thesis that demonstrates advanced level competence in one of the available disciplines of Mechanical Engineering. Accreditation criteria require that we continually assess our success in achieving program outcomes and feed back the results of our assessment to improve the program outcomes. Please provide your assessment of the level of success for this student relative to Outcome 4, based on the student's written thesis, the thesis presentation, and plans (if known) for subsequent publication involving this student.

1. Advanced Level Competence		
Rating		**Comments**
	5. Outstanding	
	4. Excellent	
	3. Satisfactory	
	2. Fair	
	1. Poor	

2. Scientific or Technical Merit of the Thesis		
Rating		**Comments**
	5. Outstanding	
	4. Excellent	
	3. Satisfactory	
	2. Fair	
	1. Poor	

3. Defense Relevance		
Rating		**Comments**
	5. Outstanding	
	4. Excellent	
	3. Satisfactory	
	2. Fair	
	1. Poor	

4. Written Communication		
Rating		**Comments**
	5. Outstanding	
	4. Excellent	
	3. Satisfactory	
	2. Fair	
	1. Poor	

5. Oral Communication		
Rating		**Comments**
	5. Outstanding	
	4. Excellent	
	3. Satisfactory	
	2. Fair	
	1. Poor	

6. Reporting in Archival Literature
Please list citations for journal articles, conference presentations, conference publications, invention disclosures, software or other scholarly products related to the student's work. Indicate if planned, submitted, accepted or published.

Rater Information: Rater is (please check)	
	Advisor
	Co-Advisor
	Reader
	Chairman
Date:	
Signature:	

Appendix I-D-5

MSME DEGREE PROGRAM
GRADUATING STUDENT EXIT SURVEY

Questionnaire:

1. Name:
2. Service:
3. MOS/Designator:
4. Grad date (mm/yy):

The ABET accredited MSME Degree Program you are now completing is designed to achieve the program outcomes listed below. Accreditation criteria require that we continually assess our progress in achieving the outcomes and provide the results of our assessment as feedback to the faculty for the purpose of improving the program. Please provide your assessment of the level of success for each of the program objectives and outcomes.

5 = STRONGLY AGREE
4 = AGREE
3 = NO STRONG OPINION
2 = DISAGREE
1 = STRONGLY DISAGREE
0 = NO COMMENT

Program Objectives

The overall educational objective of the Mechanical Engineering program is to support the NPS mission by producing graduates who have knowledge and technical competence, at the advanced level in Mechanical Engineering, in support of national security.

In order to achieve this goal, the specific objectives are to produce graduates who have:

1. The ability to identify, formulate, and solve technical and engineering problems in Mechanical Engineering and related disciplines using the techniques, skills and tools of modern practice, including modeling and simulation. These problems may include issues of research, design, development, procurement, operation, maintenance or disposal of engineering components and systems for military applications.

2. The ability to provide leadership in the specification of military requirements, in the organization and performance of research, design, testing, procurement and operation of technically advanced, militarily effective systems. The graduate must be able to interact with personnel from other services, industry, laboratories and academic institutions, and be able to understand the role that engineering and technology have in military operations, and in the broader national and global environment.

3. The ability to communicate advanced technical information effectively in both oral and written form.

5 = Strongly Agree, 4 = Agree, 3 = No Strong Opinion, 2 = Disagree, 1 = Strongly Disagree, 0 = No Comment

Rate the program relative to the stated objectives:

	5	4	3	2	1	0
1. The program enabled me to meet objective #1	☐	☐	☐	☐	☐	☐
2. The program enabled me to meet objective #2	☐	☐	☐	☐	☐	☐
3. The program enabled me to meet objective #3	☐	☐	☐	☐	☐	☐

Please provide any comments on the appropriateness of these objectives below:

Program Outcomes:

1. Graduating students will have knowledge and skills equivalent to an ABET-accredited BSME.

2. Graduating students will have advanced knowledge in Mechanical Engineering and competence in one of the available specialized disciplines of Mechanical Engineering.

3. Graduating students will have a high level of communication skills including technical writing and oral presentation.

4. Graduating students will have the ability to independently identify, formulate and solve technical and engineering problems in Mechanical Engineering.

5. Graduating students will have the ability to apply technical knowledge in a leadership role related to national security.

5 = Strongly Agree, 4 = Agree, 3 = No Strong Opinion, 2 = Disagree, 1 = Strongly Disagree, 0 = No Comment

Rate the program relative to the stated outcomes:
The program enabled me to:

1. Meet outcome #1:	5	4	3	2	1	0
1.1 Have a solid grasp on statistics	☐	☐	☐	☐	☐	☐
1.2 Understand the process of design	☐	☐	☐	☐	☐	☐
1.3 Have an adequate foundation for study at the	☐	☐	☐	☐	☐	☐

advanced level.

1.4 Apply knowledge of mathematics, science, and engineering.	☐	☐	☐	☐	☐	☐
2. Meet outcome #2:	5	4	3	2	1	0
2.1 Achieve advanced competence in my specialization field	☐	☐	☐	☐	☐	☐
2.2 Achieve advanced knowledge of analytical/numerical tools.	☐	☐	☐	☐	☐	☐
2.3 Achieve advanced knowledge of modern laboratory techniques.	☐	☐	☐	☐	☐	☐
3. Meet outcome #3:	5	4	3	2	1	0
3.1 Make a contribution to the scientific or technical literature.	☐	☐	☐	☐	☐	☐
3.2 Perform thesis research of benefit to the military	☐	☐	☐	☐	☐	☐
3.3 Do an effective and clear technical presentation	☐	☐	☐	☐	☐	☐
3.4 Have the ability to carry out further original research in my field.	☐	☐	☐	☐	☐	☐
4. Meet outcome #4	☐	☐	☐	☐	☐	☐
5. Meet outcome #5	☐	☐	☐	☐	☐	☐

Please provide any comments on the appropriateness of these outcomes below:

Did you take the PE Exam? select one. Yes

If YES, did you pass? Yes

Additional questions:

1. What changes would you recommend in the refresher and transition phase of the curriculum in order to strengthen student preparation for the MSME program?

2. What program improvements, if any, are needed to guarantee that students are able to attain competence at the advanced level in their MSME programs?

3. Of the courses in your study program, which were most important to your goals?

4. Please give your opinion of the thesis process and the value of your thesis experience.

5. Do you think the student-faculty interaction is good within Mechanical Engineering and did it contribute to or detract from your educational experience?

6. Where the laboratories, library, and computing facilities sufficient to support high quality learning experience?

Other Comments:

ALL OF US IN THE MECHANICAL AND ASTRONAUTICAL ENGINEERING DEPARTMENT WISH YOU SUCCESS IN ALL YOUR FUTURE ENDEAVORS.

DEPARTMENT OF THE NAVY
NAVAL POSTGRADUATE SCHOOL
1 UNIVERSITY CIR
MONTEREY CA 93943-5000

IN REPLY REFER TO:

29 June, 2007

Richard A. Cosier
Chair of The Maintenance of Accreditation Committee (MAC)
AACSB International
777 South Harbour Island Boulevard, Suite 750
Tampa, Florida 33602
USA

Dear Chair Cosier:

By means of this letter, **The Graduate School of Business & Public Policy at the Naval Postgraduate School** is applying for maintenance of AACSB International business accreditation for our master's degree programs.

Attached are:
1. The Maintenance Review Application including the list of the degree programs that we offer.
2. The list of our Comparison Groups, including Comparable Peers, Competitive Group, and Aspirant Group.

We request a review in **Winter** of **2010.**

Sincerely,

L A Ferrari FOR:

Daniel T. Oliver, President, Naval Postgraduate School

L A Ferrari

Leonard Ferrari, Provost/Vice-President, Naval Postgraduate School

FOR:

Robert N. Beck, Dean, Graduate School of Business & Public Policy, Naval Postgraduate School

Business Maintenance Review Application

Please send the requested information to the Maintenance of Accreditation Committee (MAC). The MAC will forward the information to the Accreditation Coordinating Committee (ACC) to rule on Eligibility Requirements for AACSB International Accreditation.

(Please see *Eligibility Procedures and Standards for Business Accreditation, January 2007* at http://www.aacsb.edu/accreditation/business/STANDARDS.pdf)

Please request the Accounting Maintenance Review Application when filing for accounting accreditation.

<table>
<tr><td colspan="4">Name of Institution
Naval Postgraduate School (NPS)</td></tr>
<tr><td colspan="4">Name of Business Unit
Graduate School of Business & Public Policy (GSBPP)</td></tr>
<tr><td colspan="3">Mailing Address
555 Dyer Road, Ingersoll Hall</td><td>Campus Box or Mail Code
Code GB</td></tr>
<tr><td>City
Monterey</td><td>State/Providence/Region
CA</td><td>Postal Code
93943</td><td>Country
United States of America</td></tr>
<tr><td>Telephone Number (include country/city code or area code)
831-656-2161</td><td colspan="2">Fax Number (include country/city code or area code)
831-656-7633</td><td>E-Mail Address
dmoses@nps.edu
rnbeck@nps.edu</td></tr>
<tr><td colspan="4">Name/Title of Business Unit Head
Mr. Robert N. Beck, Dean</td></tr>
<tr><td colspan="4">Name/Title of Chief Executive Officer/President/Chancellor
President Daniel T. Oliver, VADM (ret), President</td></tr>
<tr><td colspan="4">Name/Title of Provost/Academic Vice President
Leonard A. Ferrari, Ph.D., Provost/Vice-President</td></tr>
</table>

APPLICATION SUBMISSION INFORMATION

Please submit this application and the accompanying cover letter as follows:

1. **Electronically:** Submit via email one set of all materials to the Maintenance of Accreditation Committee Chair at MAC@aacsb.edu. If applicable, this should include a link to course catalogs available online.

2. **Hard copy:** Submit one (1) hard copy set of all materials, including course catalogs, to:

MAC Chair
C/o AACSB International
777 South Harbour Island Blvd., Suite 750
Tampa, Florida 33602-5730
United States

GSBPP - DIVERSITY AND ETHICS IN CONTEXT

The Graduate School of Business and Public Policy (GSBPP), at the Naval Postgraduate School (NPS), is a part of the U.S. Navy, the U.S. Department of Defense, and of the U.S. federal government. Our core mission is to serve the graduate education needs of these agencies. Students are predominantly active duty military officers or federal government civilians. Faculty are federal government employees. Matters of Diversity and Ethics within GSBPP are influenced significantly by GSBPP's mission, and its organizational (cultural) context as a graduate school operating within a larger university and defense and governmental setting.

1. DIVERSITY: Consistent with your mission and within your cultural context, describe how diversity in your business programs is demonstrated.

GSBPP Faculty Diversity

GSBPP Diversity Philosophy: While GSBPP does not follow an articulated plan for achieving diversity in the faculty composition, we nonetheless have a serious commitment to achieving and maintaining a high level of faculty diversity. We do not set targets or numerical goals, but we actively strive to provide a supportive and positive atmosphere where diversity among the faculty and staff can thrive and grow. We have a shared philosophy among the School's leadership that guides our efforts in the area of diversity management. This philosophy requires and involves equitable recognition and reward for one's contributions, openness to individual difficulties (with students, programs, etc.) and sensitivity to challenges that might affect one's feeling of effectiveness in their jobs and professional lives. We believe this is a continuing accomplishment in the School. We have no "second class citizens". Faculty members are recognized, treated and valued as faculty; not as "Adjunct" or "Military" or "Tenure Track"; not as "junior" or "senior"; and, certainly, not as "minorities", "women" or "handicapped".

Mission and Faculty: In terms of faculty recruitment and our efforts to support faculty diversity, we often find that the uniqueness of our academic mission, the specializations represented in our academic fields, and our focus on defense-relevance, all work against us. In many instances, the types of experience and military-relevant perspective we seek in a faculty member dramatically restrict the total pool of applicants, and the possibility of finding a well-qualified diversity hire. For example, we have an almost a constant recruiting effort in the Acquisition area. The necessity of a relevant experiential background in the area often means that plausible candidates will come principally from retired military officers or senior defense civilian employees. There are few minorities, women, and almost no handicapped candidates in these fields. While there has been an increasing number of women and minorities among the officer corps of the military, their percentages do not mirror the general public. There are somewhat analogous limitations when seeking faculty candidates in the Transportation and Logistics area, the Manpower area and the Defense Financial Management area. Nonetheless, we encourage all 'diversity candidates' in these specialized fields, using our current faculty

members' contacts and taking advantage of the fact that the communities from which qualified candidates derive are small and usually well known to our senior faculty in these fields.

Faculty Recruiting and Hiring: Because of the curricular and discipline diversity in the School, major responsibility for the development, implementation and monitoring of our diversity efforts remains vested in the Dean, with the assistance of the Associate Deans and the five faculty members acting as Area Chairs. Faculty recruitment efforts are largely carried out by the faculty group involved, with the designated Area Chair as the lead person. The Senior Associate Dean assists the School's leadership team in determining hiring needs, monitoring the recruiting process and candidate hiring recommendations.

The Naval Postgraduate School's administration is actively supportive of the EEO/Affirmative Action efforts of all schools and departments. When GSBPP begins faculty recruitment, the Area Chairs who will lead each search coordinate with the Senior Associate Dean to plan search activities. EEO factors are discussed so that all advertisements and notices bear the proper invitation for attracting a diverse pool of applicants. When applications are received we ensure that women, minorities, or identifiable handicapped individuals are objectively considered. A report is compiled for each search that outlines the pool of applicants in terms of diversity characteristics and that report is included with the hiring requests forwarded to the Dean and Provost for action.

While we have had some difficulties in those fields with small or constrained candidate pools, we have been successful in hiring and retaining diversity faculty in areas where the related candidate pool is large and mature enough to provide many competitive applicants. A table below displays our record of faculty hiring during the past five years, noting three diversity dimensions: Gender, Race/Ethnicity, and Country of Origin.

As indicated in the table, GSBPP has been growing significantly during recent years, with a total of 31 new participating faculty members hired since 2002. About 75% of the new faculty members have been hired as tenure-track faculty. Concerning diversity, 5 (16%) of the new faculty members are from racial/ethnic minorities, 17 (55% are women, and 7 (23%) originate from countries outside of the U.S. Considering all three dimensions, a full 68% of the recently hired participating faculty are diversity faculty.

GSBPP Participating Faculty Hires 2002-2006				
Year of Hire	**Academic Appointment**	**Race / Ethnicity**	**Gender**	**Origin**
2002	Assistant Professor	White	Female	US
2002	Assistant Professor	White	Female	US
2002	Professor	White	Male	US
2002	Assistant Professor	White	Female	US
2002	Assistant Professor	White	Female	US
2002	Lecturer	White	Female	US
2002	Lecturer	White	Male	US
2002	Lecturer	White	Female	US
2003	Assistant Professor	White	Male	United Kingdom
2003	Assistant Professor	White	Female	Albania
2003	Assistant Professor	Black	Female	US
2003	Assistant Professor	White	Female	US
2003	Professor	White	Male	US
2004	Assistant Professor	Asian	Female	India
2004	Associate Professor	White	Male	US
2004	Associate Professor	White	Male	Brazil
2004	Assistant Professor	White	Female	US
2004	Assistant Professor	White	Female	US
2004	Assistant Professor	White	Female	US
2004	Assistant Professor	Asian	Female	Taiwan
2004	Professor	Asian	Male	India
2004	Assistant Professor	White	Male	US
2004	Lecturer	White	Male	US
2004	Lecturer	Hispanic	Male	US
2004	Lecturer	White	Male	US
2005	Assistant Professor	White	Female	Canada
2005	Senior Lecturer	White	Male	US
2006	Associate Professor	White	Male	US
2006	Assistant Professor	White	Male	US
2006	Assistant Professor	White	Female	US
2006	Lecturer	White	Female	US

Student Diversity

Mission and Student Admissions: The mission of GSBPP is derived from the mission of NPS, as stated by Congress. The mission of GSBPP/NPS is to serve the Nation by educating military officers and DoD civilians in defense-focused business and public policy, by conducting scholarly research in defense management and public policy and by providing intellectual resources for leaders and organizations concerned with national defense management practice and policies.

With a focus on preparing military officers and government civilians for professional positions, NPS and GSBPP, in conjunction with sponsoring agencies, determine admission standards and processes. Admissions standards and processes reflect two dimensions: Academic and Professional. GSBPP/NPS set academic standards for admissions. The Navy, and other sponsoring agencies, select students -- who have met the academic standards -- for admission based on professional and career considerations. Thus admission to GSBPP/NPS is accomplished through the joint efforts of the School and students' sponsors.

During the earlier years of their career, all Navy officers have are initially screened for graduate study, based on their undergraduate academic performance (officer transcripts may be reviewed by the NPS Admissions Office). In addition to the academic admissions standards, U.S. Navy officers are reviewed for selection to graduate school based on their professional performance and promotion potential. Selection boards and Senior Officer Reviews occur annually to select eligible officers. The selection board evaluates both the officer's professional performance in the Navy and his/her prior academic record. Officers selected for graduate study are then offered the opportunity to attend a specific graduate curriculum. No one is ordered to graduate school against his/her will. Similar selection procedures are employed by the other U.S. services and by federal agencies wishing to nominate civilian employees for graduate study.

Diversity in the U.S. Navy: Given the mission and admissions process for GSBPP, diversity among GSBPP students will be significantly influenced by diversity policies within the larger Navy, and the population of officers from which students will come. Diversity is recognized as a strategic goal of the Navy and expressed as Navy policy:

Diversity is a strategic imperative for the United States Navy:

We defend the greatest nation in the world. It is a nation that welcomes, indeed encourages, the active participation of every citizen regardless of race, gender, creed or color - - a democracy founded on the promise of opportunity for all. It is also a nation whose demographic makeup continually changes, reflecting the influx of new immigrants and the growth of minority populations. The Navy must change with it. To the degree we truly represent our democracy, we are a stronger, more relevant armed force.

Diversity is critical to mission accomplishment:

Everyone in our Navy contributes to mission success, and everyone brings to that collective effort unique capabilities and individual talent. How we harness those capabilities and foster that talent bears considerable effect on our ability to successfully accomplish the mission. Like an organization in time of change, we thrive on the infusion of new ideas and the

diversity of thought. This is particularly true today, when understanding the mores, customs, and ideals of diverse cultures, as well as the perspectives of other people, remains critical to winning the long war.

Diversity is a leadership issue, and everyone is a leader:

We will promote and engender a culture that embraces our diversity. Through our communications, education, policies, programs, and conduct, each of us will actively foster work environments where people are valued, respected, and provided the opportunity to reach their full personal and professional potential. We will recruit, develop, educate, and retain leaders from and for all parts of our Navy and nation.

We defend the greatest nation in the world. The strength of our diversity directly and irrefutably helps us do so. The Navy will stay committed to improving that strength.
(US Navy Diversity Policy, Chief of Naval Operations)

Student Demographics: As indicated above, selection of individual students for admission originates with the sponsoring military service or agency, not with NPS. Hence GSBPP/NPS does not have direct influence on the diversity characteristics of students. Student diversity will depend significantly on the diversity characteristics of the wider Navy and Defense community.

Presented here are data on the diversity demographics of GSBPP's resident student population, as compared with the university (NPS) and the wider Navy officer Corp. Broadly speaking, GSBPP student characteristics with respect to Race/Ethnicity and to Gender are reflective of the university and defense community which it serves.

Race/Ethnicity **Comparison of GSBPP / NPS / Navy Officer Corps**			
	GSBPP	**NPS**	**Navy**
Caucasian	73%	78%	81%
African American	12%	7%	8%
Hispanic	7%	6%	6%
Asian	8%	7%	4%
Other	<1%	<1%	1%

Gender **Comparison of GSBPP / NPS / Navy Officer Corps**			
	GSBPP	**NPS**	**Navy**
Male	88%	89%	85%
Female	12%	11%	15%

One way in which the student population in GSBPP will, by design, differ from the officer population in the wider U.S. defense community is through the recruitment and enrollment of international students. Through an admissions and selection process roughly analogous to that used for U.S. students, allied nations may select and send officer students to NPS. Through

various programs, NPS actively seeks enrollment of international officers, and values the range of backgrounds and experiences they bring to the academic experience. Student representation for specific countries varies over time, as does the proportion of GSBPP students from other countries. Currently GSBPP enrolls students from 13 different nations, with international students comprising about 15% of the student population.

Citizenship **Comparison of GSBPP / NPS / Navy Officer Corps**			
	GSBPP	**NPS**	**Navy**
U.S.	85%	84%	~100%
International	15%	16%	

2. ETHICAL BEHAVIOR: Describe the established expectations of the institution or the business programs of the institution for ethical behavior by administrators, faculty, and students.

As a part of NPS, and the Department of the Navy, expectations for ethical behavior for all individuals within GSBPP are influenced and substantially governed by codes of conduct, policies and instructions, laws and regulations, and administrative and disciplinary systems from those institutions. Additionally, as a part of the "military community", GSBPP exists in a context in which codes of behavior are part of the culture. Collectively, the institutions and culture result in an environment deeply conscious of the importance of ethical behavior, and rich with guidance. There is no attempt here to fully describe that environment. Instead, three items are presented here to provide an overview and a sense of ethical conduct expected within GSBPP:

1. The Core Values Charter from the Department of the Navy: This provides the expectations for ethical behavior for all individuals who are part of the U.S Navy organization.
2. A statement of Ethics and Standards for Faculty: This is an excerpt from the NPS Faculty Handbook, a document that encompasses a wide range of guidance and expectations for faculty behavior at the university.
3. A list of Instructions and Policies: This is a partial, but illustrative, list of documents that specify appropriate behavior, and institutional processes, relating to a wide range of activities within GSBPP/NPS.

These items, together, are intended to convey that GSBPP is an organization that holds ethical behavior as a principal value, and that GSBPP operates in an institutional environment that actively encourages ethical behavior.

1. Core Values Charter

As in our past, we are dedicated to the Core Values of Honor, Courage and Commitment to build the foundation of trust and leadership upon which our strength is based and victory is achieved. These principles on which the U.S. Navy and the U.S. Marine Corps were founded continue to guide us today. Every member of the Naval Service - active, reserve, and civilian, must understand and live by our Core Values. For more than two hundred years, members of the Naval Service have stood ready to protect our nation and our freedom. We are ready today to carry out any mission; deter conflict around the globe and, if called upon to fight, be victorious. We will be faithful to our Core Values of Honor, Courage and Commitment as our abiding duty and privilege.

HONOR: I am accountable for my professional and personal behavior. I will be mindful of the privilege I have to serve my fellow Americans. I will:

- *Abide by an uncompromising code of integrity, taking full responsibility for my actions and keeping my word.*
- *Conduct myself in the highest ethical manner in relationships with seniors, peers and subordinates.*
- *Be honest and truthful in my dealings within and outside the Department of the Navy.*
- *Make honest recommendations to my seniors and peers and seek honest recommendations from junior personnel.*
- *Encourage new ideas and deliver bad news forthrightly.*
- *Fulfill my legal and ethical responsibilities in my public and personal life.*

COURAGE: Courage is the value that gives me the moral and mental strength to do what is right, with confidence and resolution, even in the face of temptation or adversity. I will:

- *Have the courage to meet the demands of my profession and the mission entrusted to me.*
- *Make decisions and act in the best interest of the Department of the Navy and the nation, without regard to personal consequences.*
- *Overcome all challenges while adhering to the highest standards of personal conduct and decency.*
- *Be loyal to my nation by ensuring the resources entrusted to me are used in an honest, careful and efficient way.*

COMMITMENT: The day-to-day duty of every man and woman in the Department of the Navy is to join together as a team to improve the quality of our work, our people and ourselves. I will:

- *Foster respect up and down the chain of command.*
- *Care for the professional, personal and spiritual well being of my people.*
- *Show respect toward all people without regard to race, religion or gender.*
- *Always strive for positive change and personal improvement.*
- *Exhibit the highest degree of moral character, professional excellence, quality and competence in all that I do.*

(Office of the Secretary of the Navy)

2. Ethics and Standards of Conduct (NPS Faculty Handbook)

In addition to the expected ethical standards of all faculty in academia, NPS faculty members, as government employees, are held to high federal standards of ethics and conduct. The goal is to avoid even the appearance of impropriety.

The faculty member must, for his/her own legal protection, review the provisions of the Secretary of the Navy Instruction 5370.2 (series) on "Standards of Conduct and Government Ethics" and NAVPGSCOLINST 5370.3E**.** Some of the basic principles set forth in the "Standards of Conduct" instruction include:

- Government facilities, property, and employee labor may not be used for other than officially approved purposes or for private gain (i.e., they cannot be used for consulting activities).
- A government employee may not engage in any activity, with or without compensation, which might result in a conflict of interest or the appearance of conflict of interest.
- With the exception of military reserve pay, government employees may not receive basic pay from more than one position in the government for more than an aggregate of 40 hours of work in one calendar week (Sunday through Saturday). (This is considered "dual compensation" and is forbidden by law.)
- Government employees may not receive any salary or supplementation of salary from a private source as compensation for their government service.
- A government employee may not use, directly or indirectly, "inside information" to further a private gain for his- or herself or for others.
- A government employee is prohibited from using his/her grade, rank, title or position in connection with any commercial enterprise or in endorsing any commercial product. This does not preclude author identification for materials published in accordance with DoD procedures.
- A government employee may not engage in outside employment or other outside activity, with or without compensation, that may reasonably be expected to bring discredit on the government or the Department of the Navy.

Carelessness in the formulation of agreements or thoughtless actions by either the faculty member or his/her employer can lead to the embarrassment of the School and the possible assessment of civil penalties against or criminal prosecution of the individual faculty member. The conflict of interest statutes have been interpreted as applying not only to the individual government employee but also to members of the individual's immediate family. Officers on active duty and retired officers who are members of the faculty, are additionally constrained by laws and regulations related to their military service.
(Naval Postgraduate School Faculty Handbook)

3. NPS Instructions and Policy Guidance

Academic Honor Code
Academic Probation
Academic Workload

Acceptance of Gifts
Administrative Grievance System
Conferences
Consulting and Other Outside Employment
Copyrights
Disenrollment from NPS
Equal Employment Opportunity/Affirmative Employment
Ethics And Standards of Conduct
Faculty Labor Plan
Faculty Membership
Faculty Performance Appraisal
Fraternization Policy
Human Subjects in Research
Integrity of Research
Memoranda of Agreement or Understanding
Nepotism
On-Campus Attendance
Political Activities
Questionnaires and Surveys
Reporting International Contacts
Research at NPS
Sexual Assault Policy
Solicitation and Personal commercial Affairs
Sponsored Research Program
Standards of Attire
Student/Faculty Relations
Travel
Urinalysis Screening/Testing
Working with Non- Government Organizations (NGOs)

1. List <u>all</u> business degree programs at all levels and in all locations offered through the business unit and non-business unit

Link to NPS Catalog: http://www.nps.edu/Academics/GeneralCatalog/Home.htm
Link to GSBPP Programs Website: http://www.nps.navy.mil/gsbpp/programs.htm

Business Degree Programs To Be Included in Accreditation Review:

Degree Program[1]	Level[2]	Location[3]	Date program was established	# of Credit Hours for Degree Completion[4]	Average Time to Complete Degree[5]	# Students Graduated in Previous Academic Years		
						2004-05	2005-06	2006-07
Master of Business Administration (MBA)	M	Monterey	2002	64 Credit Hours	18 Months	161	185	193
Master of Science in Management (MSM)	M	Monterey	1960	60 Credit Hours	18–21 Months	16	14	11
Executive Master of Business Administration (EMBA)	M	Distance Learning	2002	54 Credit Hours	24 Months	32	91	87

Master of Science in Program Management (MSPM)	M	Distance Learning	1999	48 Credit Hours	24 Months	1	20	21
Master of Science in Contract Management (MSCM)	M	Distance Learning	1999	48 Credit Hours	24 Months	4	16	0
Master of Executive Management (MEM)	M	Monterey	2005	54 Credit Hours	12 Months	0	0	5

2. List programs requested for exclusion from the accreditation review

Degree Programs Requested for Exclusion from Review:

NO EXCLUSIONS REQUESTED.

GSBPP COMPARISON SCHOOLS

As background, and for our own benefit, we briefly describe the thinking behind our choice of comparison schools.

Comparable Peers: AACSB describes Comparable Peer Schools as:

Schools considered similar in mission and assumed appropriate for performance comparison. The schools should be chosen carefully to match key characteristics of the applicant. In addition to mission, some features that might be salient when choosing comparison schools include student populations served, size, degree levels and primary funding source.

In addressing the question of Peer schools, we assumed it more relevant to think in terms of "type", rather than "quality". We asked: What is the mission of GSBPP? What distinguishes GSBPP? How can we characterize GSBPP, and can we find potential Peer schools that are similar in those respects? Listed below are a set of characteristics identified as descriptive of GSBPP.

Mission Orientation:

1. Single Industry Orientation: We have a focus, specializations and expertise oriented toward one sphere or industry (Defense). Are there other "niche" schools?
2. Corporate University: We are a "corporate" university in one respect. We have a clear and bounded population of customers (students and sponsors) who we serve, and we do focused tailoring of our programs to serve their needs.
3. Graduate Only: We have no undergraduate programs; we have no PhD. Our core mission and focus is graduate education at the master's level.

Academic Orientation:

4. Teaching / Research mix: We sometimes describe GSBPP as being equally committed to teaching and research missions. Not all schools try to strike this same balance.
5. Scholarship Emphasis: AACSB often describes scholarship activities as falling in three areas: a) Discipline-based Scholarship, b) Contributions to Practice, c) Learning and Pedagogical Research. We describe ourselves as equally committed to Discipline and Practice scholarship, with Pedagogical stressed less.
6. Faculty Mix: With respect to participating faculty, GSBPP is roughly 65/35 in the mix of Academically-Qualified faculty (having a doctoral degree) and Professionally-Qualified faculty (having a masters and significant professional experience).

Program Orientation:

7. Public / Private Sector mix: Our curriculum content, accreditations (AACSB & NASPAA), and faculty backgrounds, all speak to how GSBPP is a merging of both private and public sector orientations.
8. Curriculum: Most GSBPP curricula are constructed with a distinct combination of a) a broad management core and b) a deep specialization. Specializations typically diverge from traditional business school fields (Acquisition, Logistics, Financial Management, Analysis). Most GSBPP curricula have a capstone Thesis/Project requirement.
9. Distance Learning: Three GSBPP programs, and about 25-30% of teaching, are in off-campus, distance learning degree programs. This is likely to be a direction of growth fro GSBPP.

Size and Resources:

10. Faculty Size: GSBPP's full-time faculty size ranges from 60 – 70.

11. Masters Enrollment: Full-time resident masters students enrolled range from 300 – 400. Total masters students enrolled range from 500 – 600.
12. Resources: GSBPP's annual operating budget is approximately ~$15M.
13. Funding Source: GSBPP / NPS is a public institution, predominantly centrally-funded.

Because of the truly unique mission of GSBPP, we expected to find no other school that is truly similar, but sought to identify schools that might have a selection of important characteristics in common with GSBPP. Through various processes of search, research, analysis and judgment, we have identified 15 schools, each of which has a number of characteristics in common with GSBPP. But none of which is truly similar. The table below provides our list of Comparable Peer schools, and also indicates the areas where we see strong commonality (X), or weaker, but still significant, commonality (l) with these Peer schools.

	Mission			**Academic**			**Program**			**Size/Resources**			
	1	2	3	4	5	6	7	8	9	10	11	12	13
	F	C	G	T/R	S	FM	P/P	C	DL	#F	#S	$	F
Comparable Peer Schools													
Claremont Graduate University (Drucker & Ito)			X	X									
Illinois Institute of Technology (Stuart)			X	X		X					l		
Monterey Institute of International Studies (Fisher)	X		X										
Old Dominion University (Coll of Bus/Pub Admin)						X	X		X	l	l	x	X
Rensselaer Polytechnic Inst (Lally)			l	X		l		l	X	X	X	x	
St Joseph's University (Haub)			l			X			X	X	X	x	
Suffolk University (Sawyer)			l	X		l	X						
Thunderbird School of Global Management	X		X						l	X	X		
United States Air Force Academy (Dept Mgmt)		X				X							X
United States Coast Guard Academy (Dept Mgmt)		X				X							X
Vanderbilt University (Owen)			X	X	X	l		l		l	X		
Wake Forest University (Babcock)			X	X	X			l			X	x	
Wayne State University (Sch of Bus)			l	X		l			X	X		x	X
Willamette University (Atkinson)			X		X		X						
William and Mary, College of (Mason)			l	X		l				X	l		X

Competitive Group: AACSB describes Competitive Group Schools as:

Schools so directly competitive that conflict of interest considerations exclude their personnel from the review process. Only those schools should be included where the direct competition for students, faculty, or resources is so compelling that the appearance of a conflict of interest is present.

GSBPP does not see direct competitor schools and hence lists none here.

Aspirant Group: AACSB describes Aspirant Schools as:

Schools that provides a developmental goal for the applicant, represents management education programs or features that the applicant hopes to emulate, and places the vision and strategy of the applicant in context.

In identifying Aspirant Schools, we have focused on two dimensions of importance:

- Graduate Education Mission: The core mission of GSBPP is to provide graduate-level management education (for the military/defense community). As such, we limited the candidate aspirant schools to those who have a similar focus on graduate-level education.
- Scholarship Excellence: Although GSBPP's strategy calls for efforts in multiple directions, a particular strategic direction is of importance and reflects the consensus aspirations of the faculty: Scholarship Excellence. GSBPP aspires towards increased excellence in scholarship activities – which would be reflected in increased scholarship output and productivity, improved scholarship culture, and an enhanced academic reputation and wider recognition for GSBPP. As such, we look to emulate schools that we see as having achieved significant success in scholarship activities.

Listed here as our Aspirant Group Schools are five schools that, sharing the graduate education focus of GSBPP, have reputations for scholarship excellence.

	Mission			**Academic**			**Program**			**Size/Resources**			
	1	2	3	4	5	6	7	8	9	10	11	12	13
	F	C	G	T/R	S	FM	P/P	C	DL	#F	#S	$	F
Aspirant Group Schools													
California, University of -- Davis (Grd Sch Mgt)			X								l	x	X
California, University of -- Irvine (Merage)			X							l	l		X
Dartmouth College (Tuck)			X	X		l				l	X		
Rochester, University of (Simon)			X	l		l				l	X		
Virginia, University of (Darden)			X						l	X	X		X

NASPAA SELF-STUDY REPORT

August 31, 2007

MASTER OF SCIENCE IN MANAGEMENT PROGRAM

GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

Naval Postgraduate School
555 Dyer Road, Ingersoll-231
Monterey, CA 39343-5103

Certified by:

Robert N. Beck, Dean
Graduate School of Business & Public Policy
NASPAA Principal Representative

Certified by:

for Leonard A. Ferrari, Provost
Naval Postgraduate School
Chief Academic Officer

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MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAM
NASPAA
Self Study for Re-Accreditation

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MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAM
NASPAA
Self Study for Reaccreditation

List of Tables, Charts, Figures

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Standard 6.0:

Standard 7.0:

Standard 8.0:

In this Self-Study Volume: MBA Program

PROGRAM SUMMARY TABLE DEFENSE-FOCUSED MASTER OF BUSINESS ADMINISTRATION (MBA) DEGREE PROGRAM	
ITEM	**DATA**
1. Title of degree (1.3)	**Defense-Focused MBA**
2. Off-Campus locations (9.1)	None
3. Number of credits normally required for degree (4.3-A)	84-103 quarter hours
4. Total credits in required courses (4.21-B)	54 quarter hours
5. Total credits in elective courses (4.22-A)	24-43 quarter hours
6. Specializations advertised as available (4.22-C)	Supply Chain Management Transportation Management Material Logistics Support Acquisition and Contract Mgmt Systems Acquisition Mgmt Financial Management Information Systems Management Defense Systems Mgmt Defense Business Mgmt Resource Planning and Management
7. Number of credits which can be reduced for prior undergraduate education (4.3-B)	Up to 12 quarter hours
8. Number of credits which can be reduced for significant professional experience (4.3-B)	None
9. Number in faculty nucleus (5.1-B)	61
10. Number of students in degree program (6.3-D)	263 full-time students
11. Is a thesis or major professional report required? (4.3-C)	Thesis or MBA Project required
12. Is a comprehensive examination required? (4.3-C)	No
13. Is an internship available? Is it required? (4.4-B)	No internships available or required

In a separate accompanying Self-Study Volume: MSM Program

PROGRAM SUMMARY TABLE MASTER OF SCIENCE IN MANAGEMENT (MSM) DEGREE PROGRAM	
ITEM	**DATA**
14. Title of degree (1.3)	**MS in Management**
15. Off-Campus locations (9.1)	None
16. Number of credits normally required for degree (4.3-A)	95-111 quarter hours
17. Total credits in required courses (4.21-B)	55 quarter hours
18. Total credits in elective courses (4.22-A)	28-44 quarter hours
19. Specializations advertised as available (4.22-C)	Defense System Analysis Manpower Systems Analysis
20. Number of credits which can be reduced for prior undergraduate education (4.3-B)	Up to 12 quarter hours
21. Number of credits which can be reduced for significant professional experience (4.3-B)	None
22. Number in faculty nucleus (5.1-B)	61
23. Number of students in degree program (6.3-D)	64 full-time students
24. Is a thesis or major professional report required? (4.3-C)	Thesis required
25. Is a comprehensive examination required? (4.3-C)	None
26. Is an internship available? Is it required? (4.4-B)	No internship available or required

EMBA: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE EXECUTIVE MASTER OF BUSINESS ADMINISTRATION (EMBA) DEGREE PROGRAM	
ITEM	**DATA**
27. Title of degree (1.3)	**Executive MBA**
28. Off-Campus locations (9.1)	Video-tele-education
29. Number of credits normally required for degree (4.3-A)	54 quarter hours
30. Total credits in required courses (4.21-B)	54 quarter hours
31. Total credits in elective courses (4.22-A)	None
32. Specializations advertised as available (4.22-C)	None
33. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
34. Number of credits which can be reduced for significant professional experience (4.3-B)	None
35. Number in faculty nucleus (5.1-B)	61
36. Number of students in degree program (6.3-D)	199 part-time students
37. Is a thesis or major professional report required? (4.3-C)	Capstone project course required
38. Is a comprehensive examination required? (4.3-C)	No
39. Is an internship available? Is it required? (4.4-B)	No internship available or required

MSPM: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE MASTER OF SCIENCE IN PROGRAM MANAGEMENT (MSPM) DEGREE PROGRAM	
ITEM	**DATA**
40. Title of degree (1.3)	**MS in Program Management**
41. Off-Campus locations (9.1)	Video-tele-education
42. Number of credits normally required for degree (4.3-A)	50.5 quarter hours
43. Total credits in required courses (4.21-B)	50.5 quarter hours
44. Total credits in elective courses (4.22-A)	None
45. Specializations advertised as available (4.22-C)	None
46. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
47. Number of credits which can be reduced for significant professional experience (4.3-B)	None
48. Number in faculty nucleus (5.1-B)	61
49. Number of students in degree program (6.3-D)	58 part-time students
50. Is a thesis or major professional report required? (4.3-C)	Joint applied project required
51. Is a comprehensive examination required? (4.3-C)	No
52. Is an internship available? Is it required? (4.4-B)	No internship available or required

MSCM: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE MASTER OF SCIENCE IN CONTRACT MANAGEMENT (MSCM) DEGREE PROGRAM	
ITEM	**DATA**
53. Title of degree (1.3)	**MS in Contract Management**
54. Off-Campus locations (9.1)	Video-tele-education
55. Number of credits normally required for degree (4.3-A)	50.5 quarter hours
56. Total credits in required courses (4.21-B)	50.5 quarter hours
57. Total credits in elective courses (4.22-A)	None
58. Specializations advertised as available (4.22-C)	None
59. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
60. Number of credits which can be reduced for significant professional experience (4.3-B)	None
61. Number in faculty nucleus (5.1-B)	61
62. Number of students in degree program (6.3-D)	26 part-time students
63. Is a thesis or major professional report required? (4.3-C)	Joint applied project required
64. Is a comprehensive examination required? (4.3-C)	No
65. Is an internship available? Is it required? (4.4-B)	No internship available or required

MEM: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE MASTER OF EXECUTIVE MANAGEMENT (MEM) DEGREE PROGRAM	
ITEM	**DATA**
66. Title of degree (1.3)	**Master of Executive Management**
67. Off-Campus locations (9.1)	Resident program. None off-campus
68. Number of credits normally required for degree (4.3-A)	64 quarter hours
69. Total credits in required courses (4.21-B)	49 quarter hours
70. Total credits in elective courses (4.22-A)	15-20 quarter hours
71. Specializations advertised as available (4.22-C)	None
72. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
73. Number of credits which can be reduced for significant professional experience (4.3-B)	None
74. Number in faculty nucleus (5.1-B)	61
75. Number of students in degree program (6.3-D)	2 part-time students
76. Is a thesis or major professional report required? (4.3-C)	Capstone Project Course required
77. Is a comprehensive examination required? (4.3-C)	No
78. Is an internship available? Is it required? (4.4-B)	No internship available or required

EXECUTIVE SUMMARY

Naval Postgraduate School

The Naval Postgraduate School (NPS) provides unique professional graduate education to mid-career military officers and civilian employees of the US Department of Defense. Owned and operated by the United States Navy, the School prides itself on its ability to maintain the highest academic standards while responding to the dynamic needs of the Navy and other military services agencies within the Department of Defense. NPS is constantly developing new educational programs and delivery methods, and modifying its existing programs, to meet the emerging requirements for the military services and other agencies within the Department of Defense.

Graduate School of Business and Public Policy

The Graduate School of Business and Public Policy was formally established in 2001, renamed and reorganized from the earlier Department of Systems Management. The degree of Master of Science in Management (MSM) was first awarded at the Naval Postgraduate School in 1960, and was the predominate management/administration degree awarded until 2002, when the resident program evolved to additionally award a Master of Business Administration (MBA) degree.

The MSM degree program was initially accredited by NASPAA in 1980 and reaccredited most recently in 2000. With the transition to the MBA degree in 2002, NASPAA accreditation was extended to the MBA. The Naval Postgraduate School's regional accreditation is from the Western Association of Schools and Colleges (WASC). The most recent WASC reaccreditation was conducted in 1998, resulting in full accreditation granted through 2009. The Graduate School of Business and Public Policy is also accredited by The Association to Advance Collegiate Schools of Business – International (AACSB), receiving accreditation in 2000, with a reaccreditation review anticipated in 2009.

Mission

The Graduate School of Business and Public Policy (GSBPP) has a clear mission and direction. The school's mission statement, originally developed in 1992, was the result of the entire faculty's participation. The mission statement was reaffirmed by the GSBPP faculty in 1998, and newly updated by the faculty in 2007. The most recent version of our mission statement follows:

Vision

To be recognized as the nation's premier school for defense-focused business management and public policy education and research. To be the institution that national leaders look to for education, research, information, and innovation in the management

of the business of defense. To be recognized by our students, alumni, and other stakeholders for our excellence in defense-focused education and research.

Mission:
To serve our Nation by educating US and allied military officers as well as defense civilians in defense-focused business and public policy, by conducting research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with defense business management practices and policies.

***Means**: We pursue our vision and perform our mission through graduate education, research, and professional service.*

- *In Education: Through resident and distance learning degree and non-degree programs, we develop students' abilities to analyze, think critically, and take intelligent actions so they can more effectively carry out their future professional responsibilities to manage organizations, resources, people, and programs in complex, sometimes life-threatening environments.*

- *In Research: Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.*

- *In Professional Service: Provide professional expertise that advances knowledge and business management within GSBPP, NPS, the Department of Navy, the Department of Defense, and other government agencies, as well as in our professional and academic organizations.*

Degree Programs and Curriculum

The Graduate School of Business and Public Policy (GSBPP) has graduate programs leading to six different master's degrees All of the programs are related and offered by the same faculty unit, using similar course offerings. These programs are predominately delivered by the same full-time resident faculty.

Two of the degrees, the Master of Business Administration (MBA) and the Master of Science in Management (MSM), are awarded from an integrated resident program. GSBPP seeks review and reaccreditation of both the MBA and MSM degree programs in 2008. This Self-Study Volume I covers the MBA program. A separate Self-Study Volume I has been prepared for the MSM program.

GSBPP additionally offers three part-time, distance learning degree programs, the Master of Science in Program Management (MSPM), the Master of Science in Contract

Management (MSCM) and the Executive Master of Business Administration (EMBA). Starting in 2006, GSBPP also offers a new one-year resident degree, the Master of Executive Management (MEM). GSBPP does not seek accreditation for these programs.

In general each degree program consists of three main parts: a common core of courses relevant broadly to the practice of public management, a specialization emphasizing a particular functional area, and a capstone project or thesis.

The major elements of the core of all Graduate School of Business and Public Policy curricula are those functional and analytical subjects that underlie effective management in all public organizations. These subjects include communication skills, information technology, economics, financial management, human and organizational behavior, management policy, public policy processes, and quantitative and qualitative analytical methods.

In addition to the core, with few exceptions students are enrolled in specialty programs designed to prepare them for management responsibilities in specific functional areas. Their programs include required courses in their areas of specialization. The project/thesis requirement allows students to demonstrate their abilities to integrate appropriate core and special curricular material through the analyses of issues and problems pertinent to their academic programs and their professional careers

All programs have a Navy (or other service) senior leader sponsor who participates in a needs assessment and biennial curriculum reviews. Academic Associates serve as program managers for each curriculum and assure that programs and courses are assessed on an ongoing basis and continuously improved. These assessments, in conjunction with NPS and the school's evaluation systems, allow us to operate high quality, unique, and military-relevant programs, and evolve these programs as changing academic and sponsor needs may require.

Research

Faculty research is an important component of the Graduate School of Business and Public Policy's mission, and is integrated to the greatest possible extent with the educational process. Students are encouraged to participate in faculty projects and faculty research results are incorporated in classroom instruction. The school's diverse, multidisciplinary character is reflected in the breadth and depth of issues addressed by faculty research, which have historically been concentrated in areas of interest to the Navy and the Departments of Defense (DoD). The school's research programs can be grouped into five functional areas, based on the school's specialty focuses: Acquisition and Contracting; Logistics and Transportation; Manpower Systems Analysis; Economics and Financial Management; and Organization, Management, and Policy Analysis.

The primary goal of the school's research program is to provide the Navy and DoD with the capability of managing defense systems efficiently and effectively. Some of this research applies an existing base of knowledge while other research requires the

development of new concepts and theory. Thus, the school recognizes the importance of both basic research and research applied to the Navy and DoD; it seeks to create a balance of both types of research in its research program.

Students

The Naval Postgraduate School operates year round. With a few exceptions, all resident students attend school full-time, 12 months a year, carrying 16 credit-hours of coursework per quarter. The resident program length for students in the Graduate School of Business and Public Policy is 18-21 months, depending on the student's curriculum. While Naval officers comprise the single largest group (45%), GSBPP enrolls students from all the U.S. military services, as well as international students (15%). All students have significant work experience and can be described as highly motivated and mature students. They are carefully selected for these programs and nearly all students complete their instructional programs within the time allotted. After completion of the program, students return to their military careers. Overall, GSBPP programs continue to enroll more than 20% of the students campus-wide.

Faculty

The school has 61 full-time nucleus faculty members who are drawn from a wide variety of academic disciplines. In addition to the academics, practitioners are an integral part of our faculty. In keeping with our mission, we employ highly qualified practitioners on a full-time basis to enhance the relevance and quality of our programs. All full-time practitioners have at least a master’s degree and have been recognized as accomplished professionals in their fields.

All GSBPP faculty members are expected to excel in teaching as well as conduct scholarly or practitioner research that is relevant to the Department of Defense. Almost all faculty members work year round; most typically teach two quarters and conduct research and/or engage in administrative work for the other two quarters.

As a group, our faculty members make significant contributions to the Navy and to other agencies in the Department of Defense through service on advisory boards, consulting to senior leaders, and teaching in management development programs. They are also active in their professional and academic communities, making significant contributions through published research, conference presentations and leadership with in their professional societies.

The Graduate School of Business and Public Policy is highly committed to providing high quality, unique, military-relevant, and cost effective programs for military officers and government civilian professionals. This goal directs our operations and provides direction for our future.

STANDARD 1.0 -- ELIGIBILITY FOR PEER REVIEW AND ACCREDITATION

Standard 1.1 Eligibility
These standards assume a commitment to the use of peer review procedures to assess educational quality. Formal peer review and accreditation processes of NASPAA are open to programs which meet criteria related to institutional accreditation, professional education, and program length as described in standards 1.2-1.4.

1.1 Eligibility

The programs in the Graduate School of Business and Public Policy (GSBPP) at the Naval Postgraduate School are eligible for peer review and accreditation.

Standard 1.2 Institutional Accreditation
The parent institution is accredited by its regional association.

1.2 Institutional Accreditation

The Naval Postgraduate School is accredited by the Western Association of Schools and Colleges. The most recent reaccreditation was conducted in 1998, resulting in full accreditation granted through 2009.

The Graduate School of Business and Public Policy is also accredited by The Association to Advance Collegiate Schools of Business – International (AACSB), receiving accreditation in 2000, with a reaccreditation review anticipated in 2009-10.

Standard 1.3 Professional Education
The primary objective is professional education preparing persons for leadership and management roles in public affairs/policy/administration.

1.3A Leadership and Management Objective

All programs offered by GSBPP are designed for students who are commissioned officers on active duty in the U.S. military services or in the military services of allied nations, as well as for civilian employees of the U.S. government.

Our programs prepare students for increasing levels of leadership and management responsibility in policy-making and professional management roles. Each of the programs

within GSBPP is designed to acquaint students with a broad overview of the functional disciplines of management. The design of each program also takes into account the environment in which the activities will be situated and the knowledge and skill base that will be required to function effectively in a specialization.

Each of our programs draws upon courses designed to provide professional public management education. These courses include management, budgeting and financial processes, information technology, quantitative and qualitative analysis, decision making, problem solving, and public policy processes.

In addition to the foundations of professional public management, each program offers unique specializations. These specializations include logistics, acquisition, contract management, program management, financial management, manpower, defense systems, information systems, defense management, and executive management.

1.3B Degree Specification

The Graduate School of Business and Public Policy has graduate programs leading to six different master's degrees All of the programs are closely related and offered by the same faculty unit, using similar course offerings, and resources. All of these programs are delivered predominately by the same full-time resident faculty.

Two of the degrees, the Master of Business Administration (MBA) and the Master of Science in Management (MSM), are awarded from a single, integrated resident program. There are currently 12 separate programs of study within the resident program, each termed a "curriculum", falling within several groups:

- Logistics Curricula:
  - Transportation Management MBA
  - Supply Chain Management MBA
  - Material Logistics Support MBA
- Acquisition Curricula:
  - Acquisition and Contract Management MBA
  - Systems Acquisition Management MBA
- Financial Curriculum:
  - Financial Management MBA
- Information Curriculum
  - Information Systems Management MBA
- Defense Management Curricula:
  - Defense Systems Management MBA
  - Resource Planning and Management MBA
  - Defense Business Management MBA
- Analysis Curricula:
  - Manpower Systems Analysis MSM
  - Defense Systems Analysis MSM

1.3B.1 Brief Overview of the GSBPP Resident Program, Resident Degrees, and NASPAA Accreditation

It is the resident program that was initially accredited by NASPAA in 1980 and most recently reaccredited in 2000. For most of the history of the resident program, the MSM degree was the single degree offered, and completion of any of the resident curricula resulted in the award of an MSM. Starting in 1993, a second degree, the Master of Science in Resource Planning and Management (MSRPM) was established, but only one of the resident curricula (Resource Planning and Management) led to the award of this degree. During the last accreditation process, in 2000, NASPAA awarded accreditation to both of the degrees (MSM, MSRPM) in the resident program.

During 2001-2002, GSBPP conducted a major review of the resident program, resulting in a significant revision of the common core portion of the degree programs. At that time, a new degree, the MBA, was established. At that time also, the individual curricula within the resident program shifted with respect to the degree awarded upon completion of each curriculum. All curricula shifted from awarding an MSM to awarding an MBA, except for the Manpower Systems Analysis curriculum. Students completing the Manpower curriculum continued to earn and be awarded the MSM. (The Resource Planning and Management curriculum, the only curriculum that had led to the MSRPM degree, shifted to awarding the MBA in 2002, and consequently the MSRPM degree was discontinued.)

These degree changes were reported to NASPAA in the 2002 Annual Report and, following review by COPRA, the MBA became a NASPAA-accredited degree. As a result of the changing degrees being awarded in the resident program, we believe there may be some ambiguity concerning the current NASPAA accreditation status of the MSM degree. We had presumed that, with the MSM having been accredited in 2000, that accreditation status had been "extended" to the new MBA degree when it was created in 2002, but that the MSM degree remained NASPAA accredited. Our more recent understanding is that accreditation may have been "transferred" to the MBA degree, resulting in the absence of continuing accreditation of the MSM degree. In any event, GSBPP seeks (re)accreditation of both the MBA and MSM degrees in the resident program.

GSBPP originally had been scheduled for reaccreditation during the 2006-2007 academic year. We completed a self-study of our programs, with 2005-2006 being the self-study year, and with our self-study document submitted August 2006. At that time we submitted a single self-study document, covering the "resident program", and incorporating both the MBA and MSM degrees. Discussions with COPRA following its review of our self-study document led to the conclusion that the reaccreditation process would be better facilitated if we were to provide separate self-study documents for the MBA and MSM degrees. We have re-conducted our self-study for the 2006-2007 academic year and are submitting separate documents for the MBA and MSM degrees,

but with parallel treatment throughout and, often, identical or very similar content. The places of most significant difference between the two self-study documents are:

- Different program mission statements, in Standard 2.1
- Differences in some details of the curriculum, in Standard 4. Particularly in the elements of the Common Curriculum (Stnd 4.21) and the Additional Curriculum Components (Stnd 4.22).
- Where applicable and available, separation of data for the MBA and MSM degree programs in tables throughout the document, with attention focused on the data associated with the program under review.

This self-study document contains the **MBA degree**.

A listing of GSBPP degree programs follows:

DEGREE TITLE:	**Master of Business Administration (MBA)**
LOCATION:	Monterey -- Resident Program
INITIAL OFFERING:	Winter 2002
FIRST GRADUATING CLASS:	Spring 2003
NASPAA ACCREDITATION:	New degree awarded from the previously accredited program. Accreditation transferred 2002. Requesting reaccreditation in 2008

DEGREE TITLE:	**Master of Science in Management (MSM)**
LOCATION:	Monterey -- Resident Program
INITIAL OFFERING:	1960
FIRST GRADUATING CLASS:	1961
NASPAA ACCREDITATION:	Initial accreditation 1980 Last reaccreditation 2000 Requesting reaccreditation in 2008

1.3B.2 GSBPP Programs Not NASPAA-Accredited

GSBPP additionally offers three distance learning degree programs, the Master of Science in Program Management (MSPM), the Master of Science in Contract Management (MSCM), and the Executive Master of Business Administration (EMBA) that are not accredited by NASPAA. Although these programs now satisfy the four-year program length standard, GSBPP does not request a separate review nor initial accreditation of these programs at this time.

Additionally, starting with initial enrollments in July 2006, GSBPP now offers a Master of Executive Management (MEM) degree program. This program does not meet the NASPAA program length standard, and no review of this program is requested.

None of these programs are versions of either the MBA or MSM degrees. None have a similar mission and none serve a similar student population. As such, these

programs are not discussed in this Self-Study document. A description of each, however, is provided in the Appendices (Volume III), which accompanies this Self-Study.

DEGREE:	**Master of Science in Program Management**
LOCATIONS:	Off-campus. Various sites via VTC
INITIAL OFFERING:	April 1999
FIRST GRADUATING CLASS:	June 2001
NASPAA ACCREDITATION:	Not requesting accreditation review

DEGREE:	**Master of Science in Contract Management**
LOCATIONS:	Off-campus. Various sites via VTC
INITIAL OFFERING:	October 1999
FIRST GRADUATING CLASS:	December 2001
NASPAA ACCREDITATION:	Not requesting accreditation review

DEGREE:	**Executive Master of Business Administration**
LOCATIONS:	Off-campus. Various sites via VTC
INITIAL OFFERING:	Summer 2002
FIRST GRADUATING CLASS:	Spring 2004
NASPAA ACCREDITATION:	Not requesting accreditation review

DEGREE:	**Master of Executive Management**
LOCATIONS:	Monterey – Resident Program
INITIAL OFFERING:	Summer 2006
FIRST GRADUATING CLASS:	June 2007
NASPAA ACCREDITATION:	Not requesting accreditation review

Standard 1.4 Program Length
The program must have been in operation at least four years to provide adequate data for evaluating program policies, procedures, and placement of graduates.

1.4 Program Length

Initiation dates and first graduation dates for all GSBPP programs were provided above. The MBA degree was initiated in 2002, but as a continuation of the resident program, extends back decades.

Standard 1.0 Eligibility

STANDARD 2.0 -- PROGRAM MISSION

Standard 2.1 Mission Statement
The program shall state clearly its educational philosophy and mission and have an orderly process for developing appropriate strategies and objectives consistent with its mission resources, and constituencies

2.1A Mission and History of Naval Postgraduate School

The Naval Postgraduate School (NPS) provides unique professional graduate education to US military officers, civilian employees of the US government and defense-oriented individuals from other countries. Owned and operated by the United States Navy, the NPS prides itself on its ability to maintain high academic standards while responding to the dynamic needs of the Navy, other military services, other agencies within the Department of Defense and other countries. NPS is constantly developing new educational programs and delivery methods, and modifying its existing programs, to meet the emerging requirements for programs sponsors and students.

In 1901, the Naval Postgraduate School was originally established as the Postgraduate Division of the U.S. Naval Academy when it was viewed that advanced education for U.S naval officers was intrinsically valuable to the Navy. Throughout its more than one hundred year history, the Naval Postgraduate School has evolved its organization and academic programs to meet the ever-changing needs of the Navy. In 1949, as part of Department of Defense reorganization, Congress moved the Naval Postgraduate School from Annapolis, Maryland, to Monterey, California. In 1951, it officially opened at its current location.

The Naval Postgraduate School specializes in education at the Master's degree level. Some Doctoral degrees are annually conferred by the various departments in NPS. The educational programs are designed to meet the needs of the Navy; however, curricula are developed within a framework of academic degrees with the goal of keeping the highest academic standards.

The majority of the officers attending NPS are practicing military professionals who receive a mid-career education directly relevant to the challenges and concerns of their military careers. The School's curricula are therefore focused on science, engineering, technology, policy, operations, management, and international relations as they are applied to the Navy, other military services, and defense-oriented civilians.

2.1B Institutional Setting

The Naval Postgraduate School is located near downtown Monterey, on a campus of approximately 615 acres. Formerly the grounds of the Del Monte Hotel, the site was leased by the Navy during World War II and purchased in 1946. The capital of old Spanish California, Monterey was best known as a fishing port as recently as the late-1930s. Today, tourism is the area's dominant industry, although the military installations and educational institutions are also major factors in the local economy. In the wider Monterey County area, agriculture is a major industry.

In addition to the Naval Postgraduate School, the Army's Defense Language Institute, the Monterey Institute of International Studies, Monterey Peninsula College, and a branch campus of Golden Gate University are located in Monterey. Fort Ord, once an important Army installation, is now home to California State University, Monterey Bay.

Over 200,000 people live in the greater area known as the Monterey Peninsula. While the entire economic spectrum is represented, the population tends to be relatively affluent. Many have chosen the area for retirement because of the moderate climate. The Monterey Peninsula is a well known tourist area and attracts visitors from all over the world. This gives the area an active international atmosphere and supports diverse cultural events.

2.1C History of Management Education at NPS

Management education at the Naval Postgraduate School began in 1956 with the creation of the Navy Management School. At that time, the management program was five months long and did not lead to a degree. The program was lengthened to 10 months (one academic year) in 1960 and the first Master of Science in Management degrees were awarded in the following year. In 1962, as part of a general reorganization of the NPS, the Management School became a department within the Naval Postgraduate School. The program was lengthened to 12 months in 1964 and the name of the department was changed to Business Administration and Economics. In 1971, this department was merged with the Department of Operations Analysis to form a new Department of Operations Research and Administrative Sciences. In 1972, the program was extended from 12 to 18 months (six academic quarters) and the thesis requirement was instituted.

In 1975, specialty curricula for the various functional areas of management (e.g.; financial, material, manpower, etc.), each drawing on a common core, were formally established. Prior to this, there had been one curriculum with several options in the functional areas. In 1976, the Department of Operations Research and Administrative Sciences split into two separate departments: Operations Research and Administrative Sciences.

In 1992, the Department of Administrative Sciences (AS) initiated a department process to review the department's scope and direction. As a result of this process, the Department clarified its mission, developed a mission statement, and renamed itself the Department of Systems Management (SM). In 1998, Information Technology Management (ITM), which had been housed in the Department of Systems Management since 1991, was renamed, redesigned and transferred to a different division within NPS, the division of Computer and Information Sciences and Operations. Many of the ITM faculty requested and were granted joint appointments with their new division and with the Department of Systems Management. As a result, there was excellent continuity for the students.

During academic year 2000-2001, the Naval Postgraduate School (NPS) underwent a significant reorganization. Previously, NPS contained 11 academic departments, organized into three divisions. The Department of Systems Management, along with three other departments, fell within the Division of Operational and Policy Science. The Chairman of Systems Management reported to the Dean of Operational and Policy Science, who reported to the NPS Provost. NPS reorganized all academic departments into four separate graduate schools. What was formerly the Department of Systems Management became, by itself, the Graduate School of Business and Public Policy (GSBPP). The head of GSBPP is the Dean, who reports directly to the Provost. GSBPP's original organization included three Associate Deans: Associate Dean for Resident Programs, Associate Dean for Distance Learning, and Associate Dean for Research.

The original name considered for the school was the Graduate School of Business, but the faculty rejected that because it did not reflect the strong public policy component needed to meet the sponsors' and the students' broader educational needs. After extensive discussion in a faculty meeting, the faculty adopted the name Graduate School of Business and Public Policy. This was approved by the NPS Provost and Superintendent. For reference, the three other graduate schools are the School of International Graduate Studies (SIGS), the Graduate School of Engineering and Applied Science (GSEAS), and the Graduate School of Operational and Information Science (GSOIS).

The current result of these various organizational changes is that management education and research at NPS is conducted in the separate Graduate School of Business and Public Policy (GSBPP). GSBPP oversees six degree programs and 17 curricula (~30% of NPS); enrolls about 500-600 students (~25% of NPS) and employs about 65-70 full-time faculty (~15% of NPS).

2.1D GSBPP Mission and Strategy Development Process

Mission: In 1992, the Department of Administrative Sciences (an early predecessor to GSBPP), initiated a departmental process to review the scope and direction of the Department's activities, and to develop a meaningful Mission Statement. The process adopted required that faculty approval for the mission statement be unanimous, rather than by majority vote. After significant faculty discussion, a mission statement was adopted in September 1992 (the process details are contained in the September 1999 NASPAA accreditation documentation). That mission statement has been remarkably robust, and still forms the basis for the current GSBPP mission statement.

In late 1998, the Department of Systems Management (the immediate predecessor to GSBPP), initiated a departmental review of the mission statement, prompted by several changes in the previous six years: the splitting off of the Information Technology group, the establishment of new programs, the growth and changes in the international programs, and the movement of the SM Department into distance learning education. Again, after extensive faculty involvement, a modified Mission Statement was adopted in August 1999. With the exception of a few minor word changes to reflect current circumstances, that mission statement remained in effect into 2007.

Strategy: Starting in 2002 GSBPP began a school strategy process. A faculty offsite was initially held in April 2002, followed by the formation of an ad hoc school strategic planning committee. The strategic planning committee reported to the faculty in December 2002. During 2003 - 2004, the strategy process continued with recurring meetings of the GSBPP leadership team conducting a strategic analysis of the state of the school and the strategic issues it confronts. These processes resulted in two documents speaking to the strategic directions of GSBPP: A Dean's Strategic Report (2002) and a GSBPP Strategic Issues Report (2004). Copies of these documents are in Appendices 2.1I1 and 2.1I2. More recently, in 2006, the GSBPP Dean provided an updated SWOT analysis, based on his perceptions of GSBPP and the evolving external environment, and additionally provided a revised Statement of Dean's Vision and Goals. These documents are contained in Appendices 2.1I3 and 2.1I4.

The School's strategy process has continued in 2007. A GSBPP Ad Hoc Strategic Planning Committee was formed during fall 2006, initially focusing on a review and revision of the School's mission statement. A revised mission statement was adopted in February 2007, which is in effect today. This is presented in the next section, 2.1E. Building from the new mission statement and the 2004 Strategic Issues Report, the Committee developed a Strategic Directions document. This document outlines directions, initiatives and programs deserving of attention by the School and is expected to provide the focus for School efforts in the immediate future. The Strategic Directions document was endorsed by the Faculty in July 2007. A copy is provided in Appendix 2.1I5.

Program Mission: Another important activity during 2007, particularly in the context of this NASPAA reaccreditation review, concerns the development of mission statements at the level of individual degree programs. While GSBPP has long had a mission statement speaking to the School as a whole, GSBPP had not previously thought in terms of separate mission statements for each individual degree program. As noted earlier in Standard 1.3B.1, GSBPP had submitted a single Self-Study document to NASPAA is 2006 encompassing both the resident MBA and MSM degrees, but is resubmitting self-studies this year, separately for the two degrees. This exercise of separation has beneficially caused us to identify the different purposes of the two NASPAA-accredited degree programs and to clarify their distinct missions. During 2007, the GSBPP Faculty Instruction Committee (FIC) drafted separate program mission statements for the MBA and the MSM degrees. While there is considerable overlap in the two degree programs, each does have a "slant" that is distinct. Somewhat oversimplifying, the MBA degree leans toward the "Managerial" and the MSM degree leans toward the "Analytical". Both GSBPP degrees are unique and do not have perfect correlates with "standard" NASPAA degrees, but the MBA might be characterized as akin to a degree in "Public Management", while the MSM might be characterized as more akin to a degree in "Public Policy Analysis".

The newly created mission statement for the MBA degree program is presented below in section 2.1H.

2.1E GSBPP Mission Statement

Vision

To be recognized as the nation's premier school for defense-focused business management and public policy education and research. To be the institution that national leaders look to for education, research, information, and innovation in the management of the business of defense. To be recognized by our students, alumni, and other stakeholders for our excellence in defense-focused education and research.

Mission:
To serve our Nation by educating US and allied military officers as well as defense civilians in defense-focused business and public policy, by conducting research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with defense business management practices and policies.

***Means**: We pursue our vision and perform our mission through graduate education, research, and professional service.*

- *In Education: Through resident and distance learning degree and non-degree programs, we develop students' abilities to analyze, think critically, and take intelligent actions so they can more effectively carry out their future professional responsibilities to manage organizations, resources, people, and programs in complex, sometimes life-threatening environments.*

- *In Research: Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.*

- *In Professional Service: Provide professional expertise that advances knowledge and business management within GSBPP, NPS, the Department of Navy, the Department of Defense, and other government agencies, as well as in our professional and academic organizations.*

2.1F GSBPP Objectives

Education Objective

Our objective is to provide high quality, relevant, graduate education to career military officers and other government civilians whose contribution to their service or command can most be enhanced by graduate level management education. Our goal is to prepare students for a wide variety of managerial positions in both field activities (e.g., naval stations, shipboards and shipyards, supply centers, etc.) and headquarters where they might be assigned in the future. Typical career specialties for which we prepare our students include financial management, comptrollership, acquisition, logistics, manpower planning and analysis, contracting, human resources, supply center management, and transportation management.

Research Objective

Our research objective is to create opportunities for individual faculty members to engage in original research directed toward advancing the frontiers of knowledge, and thereby to maintain the currency of knowledge which is essential to conducting graduate education and guiding graduate project and thesis work.

We also aspire to enrich our research and instructional programs by encouraging faculty members and students, through personal involvement, to become acquainted with and help solve the scientific and technological challenges facing the Navy and other

organizations. We work well with the key personnel responsible for the programs attacking these problems.

We view the master's project or thesis as an important component of our program because it requires students to develop an ability to conduct independent, analytical investigations and present them in a professional way. We believe that the student who completes a carefully guided master's project or thesis is better prepared both to engage in independent research and to evaluate the research products of others.

2.1G GSBPP Educational Philosophy

All degree programs within GSBPP are designed for mid-career professionals within the military or other DoD organizations. The underlying philosophy of the graduate degrees in GSBPP calls for all students, regardless of specialty, to become familiar with each of the functional disciplines so that they can (1) exercise leadership with an awareness of how their specialty fits in with the interdependent operational characteristics of modern, complex organizations and (2) perform as informed professionals should it be necessary to take on temporary duties within a functional discipline other than their own specialty.

In the resident degree programs (MBA and MSM), this philosophy is implemented via a core of instruction that is common to all students and a specialty in a specific functional management area. It is through the core that the faculty ensures each student's compliance with the common curriculum components detailed in NASPAA's Standard 4.21. The requirements of the student's specialty provide the additional knowledge and skills that build educational relevance into the sponsor's community.

The standards that GSBPP has set for all management programs are stated in the catalog and vary by program. The standard for all degrees is a minimum of 48 quarter credit hours of graduate-level courses, although curricula in the resident program have actual credit hours well in excess of this minimum to satisfy both degree and specialty requirements. All resident MBA and MSM degrees require the successful completion of an MBA project or master's thesis.

2.1H MBA Program Mission Statement

Defense-Focused MBA Program Mission

The mission of the Defense-Focused MBA degree program is to prepare graduates for management and leadership roles in the Defense establishment of the United States or allied nations. The program prepares graduates to manage organizations, resources, people, and programs in complex environments. The program prepares graduates to

***Managerial**: Be well grounded in fundamental areas of management, including accounting, financial management, operations, economics, acquisition, strategy, communications and organizational management.*

***Environmental:** Understand the economic, political, governmental, defense and organizational environments that influence their decisions and the organizations in which they work.*

***Professional**: Possess the specialized knowledge, skills and abilities to serve in positions of significant responsibility within a specified Defense Management field (Financial Management, Logistics, Acquisition, Contracting, Defense Management, and Information Management).*

***Analytical:** Apply analytical and problem-solving techniques to enhance decision making in policy and management*

***Critical**: Be capable of thinking in a critical, creative, integrative and strategic manner*

2.1I GSBPP and MBA Program Student Body

The student body in GSBPP resident programs, and in the MBA program, is comprised of military officers and defense department civilians from all services of the United States, officers and civilians of other nations' militaries, and U.S. federal government employees. Students are generally enrolled in NPS only after completing five to eight years of military service or work experience. Students have demonstrated their professional competence and have already served in positions of significant responsibility.

Almost all of our resident students are full-time. While many of our students are graduates of the U.S. military academies, most of the students who enter the curricula offered by the Graduate School of Business and Public Policy obtained their baccalaureate degrees from civilian colleges and universities.

To be qualified for admission, a student must be a proven leader in his/her own service or command. The candidate must also hold a baccalaureate degree with at least a C+ average, and must have completed the prerequisites as required for each degree program. In addition, all international students must demonstrate English fluency. The graduate level curriculum requires dialogue and discussion both in the classroom and team projects; a good understanding of the English language is critical to success.

(The student body for our distance and off-campus education programs includes both military officers and DoD civilians. Military officers are comparable in rank to the

students who attend the resident programs. DoD civilians are mid-career professionals who have obtained baccalaureate degrees, at least, from civilian colleges and universities.)

2.1J GSBPP and MBA Program Enrollment Trends

Student enrollment is monitored and, in some cases, limited to maintain reasonable numbers of students in each discipline. Care is exercised to maintain acceptable balances between resources and numbers of students. GSBPP has seen significant growth each year over the period of the past four-five years. Growth in GSBPP has been driven primarily by two factors: 1) Increased enrollment in the resident MBA program, primarily a result of increases in U.S. Air Force students, a group that was previously an insignificant portion of our student body. This growth has enriched classroom discussions. This growth in USAF students is, however, reversing in 2007 and is expected to lead to a noticeable reduction in resident enrollment. 2) Expansion in distance learning programs, primarily a result of the establishment of the DL Executive Master of Business Administration (EMBA) program, which has risen to a steady state enrollment of about 200 students since its beginning in 2002. Table 6.3B, in the Standard 6 Student chapter of this report, provides details on the enrollment trends.

We have worked to match the growth in enrollment with a commensurate growth in faculty, support and material resources, though this has been a challenge. We see growth continuing at a moderate pace to meet the increasing demand for officers and civilians with the knowledge and tools to manage scarce human and capital resources in the defense sector. Future growth will likely occur primarily in the collective DL degree programs (not NASPAA-accredited) as opposed to the resident MBA and MSM degree programs (NASPAA-accredited).

2.1K GSBPP Instruction Program Guidance

The GSBPP faculty controls the content of the curricula leading to the degrees granted. Each of the specialty curricula in GSBPP has a sponsor. The civilian-world analogy of a sponsor would be the employer for whom the students will typically work after graduation. As an example, the sponsor for the Financial Management Curriculum is the Office of the Comptroller of the Navy. Sponsors work with GSBPP to help understand the educational needs of the students in their respective curricula. The MBA common core curriculum in the resident program is controlled by the faculty, but obtains required NPS Academic Council approval when required.

The Dean of the School, the Associate Deans, led by the Senior Associate Dean, the Academic Associates for the specific curriculum, and the Program Officer work closely with curriculum sponsors to determine educational skill requirements necessary to prepare students to serve within the sponsored specialty. There is regular and on-going contact with

the sponsors, who participate in formal, on-campus biennial curriculum reviews to foster innovation and evolutionary change.

Internally within GSBPP, the Faculty Instruction Committee (FIC) acts as the agent of the Faculty for the oversight of instruction matters and the development of instruction policy and programs. The membership of the FIC consists of faculty representing GSBPP's various faculty areas, various curricula, and various degree programs. The FIC is GSBPP's initial body for consideration of matters involving 1) instruction policy and practices, 2) significant changes to the core curriculum of degree programs or degree program requirements, and 3) the creation of new degree or non-degree instruction programs. Appendix 3.4C contains a copy of the FIC's initial charter.

External to GSBPP, the school also has a GSBPP Advisory Committee, made up of senior military flag officers and government officials at the Assistant Secretary level. The Advisory Committee advises the Dean and faculty on current military issues and future needs, and helps direct us toward research issues and funding. Their personal involvement and support for both teaching and research is helpful for GSBPP to stay in front of the many changes that are occurring in the national security environment around the world. The GSBPP Advisory Committee was established in 2002. Intended to meet at least twice a year, the level of the Committee's involvement and attention to GSBPP has varied since its establishment, often depending on the Chairmanship and make up of the Committee. While continuing communication between the GSBPP Dean and members of the Committee – as individuals – occurs, there has been little activity of the Advisory Committee – as a Committee - during the past couple of years. At present the Advisory Committee represents unrealized potential for the benefit of GSBPP. Appendix 2.1G contains the Advisory Committee's initial charter.

Standard 2.2 Assessment
The program shall assess its students' performance and the accomplishment of its objectives. Assessment procedures and measures may take any form appropriate to the program and its circumstances, but each program shall develop and use procedures for determining how well it carries out its mission.

2.2A Overview of GSBPP Assessment and Review Procedures

Assessment practices flow from the school's mission: The mission of NPS is to provide advanced professional studies at the graduate level for military officers and defense officials from all services and other nations. To accomplish that mission in GSBPP, the educational programs are structured around a core curriculum as well as specialized curricula of study that fulfill the present and future needs of the defense community for officers educated in management. The various curricula are designed to

educate the officers in specific Educational Skill Requirements (ESRs). ESRs define a particular set of educational skills that an officer should possess to function effectively as a manager in a given specialization area. ESRs for a program are developed by curriculum sponsors in conjunction with NPS, especially with the faculty who teach in specialty areas.

The Graduate School of Business and Public Policy has various stakeholders, including students, alumni, faculty, program sponsors, and the broader defense and academic communities. The school relies on a number of procedures, both formal and informal, to obtain feedback from each of these groups to assess the school's performance and the accomplishment of its educational mission.

Formal systems include such items as surveys and questionnaires, which are routinely administered, primarily to current students. A survey for alumni, to be conducted by NPS, is in final draft stages. There are also formally assigned positions within the school that have central responsibility for assessment and management of curricula.

Informal systems include the network of contacts that exist between faculty and former students, military officers, and executives within the larger defense community. The various mechanisms used for assessment and review fall into three related areas – positions, processes, information - as follows:

- Managerial Positions with Assessment Responsibility
  - -Senior Associate Dean / Associate Dean for Instruction
  - -Academic Associate for the MBA/MSM Core
  - -Academic Associates for specialization curricula
  - -Program Officer
  - -Course Coordinators
- NPS and GSBPP Review Processes
  - -Curriculum Review Process
  - -Educational Skill Requirements (ESRs)
  - -Annual Faculty Review Process
  - -Faculty Instruction Committee
  - -Faculty Advisory Board
  - -Ad hoc program review committees
  - -Student Educational Representatives
- Assessment Information: Surveys and Questionnaires:
  - -NPS Student Opinion Forms
  - -GSBPP Core Curriculum Survey
  - -GSBPP Student Exit Curriculum Surveys
  - -Midterm Student Opinion Forms
  - -NPS Alumni Survey

All of these mechanisms play a role in assessment and will be discussed further below. However, unique to NPS, and central to assessment, are the position of Academic Associate and the formal process of the Curriculum Review, so these mechanisms are described first.

2.2B Academic Associates and Curriculum Reviews

Academic Associates

Assessment practices are structured in terms of curricula. Once a curriculum is established, an Academic Associate is designated for each curriculum. This person has the primary responsibility for managing the curriculum. He/she is responsible for developing, maintaining, and updating curricula to accommodate the needs and academic requirements of the Navy and the Department of Defense. The Program Officer, an active duty naval officer assigned to GSBPP, assists the Academic Associate with administrative liaison with sponsors. The Academic Associate is a faculty member thoroughly familiar with NPS, the Navy and DoD, and is assigned part-time duty to this position. (Appendix 2.2B1, from the NPS Faculty Handbook, further describes the Academic Associate and Program Officer positions.)

The Academic Associate works with specialty sponsors and consultants to define pertinent needs, including professional objectives; to delineate projected utilization of program graduates; and to consult with GSBPP management and faculty to propose useful courses and curricula. These plans and projections consider the impact of developing technology, evolving bodies of knowledge (i.e., other graduate programs related to those under their purview), and the changing mission of the Navy. They are prepared, reviewed, and updated during sponsor reviews of curricula. The Academic Associate maintains a close relationship with the curriculum sponsor to ensure Navy requirements are linked to the academic ESRs.

The Academic Associate for the resident MBA core curriculum is responsible for working with faculty, students and GSBPP management to ensure the quality of the core courses. As will all Academic Associates, he/she has access to all assessment data collected and is responsible for formulating recommendations for suggested changes (such recommendations would go first to the Faculty Instruction Committee and subsequently to the faculty for vote).

Academic Associates for the **resident MBA curricula** are as follows:

Logistics Management Curricula:

- Transportation Management (814) — Keebom Kang
- Supply Chain Management (819) — Keebom Kang
- Material Logistics Support (827) — Keebom Kang

Acquisition Management Curricula

- Acquisition and Contract Management (815) — Rene Rendon
- Systems Acquisitions Management (816) — Keith Snider

Financial Curriculum

- Financial Management (837) — Larry Jones

Defense Management Curricula

- Defense Systems Analysis International (818) — Alice Crawford
- Resource Planning & Mgnt for Intl Defense (820) — Alice Crawford
- Defense Business Management (809) — Jim Suchan

Information Management Curriculum

- Information Systems Management (870) — Glenn Cook

Core Curriculum

- MBA Common Core — Jim Suchan

Academic Associates for the **resident MSM curricula** are as follows:

Analysis Curricula

- Manpower Systems Analysis (847) — Steve Mehay
- Defense Systems Analysis (817) — Don Summers

Core Curriculum

- MSM Common Core — Jim Suchan

Academic Associates for the **Executive Management** curricula are as follows:

Executive Masters in Business Administration (805) — John Mutty
Master of Executive Management (808) — Bryan Hudgens

Academic Associates for the **Distance Learning MS** curricula are as follows:

Contract Management (835) — Corey Yoder
Program Management (836) — Brad Naegle

In carrying out his or her responsibilities, each Academic Associate maintains ongoing contact with the students, faculty, sponsors and alumni of his/her curriculum. Academic Associates for all curricula have a similar responsibility, but each develops his/her own procedures for managing the curriculum. Routine practices cited by the Academic Associates who manage the resident curricula include:

Input from current students

Meetings with student Section Leaders
Evaluation meetings with current students in the curriculum
Formal exit questionnaires administered to graduating students
End of curricula exit interviews/critiques with graduating students

Academic advising sessions with students
Review of course evaluation (SOF) data
Input from curriculum sponsors
Biennial Curriculum Review
Sponsor campus visits
Informal curriculum reviews with sponsor
Ongoing ad hoc sponsor contact
Input from graduates/alumni:
Ad hoc contact with graduates
NPS Alumni survey planned
Input from Faculty
Curriculum faculty meetings
Supervision of Course Coordinators
Review of course outlines

The Curricular Review Process

The Naval Postgraduate School is unique in that each curriculum exists to serve specified educational needs identified by a sponsor external to the school, but within the defense community. The content of each curriculum is assessed and revised every two years through a structured sequence of events culminating in a formal Curriculum Review with the curriculum sponsor. The purpose of the review is to validate ESRs and propose new ESRs if required; validate any joint stakeholder requirements; review degree requirements that may be independent of the ESRs; conduct an assessment of the design and execution of the curriculum (including a review of faculty and student research). Appendix 2.2B2 provides the formal NPS instruction for curriculum reviews.

Planned events in the review cycle leading up to the formal Review include the following:

Twelve months prior: the Academic Associate begins coordination with sponsors/stakeholders on issues for the next curricular review. They may be assisted in the logistics of this effort by the GSBPP Programs Officer (A Navy Commander who has military line authority over the students and is thoroughly familiar with the curriculum, the sponsors and Navy systems).

Eleven months prior: a review is conducted by program sponsors. This process is mostly external to NPS. The intent is for the program sponsor to review manpower and billets (jobs) and hence review needs for students educated within a given specialty area. The Academic Associate begins collecting required internal data such as exit interviews, survey results, and course content for analysis.

Seven months prior: the School Dean chairs an internal curriculum review. Participants include the NPS Director of Programs, the Academic Associate for the

curriculum, the GSBPP Programs Officer, and the Associate Dean for Instruction. The objective is to assess the curriculum's quality and relevancy. The Academic Associate conducts a curriculum self-study in preparing the Internal Review. One outcome of the Internal Review is a set of curriculum issues to be discussed with the program sponsor and become part of the formal review agenda.

Two months prior: the Academic Associate consults with the sponsors on the status of the review and gathers a set of expected issues. Action plans are drafted for the expected issues.

One-month prior: the Academic Associate pre-briefs the NPS President, Provost, Associate Provost for Academic Affairs, and the Director of Programs. The pre-brief reviews the issues and the proposed presentation to the sponsor. Issues are clearly defined and coordinated with the sponsor.

Formal Curriculum Review: joint review of the curriculum by NPS and the program sponsor. The review focuses on ESRs, curriculum content and resources necessary to support the curriculum. Actions necessary to change and improve the curriculum are identified and agreed upon. While the sponsor is on campus, he/she meets with students to get direct feedback on the curriculum.

2.2C Managerial Positions, Processes and Information

Managerial Positions

- Associate Dean for Instruction Responsible for managing the development and delivery of the Graduate School of Business and Public Policy's educational programs.
- Academic Associates / Program Officer Discussed above.
- Course Coordinators Faculty members assigned to each course. Course coordinators monitor course content and assure that courses are current and relevant.

Review Processes and Review Committees

- Curriculum Review Process and Educational Skill Requirements: discussed above
- Annual Faculty Review Process Annually, the school conducts a "Collegial Review" process for faculty who are not yet at the Full Professor or Senior Lecturer rank. All Full Professors, as a group, review tenured Associate Professors; tenured Professors, as a group, review untenured Professors and Lecturers; and Senior Lecturers review Lecturers. This process reviews and mentors faculty as they progress toward promotion and/or tenure in their career at

GSBPP. But, secondarily, the review process assesses the manner in which faculty members contribute to the educational mission of the school.

- Faculty Instruction Committee The Faculty Instruction Committee (FIC) is a standing GSBPP faculty committee serving as the focal point for addressing matters related to instruction policy and practice in GSBPP. The FIC engages major curriculum issues within instructional programs. Specific roles and responsibilities include: studying and evaluating issues and proposed actions and making recommendations to the GSBPP faculty for consideration; making operational policy decisions relevant to instructional programs; providing consultation and advice for the GSBPP administration, particularly the Associate Dean for Instruction. The FIC is discussed further in standard 3.4C, within the GSBPP administrative organization.
- Faculty Advisory Board The Faculty advisory Board (FAB) is the standing faculty committee with the broadest perspective on school-wide issues and leads the processes of faculty governance in GSBPP. The primary role of the Faculty Advisory Board is to consult with and advise the Dean on GSBPP-wide issues of policy, strategy, and organization. FAB membership includes representatives of the various faculty groups in the school. The FAB is discussed further in standard 3.4C, within the GSBPP administrative organization
- Ad Hoc Faculty Program Review Committees It has been common practice in GSBPP that an ad hoc faculty review committee is established to provide an independent review of any newly proposed degree program or curricula. Such ad hoc committees report the findings of their review to the full GSBPP faculty as part of the new program approval process. (Since its recent establishment, the FIC has also played this role.) It is also common practice to establish a faculty program review committee at some period after initiating a new program, to assess the program's effectiveness once underway. Ad hoc faculty committees reviewed the MSCM and MSPM distance learning degree programs in 2003. Twice since its inception in 2002, faculty committees have reviewed the new MBA degree program. (Further comments on the review of the MBA will follow in standard 2.3, Guiding Performance.) GSBPP plans to conduct a faculty review of the EMBA program in the near future.
- Educational Representatives In 2002, GSBPP created the role of student Educational Representatives (Ed Reps) to assist the continuing assessment of the resident MBA/MSM program. The Ed Rep is selected during the first quarter by the other students in his/her entering cohort. The Ed Rep serves as a medium to facilitate communication between students, course instructors and GSBPP program administrators, thus encouraging ongoing dialogue directed toward improving the instructional programs.

Assessment Information

- Student Opinion Forms (SOFs) A questionnaire filled out by all NPS students at the completion of each course. It provides quantitative and qualitative course and

instructor evaluation. It is used by instructors to revise and improve courses and by GSBPP to evaluate faculty instructional performance. Appendix 2.2C contains a copy of the SOF. .

- GSBPP Core Curriculum Survey A student questionnaire conducted after students complete the common core curriculum in the resident MBA/MSM program (usually late in the students' third quarter or fourth quarter). This survey provides students' assessments of the value, defense-relevance and satisfaction associated with the common core curriculum courses. Rating and qualitative assessments are provided. It is used by the Associate Dean for Instruction and Academic Associate for the Core to improve the core curriculum. Appendix 2.2C contains a copy of the Core Survey.
- GSBPP Student Exit Surveys A questionnaire conducted when students complete the specialty part of the resident MBA/MSM program (late in students' final quarter at NPS). It provides students' assessments of the value, defense-relevance and satisfaction associated with the specialty curriculum courses. Rating and qualitative assessments are provided. These surveys are generally accompanied by exit briefs with graduating students to review the survey findings. It is used by Academic Associates to improve the curriculum. Appendix 2.2C contains an example subspecialty curriculum survey.
- Midterm Student Opinion Forms Some faculty members administer a course evaluation at the midterm. This may replicate the formal NPS SOF or it may be designed by the faculty member.
- NPS Alumni Survey An NPS survey has been designed and is ready to conduct. NPS plans call for initial administering of the survey during fall 2007. Appendix 2.2C contains a copy of this planned alumni survey.

Standard 2.3 Guiding Performance
The program shall use information about its performance in directing and revising program objectives, strategies, and operations

2.3A Overview of Program Changes Resulting from Assessment and Review Procedures

Significant curriculum changes have occurred during recent years due to assessment and review processes undertaken within GSBPP, as discussed in the preceding standard 2.2.

The school has reviewed and clarified its mission, principally through on-going work on the school strategy by the GSBPP management team and the Ad Hoc Strategy Committee in addition to many meetings held between sponsors/stakeholders and the Dean who entered in September 2005. This has resulted in new markets being identified,

and new programs and curricula being evaluated and created. Program changes have occurred that 1) significantly altered the resident MBA/MSM program, with emphasis in the core curriculum, 2) added and deleted specialty curricula, 3) modified the specialty curricula to better serve sponsor requirements, and 4) added and deleted degree programs. . The remainder of this section provides summary descriptions, with more detail concerning these program changes.

2.3B The MBA/MSM Resident Program -- Change in Core and Degree

Resident Degree Change Starting in 2001, GSBPP conducted a comprehensive assessment of its main resident degree programs. In part, this review grew out of the previous years' NASPAA and AACSB accreditation visits. In part, it was the result of a long-standing faculty desire to comprehensively review its core curriculum. In part it was motivated by the initiative, encouragement and support from a new NPS Superintendent at the time. The assessment included the following:

- Contact and discussion with high-level Admirals throughout the US Navy to determine their needs and expectations concerning graduate level education
- Assimilation of curriculum sponsor and student evaluations of GSBPP resident curricula
- Survey of current students to determine the value they attached to particular degrees and degree programs
- Review of the existing resident degree programs by GSBPP faculty
- Bench marking of GSBPP degree programs against peer schools

The comprehensive review of GSBPP resident degree programs was lead by a representative committee of GSBPP faculty. The committee's recommendations were reviewed by an independent GSBPP evaluation committee. These results were presented to the full faculty for further discussion and modification. After extensive faculty input and debate, the GSBPP faculty adopted the resulting recommendations, which were then approved by the NPS Academic Council. This process led to several significant decisions and actions:

- Ground-up redesign of the core courses within the resident program
- Changing the name of the predominant degree earned in the resident program from Masters of Science in Management (MSM) to Masters of Business Administration (MBA); at the time of this name change, 11 of GSBPP's resident curricula changed to awarding a "Defense-Focused MBA" degree, while one curriculum continued to award the MSM degree
- Merging the Masters of Science in International Resource Management and Planning into the defense-focused MBA degree program

Detailed results of these changes were reported to NASPAA under standard 4.0 in the 2002 annual report. (Appendix 2.3C contains excerpts from NASPAA Annual Reports 2002-2004 describing curriculum changes.)

2002 Review The GSBPP faculty closely tracked the initial student cohorts that started in January 2002 to monitor all aspects of the program. This tracking involved substantial student input. It became clear early on that the new core design materially exacerbated a problem our students had been experiencing, to a lesser degree, for a number of years: excessive academic workload. In responding to evolving and increasing educational requirements from our specialized curricula sponsors, we had added several required specialty courses, many of them "small" course (less than the 4-credit hour standard). The cumulative effect of added requirements in the specialization curricula and the core redesign was to increase student workload beyond a level conducive to successful learning.

During fall 2002, a faculty committee examined the issue and suggested changes to correct the student workload problem. The process involved the faculty examining the core MBA program, the Academic Associates, in conjunction with faculty groups in each specialty area, examining the specialty portion of the program, and individual instructors examining the workload in their courses. The recommended changes were adopted by the larger faculty and approved by the NPS academic council as appropriate. Objectives were to:

- Reduce the absolute number of courses (particularly 2-credit hour courses)
- Reduce the total credit hours in specialization curricula
- Adjust student work assigned in individual courses to correspond to course credit hour size.

With these changes, the curricula now average somewhere around 16 +/- credit hours per quarter, a "normal" load. Detailed results of these changes were reported to NASPAA under standard 4.0 in the 2003 annual report.

2003-2004 Review When GSBPP adopted the MBA, the faculty pledged to systematically review the program after the first class graduated in June 2003. This review was initiated during fall 2003 and completed in summer 2004. The review was lead by a GSBPP faculty committee. Their recommendations were adopted by the full GSBPP faculty and approved by the NPS Academic Council, as appropriate. The committee suggested modest adjustments to the core courses. These changes primarily involved repackaging the management and analytical core courses. Detailed results of these changes were reported to NASPAA under standard 4.0 in the 2004 annual report.

2005 Changes The only significant change to the core in 2005 was introducing a "core elective" block. Students had almost no flexibility or room in their defined curricula for elective courses. As a part of the MBA core, all students are now required

to select one course from a short list of offerings. This core elective block provides a space both for students to select an elective course and for the program to experiment and innovate by offering new courses. An acceptable core elective must add value to the core knowledge in business and public policy and be relevant to students in any concentration curricula. Detailed results of these changes were reported to NASPAA under standard 4.0 in the 2005 annual report.

As described above, our curricula are periodically fine tuned to meet the changing needs of the students and program sponsors. Care is taken to maintain an integrated curriculum that is linked across each curriculum's educational objectives. This results in an effective student learning environment.

2.3C The MBA Program -- Additions and Deletions of Specialty Curricula

In response to changing sponsor needs, interest in the MBA program by new sponsors, or changes in student enrollments, new individual specialty curricula may be created and older ones discontinued. During recent years, two new curricula have been added under the MBA program umbrella, two have dropped out.

Shore Installation Management: At the time GSBPP was last reaccreditation by NASPAA, the Shore Installation Management (SIM) Curriculum was one of the many curricula offered within the resident degree program. Though valued by the Navy, the Navy was unable to maintain student enrollments in the SIM curriculum at the level anticipated when the curriculum was created. Small student numbers made the curriculum unsustainable and the final students graduated in 2002.

Information Systems Management: A new specialty curriculum created since the last NASPAA reaccreditation is the Information Systems Management (ISM) curriculum. ISM was developed in response to a requirement from the Naval Supply Systems Command (NAVSUP). NAVSUP sponsors a number of curricula at NPS, both in GSBPP and in other NPS graduate schools. NAVSUP identified a need for graduates with a blended education, including broad managerial and administrative expertise with significant information system technology depth. The ISM curriculum combines the common core curriculum courses from GSBPP's MBA program with specialization courses from NPS's Department of Information Sciences. This curriculum is described fully in standard 4.0.

Defense Business Management: A new curriculum created just this past year (2007) is the Defense Business Management (DBM) curriculum. DBM was created for students who may pursue the MBA degree but have no need to satisfy the specialization requirements of any of the other recognized specialty curricula. The DBM permits students to design their own specialization, in conjunction with their Academic Associate.

Defense Systems Analysis: Defense Systems Analysis (DSA) has long been one of the curricula in the resident program. As for most resident curricula, an MSM degree was awarded prior to 2002, and the DSA curriculum then shifted to awarding the MBA degree upon its development in 2002. During 2006-2007, the DSA curriculum underwent a significant curriculum review with the sponsors, leading to a redefinition of the objectives of the curriculum. Sponsors wished to increase the emphasis and focus on developing the analytical skills and capabilities of the graduates. In response to this, quantitative methods and modeling courses were added to the DSA and a master's thesis became a required component. The objectives of this "new" DSA curriculum are better aligned with the MSM degree program rather than the MBA degree program, so the DSA curriculum now satisfies the requirements of the MSM degree and, starting with 2007, students following the DSA curriculum will earn and be awarded the MSM. DMA is no longer and MBA degree curriculum.

2.3D MBA Specialty Curricula Review and Changes

The school has assessed and reviewed the MBA specialization curricula, principally through the ongoing formal process of curriculum reviews of existing programs. This has resulted in continuing modification and adjustment to better satisfy academic and curriculum sponsor needs. Below is a summary of changes in specialty curricula that have occurred during recent (about five) years.

Logistics Curricula:

- The following sentence was added to the ESRs: "The graduate will also have a detailed understanding of the plans and processes of the DoD for providing support of strategic sealift and mobilization."
- Transportation Logistics Management Curriculum (813) and Systems Inventory Management Curriculum (819) were merged under the Supply Chain Management Curriculum (819)
- With the change from the MS to MBA degree, three curricula (Transportation Management (814), Supply Chain Management (819), and Material Logistics Support Management (827)) adopted a common course matrix
- Added a new course: GB3420 Supply Chain Management
- Added a new course: GB4420 Logistics Information Systems
- Revised requirements for Acquisition courses: GB3031 (2-0) may be substituted by MN3301 (4-0) or MN3331 (5-1) as part of DAWIA certification requirements; Curriculum 819 officers (3100 Officers) take MN3331 (5-1); Curriculum 814 and 827 officers (1110 & 1520 Officers) choose between MN3301 (4-0) and MN3331 (5-1)

Acquisition Curricula:

For the Acquisition and Contract Management Curriculum (815)

- Created, in response to USAF needs, a three-course track in Strategic Purchasing. Developed Educational Skill Requirements (ESRs) for this track
- Created two new courses, one on Contingency Contracting and one on Contracting for Services
- Revised three courses (MN3303, MN3315, and MN4371) to align those more closely with Defense Acquisition University (DAU) learning objectives
- 5th quarter; Contingency Contracting course (MN3318) moved to 6th quarter
- Dropped MN2302 (0-2) seminar in quarters 4, 5, and 6. Retain capability for guest speakers.
- MN3304 and MN3312 DAU equivalencies updated

For the Systems Acquisition Management Curriculum (816):

- In response to Army and Air Force sponsor needs, reduced curriculum length from seven to six quarters
- Revised MN4602 (Test & Evaluation Management) from 2-0 to 2-2 to reflect additional content and sponsor emphasis
- Revised Educational Skill Requirements (ESRs) to reflect sponsor emphasis on "systems of systems" management and strategic thinking
- Removed MN2303 (Seminar for Program Management Students) to reduce the students' quarterly workload
- Obtained DAU equivalency for MN4602 (Test & Evaluation Management, 2-2)
- Updated MN3303 and MN3304 to reflect new DAU equivalencies

Financial Curriculum

For the Financial Management Curriculum (837):

- As a result of the 2004 Curriculum Review, the ESRs were revised to conform to the Joint Financial Management Improvement Program's Competencies for Federal Financial Managers; JFMIP is jointly sponsored by OMB, OPM and Treasury
- Added two options for Certified Management Accountant (CMA), Certified Financial Manager (CFM), and Certified Defense Financial Manager (CDFM) Professional Certifications: MN4157 Seminar in Management Accounting and GB4560 Seminar in Financial Management
- Added required courses GB4550 (Advanced Financial Reporting) and GB4570 (Advanced Finance)

- Added OA4702 (Cost Estimation) to replace required MN4163 (Decision, Cost and Policy Analysis)
- Developed new required course, MN3301 (Systems Acquisition Management) for U.S. Navy and Air Force students in place of MN3331 (Systems Acquisition and Project Management), which continues as the requirement for USMC students
- Reinstituted GB4520, Internal Control and Auditing, as a required curriculum course.

2.3E New and Deleted GSBPP Degree Programs

Beyond the development of the MBA degree, there have been four major additions and deletions to GSBPP degree programs during the past five years.

EMBA In 2002, GSBPP began a new Executive Master of Business Administration (EMBA) program. A continuing issue concerning graduate education for U.S. Naval officers is the difficulty of Unrestricted Line (URL) officers to devote lengthy periods of time away from operational careers to full-time graduate education. As a response to these circumstances, GSBPP created the part-time, distance learning EMBA program, providing management and administrative education without disrupting officers' career paths. The EMBA program is offered to students by VTC at 13 sites around the country. The program currently has an enrollment of about 200 students. The EMBA is described in detail in the Volume III, Appendices, within Appendix 9.0.

MSRPM: The Master of Science in Resource Planning and Management (MSRPM) degree program had existed since 1993, and was the degree awarded to students (all international) who completed the Resource Planning and Management for International Defense curriculum. In 2002, following the revision of the resident core curriculum and the establishment of the MBA degree, sponsors for the Resource Planning curriculum decided to transition the curriculum to the MBA program. The set of courses in the Resource Planning curriculum were revised to incorporate all MBA core courses and satisfy MBA degree requirements. With this shift to the MBA, the MSRPM degree was discontinued.

MEM In 2006, GSBPP received approval from the NPS Academic Council to offer a new resident degree program, the Master of Executive Management (MEM). The MEM was developed at the request of the U.S. Air Force Acquisition community. Across the service, the USAF designates high-performing, mid-career officers for Intermediate Development Education (IDE) and sends such officers to graduate programs. The USAF Acquisition community requested that GSBPP develop a 1-year resident program to serve its IDE officer needs. Curriculum-wise, the MEM has been modeled on the EMBA program and is very similar with respect to objectives, curriculum content and courses. The MEM enrolled its first students (5) in July 2006. The MEM is described more fully in Appendix 4.1.

LEAD The Master of Science in Leadership and Human Resource Development (LEAD) program was designed and managed for the United States Naval Academy (USNA) by GSBPP for nine years. The program was delivered by NPS faculty, who traveled to USNA, in modularized courses one to two weeks long. During 2006, USNA conducted a review of their needs and decided to put the program up for competitive bids. In June 2006, USNA outsourced this program to the University of Maryland. While 2006 marked that last year for GSBPP delivery of the LEAD program, there is some possibility that the program could return to GSBPP at some point in the future. The LEAD program is discussed fully in Volume III, Appendices, within Appendix 9.0.

STANDARD 3.0 -- PROGRAM JURISDICTION

Standard 3.1 Administrative Organization
Within the framework of the university organization, responsibility for the professional masters degree program should rest with an identifiable component of faculty and an administrative organization capable of conducting the program effectively.

3.1A Administration Arrangement

The Naval Postgraduate School (the university) is organized into university-level administrative offices and the academic operating units. An NPS organization chart is provided below that depicts an overview of the university administration and the academic units. The major academic units are the four individual graduate schools, further divided into departments:

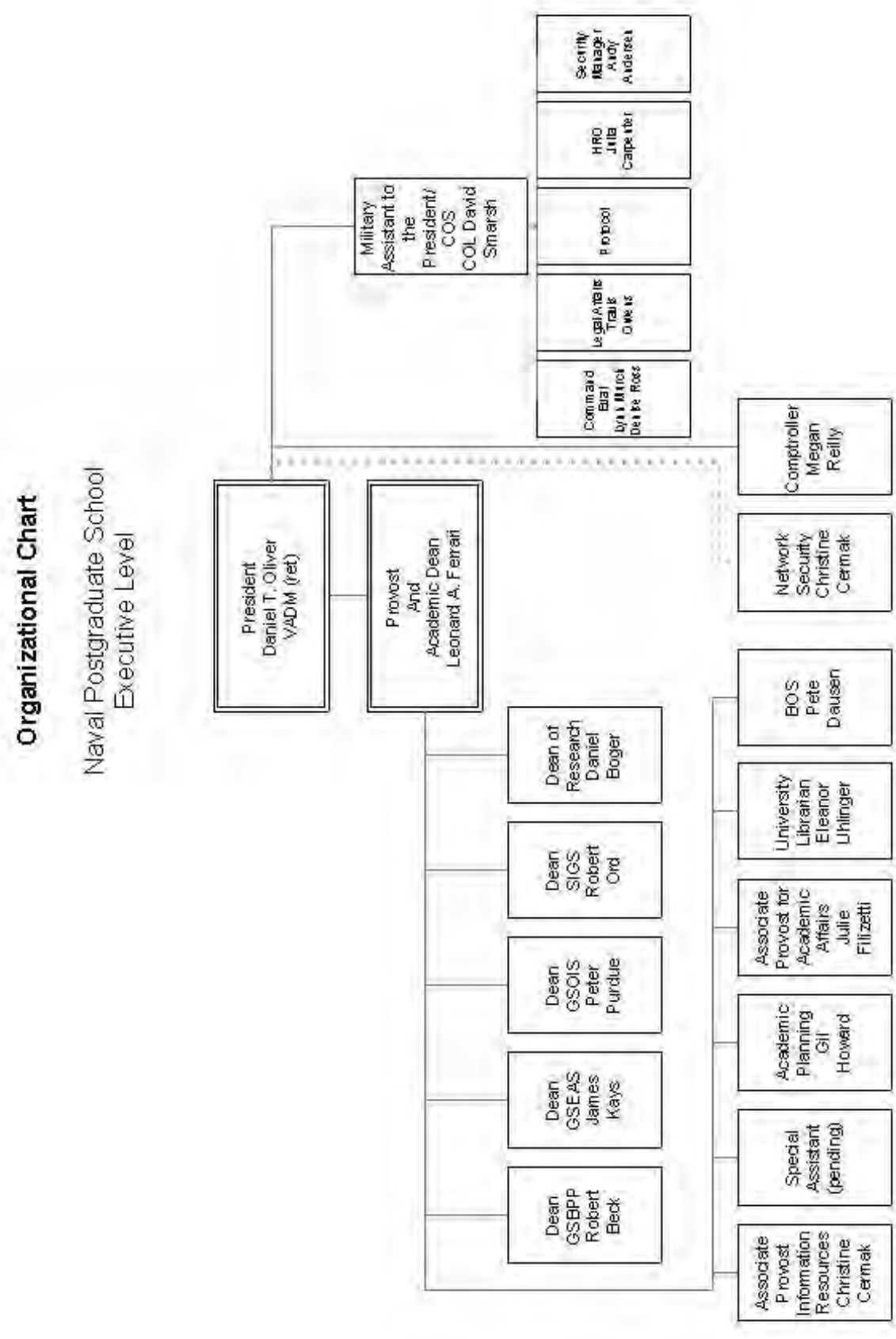
- The Graduate School of Engineering and Applied Sciences: Dean James Kays
  - -Applied Mathematics
  - -Oceanography
  - -Space Systems
  - -Systems Engineering
  - -Physics
  - -Meteorology
  - -Mechanical and Astronomical Engineering
  - -Electrical and Computer Engineering

- The Graduate School of Operational and Information Sciences: Dean Peter Purdue
  - -Operations Research
  - -Computer Science
  - -Information Sciences
  - -Defense Analysis

- The School of International Graduates Studies: Dean Robert Ord
  - -National Security Affairs
  - -Center for Homeland Defense and Security
  - -Center for Civil Military Relations
  - -Defense Resources Management Institute

- The Graduate School of Business and Public Policy: Dean Robert Beck

Besides the four graduate school deans, NPS has a Dean/Associate Provost of Research, providing oversight of NPS research program activities and administrative supervision of three NPS research institutes:


Organizational Chart
Naval Postgraduate School
Executive Level
President
Daniel T. Oliver
VADM (ret)
Provost
And
Academic Dean
Leonard A. Ferrari
Military
Assistant to
the
President/
COS
COL David
Smarsh
Command
Chief
Legal Affairs
Trial
Protocol
HRO
Security
Manager
Andy
Anderson
Comptroller
Megan
Reilly
Network
Security
Christine
Cermak
Dean of
Research
Daniel
Boger
Dean
SIGS
Robert
Ord
Dean
GSOIS
Peter
Purdue
Dean
GSEAS
James
Kays
Dean
GSBPP
Robert
Beck
Associate
Provost for
Academic
Affairs
Julie
Filizetti
University
Librarian
Eleanor
Uhlinger
BOS
Pete
Dausen
Academic
Planning
Gil
Howard
Special
Assistant
(pending)
Associate
Provost
Information
Resources
Christine
Cermak

- Dean and Associate Provost of Research: Dan Boger, Acting
  - -Meyer Institute for Systems Engineering
  - -Modeling and Virtual Environments (MOVES) Institute
  - -Cebrowski Institute

Within the NPS academic units, department chairs report to the graduate school deans; the deans report to the Provost and Vice President of NPS. The Provost is responsible for the academic programs and their operations. He delegates responsibilities, as appropriate, to the respective deans and department chairmen. The current NPS Provost position is Dr. Leonard Ferrari. Formerly the NPS Dean of Research, Dr. Ferrari assumed the Provost position in early AY 2007.

The institution is headed by a President. Historically, the President (formerly Superintendent) of NPS has been an Admiral on active duty in the Navy. Historically, the President's term ranged from two to three years duration. The most recent President of NPS was Rear Admiral Richard Wells, Acting President from January-June 2006. During 2006, legislation was passed by the U.S. Congress permitting the President's position to additionally be filled by a civilian. The President's position was vacant until April 1, 2007, when the position was assumed by President Daniel T. Oliver. President Oliver is the first civilian President of NPS, with an initial term of five years. While a civilian, President Oliver is a retired Vice Admiral, having formerly served a full and accomplished career in the U.S. Navy.

3.1B Relationship with Other Academic Units

There are no significant formal relationships or joint agreements between GSBPP and other departments at NPS. There are, however, numerous situations in which GSBPP and other departments collaborate to deliver NPS degree programs or curricula. These arrangements are typically of the service type, providing courses either to or from other departments. The Operations Research, Information Sciences, National Security Affairs, and Systems Engineering Departments all offer courses designed for MBA and MSM students. Our faculty exercise considerable influence on this course content.

Standard 3.2 Recognized Program
There is a public affairs and administrative program with identifiable faculty membership, whose primary responsibility for the program is recognized at the next higher level of university organization.

3.2 Recognized Program

As shown in the GSBPP organizational chart below, Robert Beck was the Dean of the Graduate School of Business and Public Policy during the self-study year. Dean Beck

has overall responsibility for GSBPP's operation and for maintaining links with the school's external sponsors and stakeholders. Dean Beck is advised by the Faculty Advisory Board (FAB). The FAB is composed of elected representatives from all faculty groups and serves as the standing faculty committee with the broadest perspective on School-wide issues.

2A School Administration

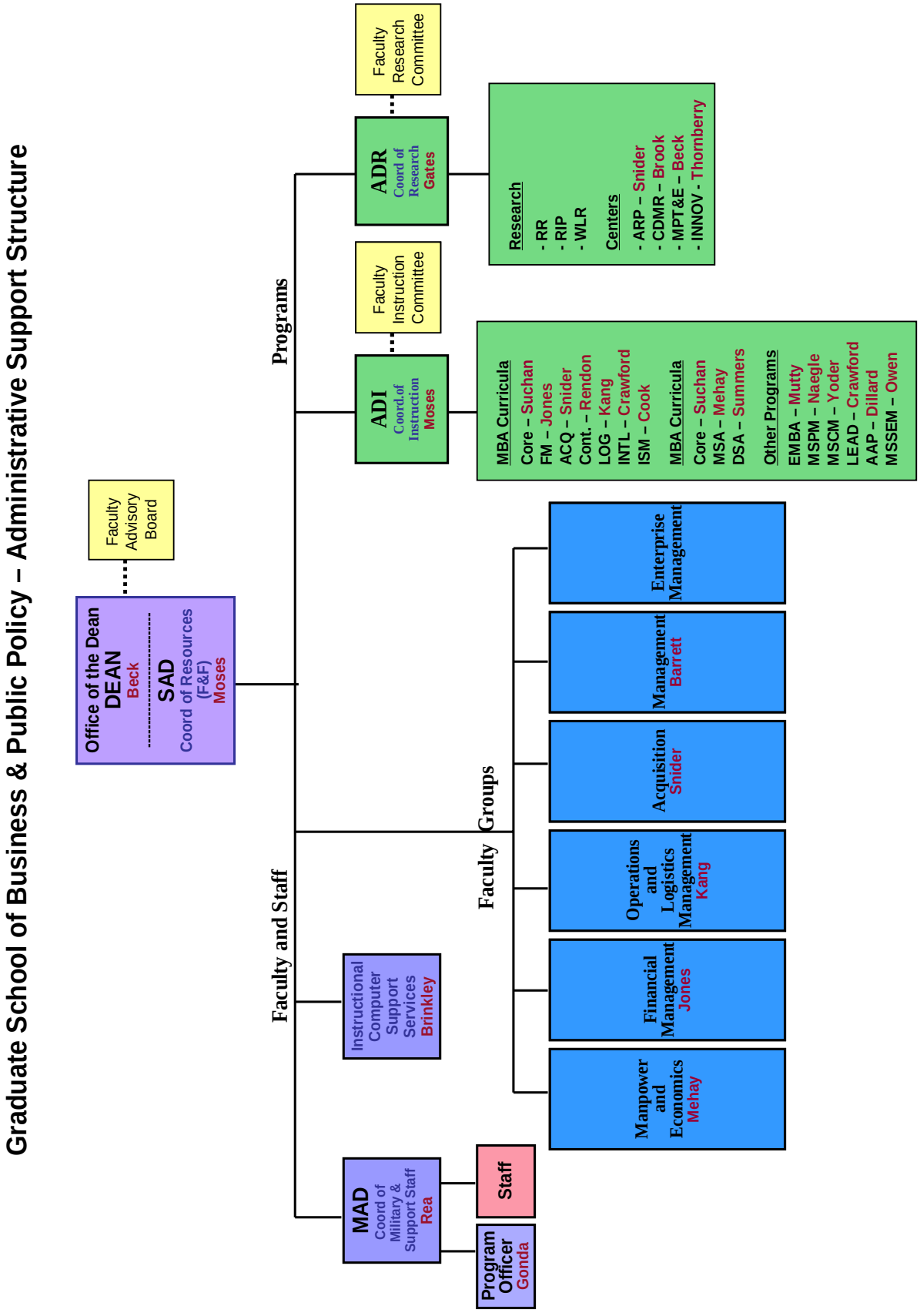
Dean Beck is assisted in his administrative duties by one Senior Associate Dean (Professor Doug Moses) and three Associate Deans; one for Instruction (Professor Doug Moses), one for Research (currently vacant); and one Military Associate Dean (Captain Terry Rea, USN). Professor Doug Brinkley serves as the department's Director of Instructional Computer Support, a part-time administrative role

Professor Doug Moses (Senior Associate Dean and Associate Dean-Instruction) assists the Dean with the overall internal operations of the Graduate School of Business and Public Policy, including budgeting oversight, faculty affairs (e.g., recruiting and hiring, collegial review process, etc.), instructional program coordination, and academic issues. As Associate Dean – Instruction, Professor Moses is responsible for assigning faculty to deliver the courses required by the various curricula. He also chairs the Faculty Instruction Committee (FIC) which exercises the oversight necessary to maintain consistent academic quality across the broad spectrum of curricula offered.

The Associate Dean-Research is charged with encouraging and facilitating scholarly activity on the part of our faculty. S/he oversees the processing of proposals for both internal and external research support and represents GSBPP on the NPS Research Board. S/he also chairs the Faculty Research Committee (FRC), which provides advice and guidance on GSBPP-wide issues of research policy and strategy, with the objective of continually improving GSBPP's scholarly productivity, broadly defined.

Captain Terry Rea, USN (Military Associate Dean) is the senior military officer in the school. Captain Riddle oversees military officers in the school and acts as a liaison with external military commands. In GSBPP, the Military Associate Dean also coordinates support functions and activities within the school and supervises staff members who provide those services. Included are secretarial services, supply and equipment purchasing, travel, word processing and graphic arts support, and contract services.

Professor Brinkley is responsible for coordination and operation of the school's classroom computers and computer labs, both research and instructional.


Graduate School of Business & Public Policy – Administrative Support Structure
Office of the Dean
DEAN
Beck
SAD
Coord of Resources (F&F)
Moses
Faculty Advisory Board
Programs
ADR
Coord of Research
Gates
Faculty Research Committee
Research
- RR
- RIP
- WLR
Centers
- ARP – Snider
- CDMR – Brook
- MPT&E – Beck
- INNOV - Thornberry
ADI
Coord.of Instruction
Moses
Faculty Instruction Committee
MBA Curricula
Core – Suchan
FM – Jones
ACQ – Snider
Cont. – Rendon
LOG – Kang
INTL – Crawford
ISM – Cook
MBA Curricula
Core – Suchan
MSA – Mehay
DSA – Summers
Other Programs
EMBA – Mutty
MSPM – Naegle
MSCM – Yoder
LEAD – Crawford
AAP – Dillard
MSSEM – Owen
Faculty and Staff
Faculty Groups
Enterprise Management
Management Barrett
Acquisition Snider
Operations and Logistics Management Kang
Financial Management Jones
Manpower and Economics Mehay
Instructional Computer Support Services Brinkley
MAD
Coord of Military & Support Staff
Rea
Staff
Program Officer
Gonda

3.2B Faculty Administration

GSBPP includes a number of administrative positions designated as "Academic Associates" (AAs). Each instructional program or curriculum within the school, and each of the major faculty groups within the school, is administered by a faculty member holding an Academic Associate position. Individual AAs may have program responsibility, faculty responsibility, or both. AAs with program responsibility oversee the curriculum content and the integrity of their academic programs and maintain relationships with program sponsors (including conducting curriculum reviews). AAs with faculty responsibility oversee the faculty members within their area, including teaching schedules, recruiting and hiring, and mentoring. The Academic Associates are nominated by the school's Dean and appointed by the NPS Provost.

Since 2006, reflecting an evolution in roles, the Academic Associates who have faculty responsibility have also been referred to as "area chairs". Staring July 2007, distinct administrative appointments as Area Chair have been extended to the five AA positions with responsibility for coordinating area faculty. They are:

Area Chair	Academic Area
• Professor Larry Jones	Financial Management Faculty
• Professor Steve Mehay	Economics and Manpower Faculty
• Professor Frank Barrett	Management Faculty
• Associate Professor Keith Snider	Acquisition Faculty
• Associate Professor Keebom Kang	Operations and Logistics Faculty

3.2C Administration of Research Activities

As noted above, GSBPP has an Associate Dean for Research whose central responsibility is coordination and administration related to the school's research programs and activities. Additionally, as part of the faculty governance structure (discussed more fully in section 3.4), the Faculty Research Committee provides the means for direct faculty participation in the school's research policies and practices.

Research programs within the school vary in size, breadth of faculty involvement, and continuity. With sufficient size, involvement and continuity, research programs may become established as having an individual identity and perhaps formal recognition as entities within the school. At present, six research programs exist as administrative entities in GSBPP:

• Acquisition Research Program	Jim Greene, Chair; Keith Snider, Prog. Mgr
• Center for Defense Mgnt Reform	Douglas Brook, Director
• Center for Innovation	Neil Thornberry, Chair
• Faculty Workload Fund	Associate Dean for Research, Coordinator
• Research Initiation Program	Associate Dean for Research, Coordinator
• MPT&E Research Program	Robert Beck, Dean, Program Manager

Standard 3.3 Program Administration
Responsibility for program administration is assigned to a dean, chairperson, director, or other single administrator who is appointed after appropriate consultation with the program faculty.

3.3A Dean

Overall responsibility for the Graduate School of Business and Public Policy and its programs is assigned to the Dean. The Dean's appointment is limited to a maximum term of three years, with possible renewals. When a Dean is to be appointed or reappointed, the NPS Provost appoints a faculty committee to poll the GSBPP faculty regarding reappointment or the need to conduct a search for a new Dean. A Dean search may include both inside and outside candidates.

An outside search begins with the formation of a committee composed of a cross-section of faculty from the Graduate School of Business and Public Policy and at least one representative from another school. The committee uses advertisements, notices, etc., in the same manner as a Dean search at a civilian university. Top candidates are brought in for interviews.

For inside candidates, individual faculty are interviewed by the Provost, as appropriate, to determine their concerns and preferences with regard to candidates. With the advice of the faculty, the NPS President and Provost confer and offer an individual the job as Dean. This process continues until a suitable person accepts and the new appointment is announced. In such a process the School faculty members have great influence on the Dean selection. In every search or reappointment since this policy was adopted, the successful candidate was supported by a majority of the School faculty.

3.3B Academic Associates

As indicated in section 3.2, the Associate Dean for Instruction is responsible for coordinating of the school's instruction programs, but each instructional program or curriculum within the school is administered by a faculty member holding an Academic Associate position. AAs with program responsibility oversee the curriculum content and the integrity of their academic programs and maintain relationships with program sponsors (including conducting curriculum reviews). The responsibilities of the curricular AAs were discussed in depth in section 2.2. Academic Associates are nominated by the school's Dean and appointed by the NPS Provost. Faculty currently acting as Academic Associates include:

For the <u>MBA program</u> and MBA curricula:

- Professor Jim Suchan — MBA core curriculum
- Professor Larry Jones — Financial Management curriculum

- Associate Professor Keith Snider — Systems Acquisition Management curriculum
- Senior Lecturer Rene Rendon — Acquisition and Contracting curriculum
- Associate Professor Keebom Kang — Logistics curricula
- Senior Lecturer Alice Crawford — International Student curricula
- Lecturer Glen Cook — Information Tech. Mgnt curriculum
- Professor Jim Suchan — Defense Business Management curriculum

For the MSM program and MSM curricula

- Professor Jim Suchan — MSM core curriculum
- Professor Steve Mehay — Manpower Systems Analysis curriculum
- Lecturer Don Summers — Defense Systems Analysis curriculum

For Other GSBPP programs and curricula:

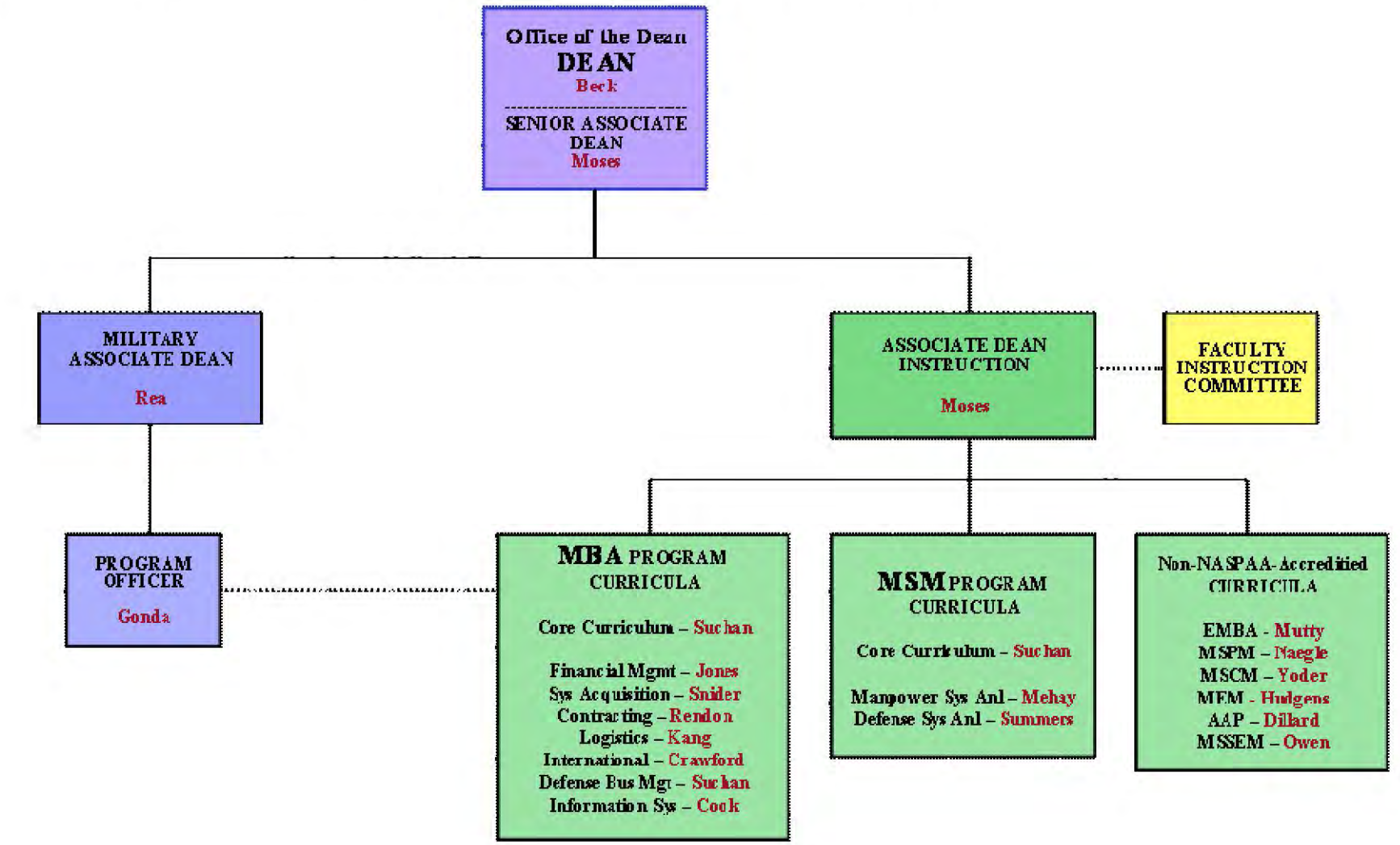
- Senior Lecturer John Mutty — Executive MBA
- Lecturer Bryan Hudgens — Master of Executive Management curriculum
- Senior Lecturer Brad Naegle — MS in Program Management
- Lecturer Cory Yoder — MS in Contract Management
- Senior Lecturer Wally Owen — MS in Systems Engineering Management

3.3C Program Officer

A unique position at the Naval Postgraduate School is the Program Officer. There are several Program Officers across NPS, one assigned to GSBPP. The Program Officer is an active duty military officer (typically at the O5 rank) with administrative responsibilities for a set of curricula. In GSBPP, the Program Officer has responsibility for student administration and administration of the school's formal curriculum review process. The Program Officer acts as a liaison between program sponsors and Academic Associates in overseeing the content of the school's resident curricula. Responsibilities of the Program Officer are noted in section 2.2. Commander Phil Gonda, USN, is the GSBPP Program Officer. Appendix 2.2B1 further describes the Program Officer position.

The following page contains a figure summarizing the GSBPP positions associated with administration of curricula and programs.

Graduate School of Business and Public Policy – Instruction Programs Administration



Standard 3.4 Scope of Influence
Within the framework of organization and process peculiar to the institution, the public affairs and administration faculty and/or administrator exercises initiative, and substantial determining influence with respect to general program policy and planning; degree requirements, new courses and curriculum changes; admissions, certification of degree candidates; course scheduling and teaching assignment; use of financial and other resources; appointment, promotion and tenuring of program faculty.

3.4A General Program Policy and Planning

The GSBPP faculty and administrators determine policy with respect to GSBPP issues. Within NPS's policy and procedures, GSBPP develops policy to facilitate the effective management of the school. Policies that have been developed or refined in the past several years include: The GSBPP Annual Review and Promotion & Tenure Processes (Appendix 3.4J1); The GSBPP Faculty Promotion & Tenure Voting Policy (Appendix 3.4J1); Policy On Lecturer and Senior Lecturer Appointments (Appendix 3.4J2); The GSBPP Policy on Recruiting and Appointment of Tenure Track Faculty (Appendix 3.4I1); and a policy establishing three faculty advisory boards, the Faculty Advisory Board (FAB), the Faculty Instruction Committee (FIC) and the Faculty Research Committee (FRC) (Appendix 3.4C).

3.4B The Senior Faculty Council

Growing out of discussions after the 1997 promotion and tenure deliberations and faculty mentoring sessions, the senior faculty (full professors) in GSBPP (then the Systems Management Department) expressed a collective desire to take more leadership and exert more influence on the governance of the Department. The Chairman at the time had encouraged this increased involvement by the senior faculty. As a result of a series of informal meetings, the Senior Faculty Council was formed in the fall of 1997. After transitioning from the Systems Management Department to the Graduate School of Business and Public Policy, the Senior Faculty Council's Charter became:

Objectives: to function as the advisory body to the School Dean in establishing policies in academic matters, including (1) programs, (2) curricula, (3) faculty evaluation and promotion, (4) collegiality, and (5) professional practice.

Membership: includes all faculty members in the school who hold the rank of full professor.

Structure and Process: The Senior Faculty Council will, after full discussion among its members, including the School Dean, make recommendations to the Dean about actions and policy making guidance. These recommendations will be based on a recorded vote of the members and are advisory to the Dean. The executive agent of the

Council is a four-person Executive Committee, consisting of three full professors selected by the Council and the Dean as an ex officio member. The three elected members will serve a one-year term and are eligible for reelection. A chairperson of the Executive Committee is selected to coordinate and chair all Executive Committee and Council meetings.

The tasks of the Executive Committee include the following:

- Solicit/entertain inputs from the faculty, students, and program sponsors regarding potential policy matters for the Senior Faculty Council to address.
- Decide whether or not a potential issue should be undertaken for further consideration, and the appropriate body (full professors, tenured faculty, full faculty, etc.) for final decision.
- Prepare specific recommendations for discussion and decision by the appropriate faculty body.
- Serve as the advisory body for the Dean on urgent academic-related matters.

When the GSBPP faculty approved the faculty governance initiatives, which included forming the Faculty Advisory Board (FAB), the Senior Faculty Council relinquished its routine advisory role in favor of the FAB, with its broader faculty representation. However, the Senior Faculty Council, now with the name of the Senior Advisors Council (SAC) continues to provide guidance as situations dictate.

3.4C GSBPP Faculty Governance Structure

The Graduate School of Business and Public Policy recently approved a faculty governance structure involving three faculty committees, the Faculty Advisory Board (FAB), the Faculty Instruction Committee (FIC) and the Faculty Research Committee (FRC). These committees serve the school's Dean, Associate Dean for Instruction and Associate Dean for Research, respectively, in both advisory and policy approval roles. The original proposals that outline the committees' membership, roles and responsibilities are provided in Appendix 3.4C.

The Faculty Advisory Board (FAB): The FAB is the standing faculty committee with the broadest perspective on school-wide issues and leads the processes of faculty governance in GSBPP. The primary role of the Faculty Advisory Board is to consult with and advise the Dean on GSBPP-wide issues of policy, strategy, and organization. Both the Dean and the FAB members can initiate and propose matters for discussion. FAB membership includes representatives of the various faculty groups as follows:

- Two members from the tenured faculty
- One member from the untenured, tenure track faculty
- Two members from the Senior Lecturer/Lecturer faculty

Members of the committee are selected for two-year staggered terms and are elected by each faculty group according to processes decided by each group.

The Faculty Instruction Committee (FIC): The FIC is a standing GSBPP faculty committee serving as the focal point for advising the Associate Dean for Instruction (ADI) on instructional matters. The FIC engages major curriculum issues within instructional programs. Specific roles and responsibilities include: studying and evaluating issues and proposed actions and making recommendations to the GSBPP faculty for consideration, as appropriate; making operational policy decisions relevant to instructional programs; providing consultation and advice for the GSBPP administration (particularly the ADI) to discuss instructional program issues and initiatives. Membership includes The ADI (chair), the five faculty area Academic Associates, the Academic Associate for International curricula, an Academic Associate from the DL programs and two at-large faculty members appointed by the Associate Dean for Instruction.

The Faculty Research Committee (FRC): The FRC is a standing GSBPP faculty committee serving as the principle faculty advisory body to the Associate Dean of Research (ADR). The FRC consults with and advises the ADR on GSBPP-wide issues of policy and strategy, with the objective of continually improving GSBPP's scholarly productivity. Both the ADR and the FRC members can initiate and propose matters for discussion. FRC membership includes the ADR (chair) and five faculty members representing the diversity of faculty in GSBPP, including: tenured professors/associate professors, untenured tenure-track faculty members, lecturers/senior lecturers.

3.4D Establishment of Curricula, Degree Requirements and New Courses

The MBA program and curricula that are under consideration in this review are developed in a two-pronged manner. Each program must meet both a) the education needs of the sponsor (the operating department or division for whose requirement the curriculum is maintained), and b) the academic degree requirements.

All degree requirements must be approved by the GSBPP faculty and the NPS Academic Council. The degree requirements are controlled by the faculty, and the curriculum requirements meet both the academic requirements established by the faculty and the educational skill requirements of the program sponsor.

Changes in degree requirements originate through various channels. Degree requirements or changes that may be proposed are reviewed by a committee of the faculty. In the past, ad hoc review committees composed of department faculty would be appointed by the chair. Since the adoption of the new faculty governance structure and the establishment of the Faculty Instruction Committee, the FIC has replaced ad hoc committees as the first level of faculty review. A separate ad hoc committee to review a particularly significant degree program matter may be recommended by the FIC. If, after extensive study of the question, the FIC votes to recommend the proposal, the FIC takes the proposal to a school faculty meeting for consideration, debate and vote by the full faculty. Appendix 4.1 is an example of a report that was recently produced for what became the Master of Executive Management (MEM) program.

If approved by the GSBPP faculty, the Dean then makes a recommendation to the NPS Academic Council through the school's representative. The Academic Council, which consists of representatives of all departments and seven ex-officio members, makes the final decision.

In defining functional management specialties, sponsors and Academic Associates often confer to design courses which have specific goals. Sponsors define these goals by specifying Educational Skill Requirements (ESRs). The faculty responds by designing academically sound courses which simultaneously meet the sponsor's objectives and contain scholarly substance.

The disciplines in the school contribute expertise for developing courses in a broad and relevant mix of subject matter. All new courses and revised courses must obtain approval from NPS's Academic Council. See Appendix 3.4D for the Council's approval guidelines.

3.4E Admission of Students to the Program

Students are admitted to the MBA Program in two basic ways. Officers are first reviewed for academic potential and performance using criteria established by the faculty and supplied through the Program Officer. Then they are screened by their particular service or command for professional performance and potential. The School provides academic ability determination advice in threshold situations, through the Academic Associate.

After an officer is selected to attend a given curriculum, contact is made through the Program Officer and Academic Associate for academic counseling. After a student arrives at the Naval Postgraduate School, the academic record is again reviewed and the Academic Associate who suggests validation of courses, as appropriate (which may be accomplished by examination or review of academic background). Throughout the curriculum, each student is again reviewed for academic performance and potential. Some individuals may be disenrolled, but the vast majority of students are able to continue to graduation.

Civilian employees of the Federal government, particularly the Department of Defense, are eligible to enroll at the Naval Postgraduate School. They are proposed to the School by their agency or activity. If the individuals proposed meet the academic standards, they are admitted.

3.4F Certification of Students for Graduation

The Academic Associate and Program Officer review the records of each individual based on the graduation policy of the Academic Council and the school. The proposed degree recipients are then reviewed by the Dean. If the Dean has any questions, he/she

consults the Academic Associate, the Program Officer, and other faculty as required. The Dean's recommendation is forward to the Academic Council for final review and award of the degree by the NPS President.

3.4G Course Schedules and Faculty Assignments

The Naval Postgraduate School is relatively conventional in its course scheduling and faculty assignment process. The Academic Associate and Program Officer assure a plan for each student's entire program is placed in the NPS student management system (PYTHON) when the student enters the program. This provides a forecast of required courses for students onboard. Future student enrollments are forecast by the Associate Dean for Instruction, in consultation with the Academic Associates. Generally, the school plans for required courses on an annual basis, summarized in the annual teaching plan. The Area Chairs for the major faculty areas coordinate the area faculty to cover the course requirements in the annual plan. The starting notion is that tenure-track faculty will teach for two quarters a year, non-tenure-track for three or four, but divergence from this standard is common as faculty may increase or decrease their teaching load depending on their involvement in research opportunities or administrative positions. Teaching requirements to deliver the school's instruction programs may change as the year proceeds, so the process of forecasting needs and coordination between the Associate Dean for Instruction, the Academic Associates, and area faculty continues iteratively throughout the year. One way in which NPS may differ from other universities is that course requirements are "demand driven". Students are sent to NPS for graduate programs of a specified length, so courses must be provided as the students' programs demand. Hence, the faculty teaching assignment process presumes that all courses demanded by students' programs will be provided. Appendix 3.4G contains the annual GSBPP Workload Planning guidelines.

3.4H Budget Preparation and Spending Authorization

The Graduate School of Business and Public Policy negotiates a budget (that covers faculty and staff salaries, operating support, supplies and travel) each year through the Director of Academic Planning, who sits as a member of NPS's Resources Planning Board. This Board recommends all Naval Postgraduate School resource allocations for the President's approval. The Board is chaired by the Provost. The Dean controls GSBPP operating expenditures.

Additional funding for faculty and staff salaries, travel, equipment and other school activities is generated through sponsored research and instructional activity. Additional funds for activities such as curriculum development, based on demonstrated needs and approved new programs, and are frequently awarded. These funds are allocated from the central NPS administration and then administered by the Dean and Associate Dean for Instruction. In recent years, funds through the International Military Education and Training program (IMET) have been available to specifically develop materials for educating international students.

3.4I Selection, Hiring, and Retention of Faculty

Upon receipt of hiring authority from the Provost, the Dean and the faculty in the relevant discipline(s) begin the recruiting process. EEO rules and procedures are reviewed by all who will participate in the effort. For reference, the GSBPP Policy on Recruiting and Appointment of Tenure Track Faculty is found at Appendix 3.4I1.

Advertising is done at professional meetings, through letters to universities, relevant print media including professional journals, through other more general media such as The Chronicle of Higher Education, and announced through the university's Human Resources website.

As vitae and recommendation letters are received they are passed to relevant faculty members for comment. Meetings are held to screen and select individuals to be invited for visits. The visitation process calls for broad exposure of the prospective new colleague to faculty and administrators. The candidate is also required to present a seminar to demonstrate his/her research abilities to all interested faculty. Upon the completion of visits, the faculty makes recommendations to the Dean about which individuals, if any, should be made offers. When a school decision is reached, the Dean confers with the candidate to ascertain his/her level of interest and salary requirement. He then formulates an offer, which is presented to the Provost for authorization. The offer can then be made by the Dean to the candidate who either accepts or rejects it. This process continues until the required individuals are hired. Operationally, the school's overall process of analyzing faculty needs, recruiting and hiring is coordinated through the Senior Associate Dean.

After an individual has joined the faculty, the Dean is responsible for performing annual performance reviews. Each year all faculty members submit a Faculty Activity Report. In the Graduate School of Business and Public Policy, it is the Dean's practice to form a performance review committee including the Associate Deans and the Dean to review all faculty, tenure-track, non-tenure-track and adjuncts, and to rate each faculty member's performance in terms of teaching, student advising, research, publications, professional and community service, colleague mentoring and administrative duties. The annual Faculty Activity Report Guidelines is in Appendix 3.4I2

These ratings, reached through discussion within the committee, are approved by the Dean and forwarded to the Provost to form the basis for the annual performance salary adjustments.

3.4J Faculty Mentoring and Annual Review Process

Each year all untenured tenure-track faculty members, tenured associate professors considering promotion to full professor or lecturers considering promotion to senior lecturer are eligible to participate in a collegial review process. This process involves submitting a

written summary and vitae that highlights the faculty member's teaching, research, and service accomplishments. Each faculty member has his or her case presented at a faculty meeting by a higher ranking colleague; all higher ranking faculty members are eligible to participate in this meeting. Discussions regarding expectations and "trajectory" toward a successful promotion and/or tenure decision ensue. After the final rounds of discussions, the reviewing faculty members complete an evaluation form. Summaries of these evaluations and discussions are provided to each reviewed faculty member by their faculty mentor. Specific recommendations for improvement are provided when an individual is not "on track". This process has provided a forum for open discussion regarding the criteria for tenure and promotion in GSBPP. Appendix 3.4J1 contains various guidelines and policies related to the annual review process.

For untenured tenure-track faculty following the normal "clock" for a tenure decision in their sixth year, collegial reviews would typically occur about three times prior to the formal tenure decision year. The initial tenure track appointment is typically for three years, so the third year review is a more rigorous evaluation leading to a faculty recommendation regarding continued employment. This recommendation provides input for the Dean's reappointment recommendations to the Provost. Faculty members considering promotion to Full Professor or Senior Lecturer are required to participate in at least two collegial reviews in the three years prior to initiating the promotion process. Non-tenure-track faculty are also reviewed as part of the annual collegial review process. In 2003 GSBPP adopted a policy on expectations related to retention and promotion of non-tenure-track faculty, contained in Appendix 3.4J2.

3.4K Promotion and Tenure of Faculty

Promotion policies at NPS are university-wide, encompassing all schools and departments. Policies differ according to the rank of faculty. Promotion from assistant to associate professor requires that one meet threshold performance criteria and exhibit scholarly accomplishments and future potential. At the time of a promotion or tenure decision, the school forms a Department Evaluation committee (DEC) that works with the candidate in preparing the promotion case. All faculty with the rank of associate professor and above then review the individual's case and make a recommendation to the Dean and Provost and to a school-wide committee composed of all Deans, Chairmen, and the Provost. Promotion to full professor is similar except that the review and recommendation is provided by only those faculty members holding the rank of Professor.

Tenure is regarded as the most important career decision point for all faculty members and the Naval Postgraduate School handles this in accordance with AAUP guidelines. A three-person committee reviews the individual's application and prepares complete documentation (which includes outside references). The school's tenured faculty then votes as a group. That vote and the GSBPP Dean's recommendation are presented to the university-wide committee described above. After this, the Deans and the Provost confer and the Provost makes a formal recommendation to the NPS President.

Further information about the mentoring, annual performance review and promotion and tenure processes are provided in Standard 5.3 Faculty Quality.

Standard 3.0 Program Jurisdiction

STANDARD 4.0 -- CURRICULUM

Standard 4.1 Purpose of the Curriculum
The purpose of the curriculum shall be to prepare students for professional leadership in public service.

4.1 Purpose

The basic objective of all of the GSBPP programs and curricula is to prepare military officers, government civilians, and international officers from allied nations for positions of middle and upper management in the defense establishment. Thus, the focus of the programs and curricula is on managing financial, human, material and information resources in the Federal government and, particularly, in the Department of Defense.

GSBPP has multiple degree programs and numerous specialized curricula, but in general each program consists of three main parts: a common core of courses relevant broadly to the practice of management, a specialization emphasizing a particular functional area, and a thesis or capstone project.

The major elements of the core in all GSBPP curricula are those functional and analytical subjects that underlie effective management in all public organizations. These subjects include communication skills, information technology, economics, budgeting and financial management, human resources and organizational behavior, management policy, public policy processes and analytical methods.

In addition to the core, with very few exceptions, all students are enrolled in special programs ("subspecialties" or "specializations") designed to prepare them for management responsibilities in specific functional areas. Their programs include required and/or elective courses in their areas of specialization. Finally, all students are required to prepare masters theses or applications projects designed to demonstrate their abilities to integrate appropriate core and special curricular material in the analyses of issues and problems pertinent to their academic programs and their professional careers.

Outline of Programs: Degrees and Curricula

GSBPP awards six different master's degrees and has 16 different fields of study (curricula). The dominant program, in terms of student enrollment, is the long-standing, resident program leading to either a Master of Business Administration (MBA) degree or a Master of Science in Management (MSM) degree. The other four degree programs have been created within recent years to serve particular student communities, typically non-resident. Each of these degree programs has only one curriculum associated with it. An outline of the GSBPP programs (degrees and curricula) is as follows:

Master of Business Administration (MBA) Program (10 curricula)

Logistics Management
- Transportation Management (814)
- Supply Chain Management (819)
- Material Logistics Support Management (827)

Acquisition Management
- Acquisition and Contract Management (815)
- Systems Acquisitions Management (816)

Financial Management
- Financial Management (837)

Defense Management
- Defense Systems Management - International (818)
- Resource Planning and Mgmt for Intl Defense (820)
- Defense Business Management (809)

Information Management
- Information Systems Management (870)

Master of Science in Management (MSM) Program (2 curricula)

Analysis Curricula
- Manpower Systems Analysis (847)
- Defense Systems Analysis (817)

Executive Degree Programs
- Executive Master of Business Administration (805)
- Master of Executive Management (808)

Master of Science Degree Programs
- Masters of Science in Program Management (836)
- Master of Science in Contract Management (835)

Coverage of Degree Programs in this Report:

This chapter will cover Standards 4.2 - 4.4 for the Master of Business Administration (MBA) degree program, including the ten curricula within that program and which lead to the MBA degree.

A separate Self-Study document (Volume I) has been prepared for the Master of Science in Management (MSM) degree program, including the (currently) two curricula within that program and which lead to the MSM degree.

An Appendix document (Volume III) provides an overview and description of the EMBA, MEM, MSPM, and MSCM degree programs, for reference. NASPAA accreditation of these program is not being sought, but collectively they represent about

30% of the instructional activity of GSBPP, and so are described in the Appendix for background purposes.

Standard 4.2 Curriculum Components for MBA Program
The curriculum components are designed to produce professionals capable of intelligent, creative analysis and communication, and action in public service. Courses taken to fulfill the common curriculum components shall be primarily for graduate students. Both the common and additional curriculum components need to be assessed as to their quality and consistency with the stated mission of the program.

4.2 Curriculum Components for MBA Degree Program

The central objective of the MBA degree program is to prepare military officers and defense civilians for positions of middle and upper management in the United States' military and defense establishment, and the military and defense establishments of allied nations. The educational objectives of the MBA program are reflected in the program mission statement (reproduced again here from Standard 2.1):

Defense-Focused MBA Program Mission

The mission of the Defense-Focused MBA degree program is to prepare graduates for management and leadership roles in the Defense establishment of the United States or allied nations. The program prepares graduates to manage organizations, resources, people, and programs in complex environments. The program prepares graduates to

- ***Managerial**: Be well grounded in fundamental areas of management, including accounting, financial management, operations, economics, acquisition, strategy, communications and organizational management.*

- ***Environmental:** Understand the economic, political, governmental, defense and organizational environments that influence their decisions and the organizations in which they work.*

- ***Professional**: Possess the specialized knowledge, skills and abilities to serve in positions of significant responsibility within a specified Defense Management field (Financial Management, Logistics, Acquisition, Contracting, Defense Management, and Information Management).*

- ***Analytical:** Apply analytical and problem-solving techniques to enhance decision making in policy and management*

- ***Critical**: Be capable of thinking in a critical, creative, integrative and strategic manner*

4.2A Background Information

Credit System:	Quarter
Length of term:	12 weeks
Full time status:	16 credits per quarter
Credit Limits:	8 credit minimum, 20 credit maximum
Time limitations:	18-21 months, depending on curriculum
Class contact hours:	1 credit = 11 contact hours
Numbering system:	0000s = no credit 1000s = Lower division college 2000s = Upper division college 3000s = Upper division or graduate 4000s = Graduate

4.2B Course Credits Distribution

Table 4.2B
COURSE CREDITS DISTRIBUTION IN MBA PROGRAM

Course Level	Required Prerequisites	Required Graduate	Additional Components	Total
Lower Div.	0-2*	0	0-7**	0-9
Upper Div.	0	0	0	0
Up Div & Grad	0	36	7-31****	43-67
Graduate only	0	18	8-26****	26-44
Project / Thesis	0	6-12***	0	6-12
Total	0-2	60-66***	24-43****	84-103

Ten curricula are offered within the MBA. All curricula share a common 16 course (54 credit) core. The variances in the table above are due to:

*A math prerequisite course (MA1010) may be required for students not suitably prepared..
**Two orientation courses (Language & Communication; US Institutions) may be required for international students.
*** The variance in the Required Graduate column is due to a choice allowed between an MBA project or a Master's thesis. The project is nominally 6 credits; the thesis is nominally 12 credits.
****The variance in the Additional Components column is due to each curriculum having different requirements for specialization courses. Two curricula (809, 818) require a minimum of 24 credit hours of additional graduate courses, but all are elective, resulting in the number of credit hours at the Upper Division/Grad or Graduate Only levels being unspecified in advance.

4.2C Capable Professionals

The MBA degree program is designed to create capable professionals by providing educational curricula (described below) designed to satisfy specific

"Educational Skills Requirements." Degree programs and curricula are created at the Naval Postgraduate School in response to educational needs identified by curriculum sponsors, the military commands that send students to attend the programs. The educational needs are formalized as a set of Educational Skills Requirements, which specify the educational objectives of each curriculum

4.2D Assessment and Guiding Performance

The curricula are monitored, assessed, reviewed and modified through several processes and mechanisms. Though there is overlap, some mechanisms are focused more on the common core of the MBA degree program, some more on the specially curricula within the degree program.

Core-Related Mechanisms:

- The managerial position of Academic Associate for the Core Curriculum: the Academic Associate is responsible for coordinating oversight of the objectives, content, assessment and quality of the core curriculum; this position is a recent addition and replaces previous faculty committees that provided core oversight
- The Student Feedback system: systematic interaction with students provides ongoing feedback concerning their assessment of the core curriculum; feedback occurs periodically throughout their program in the form of curriculum surveys and meetings with cohorts of students

Curricula-Related:

- The managerial position of Academic Associate, for each curriculum: a faculty member, acting as Academic Associate for a specific curriculum, is responsible for managing the curriculum; the Academic Associate is responsible for ongoing curriculum assessment and maintaining contact with Curriculum Sponsors to determine curriculum effectiveness in satisfying the sponsor's educational requirements
- The Curriculum Review Process: the ongoing review and assessment of each curriculum culminates in an official Curriculum Review by the Curriculum Sponsor every two years
- The Educational Skills Requirements (ESRs) system: ESRs are a statement of the objectives each curriculum is to satisfy; ESRs provide the focal point for determining if curricula meet sponsors' needs

The position of Academic Associate and the Curriculum Review Process were discussed further in this report in Standard 2.2 (Assessment). The ESRs for each curriculum are presented later in this section.

4.2E Graduate Classes

All courses in all programs are "primarily for graduate students" since NPS is exclusively a graduate school and GSBPP degree programs only enroll graduate students. NPS academic policy requires a minimum of 12 credit hours in 4000-level ("exclusively graduate") courses for a master's degree. Actual 4000-level classes in the MBA, vary across the curricula, ranging from 26-44 credits.

4.2F Required Prerequisites

Two semesters of college algebra or trigonometry with a B or better is the only stated prerequisite for admission to the program. Literacy in common computer applications programs is also expected.

Standard 4.21 Common Curriculum Components for MBA Program
The common curriculum components shall enhance the student's values, knowledge and skills to act ethically and effectively:

-In the management of Public Service Organizations, the components of which include: Human Resources; Budgeting and financial processes; Information management, technology applications, and policy.

-In the application of Quantitative and Qualitative Techniques of Analysis, the components of which include: Policy and program formulation, implementation and evaluation; Decision-making and problem-solving.

-With an understanding of the Public Policy and Organizational Environment, the components of which include: Political and legal institutions and processes; Economic and social institutions and processes; Organization and management concepts and behavior.

4.21 Common Curriculum Components for MBA Program

The MBA degree program design is based on the premise that a quality management education must include both a solid broad-based foundation of knowledge and skill in several basic management disciplines and a focused, comprehensive exposure to knowledge and practical skills in one particular management specialty area.

The broad, multi-disciplinary exposure provides the graduate with the perspective and foundation knowledge needed throughout one's managerial career as problems and challenges requiring broader consideration are encountered, especially those typically faced at senior management and executive levels. The more focused and specialty education is intended to prepare the graduate for the more immediate and anticipatable assignments as functional managers and senior staff experts in a particular discipline. The MBA common core curriculum is designed to provide the broad-based, multi-disciplinary foundation needed for future general management positions, while the

specialty curriculum is designed to provide the necessary knowledge and skills to excel in one's chosen functional discipline.

Through completion of the MBA degree program, students will earn:

- Master's Degree: Accredited by NASPAA, AACSB, WASC
- Military Specializations:
  - US Navy Subspecialty Code
  - USMC Military Occupational Specialty
  - US ARMY Military Occupational Specialty
- Professional Certifications:
  - Defense Acquisition University
  - Certified Management Accountant
  - Certified Defense Financial Manager
  - Certified Professional Contract Manager
- Military Certifications:
  - Joint Professional Military Education

Table 4.21
MBA PROGRAM DESIGN

MANAGEMENT CORE	
Organizations	Financial Management
Decision and Ops Analysis	Information Technology
Management	Analytical Methods
MISSION CORE	
DoD Mission and Structure	Strategy and Policy
DoD Resource Determination	Global Defense Economics
Economics for Defense Managers	Acquisition Management
CURRICULAR SPECIALIZATION	
Acquisition Management	Resource Planning & Management
Contracting	Financial Management
Logistics Management	Information Systems Management
Defense Management	
APPLICATION PROJECT / THESIS	
PROFESSIONAL CERTIFICATIONS	

MBA Project vs. Thesis: The MBA degree requires completion of an MBA Project or a Master's Thesis. Generally, the choice is left to the student and the overwhelming majority of students choose a Project. An exception is the "Conrad Scholars" program. The Conrad Scholars program is an honors program, open to perhaps eight students per year, that is associated with the Financial Management curriculum. Conrad scholars are required to complete a Thesis. Both the Thesis and the MBA Project provide a capstone experience for diagnosis, analysis and application of the knowledge and skills acquired during the program. Both Theses and Projects are designed to be culminating, integrative experiences, but they do differ in some respects. The principal differences are in terms of:

Participation Theses are conducted by individual students. MBA Projects are conducted by teams of students (up to three). Exception are permitted, but the norm is individual vs. teams.

Orientation Theses tend to be more analytical and research-focused. Projects may be more applied or focused on problem solving or consulting.

Scope of the effort Theses nominally equate to 12 credits of student activity. Projects nominally equate to 6 credits of student activity. While the overall scope of a Project with multiple students on a team may exceed a Thesis, the individual effort on a Thesis is intended to be greater.

4.21A Common Curriculum Courses

The following courses are required of students in the MBA degree program:

Table 4.21A
MBA CORE COURSES

Course Number	Course Title	Credits
GB3010	Managing for Organizational Effectiveness	(4-0)
GB3012	Communication for Managers	(3-0)
GB3013	Problem Analysis and Ethical Dilemmas	(0-2)
GB3020	Fundamentals of Information Technology	(4-0)
GB3040	Managerial Statistics	(4-0)
GB3042	Operations Management	(4-0)
GB3050	Financial Reporting and Analysis	(4-0)
GB3051	Cost Management	(3-0)
GB3070	Economics of the Global Defense Environment	(4-0)
GB4014	Strategic Management	(4-0)
GB4043	Business Modeling and Analysis	(3-0)
GB4052	Managerial Finance	(3-0)
GB4053	Defense Budget and Financial Management Policy	(4-0)
GB4071	Economic Analysis and Defense Resource Allocation	(4-0)
GB3031	Acquisition and Program Management*	(2-0)
GBxxxx	Core Elective**	(3-0)
NW3230	Strategy and Policy: The American Experience***	(4-2)

*A minimum (2-0) Acquisition course is a core requirement, but most curricula include a larger, superior course that satisfies this requirement (usually, MN3301 or MN3331).
**Choices typically include GB3030 Marketing Management (3-0), GB4021 Strategic Management of Information Technology (3-0) or GB4044 Managerial Inquiry (3-0).
***Not required for International students. Non-DoN US officers may substitute service equivalent.

The numbers in the credit column after a course title indicate both the class hours and the quarter credit hours for the course. The first digit indicates lecture hours per week and the second digit, lab hours. One credit hour is granted for each lecture hour, and one half of a credit hour for each lab hour.

The chart below shows the pre-requisite relationship among the required core courses, and additionally shows the placement of the core courses in a typical program.

Chart 4.21A1
MBA CORE CURRICULUM MATRIX

1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (4-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	MA1010 (2-0) College Algebra (if needed)
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation		
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget & Financial Mgmt Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management		
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) MBA Core Elective	GB3031 Principles of Acquisition Management			
5 W/Sm	Application Project or Thesis		Curriculum Concentration Courses (Minimum 24 credit hours)			
6 Sp/F	Application Project or Thesis	NW3230 (4-2) Strategy & Policy				

Core Curriculum Design

The courses within the common MBA core were listed above. However, it might be appropriate to briefly summarize the design underlying the common curriculum. There are two ways to do this: first, in terms of broad areas the core course address; second, in terms of how the core courses topics prepare managers.

Broad Areas: Basically, the common curriculum addresses six broad areas that we feel are critical to effective management practice: organizations and organizational behavior, economics and policy analysis, financial management, quantitative methods and analysis, operations and information technology, and institutional processes and strategic management. How each of these elements is addressed is briefly described in the following few paragraphs

Organization and organizational behavior considerations are the basic content of Managing for Organizational Effectiveness (GB3010) and are also important elements in Problem Analysis and Ethical Dilemmas (GB3013), Communication for Managers (GB3012) and Strategic Management (GB4014).

Economic analysis is emphasized in Economic of the Global Defense Environment (GB3070) while policy analysis using economic frameworks and tools is the central focus of Economic Analysis and Defense Resource Allocation (GB4071).

Concepts and techniques of financial management, including budgeting, accounting, resource management, financial analysis are addressed most explicitly in Financial Reporting and Analysis (GB3050), Cost Management (GB3051), Managerial Finance (GB4052), and Defense Budget and Financial Management Policy (GB4053) which examines the federal budget process.

Quantitative and statistical methods are the principal focus of Managerial Statistics (GB3040) and Business Modeling Analysis (GB4043).

Operations Management (GB3042) and Fundamentals of Information Technology (GB3020) both address the management of organizations in today's technological world.

In the common core, political and legal institutional processes are addressed most directly in Defense Budget and Financial Management Policy (GB4053). The focus of this course is on the processes by which government policy is established and, in particular, on the federal budget process. Economic institutions and processes are studied in Economics of the Global Defense Environment (GB3070). Strategic management considerations are the primary emphasis of Strategic Management (GB4014), although strategic planning and implementation are also addressed in Economic Analysis and Defense Resource Allocation (GB4071) and Cost Management (GB3051).

Preparation of Managers: The design of the core assumes that managers need preparation in three areas: knowledge of the functional activities that occur in

organizations, development of personal capabilities, and knowledge of the wider context in which organization exist and operate. Courses and topics within the core curriculum address these three aspects of preparing managers.

Chart 4.21A2

MBA CORE DESIGN

MANAGERIAL FUNCTIONS (What gets done)	MANAGERIAL CAPABILITIES (What helps to do it)
Accounting Financial Management Production/Operations Acquisition Planning and Budgeting Strategic Management Marketing	Quantitative Analysis Modeling & Economic Analysis Communications Information Technology Organizational Behavior & Leadership Ethical Reasoning Inquiry & Decision Making
MANAGERIAL CONTEXT (What's the larger setting) Defense Strategy and Policy Global Economic Environment Government and Organizations	

4.21B Ethical Action: Analysis of the Common Core Courses

The above sections described our purposes and organizing framework in the design of the MBA common core. This section describes the treatment of Ethics within the common core. Ethics is taught in two distinct ways: first, as the central topic of GB3013, the Problem Analysis and Ethical Dilemmas course; second, as a theme that relates to all aspect of management and is revisited in individual courses in connection to the subjects of those courses.

The Problem Analysis and Ethical Dilemmas (PAED) course is distinct from all others in the MBA curriculum. During the first two days of the first quarter in attendance for all new MBA students, regular classes are suspended and the PAED seminar is held for the full period. The course is designed to be a "welcome to what graduate school is like" experience and to immediately present new students with complex, ill-defined, no-right-answer problems and the ethical dimensions inherent in such problems. Students learn frameworks for ethical reasoning that are intended to be of value throughout their

curriculum and beyond. The remaining courses in the curriculum continue to raise ethical questions and themes in settings related to the courses' topics.

Table 4.21B offers an overview of Ethics in the common core courses. It lists brief examples of the manner or context in which Ethics is covered in core courses and provides rough estimates of the proportion of each course related to Ethics.

Table 4.21B

ETHICS CONTENT WITHIN THE MBA CORE CURRICULUM

"Enhances students' values, knowledge, and skills to act ethically"		
GB3013	**Problem Analysis and Ethical Dilemmas** As military officers advance to higher levels of responsibility, the organizational environments in which they operate become more complex and the decisions that they must make become more clouded by uncertainty. Senior government and business leaders face similar challenges. Under these conditions, ethical problems and issues often emerge in complex and uncertain ways leading to questions that go beyond simply "following the rules." The purpose of this seminar is to gain familiarity with problem analysis and the moral and ethical issues arising in the normal pursuit of public and private sector management practices. We accomplish this through the presentation, analysis, and discussion of representative case studies treating the ethical issues in society and within organizations. These cases illustrate the interdisciplinary character of moral dilemmas, and show how such dilemmas draw on insights from organizational and management theory, law, political science and social psychology, as well as from philosophical ethics. Thus, the seminar seeks to educate BPP students in theories and models of ethics, and to explore the application of this understanding of ethics to real problems of military leadership and Defense management.	100%
GB3010	**Managing for Organizational Effectiveness** Ethics in relation to leadership, change management, conflict management, negotiation, and power/influence	25%
GB3012	**Communication for Managers** Ethics in the context of persuasion. Ethics in writing and speaking assignments.	5%
GB3020	**Fundamentals of Information Technology** Information security and the protection of personal and organizational information	10%
GB3040	**Managerial Statistics** Ethical obligations of researchers and analysts toward human subjects. Ethical obligations for objective and unbiased analysis and findings.	5%
GB3042	**Operations Management**	5%

	Ethical questions in the conduct of organizational operations. Environmentally responsible and socially beneficial operations.	
GB3050	**Financial Reporting and Analysis** Ethical issues in accounting and financial reporting. Ethical implications of corporate accounting scandals and financial manipulations and misrepresentation.	15%
GB3051	**Cost Management** Professional standards for ethical conduct of management accountants.	5%
GB3070	**Economics of the Global Defense Environment**	2%
GB4014	**Strategic Management** Ethical obligations to organizational stakeholders. The right, appropriate and legitimate balancing of stakeholder interests as intrinsic in the process of strategic management.	15%
GB4043	**Business Modeling and Analysis** Ethical principles related to conducting analysis.	5%
GB4052	**Managerial Finance** Laws and restrictions governing financial activities. Corporate governance mechanisms by which the incentives of managers are aligned with organizational shareholders and stakeholders.	15%
GB4053	**Defense Budget and Financial Management Policy** Ethics in the context of budgetary strategy. Strategic representation and misrepresentation of needs and priorities in the budget process. Ethics related to power and influence in the DoD acquisition, procurement and contracting.	10%
GB4071	**Economic Analysis and Defense Resource Allocation** Ethics in the context of conducting and presenting the results of analysis and policy evaluation.	5%
GB3031	**Principles of Acquisition Management** Ethics in the context of the acquisition process. Fraud.	5%

4.21C Curriculum Coverage: Analysis of Common Core Courses

The above sections described our purposes and organizing framework in the design of the MBA common core. This section relates the core courses to the areas listed in standard 4.21. The primary intent here is to indicate, by listing, which courses contribute to each of the NASPAA topic areas. Secondarily, rough estimates of the proportion of each course that contributes to an area are provided.

Table 4.21C RELATIONSHIP OF MBA CORE CURRICULUM TO STANDARD 4.21		
The Management of Public Service Organizations, the components of which include:		
-Human Resources		
GB3010	Managing for Organizational Effectiveness	80%
GB3012	Communication for Managers	70%
GB3013	Problem Analysis and Ethical Dilemmas	20%
GB3020	Fundamentals of Information Technology	5%
GB3040	Managerial Statistics	5%
GB3042	Operations Management	20%
GB3050	Financial Reporting and Analysis	5%
GB3051	Cost Management	5%
GB4014	Strategic Management	5%
GB4043	Business Modeling and Analysis	5%
GB4053	Defense Budget and Financial Management Policy	5%
GB4071	Economic Analysis and Defense Resource Allocation	5%
GB3031	Principles of Acquisition Management	10%
-Budgeting and Financial Processes		
GB3010	Managing for Organizational Effectiveness	5%
GB3020	Fundamentals of Information Technology	5%
GB3040	Managerial Statistics	5%
GB3042	Operations Management	5%
GB3050	Financial Reporting and Analysis	100%
GB3051	Cost Management	29%
GB3070	Economics of the Global Defense Environment	5%
GB4014	Strategic Management	10%
GB4043	Business Modeling and Analysis	5%
GB4052	Managerial Finance	70%
GB4053	Defense Budget and Financial Management Policy	40%
GB3031	Principles of Acquisition Management	10%
-Information Management, technology applications, and policy		
GB3010	Managing for Organizational Effectiveness	30%
GB3012	Communication for Managers	5%
GB3020	Fundamentals of Information Technology	100%
GB3042	Operations Management	15%
GB3050	Financial Reporting and Analysis	20%
GB3051	Cost Management	5%
GB4014	Strategic Management	5%
GB4043	Business Modeling and Analysis	20%
GB4053	Defense Budget and Financial Management Policy	5%
GB3031	Principles of Acquisition Management	10%

The application of Quantitative and Qualitative Techniques of Analysis, the components of which include:		
-Policy and Program Formulation, Implementation, & Evaluation		
GB3010	Managing for Organizational Effectiveness	40%
GB3013	Problem Analysis and Ethical Dilemmas	10%
GB3020	Fundamentals of Information Technology	10%
GB3040	Managerial Statistics	10%
GB3042	Operations Management	20%
GB3051	Cost Management	4%
GB3070	Economics of the Global Defense Environment	15%
GB4014	Strategic Management	80%
GB4043	Business Modeling and Analysis	10%
GB4053	Defense Budget and Financial Management Policy	10%
GB4071	Economic Analysis and Defense Resource Allocation	100%
GB3031	Principles of Acquisition Management	25%
-Decision Making and Problem Solving		
GB3010	Managing for Organizational Effectiveness	80%
GB3012	Communication for Managers	45%
GB3013	Problem Analysis and Ethical Dilemmas	100%
GB3020	Fundamentals of Information Technology	10%
GB3040	Managerial Statistics	100%
GB3042	Operations Management	100%
GB3050	Financial Reporting and Analysis	25%
GB3051	Cost Management	43%
GB3070	Economics of the Global Defense Environment	10%
GB4014	Strategic Management	50%
GB4043	Business Modeling and Analysis	60%
GB4052	Managerial Finance	100%
GB4053	Defense Budget and Financial Management Policy	10%
GB4071	Economic Analysis and Defense Resource Allocation	50%
GB3031	Principles of Acquisition Management	25%
Understanding of Public Policy and Organization Environment, the components of which include		
-Political and Legal Institutions and Processes		
GB3010	Managing for Organizational Effectiveness	20%
GB3013	Problem Analysis and Ethical Dilemmas	50%
GB3020	Fundamentals of Information Technology	5%
GB3042	Operations Management	5%
GB3050	Financial Reporting and Analysis	10%
GB3051	Cost Management	2%
GB3070	Economics of the Global Defense Environment	5%
GB4014	Strategic Management	5%
GB4052	Managerial Finance	20%
GB4053	Defense Budget and Financial Management Policy	40%

GB3031	Principles of Acquisition Management	10%
-Economic and Social Institutions and Processes		
GB3010	Managing for Organizational Effectiveness	20%
GB3013	Problem Analysis and Ethical Dilemmas	50%
GB3020	Fundamentals of Information Technology	5%
GB3042	Operations Management	10%
GB3050	Financial Reporting and Analysis	10%
GB3051	Cost Management	2%
GB3070	Economics of the Global Defense Environment	100%
GB4014	Strategic Management	25%
GB4043	Business Modeling and Analysis	2%
GB4052	Managerial Finance	50%
GB4053	Defense Budget and Financial Management Policy	5%
GB4071	Economic Analysis and Defense Resource Allocation	100%
GB3031	Principles of Acquisition Management	10%
-Organization and Management Concepts and Behavior		
GB3010	Managing for Organizational Effectiveness	100%
GB3012	Communication for Managers	50%
GB3013	Problem Analysis and Ethical Dilemmas	100%
GB3020	Fundamentals of Information Technology	5%
GB3040	Managerial Statistics	5%
GB3042	Operations Management	30%
GB3050	Financial Reporting and Analysis	10%
GB3051	Cost Management	10%
GB3070	Economics of the Global Defense Environment	5%
GB4014	Strategic Management	25%
GB4052	Managerial Finance	20%
GB4053	Defense Budget and Financial Management Policy	5%
GB3031	Principles of Acquisition Management	50%

Standard 4.22 Additional Curriculum Components for MBA Program
Each program shall clearly define its objectives for additional work and the rationale for the objectives, and shall explain how the curriculum is designed to achieve those objectives. The statement of objectives shall include any program specializations or concentrations and the main category of students to be served (e.g., pre-service, in-service, full-time, part-time). If a program advertises its ability to provide preparation for a specialization or concentration in its catalog, bulletin, brochures, and/or posters, evidence shall be given that key courses in the specialization or concentration are offered on a regular basis by qualified faculty. Specialization or concentration courses may be offered by units other than the public affairs or administration program. The specialization or concentration courses shall not be substitutes for the common curriculum components.

4.22A Elective Design

In general within the MBA degree program, advanced coursework beyond the common core is intended to prepare students for management responsibilities in some particular functional area of management, a specialization. Virtually all students are sent to the Naval Postgraduate School by military sponsors who specify the functional specialties each student is to take. (The only exceptions are some, but not all, foreign military officers and U.S. government civilian employees, who are allowed to select their advanced courses, with the advice and approval of their faculty advisors. Even so, many of these students actually choose courses in one of the established specialty curricula.)

Some of the curricula have requirements such that all advanced courses beyond the common core are specified and required for students in that specialization. Some curricula may require a number of specific courses but permit the student to elect, perhaps one or two, other courses from a list of approved specialty courses. Finally, some curricula may permit the student to choose a free elective that could fall outside the specialty area. Regardless of these small differences in design, the intent of all the advanced coursework beyond the core is to achieve a specialization rather than broad, advanced training. (The exceptions are the Defense Systems Management (#818) and the Defense Business Management (#809) Curricula, where all courses beyond the core are electives and students can, if they wish, design a broad rather than specialized program.)

Current program length for nine of the ten MBA curricula is 18 months; program length for one (Information Systems Management) is 21 months. Since all share a common core (and either a thesis or project requirement), their differences are in their specialization requirements. (Even within a given curriculum, the specialization requirement may differ slightly depending on the student and/or sponsor.) Required quarter credit hours, beyond the common core curriculum, to satisfy the specialization requirements are approximately as follows:

Logistics Management
- Transportation Management (814) 26 credits
- Supply Chain Management (819) 26 credits

- Material Logistics Support Management (827) 26 credits

Acquisition Management
- Acquisition and Contract Management (815) 39 credits
- Systems Acquisitions Management (816) 37 credits

Financial Management
- Financial Management (837) 33 credits

Defense Management
- Defense Systems Management - International (818) 24 credits
- Resource Planning and Mgmt for Intl Defense (820) 24 credits
- Defense Business Management 24 credits

Information Management
- Information Systems Management (870) 43 credits

The nature of the advanced courses varies considerably, depending on both the specialization area and the particular course objectives. Some emphasize the application of analytical techniques to issues and problems in the specialization area. Others focus more on management processes in that area.

With the exception of a few seminars, used primarily for guest speakers and/or training and administrative matters, none of the advanced courses offered, either in the specialty curricula or as free electives, is listed at the undergraduate level. There are no undergraduate students in GSBPP programs, so undergraduate courses are largely absent from the programs.

4.22B Additional Curriculum Components: Specializations

Objectives, Educational Requirements & Courses for MBA Curricula

As was noted earlier, each specialty curriculum is designed to prepare students for functional management responsibilities in that specialization area. Each curriculum has its own objective. Most curricula have their own set of Educational Skill Requirements (ESRs), prepared by the faculty in consultation with the program sponsor. These skill requirements constitute the specific curriculum requirements. Each curriculum has its own required specialization courses and, perhaps, an optional course.

Descriptions of each of the ten curricula in the MBA program are presented on the following pages. The descriptions include: curriculum objective, Educational Skills Requirements (ESRs), required curriculum specialization courses (along with the names of faculty who regularly teach each course), and a "course matrix." It may be noted that certain courses appear in more than one curriculum.

LOGISTICS MANAGEMENT AREA

Transportation Management - Curriculum 814
Supply Chain Management - Curriculum 819
Material Logistics Support - Curriculum 827

Objective and Description:

The Logistics Management curricula provide education in all aspects of the logistics function. The curricula are comprised of management core and logistics concentration subjects. The management core of the Logistics Management curricula provides study in mathematics, accounting, economics, communications, marketing management, risk analysis, DoD mission, structure and resource determination, strategy making, and the global defense marketplace. The logistics curricula subjects are significant components of the military supply chain and each provides unique and relevant education that meets the critical needs of the armed services. The specialized logistics courses concentrate on studies in production and project management, inventory management, integrated logistics support, procurement and contract administration, systems acquisition, and logistics strategic planning. The logistics curricula are rounded out by including education in national, international, and defense transportation systems. The educational skills in these curricula prepare those responsible for managing the various elements of total life cycle support from requirements determination through sustainment.

The Logistics Management curricula are interdisciplinary, integrating mathematics, accounting, economics, management theory, operations analysis, and the specialty concentration to understand the process by which the defense mission is accomplished. The curricula provide the officer with fundamental interdisciplinary techniques of quantitative problem-solving methods, behavioral and management science, economic analysis, and financial management; furthermore, they provide the officer with a Navy/Defense systems-oriented graduate management education and to provide the officer with the specific functional skills to effectively manage in these specialty areas. These curricula prepare officers for naval logistics system positions. The Logistics Management curricula emphasize all of the aspects for providing integrated logistics support of military systems. Skills from the curricula prepare those responsible for managing the various segments of a military system's life cycle from initial planning for support to fielding the system, through sustaining operations to phase out. These curricula additionally emphasize the management of military owned inventories at the three levels of wholesale, intermediate and retail customer support, and worldwide transportation and distribution systems.

Completing these curricula provides a naval officer with a specialization in Supply Chain Management (subspecialty code 1304P), Material Logistics Support Management (subspecialty code 3121P), or Transportation Management (subspecialty code 3122P). U.S. Marine officers receive MOS 9662. Curriculum Sponsors are Naval

Supply Systems Command Headquarters (819), Naval Air Systems Command Headquarters (827), and Navy Military Sealift Command Headquarters (814).

Educational Skills Requirements: Curricula 814, 819, 827

1. Management Fundamentals - Quantitative Analysis The graduate will have the skills to apply mathematical, statistical, accounting, economic and other state-of-the-art quantitative techniques and concepts to the solving of day-to-day military management problems as well as the capability to use these skills as a participant in the long-range strategic planning efforts of the Navy and DoD.

2. Management Fundamentals - Organization and Management The graduate will have a thorough knowledge of basic management theory and practices, embracing leadership, communication, organizational design, staffing, directing, planning and controlling of military organizations.

3. Integrated Logistics Support Management The graduate will have a detailed understanding of the processes associated with designing an integrated logistics support system for a new weapon system. The graduate will also have detailed knowledge about the DoD processes for contracting for and acquiring a new weapon system. The graduate will be able to serve as an assistant program manager for logistics (APML) for a major weapon system.

4. Budgeting and Financial Controls The graduate will have an understanding of the financial management practices of DoD, will be able to conduct cost/benefit analyses and participate in the budgetary planning by a hardware systems command for the support of both old and new weapon systems.

5. Production/Operations Management The graduate will be able to apply the techniques of production/operations management at Naval Aviation Intermediate Activities and Depots, Navy Fleet Industrial and Support Activities and other DoD maintenance and maintenance support activities.

6. Materials and Physical Distribution Management The graduate will be able to apply the techniques of materials management and physical distribution management in designing and operating of fleet and troop support systems, both during peacetime and during rapidly developing wartime contingencies. This will include acquiring material and transportation assets to ensure that the distribution of material is both cost-effective and efficient. The graduate will also have an in-depth understanding of domestic, international and defense transportation systems including the various modes, types of carriers within each mode and the regulations affecting material movement by each type of carrier.

7. Joint and Maritime Strategic Planning The graduate will have knowledge of the development and execution of military strategy and the effects of technical effects

on warfare, an understanding of the means of formulation of U.S. policy, the roles of military forces and joint planning and current issues in the defense organization. The graduate will also have a detailed understanding of the plans and processes of the DoD for providing support of strategic sealift and mobilization.

8. Thesis/Project The graduate will demonstrate the ability to conduct independent research and analysis, and proficiency in presenting the results in writing by means of a thesis appropriate to this curriculum.

Required Specialization Courses

Transportation Management - Curriculum 814 Supply Chain Management - Curriculum 819 Material Logistics Support - Curriculum 827			
Course	**Credits**	**Course Title**	**Faculty**
MN3370	(0 - 2)	Defense Logistics Seminar (taken multiple quarters)	Kang
GB4410	(4 - 0)	Logistics Engineering	Kang
GB4430	(4 - 0)	Defense Distribution and Transportation	Lewis
GB4420	(3 - 0)	Logistics Information Systems	Housel
GB4450	(4 - 0)	Logistics Strategy	Petross
GB4440	(3 - 0)	Models and Simulation for Managerial Decision Making	Kang
GB3031	(2 - 0)	Principles of Acquisition Management	Rendon
GB3420	(4 - 0)	Supply Chain Management	Ferrer
GB/MNxx	(x - 0)	Curriculum Elective Course	

LOGISTICS MANAGEMENT CURRICULA (814, 819, 827) MATRIX						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (3-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	MA1010 (2-0) College Algebra*** (if needed)
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation	GB3031** (2-0) Principles of Acquisition Mgnt	
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget and FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management	GB4440 (3-0) Models & Sim for Mgrl DM	MN3370 (0-2) Defense Logistics Seminar (option)
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) Core Elective			GB3420 (4-0) Supply Chain Mgmt	MN3370 (0-2) Defense Logistics Seminar
5 W/Sm	GB4090 (0-6) MBA Project			GB4410 (4-0) Logistics Engineering	GB4430 (4-0) Defense Dist & Trans	MN3370 (0-2) Defense Logistics Seminar
6 Sp/F	GB4090 (0-6) MBA Project	NW3285* (4-0) Strategy & Policy		GB4450 (4-0) Logistics Strategy	GB4420 (3-0) Logistics Information Systems	MN3370 (0-2) Defense Logistics Seminar (option)

- *Not required for international students. Non-Navy students may validate comparable Service course(s)
- ** Is replaced by MN3301 (4-0) or MN3331 (5-1) for higher levels of DAU equivalency. International students take GB3031 in the 4th quarter.
- *** International Students take IT1600, Communications Skills for International Officer (if needed) in the first quarter, and IT1500, American Life and Institutions in the second or third quarter.

ACQUISITION MANAGEMENT AREA

The Acquisition Management Curricula develop the knowledge, skills and competencies necessary to effectively lead the acquisition workforce and efficiently manage the resources allocated to the acquisition process. The curricula focus on problem solving and decision-making in a variety of acquisition situations demanding critical thinking and a balanced approach in applying theory and practical solutions. Graduates of the curricula are expected to assume leadership positions in the acquisition workforce.

Acquisition and Contract Management - Curriculum 815

Objective and Description

The Acquisition and Contract Management Curriculum develops the knowledge, skills and competencies necessary to effectively lead the acquisition workforce and efficiently manage the resources allocated to the acquisition process. The curriculum focuses on problem solving and decision making in various acquisition situations demanding critical thinking and a balanced approach in applying theory and practical solutions. Graduates of the curriculum are expected to assume leadership positions in the acquisition workforce.

Completion of this curriculum qualifies naval officers as Acquisition and Contract Management specialists with a subspecialty code of 1306P, Army officers as Functional Area 51C, USAF officers as 64P, and Marine Corps officers with a 9656 MOS. The curriculum satisfies mandatory Defense Acquisition University (DAU) contracting courses required by the Defense Acquisition Workforce Improvement Act (DAWIA). The curriculum sponsor is the Deputy Assistant Secretary of the Navy (Acquisition)

Educational Skills Requirements (ESR): Curriculum 815

1. Management Fundamentals The graduate will understand the theory of and have an ability to apply accounting, economic, mathematical, statistical, managerial and other state-of-the-art management techniques and concepts to problem solving and decision-making responsibilities as military managers.

2. Advanced Management Concepts The graduate will have the ability to apply advanced management and operations research techniques to defense problems. This includes policy formulation and execution, strategic planning, defense resource allocation, cost benefit and cost effectiveness analysis, federal fiscal policy, computer-based information and decision support systems, and complex managerial situations requiring comprehensive integrated decision making.

3. Acquisition and Contracting Principles The graduate will have an understanding of and will be able to apply the principles and fundamentals of acquisition and contracting within the federal government, including knowledge of the acquisition

laws and regulations, particularly the Federal Acquisition Regulation (FAR) and the DoD FAR Supplement (DFARS); the unique legal principles applied in government contract law and the Uniform Commercial Code; and the application of sound business principles and practices to defense contracting problems. Further, the graduate will be able to apply innovative and creative approaches not only to resolve difficult acquisition and contracting issues but to significantly influence the legal and regulatory structure within which acquisition decision making occurs. Finally, the graduate will have the ability to conceptualize, develop and execute strategic business alliances and relationships necessary to the successful acquisition of goods and services.

4. Acquisition and Contracting Policy The graduate will have an ability to formulate and execute acquisition policies, strategies, plans and procedures; a knowledge of the legislative process and an ability to research and analyze acquisition legislation; and a knowledge of the government organization for acquisition, including Congress, the General Accounting Office, the Office of Federal Procurement Policy, the federal and military contracting offices, the Boards of Contract Appeals, and the court system.

5. Contracting Process The graduate will understand the theory of and have the ability to manage the field contracting, system acquisition and contract administration processes. This involves a knowledge of the defense system life cycle processes, including requirements determination, funding, contracting, ownership and disposal; an ability to evaluate military requirements, specifications and bids and proposals; an ability to utilize the sealed bid, competitive proposals and simplified acquisition methodologies; a comprehensive knowledge of all contract types and their application in defense acquisition; an ability to conduct cost and price analyses; and an ability to negotiate various contracting actions, including new procurement, contract changes and modifications, claims, equitable adjustment settlements and noncompliance issues.

6. Business Theory and Practices The graduate will have an understanding of the business philosophy, concepts, practices and methodologies of the global commercial industrial base, and the ability to apply these to the federal government acquisition environment.

7. Federal and Defense Budgeting The graduate will have an ability to apply economic and accounting principles, including monetary and fiscal theories, to defense acquisition and contracting issues.

8. Program Management The graduate will have an understanding of the basic principles and fundamentals of Program Management, with particular emphasis on the Procuring Contractor Officer's and Administrative Contracting Officer's roles and relationships with the Program Manager.

9. Acquisition Workforce The graduate will satisfy all requirements of the Defense Acquisition Workforce Improvement Act (DAWIA) and mandatory contracting courses required by the Defense Acquisition University (DAU) at Levels I, II, III.

10. Ethics and Standards of Conduct The graduate will have an ability to manage and provide leadership in the ethical considerations of military acquisition, including the provisions of procurement integrity, and to appropriately apply defense acquisition standards of conduct.

11. Strategy and Policy Officers develop a graduate-level ability to think strategically, critically analyze past military campaigns and apply historical lessons to future joint and combined operations, in order to discern the relationship between a nation's policies and goals and the ways military power may be used to achieve them. This is fulfilled by completing the first of the Naval War College course series leading to Service Intermediate-level Professional Military Education (PME) and Phase I Joint PME credit.

12. Analysis, Problem Solving, and Critical Thinking: The graduate will demonstrate the ability to conduct research and analysis, and proficiency in presenting the results in writing and orally by means of an applied project and a command-oriented briefing appropriate to this curriculum.

Required Specialization Courses

Within the 815 curriculum, students may substitute specialty courses in strategic purchasing with the approval of their service and the academic associate.

Acquisition and Contract Management - Curriculum 815			
Course	**Credits**	**Course Title**	**Faculty**
MN3331	(5 - 1)	Principles of Systems Acquisition and Program Management	Rendon, Snider, Matthews, Nalwasky, Petross
MN3384	(5 - 1)	Principles of Acquisition Production and Quality Management	Boudreau
MN3303	(4 - 0)	Principles of Acquisition and Contract Management	Cuskey, Rendon, Nalwasky
MN3304	(5 - 2)	Contract Pricing and Negotiations	Yoder, Nalwasky
MN3312	(4 - 0)	Contract Law	Desbrow
MN3315	(4 - 0)	Acquisition Management and Contract Administration	Desbrow, Nalwasky
MN3318	(1 - 0)	Contingency Contracting	Yoder, Nalwasky
MN4304	(2 - 0)	Defense Systems Contracting	Cuskey, Rendon,
MN4311	(3-0)	Contracting for Services	Rendon
MN4371	(4 - 0)	Acquisition and Contracting Policy	Cuskey

ACQUISITION AND CONTRACT MANAGEMENT(815) MATRIX						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (3-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	MA1010 (2-0) College Algebra*** (if needed)
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation	MN3331 (5-1) Systems Acq & Program Management	
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management	MN3303 (4-0) Principles of Acq & Contracting	
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) Core Elective		MN3315 (4-0) Acq Mgmt & Contract Admin	MN3312 (4-0) Contract Law	
5 W/Sm	GB4090 (0-6) MBA Project		MN3318 (2-1) Contingency Contracting	MN4304 (2-0) Defense Systems Contracting	MN3304 (5-2) Contract Pricing & Negotiations	
6 Sp/F	GB4090 (0-6) MBA Project	NW3230 (4-2) Strategy & Policy*	MN4311 (3-0) Contracting for Services****	MN3384 (5-1) Prin of Acq Production & Quality Mgmt**	MN4371 (4-0) Acquisition & Contracting Policy	

- *Not required for international students. Non-Navy students may validate comparable Service course(s)
- ** Required for USMC, US Army. Strategic Purchasing students complete MN3306.
- *** International Students take IT1600, Communications Skills for International Officer (if needed) in the first quarter, and IT1500, American Life and Institutions in the second or third quarter.
- **** Navy students substitute MN3306.
- USAF Strategic Purchasing Track substitutes MN3306 Strategic Purchasing, MN3307 Entrepreneurship, and MN4374 Contracting and Strategic Purchasing Capstone, for MNMN3312, MN3304.

Systems Acquisition Management - Curriculum 816

Objective and Description:

The Systems Acquisition Management curriculum is an interdisciplinary program that integrates business principles, program leadership and management theory, operations analysis, and systems engineering applications. It is uniquely tailored to federal government acquisition management and intensive exposure to the fundamental principles of the acquisition environment. The courses in this curriculum apply business analysis and problem solving techniques essential to effective major system program management within the structure of DoD acquisition management. It further focuses on the decisions and problems facing the acquisition manager, the various forces at work within industry and government, and the impact of acquisition policies and strategies. Student input includes officers and civilians from all DoD Services, other federal agencies and allied nations.

Completing this curriculum qualifies an Army officer for Functional Area 51, an Air Force officer as 63A and a Marine Corps officer for MOS 9657. Department of Defense civilians are typically members of the acquisition workforce as specified by the Defense Acquisition Workforce Improvement Act (DAWIA). This curriculum satisfies the mandatory Defense Acquisition University (DAU) program management education required by the DAWIA for Program Management through Level III and provides up to 14 additional DAU equivalencies in other functional areas. The curriculum Sponsor is Director, Acquisition Career Management, Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology): ASA/ALT (DACM).

Educational Skills Requirements (ESR): Curriculum 816

1. Management Fundamentals The graduate will understand the theory of and have an ability to apply accounting, economic, mathematical, statistical, managerial and other state-of-the-art management techniques and concepts to problem solving and decision-making responsibilities as Department of Defense managers. The graduate will have the ability to think creatively, addressing issues and problems in a dynamic, challenging environment.

2. Advanced Leadership and Management Concepts The graduate will have the ability to apply advanced leadership, management and operations research techniques to defense problems. This includes policy formulation and execution, strategic planning, defense resource allocation, project leadership, cost benefit and cost effectiveness analysis, federal fiscal policy, computer-based information and decision support systems, and complex managerial situations requiring comprehensive integrated leadership abilities.

3. Program Leadership and Management Principles The graduate will have an understanding of and will be able to apply the principles, concepts and techniques of program leadership and program management to the acquisition of major

defense weapon systems. This includes the principles of risk management and tradeoff decision analysis using Total Ownership Cost, schedule and performance dynamics from a total life cycle management perspective.

4. Program Management Policies The graduate will have an ability to formulate and execute defense acquisition policies, strategies, plans and procedures; an understanding of the policy-making roles of various federal agencies of the executive, legislative and judicial branches of the U.S. government, particularly the Department of Defense (DoD), the General Accounting Office (GAO), congressional committees, the Office of Management and Budget (OMB); and an understanding of the strategies necessary to influence policy development and implementation.

5. Systems and Acquisition Process The graduate will understand the theory of and have an ability to lead program teams and manage the systems acquisition process. This involves the system life cycle process for requirements determination, research and development, funding and budgeting, procurement, systems engineering, including systems of systems, test and evaluation, manufacturing and quality control, integrated logistics support, ownership and disposal; the interrelationship between reliability, maintainability and logistics support as an element of system effectiveness in defense system/equipment design; and embedded weapon system software, particularly related to current policies and standards, software metrics, risk management, inspections, testing, integration and post-deployment software support.

6. Contract Management The graduate will understand the role of the contracting process within the acquisition environment, including financial, legal, statutory, technical and managerial constraints in the process.

7. Business Theory and Practices The graduate will have an understanding of the business and operating philosophies, concepts, practices and methodologies of defense industry with regard to major weapon systems acquisition, particularly the application of sound business practices.

8. Government and Industry Budgeting and Financial Management The graduate will have an understanding of and an ability to apply the principles of government and private organizational financing, including corporate financial structures, cost and financial accounting, capital budgeting techniques, financial analysis and defense financial management and budgeting processes, to include the Government Planning, Programming and Budgeting System (PPBS).

9. Acquisition Workforce The graduate will satisfy all requirements of the Defense Acquisition Workforce Improvement Act (DAWIA) and mandatory program management courses required by the Defense Acquisition University (DAU) at Levels I, II, and III.

10. Ethics and Standards of Conduct The graduate will have an ability to manage and provide leadership in the ethical considerations of defense acquisition, including the provisions of procurement integrity, and to appropriately apply defense acquisition standards of conduct.

11. Analysis, Problem Solving, and Critical Thinking The graduate will demonstrate the ability to conduct research and analysis, and proficiency in presenting the results in writing and orally by means of an applied project and a command-oriented briefing appropriate to this curriculum.

Required Specialization Courses

Systems Acquisition Management - Curriculum 816			
Course	**Credits**	**Course Title**	**Faculty**
MN3331	(5 - 1)	Systems Acquisition and Program Management	Rendon, Snider, Matthews, Nalwasky, Petross
MN3384	(5 - 1)	Principles of Acquisition Production and Quality Management	Boudreau
MN4602	(3 - 0)	Test and Evaluation Management	Naegle, Snider
MN3309	(4 - 1)	Acquisition of Embedded Weapon Systems Software	Naegle, Petross
GB4410	(3 - 0)	Logistics Engineering	Kang
MN3303	(4 - 0)	Principles of Acquisition and Contract Management	Cuskey, Rendon, Nalwasky
MN4307	(4 - 0)	Program Management Policy and Control	Dillard, Yakovac, Naegle, Boudreau
MN3304	(5 - 2)	Contract Pricing and Negotiations	Yoder, Nalwasky
GB4450	(4 - 0)	Logistics Strategy	Petross
SI4011	(3 - 2)	Systems Engineering for Acquisition Managers	Huynh

SYSTEMS ACQUISITION MANAGEMENT (816) MATRIX						
1 W/Su	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (3-0) Financial Reporting & Analysis	GB3070 (4-0) Economics and the Global Defense Environment	GB3020 (4-0) Fundamentals of Information Technology	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	MA1010 (2-0) College Algebra*
2 F/Sp	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Def Resource Allocation	MN3331 (5-1) Principles of Sys Acqn & Prgm Mgmt	
3 W/Su	GB3012 (3-0) Communications for Mgrs	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management	MN3303 (4-0) Prin of Acq & Contracting	
4 F/Sp	GB4014 (4-0) Strategic Management	GBxxxx (3-0) Core Elective	SE4011 (3-2) Syst Eng for Acq Managers	MN3384 (5-1) Prin of Acq Prod & Qual Mgmt		
5 W/Su	GB4090 (0-6) MBA Project	MN3304 (5-2) Contracts Pricing and Negotiations	MN3309 (4-1) Acqn of Wpn Sys Software	GB4410 (4-0) Logistics Engineering		
6 F/Sp	GB4090 (0-6) MBA Project	MN4307 (4-0) Prog Mgmt Policy & Control	MN4602 (2-2) Test & Eval Management	GB4450 (4-0) Logistics Strategy		

* If necessary

International Students pursue a 7-quarter program, taking IT1600, Communications Skills for International Officer (if needed) in the first quarter, and IT1500, American Life and Institutions in the second or third quarter.

FINANCIAL MANAGEMENT AREA

Financial Management - Curriculum 837

Objective and Description

The Financial Management Curricula prepares officers for business, financial and analysis positions within the DoN and DoD. Financial managers assist the DoN's decision-making processes at all levels by providing accurate, timely and relevant information and analysis. They are concerned with the optimal allocation of human, physical and financial resources to achieve the DoN's goals and objectives while assuring efficient and effective expenditure of public funds. Graduates of the Financial Management Curricula will be prepared for assignment to positions in strategic planning, business analysis, financial analysis, budgeting, accounting, business and financial management, and internal control systems and auditing.

Graduate courses cover topics such as financial reporting standards, cost standards, cost analysis, budgeting, internal control, auditing, management planning and control systems, strategic resource management, quantitative techniques used in planning and control, system acquisition and program management, and the Planning Programming, Budgeting and Execution System (PPBES) used within the Department of Defense.

Completing this curriculum qualifies a U.S. Navy officer as a Financial Management specialist, subspecialty code 3110P. Completion qualifies a U.S. Marine Corps officer for MOS 9644. The curriculum sponsor is N-82, Director, Office of Budget and Fiscal Management Division.

Educational Skills Requirements (ESR): Curriculum 837

1. Management Fundamentals The graduate will have the ability to apply quantitative techniques, accounting, economics, finance, organization theory, information technology and other state-of-the-art management techniques and concepts to military management problems. Also, the graduate will know basic management theory and practice, embracing leadership, ethics, written and oral communication, organization design, team building, human resource management, conflict resolution, quality assurance, cost-benefit analysis, risk analysis, stakeholder analysis and planning within military organizations, as well as military sub-units and activities. This ensures internal and external constituencies are considered in resource management.

2. Strategic Vision and Defense Budgeting The graduate will understand the roles of the executive and legislative branches in strategic planning, setting federal fiscal policy, allocating resources to national defense, budget formulation, budget negotiation, budget justification and budget execution strategies, including the principles of Federal Appropriations Law. In addition, the graduate will have knowledge of all aspects of the federal, defense and navy budget cycles including

the Planning, Programming, Budgeting, and Execution System with emphasis on budget formulation and execution.

3. Funds Management In support of approved programs, the graduate will be able to manage appropriated, revolving and non-appropriated funds in compliance with regulations of the Comptroller of the Navy and the federal government. Also, the graduate will be able to develop and review financial reports, analyze budget execution against operating and financial plans, develop alternate plans based on analyses of an activity's financial performance and prepare recommendations or make decisions regarding the reallocation or reprogramming of funds. The guidelines of the Defense Finance and Accounting System and the Federal Accounting Standards Advisory Board are relevant.

4. Accountability, Control, and Auditing The graduate will be able to acquire and analyze financial data and communicate the results to a diverse audience, including maintaining an integrated financial information system and appropriate internal controls to ensure timely, accurate, and consistent financial information. In accordance with the auditing standards of the U.S. Government Accountability Office, the defense and navy audit organizations and the professional standards of the American Institute of Certified Public Accountants, the graduate will learn to apply audit techniques that enforce sound internal accounting and administrative controls, safeguard defense assets, and assure the completeness and integrity of financial reports.

5. Acquisition and Program Management The graduate will understand the purpose and concepts, fundamentals and philosophies of the defense systems acquisition process and the practical application of program management methods within this process. This includes systems acquisition management; the systems acquisition life cycle; user-producer acquisition management disciplines and activities; and program planning, organizing, staffing, directing and controlling. This satisfies the Defense Acquisition University education equivalency requirements for defense acquisition professionals as specified in Congress' Defense Acquisition Workforce Improvement Act (DAWIA).

6. Economy, Efficiency, and Effectiveness The graduate will have the skills for solving complex and unstructured management problems in which alternatives must be identified, evaluated and selected in accordance with economical procurement of resources, efficient utilization of resources and effective accomplishment of overall defense and navy goals and objectives. This includes cost/benefit analysis, systems analysis, cost estimation, value engineering, business process reengineering and application of relevant OMB and Defense regulations.

7. Cost Management and Analysis The graduate will be able to design, implement, and evaluate different costing systems encountered within defense and navy

organizations and activities, as well as those found in private sector organizations conducting business with the federal government. In addition to private sector cost management policies and practices, the graduate will understand the application of defense unit costing guidelines to functional business areas, and the Office of Management and Budget's Cost Accounting Standards for major suppliers of goods and services to the federal government.

8. Strategic Resource Management The graduate will have knowledge of strategic vision and strategic core competency concepts for setting long-range goals and objectives; designing programs to achieve objectives; assigning individual responsibility for resource management, actions and decision making; measuring performance; reporting results; and evaluating and rewarding performance. This includes assessing customer needs and customer satisfaction, making recommendations and implementing improvements in the effective delivery of goods and services to customers or users.

9. Innovation and Creativity The graduate will demonstrate innovation and creativity in developing solutions to complex financial, budget, and program management issues that increase program effectiveness and customer satisfaction, while controlling the efficient utilization of financial, physical and human resources. This involves the ability to identify problems and potential concerns, providing leadership and teaming with others in the decision making process, and obtaining support for recommended decisions or courses of action.

10. Strategy and Policy Officers develop a graduate-level ability to think strategically, critically analyze past military campaigns and apply historical lessons to future joint and combined operations, in order to discern the relationship between a nation's policies and goals and the ways military power may be used to achieve them. Fulfilled by completing the first of the Naval War College series leading to Service Intermediate-level Professional Military Education (PME) and Phase I Joint PME credit.

Required Specialization Courses

Financial Management - Curriculum 837			
Course	**Credits**	**Course Title**	**Faculty**
GB4530	(3 - 0)	Management Control Systems	Euske
MN3301	(4 - 0)	Systems Acquisition	Snider, Rendon
GB3510	(3 - 0)	Defense Financial Management Practice	Candreva, Mutty, Potvin
GB4510	(4 - 0)	Strategic Resource Management	San Miguel
GB4540	(2 - 0)	Financial Management Seminar	Hughes
GB4570	(2 - 0)	Advanced Finance	Hensel, Wang, Laverson
OA4702	(4 - 0)	Cost Estimation	Mislick
GB4550	(4 - 0)	Advanced Financial Reporting	San Miguel, Thibodeau
MN4157	(3 - 0)	Seminar in Management Accounting I	Summers
GB4560	(3 - 0)	Defense Financial Management	Mutty
GB/MN	(X - 0)	Elective	

FINANCIAL MANAGEMENT (837) MATRIX						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (4-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Inform. Tech.	GB3070 (4-0) Econ. of Global Defense Environment	GB3013 (0-2) Prob. Anal. & Ethical Dilemmas	MA1010 (2-0) College Algebra*** (If Needed)
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Res. Allocation		
3 W/Sm	GB3012 (3-0) Communication for Managers	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management	GB4550 (4-0) Advanced Financial Reporting	
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) MBA Core Elective	GB4530 (4-0) Management Control Systems	MN3301** (4-0) Systems Acquisition	GB3510 (3-0) Defense Fin. Mgt. Practice	
5 W/Sm	GB4090 (0-6) MBA Project	GB4510 (4-0) Strategic Resource Management	GB4540 # (2-0) Financial Mgmt Seminar	GB4520 (2-0) Internal Control & Auditing	OA4702 (4-0) Cost Estimation	
6 Sp/F	GB4090 (0-6) MBA Project	GB4570 & (3-0) Advanced Finance	MN4157 # (CMA/CFM) or GB4560 (CDFM) Option (3-0)		NW3230 * (4-2) Strategy & Policy	

- *Not required for international students. Non-Navy students may validate by comparable Service course(s)
- ** USMC take MN3331 (5-1). Internationals take GB3031 (3-0)
- *** International Students take IT1600, Communications Skills for International Officer (if needed) in the first quarter, and IT1500, American Life and Institutions in the second or third quarter.
- # Either MN4157 or GB4560 or both may be selected. Optional for International officers & Optional for USN completing JPME in six quarters.

INFORMATION MANAGEMENT AREA

Information Systems Management - Curriculum 870

Objective and Description

The Information Age has generated a revolution in the means by which we conduct business and warfare. New technologies have changed the traditional views of the marketplace, supply chain management, and logistics. As the range and complexity of computer applications have grown, the need to manage and exploit those resources has increased. This curriculum provides both the technical skills and business acumen to deal with a constantly evolving digital world.

The Information Systems Management graduate has the knowledge, skills and competencies to: 1) manage the acquisition of Information Systems for public sector applications; 2) manage Information Systems and infrastructure support afloat and ashore; 3) solve Information Systems engineering and management problems individually and in teams; 4) apply technological solutions at the organizational and enterprise level focusing on public sector applications; 5) develop and implement effective strategies and policies to take advantage of technological opportunities and mitigate risk; 6) assimilate new technologies and transform organizations, processes, and strategies to compete in the marketplace or on the battlefield. These general education skill requirements are supported by the topical educational skill requirements provided below.

Completing this curriculum qualifies a U.S. Navy Supply Corps Officer as a Logistics - Information Technology specialist (subspecialty code 1309P). The curriculum sponsor is the Naval Supply Systems Command.

Educational Skills Requirements (ESR): Curriculum 870

1. Management Fundamentals The graduate will have the ability to apply quantitative accounting, economics, information technology and other management techniques and concepts to military management problems. Also, the graduate will know management theory and practices, including leadership, communications, organizational design, staffing, quality and planning within large public and private sector organizations with a focus on military sub-units and activities.

2. Information Systems Technology The officer will have a thorough knowledge of information systems management to include: 1) computer system components 2) computer networks: network architectures, protocols and standards; 3) database management systems: database technologies, object-oriented databases, data warehouses, OLAP, technical and administrative issues involved in the design, implementation and maintenance of database management systems.

3. Decision Support and Knowledge Management Systems The student will have a thorough knowledge of problem identification, formulation and application of systems to support decision making. The student will understand the purpose of executive information systems, group decision support systems and contingency management systems and their potential impacts on public organizations and missions. The student will also be familiar with knowledge collection technologies designed to capture, categorize, store, retrieve and present knowledge.

4. Computer Security The student will gain fundamental knowledge of the methods for ensuring integrity, confidentiality, authentication and availability of computer resources, distributed databases and networks.

5. Information Systems Analysis and Management The officer will have a thorough knowledge of the following concepts to effectively manage the application of information systems to organizational goals, including: 1) Managerial Concepts: decision-making theory, microeconomics, marketing, operations analysis, statistics, financial management, organizational development and research methodologies; 2) Evaluation of Information Systems: cost-performance (effectiveness) analysis; selection, evaluation, acquisition, installation and effective utilization of information systems hardware and software risk assessment; 3) Systems Analysis and Design: information systems feasibility, life cycle management, system requirements determination, system performance evaluation, conversion and maintenance of legacy systems, and post-implementation evaluation,; 4) Management of Information Systems: metrics evaluation, monitoring, capacity planning, human resource management, budgeting and financial control of computer centers, design of effective organization structure, understanding architectural constraints, control and security (INFOSEC) policies and training requirements for both the user and support staff; 5) Adapting to Technological, Organizational, and Economic Changes: evaluation of potential impacts of new technology on information systems and organizational strategy.

6. Military Applications: The officer must be able to combine analytical methods and technical expertise with operational experience for effective military applications to include: 1) DoD Decision-Making Process on Information Systems: DoD, DoN, OMB and congressional decision making on information systems matters; 2) Information Technology Acquisition Management: acquisition policies and procedures of the DoD, including: statutory framework, acquisition planning, contracting, and the planning, programming, and budgeting system; 3) Joint Professional Military Education (JPME) Level 1.

7. Independent Research: The graduate will demonstrate the ability to conduct independent research analysis and proficiency in communicating the results in

writing and orally by means of a field application study. The research in information technology and its management will include problem formulation, decision criteria specification, decision modeling, data collection and experimentation, analysis and evaluation.

Required Specialization Courses

Information Systems Management - Curriculum 870			
Course	**Credits**	**Course Title**	**Faculty**
IS3200	(3 - 2)	Systems Analysis and Design	Mark Bergman
IS3201	(4-2)	Database Management Systems	Stan Bush
IS3301	(3-2)	Decision Support Systems	Dan Dolk
IS3502	(4-2)	Network Systems: LAN/WAN	Albert Baretto
IS4182	(4-0)	Architecture/IS Management	Rick Hayes-Roth
IS4220	(3-2)	Process ReEngineering with IT	Glenn Cook
IS4300	(3-2)	Software Engineering/Project Management	John Osmundson
CS3030	(3-2)	Computer Architecture/Operating Systems	Scott Cote
CS3600	(4-1)	Information Assurance/Computer Security	Dan Warren

INFORMATION SYSTEMS MANAGEMENT (870) MATRIX					
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (3-0) Financial Reporting & Analysis	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	IS3201 (3-2) Database Management
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation	
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management	
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) MBA Core Elective	IS3200 (3-2) Systems Analysis and Design	**IS-4300** **(3-2)** Software Eng & Program Management	NW3230** (4-2) Strategy & Policy
5 W/Sm	GB4090 (0-6) MBA Project	IS-3502 (3-2) Computer Networks	CS-3600 (4-2) Intro to Computer Security	NW-3275 (4-0) JMO I	
6 Sp/F	GB4090 (0-6) MBA Project	MN3331 (5-1) System Acquisition & Program Mgmt	IS-3301 (3-2) Decision Support Systems	NW-3276 (4-0) JMO II	
7 W/Sm	IS4182 (4-0) Information Sys Policy & Strategy	IS-4220 (3-2) BPR With E-Biz Tech	CS-3030 (4-0) Systems Architecture and Operating Systems	NW-3285 (4-0) National Security Decision Making	

- **Not required for international students. Non-Navy students may validate by comparable Service course(s)

DEFENSE MANAGEMENT AREA

The Defense Management Curricula serve US and international officers. The overriding objective of the curricula is to provide students with the analytical skills and critical thinking ability to solve problems they confront in both operational and staff jobs. Students may design their own concentrations to meet their organizations' unique staffing and operational needs. International officers in the REPMID curriculum blend courses from the Graduate School of Business and Public Policy and the National Security Affairs Department into an integrated Defense Resource program of study.

Defense Business Management—Curriculum 809

Objective and Description

This interdisciplinary curriculum integrates within the defense context coursework in accounting, economics, mathematics, communications, management theory, and operations/systems analysis. As a result, students develop the analytical, critical thinking, and problem-solving skills not only to understand and critically assess the processes by which management in a defense organization is accomplished but also to manage and allocate wisely defense resources, evaluate written research, and analyze products of others throughout their careers.

In addition, this curriculum permits students to design their own concentration. Students work with their Academic Associate to determine the concentration areas and courses that meet their sponsoring agency needs. Students are free to choose among any of the specific management areas available. For example, a student may elect to specialize in the relevant portion of a functional area, such as financial management, logistics, human resources and organization management, acquisition, or manpower and personnel analysis. Or, the student may choose to follow a general management program, which would include an overall balance of courses from many functional areas.

Educational Skill Requirements (ESR): Curriculum 809

1. Management Fundamentals - Quantitative Analysis: The graduate will have the skills to apply mathematical, statistical, accounting, economic, and other state-of-the-art quantitative techniques and concepts to the solving of day-to-day military management problems as well as the capability to use these skills as a participant in the long-range strategic planning efforts of the Navy and DoD

2. Management Fundamentals - Organization and Management: The graduate will have a thorough knowledge of basic management theory and practices, embracing leadership, communication, organizational design, staffing, directing, planning, and controlling of military organizations.

3. Defense Economics: The graduate will be able to apply the fundamental tools of micro- and macroeconomic theory to Defense management and resource allocation decisions. Additionally, the student will understand markets and their interactions with

Defense acquisition and contracting processes, the national security implications of globalization, and efficiency in Defense decision making.

4. Acquisition and Program Management: The graduate will understand the purpose and concepts, fundamentals and philosophies of the defense systems acquisition process, and the practical application of program management methods within this process. This includes systems acquisition management; the systems acquisition life cycle; user-producer acquisition management disciplines and activities; and program planning, organizing, staffing, directing and controlling.

5. Financial Management: The graduate will understand the roles of the executive and legislative branches in strategic planning, setting federal fiscal policy, allocating resources to national defense, budget formulation, budget negotiation, budget justification, and budget execution strategies, including the principles of Federal Appropriations Law. In addition, the graduate will have knowledge of all aspects of the federal, Defense, and Navy budget cycles including the Planning, Programming, Budgeting, and Execution System with emphasis on budget formulation and execution.

6. Complex Systems Thinking: The graduate will be able to diagnose complex Navy and DoD problems from a systems perspective and offer solutions that maintain system alignments.

7. Strategic Thinking: The graduate will have knowledge of senior-level decision-making processes under conditions of significant uncertainty within the unique context of DoD organizations. In addition, students will learn how to implement these decisions, evaluate their effectiveness, and determine steps to take if desired outcomes aren't reached.

8. Analysis for Efficiency and Effectiveness: The graduate will be able to use various statistical methods to solve complex and unstructured problems in which alternatives will be evaluated and selected based on cost and systems analysis factors. This includes the use of probability theory, decision models and decision analysis, decision trees, forecasting, and simulation to make decisions under conditions of uncertainty with competing objectives.

9. Innovation and Creativity: The graduate will demonstrate innovation and creativity in developing solutions to complex management issues that increase program effectiveness and customer satisfaction, while controlling the efficient utilization of financial, physical, and human resources. This involves the ability to identify problems and potential concerns, providing leadership, and teaming with others in the decision-making process, and obtaining support for recommended decisions or courses of action.

10. Thesis/Project: The graduate will demonstrate the ability to conduct independent research and analysis, and proficiency in presenting the results in writing by means of an MBA project or thesis.

Required Specialization Courses

No specific specialized courses are required. However, the student in consultation with his/her Academic Associate must develop a coherent plan of specialized coursework that meets the student's career and the sponsoring agency's workforce needs. At least 24 credits of these types of courses are required beyond the MBA set of courses. Also, the student must complete a project or a thesis.

DEFENSE BUSINESS MANAGMENT CURRICULUM (809) MATRIX						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (4-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	MA1010* (2-0) College Algebra (if needed)
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation		
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget & Financial Mgmt Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management		
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) MBA Core Elective	GB3031 (3-0) Principles of Acquisition Management			
5 W/Sm	Application Project or Thesis **		Curriculum Concentration Courses (Minimum 24 credit hours)			
6 Sp/F	Application Project or Thesis **					

Defense Systems Management - Curriculum 818

Objective and Description

This curriculum is designed for international students. It provides international officers with the core MBA interdisciplinary techniques of quantitative problem-solving methods, management theory, management science, economic analysis and financial management. These skills enable the officers to manage and allocate defense resources, evaluate written research and analyze products of others throughout their careers. The curriculum further provides the officers with the specific functional skills required for effective leadership and defense resources management.

This curriculum permits students the opportunity to design their own concentration. Concentration areas and courses are determined after consultation with the Academic Associate. The 818 program allows students to design a program of course work specific to management effectiveness in the host country's military system. The student may elect to specialize in the relevant portion of a functional area, such as financial management, logistics, human resources and organization management, or manpower and personnel analysis. Or, the student may choose to follow a general management program, which would include an overall balance of courses from many functional areas. International students are free to choose any of the specific management curricula available.

Educational Skills Requirements (ESR): Curriculum 818

None are specified for this curriculum

Required Specialization Courses

A minimum of 24 credit hours determined in consultation with the Academic Associate is required.

DEFENSE SYSTEMS MANAGEMENT (818) MATRIX						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (3-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	MA1010 (2-0) College Algebra** (if needed)
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation		
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management		
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) MBA Core Elective	GB3031 (2-0) Principles of Acquisition Mgnt	XXXX (4-0)* Curriculum Option		
5 W/Sm	GB4090 (0-6) MBA Project	XXXX (4-0)* Curriculum Option	XXXX (4-0)* Curriculum Option	XXXX (4-0)* Curriculum Option		
6 Sp/F	GB4090 (0-6) MBA Project		XXXX (4-0)* Curriculum Option	XXXX (4-0)* Curriculum Option		

- *Curriculum Options determined with Academic Associate. Minimum of 24 credit hours.
- ** International Students take IT1600, Communications Skills for International Officer (if needed) in the first quarter, and IT1500, American Life and Institutions in the second or third quarter

Resource Planning and Management for International Defense - Curriculum 820

Objective and Description

The Resource Planning and Management for International Defense curriculum is an interdisciplinary program designed exclusively for officers and civilian employees in defense agencies of other countries. The program focuses on economic analysis, the management of financial, material and human resources, domestic and international political institutions, civil-military relations and the role of international law. The curriculum includes a combination of existing courses within the Graduate School of Business and Public Policy and the Department of National Security Affairs. In the majority of courses, international students will study and learn with U.S. students from several other management and national security affairs curricula.

Educational Skills Requirements (ESR): Curriculum 820

None are specified for this curriculum.

Required Specialization Courses

Resource Planning and Management for International Defense - Curriculum 820			
Course	**Credits**	**Course Title**	**Faculty**
IT1600	(3 - 0)	Communication Skills for International Officers (if needed)	Young
IT1500	(4 - 0)	American Life and Institutions	Barratt
NS3023	(4 - 0)	Introduction to Comparative Politics	Okruhlik, Malley
NS3900	(4 - 0)	International Law and Organizations	Clunan
NS3030	(4 - 0)	American National Security Policy	Dombroski
NS3041	(4 - 0)	Comparative Economic Systems	Eaton
NS3025	(4 - 0)	Introduction to Civil-Military Relations	Bruneau
NS4235	(4 - 0)	Diplomacy & Strategic Coalitions - Operations other than War	Dombroski
GB/MNxxxx	(4 - 0)	Elective (Curriculum Option)	

RESOURCE PLANNING AND MANAGEMENT (820) MATRIX						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (3-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	MA1010 (2-0) College Algebra* (if needed)
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation		
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management	NS 3023 (4-0) Introduction to Comparative Politics	
4 Sp/F	GB4014 (4-0) Strategic Management	GBxxxx (3-0) MBA Core Elective	GB3031** (2-0) Principles of Acquisition Mgnt	NS 3900 (4-0) Intl. Law and Organizations	NS 3030 (4-0) American National Security Policy	
5 W/Sm	GB4090 (0-6) MBA Project			NS3041 (4-0) Comparative Econ Systems	NS 3025 (4-0) Intro to Civil-Military Relations	
6 Sp/F	GB4090 (0-6) MBA Project		XXXX (4-0) NSA Curriculum Option	NS4235 (4-0) Diplomacy & Strat/Coalition-Ops OTW	NS 4240 (4-0) Seminar Region Security Plan Problems	

- REPMID students take IT1600, Communications Skills for International Officer (if needed) in the first quarter, and IT1500, American Life and Institutions in the second or third quarter

Standard 4.23 General Competencies for the MBA Program
The common and additional components shall develop in students general competencies that are consistent with the program mission.

4.23 MBA Program Competencies

The MBA program, and the curricula within, consist of three broad phases (core, specialization, project or thesis) and develop distinct competencies in each phase:

Common Core: Develops broad management competencies in six areas:

Organizations and Organizational Behavior
Economic and Policy Analysis
Financial Management
Quantitative Methods and Analysis
Operations and Information Technology
Institutional Processes and Strategic Management

Specializations: Develop specific functional competencies in one area:

Defense Business Management	(809)
Transportation Management	(814)
Acquisition and Contract Management	(815)
Systems Acquisitions Management	(816)
Defense Systems Management	(818)
Supply Chain Management	(819)
Resource Planning and Management	(820)
Material Logistics Support Management	(827)
Financial Management	(837)
Information Systems Management	(870)

MBA Project or Master's Thesis: The project/thesis serves an integrating mechanism and develops competencies for analysis, integration and application. As examples, a list of the project/thesis topics that were completed for the last graduating class (June 2007) is provided in Appendix 4.23A.

Standard 4.3 Minimum Degree Requirements for the MBA degree:
Students with little or no educational background or professional experience in the common and additional curriculum components are expected to devote the equivalent of two academic years of full-time study to complete the professional masters degree program. Where students have had strong undergraduate preparation in the common curriculum requirements or have been engaged in significant managerial activities, some of the subject matter requirements might be appropriately waived or reduced. Even in such cases, students ordinarily must spend the equivalent of a calendar year in full-time study in formal academic work exclusive of an internship, to obtain the professional masters degree. A calendar year is defined as two semesters and a summer session at least eight weeks in duration or four quarters (exclusive of internship) of full-time academic work.

4.3 MBA Degree Requirements

Stated minimum requirements for MBA degree are contained in the Naval Postgraduate School catalog, and summarized here.

Table 4.3
MBA STATED DEGREE REQUIREMENTS

Core	Completion or validation of all required courses in the Business Core. Completion or validation of all required courses in the Mission Core.
Credits	Completion (excluding by validation) of a minimum of 58 credits of graduate-level courses, at least 22 of which are at the 4000 level.
Concentration	Completion of an approved sequence of courses in a concentration area with a minimum of 24 graduate-level credit hours.
Capstone	Completion of an acceptable project or thesis

4.3A Degree Minimum Credit Hours

Combining the core and concentration credit requirements, and assigning effective credits to the project (6) component of the degree, the theoretical minimum credits for the MBA degree is:

- MBA Degree: 64 graduate-level credits; 22 at 4000 level

In practice, practical limits on course validations and individual course requirements specified by each of the 10 different curriculum concentrations result in all students completing programs well in excess of these stated minimums.

4.3B Degree Length

Potential program length, for students with:

• Little/no education background & exp.	6 quarters*	18 months
• Strong undergrad preparation, but no exp	5 quarters	15 months
• Significant background & exp.	4 quarters	12 months

Most students require the full six quarters or 18 months to complete their programs because of the time elapsed from their undergraduate work to their graduate work. Shorter programs are extremely rare and even students with significant background will take the full six quarters allowed. Rather than reduce program length, students with strong backgrounds will identify additional requirements they might accomplish (e.g., complete a second subspecialty or professional certifications).

*One MBA curriculum (870) requires, and one curriculum (816) permits, programs seven-quarters in length.

4.3C Concluding Requirements – MBA Project or Master's Thesis

No comprehensive examination is required. All resident students complete either a an MBA project or master's thesis. Normally the students spend about 6-9 months working on their project or thesis. Two to four equivalent course blocks are identified in each student's curriculum, depending on the length of the curriculum. No academic course credit is given for the project or thesis. Students may not earn a degree without satisfactorily completing a project or thesis.

4.3D Course Format

All courses at the Naval Postgraduate School follow an (X –Y) format, where X is the number of "lecture" credit hours and Y the number of "lab" credit hours. Contact hours (class meeting hours per week) are the sum of the lecture and lab hours. Courses offered by GSBPP, and courses contained in the GSBPP curricula, range from 2 – 6 contact hours, however the most common formats are (3-0) and (4-0) courses.

Courses of (4-0) size are predominant in the MBA resident program, although (3-0) courses are common also. Most (4-0) course are scheduled to meet for two 2-hour sessions per week and (3-0) courses to meet for two 1 ½-hour sessions, although instructors have the discretion to request an alternative scheduling pattern. All courses in the MBA program meet on a weekly basis throughout the normal NPS quarters, with the exception of the Problem Analysis and Ethical Dilemmas course (GB3013), which meets for a dedicated two-day period at the start of the first quarter of the MBA program.

All classes meet during the daytime. We do not offer evening or weekend courses. The resident MBA program parallels NPS's school year, which consists of four quarters with two two-week breaks at the end of June and December. All students in these programs complete four quarters of classes within a one-year period.

4.3E Student Transcript Analysis

Student transcript analyses were completed for the MBA degree program, with students from all curricula. Grades for the common curriculum components and additional curriculum components are provided. Table 4.3E1 provides a list of the students in the sample. Table 4.3E2 displays their grades in program courses. Two factors may result in the programs of individual students differing from the stated core and specialty curriculum set of courses. A comment on each:

Validation of Courses As with many graduate programs of administration and management, our students possess varied undergraduate education, including majors (or minors) in public or business administration or economics. In order to ensure that all of our graduates are well and broadly grounded in a range of management foundation disciplines, our degree requirements include foundation courses in financial management, economics, quantitative methods and organizational behavior. Many of our entering students with strong undergraduate preparation in these disciplines already possess such foundation knowledge in these disciplines. In those cases, students may attempt to 'validate' the requirements through examination and/or interview (and transcript review) conducted by a faculty member assigned as "course coordinator" for the course.

Naval Postgraduate School policy concerning validation is: "A student with the appropriate background may validate a course that is required for his/her curriculum. Validation will allow the student to omit that course from the program of study. However, no credit will be granted for a course that has been validated. The basic purpose of the course validation is to make optimal use of the student's time at the Naval Postgraduate School. Every validation must be justified by documented evidence of prior work in the area of the course to be validated."

Substitutability of Common Core Courses GSBPP policy allows for the substitution of a core course with a more comprehensive or more advanced "Superior Substitute" course. These substitutions may occur on a curriculum-by-curriculum basis. The principal example of a superior substitute concerns the core acquisition course (GB3031). The MBA core requires a 2-credit acquisition course as one element of the degree requirement, which GB3031 was designed to serve. However, most of the resident subspecialty curricula place an even greater requirement for acquisition knowledge than that provide by GB3031. Students in these curricula complete more advanced work in acquisition and take courses that are superior to GB3031. Most students will instead complete MN3331 (5-1) or MN3301 (4-0) as substitutes for GB3031 (2-0).

Standard 4.4 Internships
A carefully planned internship experience shall be made available by the program and students who lack a significant professional work background shall be strongly encouraged to take advantage of it. The program shall provide on-going academic supervision. Internship programs shall generally reflect NASPAA's internship guidelines.

4.4 Internships

There is no requirement for an internship nor is there any provision for a student to elect one. All students, however, have significant professional experience in complex governmental organization.

Table 4.3.E1

LIST OF STUDENTS IN MBA TRANSCRIPT ANALYSIS

Student Number	Curric #	Curriculum	Degree	Grad. Date
1	815	Acquisiton and Contract Management	MBA	6/30/2007
2	815	Acquisiton and Contract Management	MBA	12/30/2006
3	815	Acquisiton and Contract Management	MBA	6/30/2007
4	815	Acquisiton and Contract Management	MBA	12/30/2006
5	815	Acquisiton and Contract Management	MBA	12/30/2006
6	815	Acquisiton and Contract Management	MBA	6/30/2007
7	816	Systems Acquisition Management	MBA	12/30/2006
8	816	Systems Acquisition Management	MBA	6/30/2007
9	816	Systems Acquisition Management	MBA	12/30/2006
10	816	Systems Acquisition Management	MBA	12/30/2006
11	817	Defense Systems Analysis	MBA	12/30/2006
12	818	Defense Systems Management International	MBA	6/30/2007
13	818	Defense Systems Management International	MBA	6/30/2007
14	819	Supply Chain Management	MBA	12/30/2006
15	819	Supply Chain Management	MBA	12/30/2006
16	820	Resource Planning and Management International	MBA	12/30/2006
17	820	Resource Planning and Management International	MBA	12/30/2006
18	827	Material Logistics Support Management	MBA	12/30/2006
19	827	Material Logistics Support Management	MBA	6/30/2007
20	827	Material Logistics Support Management	MBA	12/30/2006
21	827	Material Logistics Support Management	MBA	12/30/2006
22	837	Financial Management	MBA	6/30/2007
23	837	Financial Management	MBA	12/30/2006
24	837	Financial Management	MBA	12/30/2006
25	837	Financial Management	MBA	3/30/2007
26	837	Financial Management	MBA	12/30/2006
27	837	Financial Management	MBA	12/30/2006
28	837	Financial Management	MBA	6/30/2007
29	837	Financial Management	MBA	12/30/2006
30	837	Financial Management	MBA	12/30/2006

*Student names withheld due to Privacy Act concerns. Can be made available during site visit.

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

Course No.	Course Title	Area	Credits	Course Grades for each of 30 students:																												
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
REQUIRED GRADUATE COURSES		**CORE**																														
GB3010	Managing for Organizational Effectiveness	CORE	4-0	A-	A	A	A	A-	B+	A	A-	A	A	A-	A	V	A-	V	A	A-	A	A	A	A	A	A-	A	B+	B+	A	A	A	A-
GB3012	Communication for Managers	CORE	3-0	A-	A	A	A	B+	A-	A	B+	A	A	A-	A	B+	B+	A	B	B+	A-	A	A-	A-	A-	A-	A-	B+	B+	A-	A	A	A-
GB3013	Problem Analysis & Ethical Dilemmas	CORE	0-2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB3020	Fundamentals of Information Technology	CORE	4-0	A-	A-	A	A	A-	B+	A-	A-	A	V	A	A	A-	A-	A	A-	A-	A	A	A	A-	A	A-	A-	A	A-	A-	A	A	A
GB3031	Principles of Acquisition Management	CORE	2-0	A					A-		A				A																	
GB3040	Managerial Statistics	CORE	4-0	A	B+	A	A	B	A	A-	B+	A	A-	A	A	B	B	A	B-	B+	B+	A	B	A	A-	A-	A	A	B-	A	A-	A	B
GB3042	Operations Management	CORE	4-0	B+	B+	A	A	B	A-	A-	B+	A	A	B	A	B	V	A	C	A-	A	A	B	A	B+	B-	B	A-	B-	A	A	A	B+
GB3050	Financial Reporting and Analysis	CORE	4-0	A-	A-	A	A	B-	A-	A	A-	A	V	A	A	D	B+	A	B	B	A	A	B+	A-	C	A-	A-	A	A-	A	A	A	A
GB3051	Cost Management	CORE	3-0	A	B+	A	A	B-	A	A	B+	A	A	A	A	B-	B+	A	C+	A	A-	A	B+	A	B+	B+	A-	A-	B+	A	A	A	B+
GB3070	Economics of the Global Defense Environment	CORE	4-0	A-	A-	A	A	B+	A-	A-	B+	A	A	A	A	B-	B	V	B+	B+	A	A	B+	A	B	A-	A	A-	A	A	A	A	A-
GB4014	Strategic Management	CORE	4-0	A	A-	A	A	B+	B+	A-	A	A	A	A	A	A	B+	V	B+	B+	B+	A-	B	A-	A	A-	A	A-	B	A	A	B+	A
GB4043	Business Modeling and Analysis	CORE	3-0	B+	B+	A	A	B+	A	B+	A-	A	A	B+	A	B	A	A-	B+	A-	A	A	A-	B+	B	B	B+	A	B	A	A	B+	A-
GB4052	Managerial Finance	CORE	3-0	A	B+	A	A	B+	B+	V	A	A	V	A	A	B+	A	A	V	B+	A	A	A	A	A	A	A	A	C+	A	A	A	A
GB4053	Defense Budget and Financial Management Policy	CORE	4-0		A-	A	A	B+	A-	A-		A	A-	A	A	A-	A-	A	B+	A	A	A	A-	A	A-	A-	A-	A-	B+	A	A	A	A

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

Course No.	Course Title	Area	Credits	Course Grades for each of 30 students:																												
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
REQUIRED GRADUATE COURSES (continued)		CORE																														
GB4071	Economic Analysis and Defense Resource Allocation	CORE	4-0	A	A-	A	A	B+	A-	A	A-	A	A	A	A	B	A-	A	A	B+	A	A	A	A	B+	B+	A	A	A-	A	A	A	A
NW3230	Strategy & Policy	CORE	4-2		B+	V	V	B+		B+						B			A-	B	B+	A	B+				B+		B+	A	A		B+
GB3030	Marketing Management	ELEC	3-0	B	A	A		A	B-	A			A-		A-	B+	A-				A	A-	A		B	A			B+		A-		A
GB4021	Strategic Management of IT	ELEC	3-0						A-			A							A								A					
GB4044	Defense-Focused Managerial Inquiry	ELEC	3-0			A	A			B+				B+						A										A		A	
IS4520	Systems Dynamics	ELEC	4-0																					A-				A					
MN3118	Strategies for Building Consensus	ELEC	4-0	B+							A-				A																		
ADDITIONAL CURRICULUM COMPONENTS																																	
MN2302	Seminar for Acquisition and Contracting Students	ACQ	0-2				P					P		P		P	P								P			P		P			
MN2303	Seminar for Program Management Students	ACQ	0-2																														
MN3155	Financial Management for Acquisition Managers	ACQ	2-0																														
MN3301	Acquisition of Defense Systems	ACQ	4-0			A				A										A-		A				V					A		A
MN3303	Principles of Acquisition and Contract Management	ACQ	4-0				A					A		A		B	B+							A	A			A		A		A	
MN3304	Contract Pricing and Negotiations	ACQ	5-1				A					A				A-	A-							A-	A			A		A-		A	
MN3306	Strategic Purchasing	ACQ	3-0											A																			

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

Course No.	Course Title	Area	Credits	Course Grades for each of 30 students:																												
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ADDITIONAL CURRICULUM COMPONENTS (continued)																																
MN3307	Entreprenership in Strategic Purchasing	AOQ	3-0											A																			
MN3309	Acquisition of Embedded Weapon Systems Software	AOQ	4-1									A												A-				A-				A	
MN3312	Contract Law	AOQ	4-0				A									A-	A								A					A			
MN3315	Acquisition Management and Contract Administration	AOQ	4-0				A-						A	A-		A-	A-								A					A-			
MN3318	Contingency Contracting	AOQ	3-0				A							A-		A-	A-								A					A			
MN3331	Principles of Acquisition and Program Management	AOQ	5-1		A		A	B				V	V	A-		B	B	A	A		A-		A-	A	A		A-	A	A-	A		A	
MN3384	Principles of Acquisition Production and Quality Management	AOQ	5-1				A-					A					B+							A				A		A-		A	
MN304	Defense Systems Contracting	AOQ	2-0				A-							A-		B+	A								A-					A-			
MN307	Program Management Policy and Control	AOQ	4-0									A												A-				A-				A-	
MN371	Acquisition and Contracting Policy	AOQ	4-0				A							A-		B+	B+								B+					A-			
MN374	Seminar in Acquisition Management: Strategic Purchasing	AOQ	3-0											A																			
MN602	Test and Evaluation Management	AOQ	2-0									V												A				A				A	
SE4011	Systems Engineering for Acquisition Managers	AOQ	3-2									V												A				A				A	

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

				Course Grades for each of 30 students:																																	
Course No.	Course Title	Area	Credits	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ADDITIONAL CURRICULUM COMPONENTS (continued)																																					
GB3510	Defense Financial Management Practice	FM	3-0			A				A-			V					A		A-	A-	A				B+					A		A
GB4510	Strategic Resource Management	FM	4-0			A			A-	A			A		A			A		B+	A	A				A-					A		A
GB4520	Internal Control & Audit	FM	3-0																																		
GB4530	Management Control Systems	FM	4-0			A			B+	A			A		A			A		A	A	A				A					A		A
GB4540	Conrad Seminar	FM	2-0			P				A-			A					A-		A-		P				B+					P		A-
GB4550	Advanced Financial Reporting	FM	4-0			A				A			A		A			A		A	A	A				B+					A		B-
GB4560	Defense Financial Management	FM	3-0			A							P					P		P	P					P							
GB4570	Advanced Finance	FM	2-0			A				A-			A-		A			A			A	A				A					A		A
MN4157	Seminar in Management Accounting I	FM	3-0			P				P			P		P			P			P	P				P					P		P
OA4702	Cost Estimation	FM	4-0			A			B+	A-			A		A			A		A-	A	A				A-					A		A
GB3420	Supply Chain Management	LOG	4-0		A			B+	B+										A-				A-				A-		A-				
GB4410	Logistics Engineering	LOG	4-0		A-			B	B+			A							C+				B+	A-			B	A	B-			A-		
GB4420	Technology and Information Systems for Logistics and Operations	LOG	4-0		B			B-											A-				B				B-		A-					
GB4430	Defense Transportation System	LOG	4-0		A			A-											A				A				A-		A					
GB4440	Simulation Modeling for Management Decision Making	LOG	3-0		A			A-											B+				A-				A							

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

				Course Grades for each of 30 students:																													
Course No.	**Course Title**	**Area**	**Credits**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
ADDITIONAL CURRICULUM COMPONENTS (continued)																																	
GB4450	Logistics Strategy	LOG	4-0		A			A				A							A				A	A			A	A	A			A	A
MN3370	Seminar on Leadership in Supply Chain Management	LOG	0-2		P			P											P				P				P		P				
MN2089	Basic Quantitative Methods in Management	MSA	4-0																														
MN2111	Navy Manpower, Personnel, and Training Systems I	MSA	2-0																														
MN2112	Seminar in Manpower, Personnel, and Training Issues II	MSA	0-2																														
MN3111	Analysis of Human Resource Management	MSA	4-0																														
MN3760	Manpower Economics I	MSA	4-0																														
MN4106	Manpower/ Personnel Policy Analysis	MSA	4-0																														
MN4110	Multivariate Manpower Data Analysis I	MSA	4-1															A															
MN4111	Multivariate Manpower Data Analysis II	MSA	4-1																														
MN4114	Sociological and Psychological Perspectives on Military Service	MSA	4-0																														
MN4115	Foundations of Education and Learning in DoD Organizations	MSA	4-0																														

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

				Course Grades for each of 30 students:																											
Course No.	Course Title	Area	Credits	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ADDITIONAL CURRICULUM COMPONENTS (continued)																																	
MNH118	Modeling for Decision Support in Manpower Systems	MSA	3-2																														
MNH119	Navy Manpower Requirements Process	MSA	3-0																														
MNH130	Marine Power Management	MSA	3-0																														
MNH761	Applied Manpower Analysis	MSA	4-0																														
OS3401	Human Factors Engineering	MSA	3-0																														
OS4701	Manpower and Personnel Models	MSA	4-0																														
NS3023	Introduction to Comparative Politics	RPM	4-0	A-							A																						
NS3024	Introduction to International Relations	RPM	4-0								A-																						
NS3025	Introduction to Civil-Military Relations	RPM	4-0	A-							A-																						
NS3030	American National Security Policy	RPM	4-0	B+							A																						
NS3040	The Politics of Global Economic Relations	RPM	4-0																														
NS3041	Comparative Economic Systems	RPM	4-0	A							A-																						
NS3900	International Law and Organizations	RPM	4-0																														
NS4032	Special Topics in International Relations	RPM	4-0	B+							A-																						

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

				Course Grades for each of 30 students:																													
Course No.	Course Title	Area	Credits	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ADDITIONAL CURRICULUM COMPONENTS (continued)																																	
NS4235	Diplomacy & Strategic Coalitions - Operations other than War	RFM	4-0																														
NS4236	Stability Operations	RFM	4-0																														
NS4240	Seminar on Regional Security Planning Problems	RFM	4-0																														
MN3900	Securities Analysis		0-6															P															
OC2902	Fundamentals of Geospatial Information and Services		3-0																					A									
PH3052	Physics of Space and Airborne Sensor Systems		4-0																					B+									
OS3301	Simulation Modeling and Analysis		3-1																										C+				
SS3011	Space Technology and Applications		3-0																					A									
SS3613	Military Satellite Communications		3-0																					A									
MN4900	Political Economy Directed Studies		4-0												P																		
MN4900	Analysis of MDAPS Directed Studies		3-0															P															
MN4900	Political Economy Directed Studies		4-0																			P											
NW3275	Joint Maritime Operations I		4-0					P											P	P		P							P				P
NW3276	Joint Maritime Operations II		2-2					B+											B+	B+		A							A-				A-
NW3285	National Security Decision Making		4-0					B+											A-	B+		B							B				B+

Table 4.3.E

STUDENT TRANSCRIPT ANALYSIS

				Course Grades for each of 30 students:																												
Course No.	Course Title	Area	Credits	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
PREREQUISITES																																
MA1010	College Algebra		2-0	V	V	V	V	V	V	V	V	V	V	V	V	V	B+	V	V	A	A	V	A-	V	V	V	V	V	B	V	A	V	V
IT1500	American Life and Institutions	INTL	4-0	A					A		A				A										A			A					
IT1600	Communication Skills for International Officers	INTL	3-0						A																			A					
IT1700	Academic Writing for International Officers	INTL	2-0						A						A																		

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STANDARD 5.0 -- THE FACULTY

Standard 5.1 Faculty Nucleus
There must be a faculty nucleus that accepts primary responsibility for the professional graduate program. This regular faculty should consist of a sufficient number of full-time faculty significantly involved with the program to support the set of teaching, research and service responsibilities appropriate to the size and structure of the program. In no case should this faculty nucleus be fewer than five full-time persons. The institution should specify how each regular member is involved in the teaching and related research and service aspects of the program. At least 50 percent of the courses covering the common curriculum components shall be taught by full-time faculty of the institution.

5.1 Defining the Faculty Nucleus

At the outset of discussing faculty, we see a question of definition and bounding that needs to be directly addressed: Who are the "Program Faculty?" Which individual faculty in GSBPP should be associated with a specific program (e.g., the MBA)? As the earlier chapters have described, GSBPP has six degree programs, with 16 curricula embedded within the degree programs. Two degree programs (MBA, MSM), with 12 curricula, are being reviewed for NASPAA reaccreditation, and one degree program (MBA), with 10 curricula, is the subject of this self-study volume. Should all faculty in the School be seen as "MBA Program faculty", or should there be an attempt to identify a smaller subset of the School's faculty, those whose recent assignments and experience have been most closely aligned with the MBA program, and define that subset as the "MBA Program faculty"?

Given this choice of an "all faculty" or "subset faculty" approach, we have elected the former as being more representative of the set of faculty that exists to support a program. Two examples may help to explain why:

1. Non-resident Teaching Assignments: GSBPP has a number of faculty, full-time regular faculty members within the School, whose instructional assignments have been almost exclusively in one of the School's distance learning programs, programs that are not seeking NASPAA accreditation. In terms of recent assignments, these faculty members have not been teaching in the MBA. But all of the School's non-MBA programs and curricula rely on courses that are similar to those taught in the MBA and the programs are built on a faculty base of expertise that is the same base that forms the foundation for the MBA program. Hence all of these faculty members are potential resources for the MBA program, even if their recent assignments have been elsewhere. Their association (or not) with the MBA program is more a matter of the teaching assignment process than any inherent non-connection with the MBA program and its mission.

2. Shifting Specialty Curriculum Alignment: GSBPP has groups of faculty who are associated with some of the individual specialty curricula. As described earlier, ten specialty curricula are currently associated with the MBA degree, and students completing those curricula earn the MBA. Similarly, two specialty curricula are currently associated with the MSM degree, and students completing those curricula earn the MSM. This might suggest that faculty who teach only within one specialty curriculum should be readily associated with either the MBA program or the MSM program, but not both. We think not. The group of "Manpower" faculty, who teach courses in the Manpower curriculum, provide an example. Currently students following the Manpower specialty curriculum earn an MSM degree, so faculty teaching Manpower courses only teach students in the MSM program (and thus these faculty members might be considered as "MSM Program faculty"). But the alignment of the Manpower curriculum (or any specialty curriculum) with the MSM degree (or any degree) is somewhat tentative and subject to change. Prior to 2002, the Manpower specialty curriculum fell under the MSM degree and all Manpower students earned an MSM. From 2002 to 2006, the alignment shifted so that some Manpower students earned the MBA degree (and the actual program of study for these students was altered so as to satisfy the degree requirements of the MBA). Starting 2006, the Manpower curriculum shifted back to being a solely MSM curriculum. Similarly, the Defense Systems Analysis curriculum was an MSM curriculum until 2002, an MBA curriculum from 2002 until 2007, and has now shifted back to being an MSM curriculum. In fact all resident curricula that have been in existence since 2001 have, at one time or another, been aligned with both the MSM and the MBA degrees.

This shifting is to be expected and is even desirable. It is the result of curriculum sponsors choosing to build their specialization on top of either the MBA core curriculum or the MSM core curriculum, whichever provides the focus the sponsors (of the moment) may deem most relevant to the education of the students they sponsor. What this means from the GSBPP standpoint is that all specialization curricula are available within either the MBA or MSM program, and hence all GSBPP faculty exist to support, and are relevant to, both the MBA and MSM degree programs

We have followed this "all faculty" approach in describing the Program Faculty in this chapter. But, if of value, additional data in various tables provides information about whether GSBPP faculty assignments during the self-study period, or particular courses taught, were associated with particular programs.

5.1A Critical Mass

GSBPP views its faculty size and background as a key strength. During the self-study year, 71 different full-time, nucleus faculty made significant contributions to GSBPP programs. Departures of 10 faculty members but the addition of 10 during the year leave 61 nucleus faculty members as of the time of this document (July 2007). This 61 includes

the addition of two new nucleus faculty members recently onboard for the start of the 2008 academic year.

GSBPP faculty are drawn from a wide variety of academic disciplines—including management, business and public administration, political science, economics, education, accounting, law, information systems, psychology, operations research, engineering and other fields—to meet the demands of the School's diverse programs and curricula. In addition, faculty members represent a number of sub-disciplines within academic areas. For example, in 2007, faculty with doctorates in economics specialized in labor economics, econometrics, microeconomics, political economy, strategy and public finance; faculty with graduate degrees in accounting included those with specializations in financial reporting, cost management, comptrollership, enterprise systems and management control systems.

Students are given maximum opportunity to interact with faculty in the numerous disciplines. Curricula are designed so that students have maximum exposure to different viewpoints both in their courses and in thesis or project work.

Faculty members within the School interact regularly as project/thesis advisors, on course/curriculum design, on research projects, and on issues of faculty governance.

5.1B Faculty Nucleus

Table 5.1B provides a list of the nucleus faculty within the Graduate School of Business and Public Policy. These faculty members are the nucleus available to support all of the School's degree programs. The faculty members in the table are identified as belonging to various groups, as follows:

- ACQ Acquisition
- ECON Economics
- MGT Organizations and Management
- FM Financial Management
- OLM Operations and Logistics Management
- MSA Manpower Systems Analysis
- IT Information Technology

Table 5.1B GSBPP NUCLEUS FACULTY Jul - 07									
Last Name	**First Name**	**Rank**	**Tenure Track Status**	**Deg.**	**Year of Deg.**	**University**	**Degree Field**	**Year at NPS**	**GSBPP Area**
Apte	Uday	Professor	Tenured	PhD	1982	University of Pennsylvania	Operations Research	2004	OLM
Barrett	Frank	Professor	Tenured	PhD	1989	Case Western Reserve University	Organizational Behavior	1990	MGT
Brook	Doug	Professor	TTrack	PhD	2001	George Mason University	Public Administration / Public Policy	2002	FM
Eitelberg	Mark	Professor	Tenured	PhD	1979	New York University	Public Administration	1982	MSA
Euske	Ken	Professor	Tenured	PhD	1978	Arizona State University	Accounting	1978	FM
Jones	Larry	Professor	Tenured	PhD	1977	University of California at Berkeley	Budgeting / Finance	1987	FM
McCaffery	Jerry	Professor	Tenured	PhD	1972	University of Wisconsin	Political Science	1984	FM
Mehay	Steve	Professor	Tenured	PhD	1973	University of California at Los Angeles	Economics	1985	ECON
San Miguel	Joe	Professor	Tenured	PhD	1972	University of Texas	Accounting	1982	FM
Suchan	Jim	Professor	Tenured	PhD	1980	University of Illinois	English Literature	1986	MGT
Thomas	George	Professor	Tenured	PhD	1971	Purdue University	Economics	1978	OLM
Doerr	Ken	Associate Professor	Tenured	PhD	1994	University of Washington	Operations Management	2001	OLM
Doyle	Dick	Associate Professor	Tenured	PhD	1984	University of Washington	Political Science	1990	FM
Gates	Bill	Associate Professor	Tenured	PhD	1984	Yale University	Economics	1988	ECON
Henderson	David	Associate Professor	Tenured	PhD	1976	University of California at Los Angeles	Economics	1984	ECON
Hocevar	Susan	Associate Professor	Tenured	PhD	1989	University of Southern California	Business Administration	1990	MGT
Kang	Keebom	Associate Professor	Tenured	PhD	1984	Purdue University	Industrial Engineering	1988	OLM
Lewis	Ira	Associate Professor	Tenured	PhD	1992	Arizona State University	Business Administration	1998	OLM
Moses	Doug	Associate Professor	Tenured	PhD	1983	University of California at Los Angeles	Accounting	1985	FM
Snider	Keith	Associate Professor	Tenured	PhD	1997	Virginia Polytechnic Inst. & State Univ.	Public Administration	1993	ACQ
Thomas	Gail	Associate Professor	Tenured	PhD	1986	Arizona State University	Business / Education	1989	MGT
Arkes	Jeremy	Associate Professor	TTrack	PhD	1997	University of Wisconsin-Madison	Labor Economics	2007	ECON
Coughlan	Pete	Associate Professor	TTrack	PhD	1999	California Institute of Technology	Social Sciences / Economics	2004	ECON

Table 5.1B
GSBPP NUCLEUS FACULTY (continued)
Jul - 07

Last Name	First Name	Rank	Tenure Track Status	Deg.	Year of Deg.	University	Degree Field	Year at NPS	GSBPP Area
Ferrer	Geraldo	Associate Professor	TTrack	PhD	1997	INSEAD	Management	2004	OLM
Gibbons	Deborah	Associate Professor	TTrack	PhD	1996	Carnegie Mellon University	Organizational Behavior	2004	MGT
Ventresca	Marc	Associate Professor	TTrack	PhD	1995	Stanford University		2006	MGT
Apte	Aruna	Assistant Professor	TTrack	PhD	1997	Southern Methodist University	Decision Sciences / Ops Mgmt	2004	OLM
Dew	Nick	Assistant Professor	TTrack	PhD	2003	University of Virginia	Management	2003	MGT
Heath	Susan	Assistant Professor	TTrack	PhD	2006	University of Texas at Austin	Operations Management	2006	OLM
Hensel	Nayantara	Assistant Professor	TTrack	PhD	2001	Harvard University	Economics	2004	FM
King	Cindy	Assistant Professor	TTrack	PhD	2004	University of Washington	Communication	2004	MGT
Laverson	Alan	Assistant Professor	TTrack	PhD	1999	Rand Graduate School	Policy Analysis	2006	FM
Pema	Elda	Assistant Professor	TTrack	PhD	2003	Michigan State University	Economics	2003	ECON
Powley	Ned	Assistant Professor	TTrack	PhD	2005	Case Western Reserve University	Organizational Behavior	2006	MGT
Shen	Yu-Chu	Assistant Professor	TTrack	PhD	2001	Harvard University	Health Policy / Health Economics	2004	ECON
Thibodeau	Nicole	Assistant Professor	TTrack	PhD	2003	University of Pittsburgh	Accounting	2005	FM
Wang	Chong	Assistant Professor	TTrack	PhD	1998	Iowa State University	Economics	2007	FM
Zolin	Roxanne	Assistant Professor	TTrack	PhD	2002	Stanford University	Construction Engineering Management	2002	MGT
Boudreau	Mike	Senior Lecturer	Non-TT	MBA	1966	Santa Clara University	Management	1995	ACQ
Brinkley	Doug	Senior Lecturer	Non-TT	EdD	2003	Nova Southeastern University	Education / Instructional Technology	1998	IT
Candreva	Phil	Senior Lecturer	Non-TT	MS	1996	Naval Postgraduate School	Management	2002	FM
Crawford	Alice	Senior Lecturer	Non-TT	MA	1973	San Diego State University	Experimental Phychology	1988	MGT
Dillard	John	Senior Lecturer	Non-TT	MS	1985	University of Southern California	Systems Management	2000	ACQ
Franck	Chip	Senior Lecturer	Non-TT	PhD	1983	Harvard University	Economics	2000	ECON
Matthews	Dave	Senior Lecturer	Non-TT	MA	1974	Middle Tennessee State U.	Sociology	1994	ACQ
Matthews	Danny	Senior Lecturer	Non-TT	MS	1986	Naval Postgraduate School	Financial Management	2007	FM

Table 5.1B

GSBPP NUCLEUS FACULTY (continued)

Jul - 07

Last Name	First Name	Rank	Tenure Track Status	Deg.	Year of Deg.	University	Degree Field	Year at NPS	GSBPP Area
Mutty	John	Senior Lecturer	Non-TT	MS	1976	George Washington University	Finance	1995	FM
Naegle	Brad	Senior Lecturer	Non-TT	MS	1994	Naval Postgraduate School	Program Management	1997	ACQ
Owen	Wally	Senior Lecturer	Non-TT	MS	2002	Golden Gate University	Public Administration	1992	ACQ
Rendon	Rene	Senior Lecturer	Non-TT	DBA	2003	Argosy University	Business Administration	2004	ACQ
Roberts	Ben	Senior Lecturer	Non-TT	PhD	1977	The Pennsylvania State University	Sociology	1985	MSA
Cuskey	Jeff	Lecturer	Non-TT	MS	1993	Naval Postgraduate School	Acquisition	1997	ACQ
Hatch	Bill	Lecturer	Non-TT	MS	1991	Naval Postgraduate School	Manpower, Personnel & Training	2005	MSA
Petross	Diana	Lecturer	Non-TT	MPA	1991	University of Oklahoma	Public Policy and Administration	2006	ACQ
Simon	Cary	Lecturer	Non-TT	DBA	1997	U.S. International University	Organization Management	1997	MGT
Summers	Don	Lecturer	Non-TT	MS	1985	Naval Postgraduate School	Financial Management	2000	FM
Yoder	Cory	Lecturer	Non-TT	MS	1993	Naval Postgraduate School	Contract Management	2004	ACQ
Hill	Kim	Military Lecturer	Non-TT	MS		Naval Postgraduate School	Manpower, Personnel & Training	2006	MSA
Hudgens	Bryan	Military Lecturer	Military	MS	1997	Air Force Inst.of Technology	Contract Management	2005	ACQ
Nalwasky	Richard	Military Lecturer	Military	MBA	2003	Naval Postgraduate School	Acquisition	2007	ACQ
Potvin	Lisa	Military Lecturer	Military	MBA	1997	University of Denver	General MBA	2006	FM

5.1C Teaching Assignments

Table 5.1C lists courses taught by the nucleus faculty during the self-study year and the preceding year (AY2007 & AY2006). All of the nucleus faculty members are available and capable of teaching in the MBA program under review, but in any given year their actual teaching assignments may be in the MBA program, the MSM program, in one of the other degree programs in GSBPP (EMBA, MSCM, MSPM, MEM). The table indicated which courses, by virtue of current curriculum alignment, support MBA program, the MSM program, or both.

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Apte	Aruna	2006	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
		2007	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
Apte	Uday	2006	GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
		2007	GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
Barrett	Frank	2006	MN4125	4-0	Managing Planned Change in Complex Organizations	
			MN4125	4-0	Managing Planned Change in Complex Organizations	
			MN4125	4-0	Managing Planned Change in Complex Organizations	
		2007	MN4125	4-0	Managing Planned Change in Complex Organizations	
Bosque	Suzanne	2006	MN4119	3-0	Managing Planned Change in Complex Organizations	
			MN2111	2-0	Navy Manpower, Personnel, and Training Systems I	MSM
			MN2112	0-2	Seminar in Manpower, Personnel, and Training Issues II	MSM
			MN4119	3-0	Managing Planned Change in Complex Organizations	
Boudreau	Mike	2006	MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
			MN3363	2-0	Acquisition Manufacturing and Quality Management	
			MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
		2007	MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN4366	4-0	Program Management and Leadership	
			MN4366	4-0	Program Management and Leadership	
			MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
			MN3384	5-1	Principles of Acquisition Production and Quality Management	
			MN3363	2-0	Acquisition Manufacturing and Quality Management	
			MN3365	2-0	Acquisition Logistics and Program Sustainment	
			MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
			MN4307	4-0	Program Management Policy and Control	MBA
Brinkley	Doug	2006	GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
		2007	GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
Brook	Douglas	2006	GB3013	0-2	Problem Analysis and Ethical Dilemmas Seminar (PAED)	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB3013	0-2	Problem Analysis & Ethical Dilemmas	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
		2007	GB3013	0-2	Problem Analysis and Ethical Dilemmas Seminar (PAED)	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB3013	0-2	Problem Analysis and Ethical Dilemmas Seminar (PAED)	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
Candreva	Phil	2006	MN3154	3-0	Financial Management in the Armed Forces	
			GB3510	3-0	Defense Financial Management Practice	MBA
			GB3510	3-0	Defense Financial Management Practice	MBA
			MN3154	3-0	Financial Management in the Armed Forces	
		2007	MN3154	3-0	Financial Management in the Armed Forces	
			MN3510	3-0	Defense Financial Management Practice	
			GB3510	3-0	Defense Financial Management Practice	MBA
			GB3510	3-0	Defense Financial Management Practice	MBA
			GE3510	3-0	Defense Financial Management Practice	
			GE3510	3-0	Defense Financial Management Practice	
			MN3154	3-0	Financial Management in the Armed Forces	
			GE3510	3-0	Defense Financial Management Practice	
			GE3510	3-0	Defense Financial Management Practice	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Coughlan	Pete	2006	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
		2007	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
Crawford	Alice	2006	GE3011	2-0	Management of Teams	
			GE3011	2-0	Management of Teams	
			MN3135	3-0	Instructional Systems Design	
		2007	GE4100	3-7	Collaborative Decision Making	
			GE4100	7-0	Seminar in Defense Management	
Crawford / Hatch	Alice / Bill	2007	MN4115	4-0	Foundations of Education and Learning in DoD Organizations	MSM
Crouch	Thom	2006	MN4602	2-0	Test and Evaluation Management	MBA
			MN4602	2-0	Test and Evaluation Management	
			MN4602	2-0	Test and Evaluation Management	MBA
Cuskey	Jeff	2006	MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN4304	2-0	Defense Systems Contracting	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			MN4371	4-0	Acquisition and Contracting Policy	
		2007	MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN4304	2-0	Defense Systems Contracting	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			GE3221	3-0	Principles of Acquisition and Program Management I	
Dew	Nick	2006	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GE4016	3-0	Managing Strategic Change	
		2007	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GE4016	4-0	Managing Strategic Change	
			GE4016	4-0	Managing Strategic Change	
Dillard	John	2006	GE3222	3-0	Principles of Acquisition and Program Management II	
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN4307	4-0	Program Management Policy and Control	MBA
			MN4307	4-0	Program Management Policy and Control	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
Doerr	Ken	2006	GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
		2007	GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
Doyle	Richard	2006	MN3172	3-0	Resourcing National Security: Policy and Process	
			GE4053	3-0	DoD Mission & Resource Determination	
		2007	MN3172	3-0	Resourcing National Security: Policy and Process	
			MN4053	4-0	Defense Budget & Financial Management Policy	
			GE4053	4-0	DoD Mission & Resource Determination	
			GE4053	4-0	DoD Mission & Resource Determination	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Eitelberg	Mark	2006	MN4106	4-0	Manpower/ Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			MN4106	4-0	Manpower/ Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
		2007	MN4106	4-0	Manpower/Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			MN4106	4-0	Manpower/Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
Engelbeck	Marshall	2006	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3315	4-0	Acquisition Management and Contract Administration	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN4304	2-0	Defense Systems Contracting	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
		2007	MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN3341	4-2	Advanced Contracting Principles	
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	
Euske	Ken	2006	GE3050	3-0	Financial Reporting and Analysis	
			GE3050	3-0	Financial Reporting and Analysis	
			GE3050	3-0	Financial Reporting and Analysis	
		2007	GB4530	4-0	Management Control Systems	MBA
			GB4530	4-0	Management Control Systems	MBA
			GB3051	3-0	Cost Management	MBA & MSM
			GB4530	4-0	Management Control Systems	MBA
Ferrer	Geraldo	2006	GB3420	4-0	Supply Chain Management I	MBA
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
		2007	GB3420	4-0	Supply Chain Management I	MBA
			GB3420	4-0	Supply Chain Management I	MBA
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
Franck	Chip	2006	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GE3070	3-0	Economics for Defense Managers	
			GE3070	3-0	Economics for Defense Managers	
			MN3102	2-0	Military Leadership	
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
		2007	MN3001	3-0	Economics for Acquisition Managers	
			MN3001	3-0	Economics for Acquisition Managers	
			GE3070	3-0	Economics for Defense Managers	
			GE3070	3-0	Economics for Defense Managers	
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			MN3001	3-0	Economics for Acquisition Managers	
Gates	Bill	2006	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
		2007	GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
Gibbons	Deborah	2006	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
		2007	GE3010	3-0	Organizations as Systems and Structures	
			GE3010	3-0	Organizations as Systems and Structures	
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Hatch	Bill	2006	MN4130	3-0	Marine Manpower Management	MSM
			MN3111	4-0	Analysis of Human Resource Management	MSM
			MN4115	4-0	Foundations of Education and Learning in DoD Organizations	MSM
			MN4118	3-2	Modeling for Decision Support in Manpower Systems	MSM
			MN2111	2-0	Navy Manpower, Personnel, and Training Systems I	MSM
			MN3111	4-0	Analysis of Human Resource Management	MSM
			MN4115	4-0	Foundations of Education and Learning in DoD Organizations	MSM
			MN4118	3-2	Modeling for Decision Support in Manpower Systems	MSM
		2007	MN3111	4-0	Analysis of Human Resource Management	MSM
			MN2111	2-0	Navy Manpower, Personnel, and Training Systems I	MSM
Heath	Susan	2007	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA
			GB4440	3-0	Simulation Modeling for Management Decision Making	MBA
			GB4440	3-0	Simulation Modeling for Management Decision Making	MBA
Henderson	David	2006	MN4900	V-1	Readings in Management	MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
		2007	GE3070	3-0	Economics for Defense Managers	
			GE3070	3-0	Economics for Defense Managers	
Hensel	Nayantara	2006	GB4570	2-0	Advanced Finance	MBA
			GB4570	2-0	Advanced Finance	MBA
			GB4570	2-0	Advanced Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
		2007	GB4052	3-0	Managerial Finance	MBA
			GB4570	3-0	Advanced Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
Hill	Kim	2007	MN2112	0-2	Seminar in Manpower, Personnel, and Training Issues II	MSM
Hocevar	Susan	2006	MN3118	4-0	Strategies for Building Consensus	
			MN4080	2-0	Research Colloquium	
		2007	MN3118	4-0	Strategies for Building Consensus	
Howard	Randall	2006	GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4540	2-0	Conrad Seminar	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
Hudgens	Bryan	2006	GB3042	4-0	Operations Management	MBA & MSM
			MN3307	3-0	Entrepreneurship in Strategic Purchasing	MBA
			MN3306	3-0	Strategic Purchasing	MBA
			GE3306	3-0	Strategic Purchasing	
			GE3306	3-0	Strategic Purchasing	
			MN3306	3-0	Strategic Purchasing	MBA
		2007	GB3042	4-0	Operations Management	MBA & MSM
			MN3307	3-0	Entrepreneurship in Strategic Purchasing	MBA
			MN3306	3-0	Strategic Purchasing	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			MN3306	3-0	Strategic Purchasing	MBA
			MN4374	3-0	Seminar in Acquisition Management: Strategic Purchasing	MBA
			GE3306	3-0	Strategic Purchasing	
			GE3306	3-0	Strategic Purchasing	
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GE4460	3-0	Defense Supply Chain Management	
			GE4460	3-0	Defense Supply Chain Management	
Hughes	Thomas	2006	GB4540	2-0	Conrad Seminar	MBA
			GB4540	2-0	Conrad Seminar	MBA
		2007	GB4540	2-0	Conrad Seminar	MBA
			GB4540	2-0	Conrad Seminar	MBA

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Jones	Becky	2006	GB3030	3-0	Marketing Management	MBA
			GB3030	3-0	Marketing Management	MBA
			MN3145	4-0	Marketing Management	
			GB3030	2-0	Marketing Management	MBA
			GB3030	2-0	Marketing Management	MBA
		2007	GB3030	3-0	Marketing Management	MBA
			GB3030	3-0	Marketing Management	MBA
			MN3145	4-0	Marketing Mgmt	
			GB3030	3-0	Marketing Management	MBA
			GB3030	3-0	Marketing Management	MBA
Jones, L.	Larry	2006	GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
		2007	GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
Kang	Keebom	2006	GB4410	4-0	Logistics Engineering	MBA
			GB4410	4-0	Logistics Engineering	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			GB4410	4-0	Logistics Engineering	MBA
			GB4440	3-0	Logistics Strategy	MBA
			GB4440	3-0	Logistics Strategy	MBA
		2007	GB4410	4-0	Logistics Engineering	MBA
			GB4410	4-0	Logistics Engineering	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			GB4410	4-0	Logistics Engineering	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			GE4460	3-0	Defense Supply Chain Management	
King	Cindy	2006	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
		2007	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
Kros	Todd	2007	MN3301	4-0	Acquisition of Defense Systems	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Laverson	Alan	2007	GE4052	3-0	Managerial Finance	
			GE4052	3-0	Managerial Finance	
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
Lewis	Ira	2006	GB4430	4-0	Defense Transportation System	MBA
			GB4430	4-0	Defense Transportation System	MBA
		2007	GB4430	4-0	Defense Transportation System	MBA
			GB4430	4-0	Defense Transportation System	MBA
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GE4460	3-0	Defense Supply Chain Management	
Malina	Mary	2006	GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
Matthews	Danny	2006	GB4530	4-0	Management Control Systems	MBA
			GB4530	4-0	Management Control Systems	MBA
			GE4052	3-0	Managerial Finance	
			GE4052	3-0	Managerial Finance	
			GE3051	3-0	Cost Management	
			GB4530	4-0	Management Control Systems	MBA
			GE4052	3-0	Managerial Finance	
			GE4052	3-0	Managerial Finance	
		2007	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			MN2155	4-0	Accounting for Management	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Matthews	Dave	2006	MN4366	4-0	Program Management and Leadership	
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
		2007	MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN4366	4-0	Program Management and Leadership	
			GE3222	3-0	Principles of Acquisition and Program Management II	
			GE3221	3-0	Principles of Acquisition and Program Management I	
McCaffery	Jerry	2006	GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GE3510	3-0	Defense Financial Management Practice	
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
Mehay	Stephen	2006	MN4761	4-0	Applied Manpower Analysis	MSM
			MN4761	4-0	Applied Manpower Analysis	MSM
			MN4143	2-0	Defense Manpower and Personnel Analysis	
		2007	MN4761	4-0	Applied Manpower Analysis	MSM
			MN4761	4-0	Applied Manpower Analysis	MSM
			MN3760	4-0	Manpower Economics I	MSM
Mirano	Dave	2006	MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3301	4-0	Acquisition of Defense Systems	MBA
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
		2007	MN3315	4-0	Acquisition Management and Contract Administration	MBA
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN3301	4-0	Acquisition of Defense Systems	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Motherway	Daniel	2006	MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3301	4-0	Acquisition of Defense Systems	
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Mutty	John	2006	GB4560	3-0	Defense Financial Management	MBA
			GE3510	3-0	Defense Financial Management Practice	
			GB4560	3-0	Defense Financial Management	MBA
			GE3510	3-0	Defense Financial Management Practice	
		2007	GE4053	4-0	DoD Mission & Resource Determination	
			GE4053	4-0	DoD Mission & Resource Determination	
			GB4560	3-0	Defense Financial Management	MBA
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB3510	3-0	Defense Financial Management Practice	MBA
			GB4560	3-0	Defense Financial Management	MBA
Naegle	Brad	2006	MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN3361	2-0	Software Acqusition Management	
			MN3361	2-0	Software Acqusition Management	
			MN3361	2-0	Software Acqusition Management	
			MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN3309	4-1	Acquisition of Embedded Weapon Systems Software	
			MN4366	4-0	Program Management and Leadership	
		2007	MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN4366	4-0	Program Management and Leadership	
			MN4602	2-2	Test and Evaluation Management	MBA
			MN3361	2-0	Software Acquisition Management	
			MN3361	2-0	Software Acquisition Management	
			MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN4602	2-2	Test and Evaluation Management	MBA
			MN4307	4-0	Program Management Policy and Control	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Nalwasky	Richard	2007	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3342	4-1	Advanced Contract Management	
Owen	Wally	2006	MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN4602	2-0	Test and Evaluation Management	
		2007	MN2304	0-4	Seminar in Product Development	
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN3364	2-0	Business Financial and Contract Management	
			MN4602	2-2	Test and Evaluation Management	
			MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
Pema	Elda	2006	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			MN3760	4-0	Manpower Economics I	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
		2007	MN3760	4-0	Manpower Economics I	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
Petross	Diana	2007	MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			GB4450	4-0	Logistics Strategy	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Potvin	Lisa	2007	GB3510	3-0	Defense Financial Management Practice	MBA
			GB3510	3-0	Defense Financial Management Practice	MBA
Powley	Edward	2007	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
Rendon	Rene	2006	GE4310	3-0	Strategic Acquisition Management	
			GE4310	3-0	Strategic Acquisition Management	
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			GE4310	3-0	Strategic Acquisition Management	
			GE4310	3-0	Strategic Acquisition Management	
		2007	MN4304	2-0	Defense Systems Contracting	MBA
			MN3302	2-0	Advanced Program Management	
			MN4304	2-0	Defense Systems Contracting	MBA
			GB3031	2-0	Principles of Acquisition Management	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	
			GE4460	3-0	Defense Supply Chain Management	
Roberts, B.	Ben	2007	MN3111	4-0	Analysis of Human Resource Management	MSM
			MN3111	4-0	Analysis of Human Resource Management	MSM
San Miguel	Joe	2006	GB4550	3-0	Advanced Financial Reporting	MBA
		2007	GB4510	4-0	Strategic Resource Management	MBA
			GB4510	4-0	Strategic Resource Management	MBA
			MN2155	4-0	Accounting for Management	
Sekerka	Leslie	2006	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
		2007	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
Shank	John	2006	GB4510	4-0	Strategic Resource Management	MBA
Shen	Yu-Chu	2006	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			MN4110	4-1	Multivariate Manpower Data Analysis I	MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
		2007	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			MN4110	4-1	Multivariate Manpower Data Analysis I	MSM
			MN4110	4-1	Multivariate Manpower Data Analysis I	MSM

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Simon	Cary	2006	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			MN4105	3-0	Strategic Management	
			GE4016	4-0	Managing Strategic Change	
			GE4016	4-0	Managing Strategic Change	
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GE4016	3-0	Managing Strategic Change	
			MN3117	4-0	Organizational Processes	
			MN4120	3-0	Managing Diversity	
		2007	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			MN4125	4-0	Managing Planned Change in Complex Organizations	
			GE3011	2-0	Management of Teams	
			GE3010	3-0	Organizations as Systems and Structures	
			GE3010	3-0	Organizations as Systems and Structures	
			GB4014	4-0	Strategic Management	MBA & MSM
			MN3117	4-0	Organizational Processes	
			MN4474	3-1	Organizational Analysis	
Snider	Keith	2006	MN3392	4-0	Software Acqusition Management	
			MN2303	0-2	Seminar for Program Management Students	MBA
			MN3301	4-0	Acquisition of Defense Systems	MBA
		2007	MN3392	4-0	Systems & Project Mgmt	
			GE3222	3-0	Principles of Acquisition and Program Management II	
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN3331	5-1	Principles of Acquisition and Program Management	
Suchan	Jim	2006	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
		2007	MN3012	3-0	Communication Strategies for Effective Leadership	
			MN3012	3-0	Communication Strategies for Effective Leadership	
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
Summers	Don	2006	GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
			MN4157	3-0	Seminar in Management Accounting I	MBA
			GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
		2007	GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			MN4157	3-0	Seminar in Management Accounting I	MBA
			GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			GB3051	3-0	Cost Management	MBA & MSM
			MN4157	3-0	Seminar in Management Accounting I	MBA
			GB3051	3-0	Cost Management	MBA & MSM
Thibodeau	Nicole	2006	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
		2007	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
Thomas, G.F.	Gail Fann	2006	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GE3011	2-0	Management of Teams	
		2007	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GE3011	2-0	Management of Teams	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Thomas, Geo.	George	2006	GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
		2007	GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
Troy	Carmelita	2006	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB4550	4-0	Advanced Financial Reporting	MBA
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
		2007	GE3050	3-0	Financial Reporting and Analysis	
			GE3050	3-0	Financial Reporting and Analysis	
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
Tudor	Ron	2006	MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3312	4-0	Contract Law	MBA
			MN3312	4-0	Contract Law	MBA
			MN3315	4-0	Acquisition Management and Contract Administration	MBA
			MN3315	4-0	Acquisition Management and Contract Administration	MBA
		2007	MN3312	4-0	Contract Law	MBA
Ventresca	Marc	2007	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
Yoder	Cory	2006	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN3364	2-0	Business Financial and Contract Management	
			MN3364	2-0	Business Financial and Contract Management	
			MN3364	2-0	Business Financial and Contract Management	
			MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	2-0	Contingency Contracting	MBA
			MN3318	2-0	Contingency Contracting	MBA
		2007	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN3364	2-0	Business Financial and Contract Management	
			MN3364	2-0	Business Financial and Contract Management	
			MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3315	4-0	Acquisition Management And Contract Administration	MBA
Zolin	Roxanne	2006	GE4100	5-0	Seminar in Defense Management	
			GE4100	5-0	Seminar in Defense Management	
			GE4100	5-0	Seminar in Defense Management	
			GE4100	5-0	Seminar in Defense Management	
		2007	GE4100	3-7	Collaborative Decision Making	
			GE4100	3-7	Seminar in Defense Management	
			GE4100	7-0	Seminar in Defense Management	

5.1D Course Load

The normal course load per year for full-time tenure-track faculty is 8 course credit-hours per teaching quarter or 16 course credit-hours per year. Most faculty members teach two quarters per calendar year, with two quarters of research release per year. Tenure-track faculty (beyond their third year) are generally expected to secure funding for their two research quarters either from external sources or from internal programs available to support research activity. Tenure-track faculty without such funding may request to do additional teaching. Student thesis or project advising is considered to be part of a faculty member's normal instructional activities. While actual experience will vary widely, on average faculty would be involved with advising 2-4 students on projects/theses for each quarter they are teaching. Some faculty will serve in academic administrative positions (e.g., Academic Associate, Associate Dean). These administrative duties, or above or below average advising activity, may cause variation in a faculty member's teaching load.

Table 5.1D provides a list of the faculty members who had research, administrative or other assignments in lieu of teaching during AY2007.

Table 5.1D
NON-TEACHING ASSIGNMENTS FOR FACULTY NUCLEUS

Name	Rank	Tenure Status	Additional Assignment	Type	% of Year	Periods of non-teaching assignments
APTE, ARUNA U.	Associate Professor	TTrack	Research - RIP	Rsch	50	Fall / Spring
BROOK, DOUGLAS	Professor	TTrack	Director -- Ctr for Defense Mgmt Reform	Admin	10	Throughout year
			Research - RIP	Rsch	40	Fall / Spring
COUGHLAN, PETER J.	Associate Professor	TTrack	Research - DFR	Rsch	50	Fall / Winter
			Research - WLR	Rsch	20	Fall / Winter
			Research - ARP	Rsch	13	Fall / Winter
DEW, NICHOLAS	Assistant Professor	TTrack	Research - WLR	Rsch	20	Winter / Summer
			Research - ARP	Rsch	15	Winter
FERRER, GERALDO L.	Associate Professor	TTrack	Faculty Development - IDL	Inst	10	Fall
			Research - DFR	Rsch	10	Fall / Summer
			Research - WLR	Rsch	20	Fall / Summer
			Research - ARP	Rsch	15	Fall / Summer
GIBBONS, DEBORAH E.	Assistant Professor	TTrack	Research - DFR	Rsch	40	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
HEATH, SUSAN	Assistant Professor	TTrack	Faculty Development - IDL	Inst	10	Fall
			Research - RIP	Rsch	50	Fall / Spring
HENSEL, NAYANTARA D.	Assistant Professor	TTrack	Research - WLR	Rsch	20	Winter / Summer
			Research - ARP	Rsch	18	Winter / Summer
KING, CYNTHIA L.	Assistant Professor	TTrack	Research - DFR	Rsch	50	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
			Research - RR	Rsch	25	Summer
LAVERSON, ALAN J.	Assistant Professor	TTrack	Research - RIP	Rsch	50	Winter / Summer
PEMA, ELDA	Assistant Professor	TTrack	Instructional Development - IMET	Inst	20	Winter / Summer
			Research - WLR	Rsch	20	Winter / Summer
POWLEY, EDWARD H.	Assistant Professor	TTrack	Research - RIP	Rsch	50	Fall / Spring
SEKERKA, LESLIE E.	Assistant Professor	TTrack	Research - DFR	Rsch	30	Fall / Spring
			Research - WLR	Rsch	20	Fall
			Research - RR	Rsch	10	Fall / Spring
SHEN, YU CHU	Assistant Professor	TTrack	Research - DFR	Rsch	15	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
			Research - RR	Rsch	20	Fall / Spring
THIBODEAU, NICOLE	Assistant Professor	TTrack	Research - RIP	Rsch	50	Fall / Spring
TROY, CARMELITA J.	Assistant Professor	TTrack	Instructional Development - IMET	Inst	10	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
VENTRESCA, MARC J.	Associate Professor	TTrack	Research - RIP	Rsch	50	Winter / Summer
ZOLIN, ROXANNE V.	Assistant Professor	TTrack	Research - WLR	Rsch	20	Fall / Spring
			Research - RR	Rsch	10	Fall / Spring
APTE, UDAY	Professor	Tenured	Research - RIP	Rsch	50	Fall / Spring
BARRETT, FRANK	Professor	Tenured	Area Chair -- Management	Admin	25	Throughout year
			Executive Education - CEE	Inst	30	Winter
			Research - RR	Rsch	25	Summer
			Research - WLR	Rsch	10	Summer

Table 5.1D
NON-TEACHING ASSIGNMENTS FOR FACULTY NUCLEUS (continued)

Name	Rank	Tenure Status	Additional Assignment	Type	% of Year	Periods of non-teaching assignments
DOERR, KENNETH H.	Associate Professor	Tenured	Research - WLR	Rsch	10	Winter / Summer
DOYLE, RICHARD B.	Associate Professor	Tenured	Instructional Development - CEE	Inst	35	Throughout year
			Research - WLR	Rsch	10	Summer
EITELBERG, MARK J.	Professor	Tenured	Research - WLR	Rsch	10	Winter / Summer
EUSKE, KENNETH J.	Professor	Tenured	Research - WLR	Rsch	10	Winter
			Research - RR	Rsch	25	Winter / Summer
GATES, WILLIAM R.	Associate Professor	Tenured	Associate Dean - Research	Admin	50	Throughout year
			Research - RR	Rsch	10	Winter / Summer
			Research - ARP	Rsch	5	Winter / Summer
HENDERSON, DAVID R.	Associate Professor	Tenured	Sabbatical	Admin	40	Spring / Summer
			Research - WLR	Rsch	10	Winter
HOCEVAR, SUSAN P.	Associate Professor	Tenured	Executive Education - CEE	Inst	12	
			Instructional Development - CEE	Inst	15	Fall / Winter
			Research - WLR	Rsch	10	Fall / Winter / Summer
			Research - RR	Rsch	35	Fall / Winter / Summer
			Research - ARP	Rsch	10	Fall / Winter / Summer
JONES, LAWRENCE R.	Professor	Tenured	Research - RR	Rsch	25	Winter / Spring
			Research - ARP	Rsch	12	Spring
KANG, KEEBOM	Associate Professor	Tenured	Area Chair -- Ops & Logistics	Admin	25	Throughout year
			Executive Education - IDARM	Inst	10	
			Research - WLR	Rsch	10	Winter
LEWIS, IRA A.	Associate Professor	Tenured	Research - WLR	Rsch	10	Fall
			Research - ARP	Rsch	25	Spring
MCCAFFERY, JERRY L.	Professor	Tenured	Instructional Development - IMET	Inst	10	Summer
			Research - WLR	Rsch	10	Spring
			Research - ARP	Rsch	25	Winter
MEHAY, STEPHEN	Professor	Tenured	Area Chair -- Management	Admin	25	Throughout year
			Instructional Development - IMET	Inst	10	Spring
			Research - WLR	Rsch	10	Winter
			Research - RR	Rsch	8	Spring
MOSES, ORRIN D.	Associate Professor	Tenured	Senior Associate Dean	Admin	50	Throughout year
			Associate Dean - Instruction	Admin	50	Throughout year
SAN MIGUEL, JOSEPH G.	Professor	Tenured	Conrad Committee	Admin	25	Throughout year
			Academic Associate - FM	Admin	5	Fall
			Research - WLR	Rsch	10	Fall / Spring
			Research - RR	Rsch	15	Spring
			Research - ARP	Rsch	8	Fall / Spring
SNIDER, KEITH F.	Associate Professor	Tenured	Area Chair -- Acquisition	Admin	25	Throughout year
			Program Manager - ARP	Admin	25	Throughout year
			Research - ARP	Rsch	25	Winter / Spring

Table 5.1D
NON-TEACHING ASSIGNMENTS FOR FACULTY NUCLEUS (continued)

Name	Rank	Tenure Status	Additional Assignment	Type	% of Year	Periods of non-teaching assignments
SUCHAN, JAMES E.	Professor	Tenured	Assurance of Learning POC	Admin	10	Spring
			Academic Associate - Core	Admin	25	Throughout year
			Research - WLR	Rsch	10	Fall / Spring
THOMAS, GAIL FANN	Associate Professor	Tenured	Executive Education - CEE	Inst	30	Throughout year
			Research - DFR	Rsch	8	Throughout year
			Research - WLR	Rsch	10	Throughout year
			Research - RR	Rsch	25	Throughout year
			Research - ARP	Rsch	10	Throughout year
THOMAS, GEORGE W.	Professor	Tenured	Research - WLR	Rsch	10	Winter / Summer
			Research - RR	Rsch	20	Winter / Summer
BRINKLEY, DOUGLAS E.	Senior Lecturer	Non-TT	Director of IT	Admin	25	Throughout year
			Instructional Development - IMET	Inst	20	Throughout year
CANDREVA, PHILIP J.	Senior Lecturer	Non-TT	Course Development - MSA	Inst	20	Spring
			Executive Education - CEE	Inst	20	Fall
CRAWFORD, ALICE M.	Senior Lecturer	Non-TT	Acadecmic Associate - Intl	Admin	25	Throughout year
			CEE Coordinator	Admin	5	Throughout year
			Research - RR	Rsch	15	Fall / Spring
DILLARD, JOHN T.	Senior Lecturer	Non-TT	Program Manager - AAP	Admin	25	Throughout year
			Course Development - MSA	Inst	25	Summer
			Research - ARP	Rsch	25	Fall / Winter
ENGELBECK, R. MARSHALL	Lecturer	Non-TT	Executive Education - IDARM	Inst	5	
FRANCK, RAYMOND	Senior Lecturer	Non-TT	Research - ARP	Rsch	10	
HATCH, WILLIAM D.	Lecturer	Non-TT	Program Manager -- EMBA	Admin	90	Throughout year
MUTTY, JOHN E.	Senior Lecturer	Non-TT	NPS Faculty Chair	Admin	5	Fall
			Conrad Committee	Admin	25	Throughout year
			Academic Associate - EMBA	Admin	25	Throughout year
NAEGLE, BRAD R.	Senior Lecturer	Non-TT	Academic Associate - MSPM	Admin	25	Throughout year
			Research - ARP	Rsch	13	Winter
OWEN, WALTER E.	Senior Lecturer	Non-TT	Program Manager - MSCM, MSPM, MSSEM, MSSE, MSA, AMDLP	Admin	100	Throughout year
			Business Development - OCL	Inst	10	Throughout year
PETROSS, DIANA F.	Lecturer	Non-TT	Executive Education - IDARM	Inst		
RENDON, RENE G.	Lecturer	Non-TT	Executive Education - IDARM	Inst	5	
			Research - ARP	Rsch	35	Spring
ROBERTS, BENJAMIN J.	Senior Lecturer	Non-TT	Assistant Program Manager - MSCM, MSPM, MSSEM, MSSE, MSA, AMDLP	Admin	80	Throughout year
			Business Development - OCL	Inst	12	Throughout year
			Research - RR	Rsch	5	
SUMMERS, DONALD C.	Lecturer	Non-TT	Academic Associate - DSA	Admin	10	Throughout year
			Research - ARP	Rsch	10	Spring / Summer
TUDOR, RONNIE B.	Lecturer	Non-TT	Research - RR	Rsch	25	Winter
YODER, ELLIOT C.	Lecturer	Non-TT	Academic Associate - MSCM	Admin	25	Throughout year
			Research - ARP	Rsch	10	Throughout year
HUDGENS, BRYAN J.	Lecturer	Military	Academic Associate - MEM	Admin	10	Throughout year
POTVIN, LISA	Lecturer	Military	Program Manager - PCC	Admin	80	Throughout year

5.1E Other Full-Time Faculty

Table 5.1E provides a list of faculty who are full-time at the Naval Postgraduate School but do not have primary responsibility for teaching in the program under review. GSBPP does rely on some faculty outside of GSBPP for teaching in some areas. The most common examples are the use of faculty from the Department of Information Technology (IT) to teach in information systems courses; faculty from the Operations Research Department (OR) to teach in statistics and quantitative methods courses; and faculty from the Defense Resource Management Institute (DRMI) to teach in economics courses.

Table 5.1E

ADDITIONAL FULL-TIME FACULTY

Last Name	First Name	Rank	Tenure Status	NPS Academic Unit	Degree	University	Degree Field	Program
Airola	James	Assistant Professor	TTrack	DRMI (Def. Res. Mgt. Inst.)	PhD	University of Houston	Econ	MBA & MSM
Buttrey	Sam	Associate Professor	Tenured	Ops. Research Dept.	PhD	University of California at Berkeley	Statistics	MBA & MSM
Cook	Glenn	Lecturer	Non-TT	Information Sciences Dept.	MS	Naval Postgraduate School	Information Technology Mgmt	MBA
Housel	Tom	Professor	Tenured	Information Sciences Dept.	PhD	University of Utah	Information Technology	MBA
Kendall	Tony	Lecturer	Non-TT	Information Sciences Dept.	MS	Naval Postgraduate School	Manpower / HRM	MBA & MSM
Nissen	Mark	Associate Professor	Tenured	Information Sciences Dept.	PhD	University of Southern California	Decision Sciences / Ops Mgmt	MBA & MSM
Regnier	Eva	Associate Professor	Tenured	DRMI (Def. Res. Mgt. Inst.)	PhD	Georgia Institute of Technology	Industrial Engineering	MSM
Roberts	Ben	Senior Lecturer	Non-TT	Systems Engineering Dept.	PhD	Penn State University	Sociology	MSM
Roberts	Nancy	Professor	Tenured	Defense Analysis Dept.	PhD	Stanford University	Education	MBA & MSM
Tsolis	Kristen	Research Associate Professor	Non-TT	Information Sciences Dept.	MA	Monterey Institute of Int'l Studies	Public Admin in Int'l Mgmt	MBA & MSM
Vitalich	John	Lecturer	Non-TT	Information Sciences Dept.	MS	Naval Postgraduate School	Business Administration	MBA & MSM
McNab	Bob	Associate Professor	Tenured	DRMI (Def. Res. Mgt. Inst.)	PhD	Georgia State University	Economics	MBA & MSM

Standard 5.2 Professional Qualifications

At least 75% of the professional graduate program's full-time faculty should hold an earned doctorate or other equivalent terminal professional degree in their field. Any full-time faculty member lacking a terminal degree must have a record of outstanding professional or academic experience directly relevant to the faculty member's assigned responsibilities. Full-time faculty actively pursuing appropriate terminal degrees are to be included in the 25 percent not holding a terminal degree.

5.2 Professional Qualifications

Seventy percent (43/61 = 70%) of the nucleus full-time faculty hold terminal academic degrees. Those full-time faculty members who lack a terminal degree have a record of outstanding professional experience as evidenced in the faculty data sheets - Volume II. All GSBPP faculty members teach in areas that are relevant to their professional education.

Seven percent (4/61 = 7%) of the nucleus full-time faculty are military instructors, accomplished practitioners in their fields. Military officers bring expertise to GSBPP programs in such areas as defense contracting, program management and financial management. All military faculty members hold masters degrees in their professional field. Military faculty members are sent to the School for 2 - 3 years. GSBPP reviews officers who may be sent to the school as military faculty, but GSBPP does not hire the military faculty in the traditional sense. If military faculty members are excluded from the nucleus faculty, then seventy-five percent (43/57 = 75%) of the nucleus faculty hold terminal academic degrees.

We examined all courses taught to students in the MBA program during the past two academic years (2006-2007) with respect to the degree held by instructors. Table 5.2A shows the breakdown. For the required Common Curriculum (Core) courses in the MBA program, 86% of all courses were taught by instructors with a terminal degree. When courses from the Additional Curriculum Components (Specialization) are additionally considered, the percentage of doctorally qualified instructors across the complete set of MBA courses falls to 66%. The table suggests the ready explanation for this. Only a minority (36%) of courses in the Additional Curriculum Components (the Specialization) were taught by doctorally qualified faculty during the 2006-2007 self-study period. This pattern – doctorally-qualified faculty more heavily in the Common Core of the degree program and master-qualified faculty more heavily in the Specialization Component of the program – is to be expected, given the mission of GSBPP, the mission of the MBA degree program, and the structure of the specialized programs of study within the degree program.

One element from the MBA Program mission statement is repeated here:

- ***Professional****: The program prepares graduates to possess the specialized knowledge, skills and abilities to serve in positions of significant responsibility within a specified Defense Management field (Financial Management, Logistics, Acquisition, Contracting, Defense Management, and Information Management).*

This element of the program mission directly influences both the structure of the curriculum and the qualifications and composition of the faculty. As reported in Standard 4, the Common Core Curriculum component of the MBA program is a minimum of 60 credit hours. Specializations are constructed on the common core foundation, ranging from 24 to 43 additional credit hours, depending on the curriculum. Because of the

mission of the program, these specializations will be oriented toward a distinct set of Defense Management professional fields. And, of importance with respect to the composition of the School's faculty, masters-qualified faculty, who additionally possess significant professional experience, may be the most appropriate faculty for some of the professionally-focused courses within the Specialization component.

Table 5.2A
COURSES TAUGHT IN MBA & MSM PROGRAMS:
BY INSTRUCTOR DEGREE LEVEL

	Doctoral Qualified	Masters Qualified
MBA Program		
All MBA Program Courses	66%	34%
MBA Common Curriculum (Core) Courses	86%	14%
Additional Component (Specialization) Courses	36%	64%
MSM Program		
All MSM Program Courses	78%	22%
MSM Common Curriculum (Core) Courses	86%	14%
Additional Component (Specialization) Courses	52%	48%

Other full-time faculty members are defined as those who teach at least one-graduate course and are employed full-time by the NPS. These are generally faculty whose home is in another School or Department at NPS. As mentioned above, GSBPP utilizes some NPS faculty from outside GSBPP to teach individual courses in the MBA and/or MSM programs. All have at least a Masters degree in a related field. Sixty-seven percent (8/12) of the other full-time NPS faculty who taught in GSBPP courses hold terminal degrees. Table 5.2B below indicates the proportion of GSBPP courses taught by the GSBPP nucleus faculty and other faculty types. For the courses in the MBA Program, about 5% of courses are taught by NPS faculty from outside GSBPP. About another 6% are taught by adjunct faculty, generally hired from among faculty at other universities.

Table 5.2B PERCENT OF COURSES TAUGHT BY DIFFERENT FACULTY TYPE			
	% of MBA Program Courses	**% of MSM Program Courses**	**% of All GSBPP Courses**
Faculty Type			
GSBPP Nucleus Faculty	**89%**	83%	83%
Other NPS Full-time Faculty	**5%**	8%	8%
Part-time Adjuncts	**6%**	9%	9%

Standard 5.3 Practitioner Involvement
The involvement of practitioners is integral to the activities of a professional master's degree program. The institution shall specify how it involves practitioners in its program. Where practitioners teach courses, there shall be satisfactory evidence of the quality of their academic qualifications, professional experience, and teaching ability.

5.3 Practitioner Involvement

Practitioners are an integral part of the programs in GSBPP. In fact, GSBPP and NPS consciously employ practitioners on a full-time basis to enhance the relevancy of the academic programs. The full-time practitioners include military instructors and retired senior military officers who serve in various capacities. All full-time practitioners have master's degrees in their respective areas and have been recognized as accomplished professionals in their fields.

The military officers generally are assigned to NPS for a three-year tour. Their assignments while in GSBPP include teaching courses, advising student projects or theses, and working with civilian faculty on various projects. Military faculty members are scheduled to teach courses for which they are academically and professionally qualified to teach. Military faculty members are evaluated on teaching performance just as are civilian faculty.

Former senior military personnel also play an important role in the delivery of our programs. At this time, sixteen of the non-tenure-track faculty members among the nucleus faculty are retired military. Retired Flag and General-level officers are present in the School, both as members of the nucleus faculty and as visiting faculty or associates.

Practitioners participate in numerous phases of the programs in GSBPP including program development, teaching, student advising and assessment.

In addition to the functions mentioned above, all curricula rely on practitioners as guest speakers to bring relevance to the content areas. Guest speakers range from analyst-type personnel to high ranking senior officers and civilians.

GSBPP uses few part-time faculty because of the requirement for high-quality, relevant content. Our experience has been that few part-timers are able to possess the required level of disciplinary expertise, DoD expertise and an ability to teach to mid-level career officers. Part-time faculty members who taught in the program under review during the past two years are provided in Table 5.3. All faculty members are evaluated at the end of each course. Those faculty members who receive below average evaluations are not asked to return.

Table 5.3
ADJUNCT PART-TIME FACULTY TEACHING IN MBA/MSM 2006-2007

Last Name	First Name	Job Title / Agency	Deg.	Field	Year	Course	Course Title	Program
Doty	Lon	Adjunct, San Jose State Univ.	MBA	Organizational Behavior	2006	GB3010	Managing for Organizational Effectiveness	MBA & MSM
Kirby	Gail	Lecturer, Santa Clara Univ.	PhD	Marketing, Economics	2007	GB4071	Economic Analysis and Defense Resource Allocation	MBA & MSM
Landry	Steve	Professor, Monterey Inst. Of Intl. Studies	PhD	Accounting	2007	GB4550	Advanced Financial Reporting	MBA
Lindsey	Lisa	Adjunct	PhD	Communications	2007	GB3012	Communication for Managers	MBA & MSM
Means	Tom	Professor, San Jose State Univ.	PhD	Economics	2007	GB3040	Managerial Statistics	MBA & MSM
Means	Tom	Professor, San Jose State Univ.	PhD	Economics	2006	GB3070	Economics of the Global Defense Environment	MBA & MSM
Rendon	Juanita	Certified Public Accountant	MS	Accounting, Finance	2006	GB3050	Financial Reporting and Analysis	MBA & MSM
Rendon	Juanita	Certified Public Accountant	MS	Accounting, Finance	2007	GB4520	Internal Control & Auditing	MBA
Jones	Becky	Lecturer	MBA	Marketing, Real Estate	2006-7	GB3030	Marketing Management	MBA
Roberts	David	Professor, Monterey Inst. Of Intl. Studies	PhD	Economics	2007	GB3070	Economics of the Global Defense Environment	MBA & MSM

Roberts	David	Professor, Monterey Inst. Of Intl. Studies	PhD	Economics	2007	MN2039	Basic Quantitative Methods in Management	MSM
Tudor	Ron	Consultant	JD	Law	2007	MN3312	Contract Law	MBA
Eaton	Don	RADM, USN (ret.)	MS	Logistics	2006	GB4450	Logistics Strategy	MBA
Liao	Woody	Professor, Univ. of California, Irvine	PhD	Accounting	2006	GB4510	Strategic Resource Management	MBA
Mullane	Joe	Financial Manager	MS	Accounting	2007	GB3051	Cost Management	MBA & MSM
Savage	James	Professor, Univ. of Virginia	PhD	Public Policy	2007	GB4053	Defense Budget and Financial Management Policy	MBA & MSM
Sherman	David	Professor, Northeastern Univ.	PhD	Accounting	2007	GB3051	Cost Management	MBA & MSM
Sherman	David	Professor, Northeastern Univ.	PhD	Accounting	2007	GB4550	Advanced Financial Reporting	MBA

Standard 5.4 Faculty Quality
In addition to the above, the qualitative adequacy of faculty members shall be demonstrated by their previous and current instruction, research, experience and service.

5.4A Faculty Data Sheets

Faculty Data sheets are contained in Volume II of this self-study report.

5.4B Promotion and Tenure

NPS Promotion and Tenure Process

Before a faculty member is recommended for promotion in rank or award of tenure on the Naval Postgraduate School faculty, there is a review of professional qualifications by a Department Evaluation Committee (DEC), appointed by the Dean for this purpose. (For NPS's formal promotion and tenure process, GSBPP is seen as a Department.)

The DEC consists of at least three faculty members who are senior to the candidate's current position; one member must be from outside the candidate's Department. The DEC submits its report to the Department Faculty Promotion Council (DFPC).

The specific procedure for this colleague-review is at the discretion of the individual Department, within policy guidelines provided annually by the Provost to ensure equitable treatment of all faculty members. (Guidelines on the P&T Process and Documentation for 2007 (32 pages) are available on request.)

The Department Faculty Promotion Council (DFPC) convenes to consider the case of each candidate within their purview and makes a recommendation on each case by secret ballot. The results of the secret ballot are advisory to the Dean and must be included (along with any comments from the DFPC discussion) in the Dean's recommendation on each individual case.

The Dean makes a recommendation to the Provost. This recommendation is supported by appropriate documentation specified by the Provost and will include the written report of the candidate's DEC.

Annually during the winter quarter, there is a series of meetings of the Faculty Promotion Council (FPC) to consider all recommendations. The FPC is made up of all Department and Academic Group Chairs, all School Deans, and the Provost. The Chairman of the Professional Practices Committee of the NPS Faculty Council is an ex-officio member. The participants in the meetings shall have received copies of the Department/Group DEC and Chairman's recommendations, as well as the documentation for all candidates. At these meetings, the Department Chairman, or substitute, answers any questions about the candidate's qualifications. After full discussion, the participants in the meetings (with the exception of the Chairman of the Professional Practices Committee) individually make their recommendations regarding all candidates to the Provost.

The Provost considers the recommendations and then meets with the Deans Promotion Council (DPC) for further considerations. The NPS President is invited to be present at these meetings. Finally, the recommendations of the Provost are presented to the President in the presence of the Deans Promotion Council (DPC).

There may be cases where a faculty member is denied promotion or tenure after being positively recommended by the Department faculty, by the Chairman/Dean, or by the FPC. In that case, the Provost meets with the appropriate faculty of that Department to discuss the reasons for denial and to determine if further deliberations are appropriate. The faculty member, colleagues and/or Chairman may request the assistance of the Professional Practices Committee in appealing this adverse decision, if they feel that the decision process was flawed. The Committee shall determine whether such an appeal is justified and, if so, shall make recommendations to the Provost as to how it should be pursued.

Promotion and Tenure Evaluation Criteria

Faculty members at NPS are judged in two general categories for pay, promotion and tenure: 1) internal service to NPS and 2) external visibility which demonstrably enhances NPS's reputation in either the academic community or DoD (or both).

Tenure-track faculty members at NPS are expected to be strong contributors to high quality, relevant instruction and to be active in their profession and service to DoD. Adequate performance in these areas does not automatically qualify an individual for promotion or tenure. For example, doing an adequate, even exemplary, job of teaching courses and making only a minimal impact on the world outside NPS should not qualify a faculty member for advancement. Impact on the outside world can be achieved in any area of faculty performance, including instruction. The quality and quantity of performance above acceptable will determine the rate at which an individual progresses through the academic ranks. Promotion to Professor additionally requires that the person demonstrates consistent leadership in at least one area of faculty activity and has meritorious performance in both internal and external service. Further guidance on the evaluation of the scholarly products of faculty is found in the "Marto" Report and the Report of the Committee on Nontraditional Productivity. (Lengthy report available by request.)

Judging an individual's qualifications for advancement should be on the basis of his/her meritorious performance. This means performance in both internal and external service that are worthy of note. Listed below are some typical examples of internal and external activities that indicate such meritorious performance. The implication is not that a person should pick "one from column A and two from column B" and get promoted, but that the successful faculty member should be engaged in a significant amount of meritorious work.

Internal Activities

- Demonstration of quality and flexibility in instructing graduate-level and applications-oriented courses
- Introduction of new material in curricula and development of new courses, particularly special topics courses with DoD relevance
- Development or implementation of creative teaching methods (such as computer-aided instructional materials) to improve upon student learning efficiency
- Development of extensive instructional material
- Leadership in developing and/or refining curricula
- Development of instructional laboratories, including specifying equipment and designing experiments
- Service as academic associate, associate chairman, chairman of a school-wide committee, etc.
- Contributions to interdisciplinary research projects
- Direction of high-quality research efforts by thesis students

- Direction of DoN-relevant theses
- Tutoring students who need remedial work
- Teaching capstone courses in applied areas
- Teaching in operations oriented curricula

External Activities

- Creation of products of direct use to Navy operations, both shore and sea-based
- Publication of research results in refereed archival journals and conference proceedings at a regular rate
- Service in a professional society through elected offices, committee work, conference planning, editorial work, peer/proposal review, etc.
- Participation in fleet exercises
- Participation in a Navy, multi-laboratory research project
- Publication of a textbook that receives acceptance external to NPS
- Offering on-campus and off-campus short courses to DoD personnel
- Creation of instructional material that receives significant use outside NPS, (e.g., textbooks, course notes, teaching methodologies, etc.)
- Acting as a consultant for operational commands and other DoD organizations
- Service in high-level position in DoD
- Publication of technical reports, either unclassified or classified, from a DoD or non- DoD research program (For this work to be a significant factor in promotion and tenure actions, timely external peer review is essential.)
- Contributing chapters in research monographs
- Presentation of research results to operational commands and other DoN organizations
- Participation in research with operational units, laboratories, systems commands, and headquarters of the Navy and Marine Corps
- Service to DoD by participation in workshops, on panels, advisory boards, and liaison with laboratories

The initial appointment of all Federal Civil Service employees encompasses a one-year probationary period. This is applicable to the civilian members of the faculty at the Naval Postgraduate School. The Naval Postgraduate School accepts a maximum of three years of prior experience as a full-time teaching faculty member in an accredited collegiate institution in consideration of individual faculty members for promotion and tenure. The Postgraduate School may consider other significant professional experience in lieu of teaching experience in making promotions and in granting tenure.

Recent Experience in Tenure and Promotion

During the most recent five year period from 2003 to 2007, GSBPP received actions on eight promotion and/or tenure cases. Specifically, there have been two cases of

review for promotion to the rank of Professor, three cases of review for the award of tenure, and three cases for review for promotion from Lecturer to Senior Lecturer. In all eight cases, the candidates were successful and received the desired awards.

Standard 5.41 Instruction
Efforts to improve the instructional program, including student advisement, teaching methods, course content, and innovative curricula development.

5.41A Quality of Instruction

As mentioned in Standard 2.2-Assessment, all programs in GSBPP rely on a number of procedures, both formal and informal, to obtain feedback from numerous sources to assess the School's performance.

Formal systems include such items as surveys and questionnaires which are routinely administered, primarily to current students. There are also formally assigned positions within the School which have central responsibility for assessment and management of curricula. These include the Associate Dean for Instruction, Academic Associates, Program Officer, and the Course Coordinators. A new position, Academic Associate for the Core, was just created (July 2006) to provide a focus for oversight and coordination of both the MBA and MSM common curriculum core courses. The School also has a school committee, the Faculty Instruction Committee, responsible for instructional policy.

Informal systems include the network of contacts that exist between faculty and former students, military officers and executives within the larger defense community. The various mechanisms used for assessment and review fall into three broad areas, as follows:

Managerial Positions with Assessment Responsibility:
- Associate Dean for Instruction
- Academic Associates / Curricular Officer
- Course Coordinators

Program Review Processes:
- Curriculum Review Process
- MBA/MSM Core ad hoc curriculum review committees

Surveys and Questionnaires:
- Student Opinion Forms (at completion of each course)
- Student Core Survey (at completion of the core curriculum)
- Student Exit Surveys (at completion of program)

All of these processes are explained in Standard 2.2. These processes allow all curricula to undergo constant, continuous improvement. Evidence-based data often result in changes to a particular curriculum. Changes to curricula over the past few years are also explained in detail in Section 2.3.

Individual course quality is maintained via similar processes. Student evaluation forms are monitored quarterly by the Associate Dean for Instruction and the Dean. Faculty members who fall above or below a specified threshold are noted. Those faculty members who are evaluated in the upper range are recognized by announcement for their achievement. Those who fall in the lower range may be asked to discuss their performance with the Dean. Plans are made to improve performance.

Feedback about the quality of students' learning is also obtained from GSBPP faculty. For example, follow-on course instructors may report that students do not have the prerequisite skill level for their class. If so, the Dean and/or Associate Dean for Instruction confirm the report and take corrective action as required.

Faculty, student, and sponsor feedback is taken seriously. Formal and informal processes allow the School to monitor quality and take corrective action in a timely manner.

5.41B Workload Policy

All full-time faculty members are expected to carry equitable teaching workloads. During teaching quarters, full-time faculty members are expected to complete 11 credits-hours of instructional work. For most faculty, this typically means teaching two 4-credit-hour graduate courses (with 20-30 students each) and serving as a thesis or project advisor for 2-4 graduating students.

The number of course preparations per year varies across the faculty depending on a faculty member’s teaching expertise and student demand for particular courses. Some faculty who teach the core courses may only have one preparation. Faculty who teach specialized courses often prepare two courses per year. Occasionally a faculty member may have more than two preps. This would be most common for non-tenure-track faculty who carry a heavier teaching load.

Over a year's time, a full-time faculty member must earn 44 credit-hours. In addition to teaching and thesis work, faculty members meet their workload requirements through research or internal administrative assignments. (See Appendix 3.4G.)

All full-time faculty have a written annual workload plan and agreement that specifies on a quarter-by-quarter basis what the faculty member's workload (teaching,

research, administration, projects) will be over the entire academic year. Before the start of an academic year, the workload agreement is signed by each faculty member acknowledging that the School and the faculty member agree to the stated workload plan.

5.41C Class Sizes

Table 5.41C provides information about class size. Part I of the table shows the distribution of class size across all the GSBPP programs for the 2002-2006 period. Most classes fall in the 10-29 class size range, with class size in the 20s clearly being the mode. This is an expected consequence of the planning and scheduling of classes in accordance with GSBPP guidelines. For planning purposes, the maximum class size in GSBPP is nominally 30, with an attempt always made to break a course into multiple sections when enrollment exceeds the 30 level. In the MBA program, class size may depend on whether a course is part of the Common Core Curriculum or a Specialization. Students are grouped into distinct cohorts, which are maintained through the Common Core Curriculum. The input of students during 2007 translated to six sections of core courses during the year, with class size typically from 20-30. Beyond the core, each of the 10 MBA curricula has curriculum-specific courses. Depending on the number of students enrolled in a particular specialized curriculum, class size in concentration courses may often be less than 30.

Part II of Table 5.41C, provides class size data for only 2007, but disaggregated by degree program. (Similar disaggregated data is not readily available for the years prior to the 2007 self-study year, but may be constructed retro-actively should such be deemed important.). Part II shows great similarity of the class size distribution between MBA Program courses, MSM program courses, and GSBPP courses in the aggregate. As in previous years, classes with size in the 20s dominate the distribution. This similarity across programs and similarity with earlier years is to be expected given that the same policy and scheduling practices are followed.

Table 5.41C – Part I

CLASS SIZES – GSBPP 2003-2006

	Number of Course Sections			
Class Size	**AY2003**	**AY2004**	**AY2005**	**AY2006**
1-9	21	14	14	30
10-19	111	113	120	69
20-29	134	145	180	210
30-39	50	51	53	47
40-49	1	7	8	7
Over 50	2	8	6	4
Total Sections	**319**	**338**	**381**	**367**

Table 5.41C – Part II CLASS SIZES – 2007 BY PROGRAM			
	Number (Percentage) of Course Sections		
Class Size	**All GSBPP Courses**	**MBA Program Courses**	**MSM Program Courses**
1-9	17 (5%)	4 (2%)	7 (5%)
10-19	49 (15%)	43 (22%)	21 (15%)
20-29	211 (63%)	114 (59%)	88 (63%)
30-39	49 (15%)	27 (14%)	20 (14%)
40-49	6 (2%)	4 (2%)	1 (1%)
Over 50	2 (1%)	2 (1%)	2 (2%)
Total Sections	**334**	**194**	**139**

5.41D Actual Credit Hours Taught

Table 5.41D shows total credit hours taught by each nucleus faculty for the self study year and preceding year.

Table 5.41D CREDIT HOURS TAUGHT BY FACULTY NUCLEUS										
			AY 2006				AY 2007			
Last Name	**First Name**	**Status**	Grad.	Under Grad	Cont Ed	**Total**	Grad.	Under Grad	Cont Ed	**Total**
Apte	Aruna	Untenured	15			**15**	6			**6**
Apte	Uday	Tenured	16			**16**	13.5			**13.5**
Arkes	Jeremy	Untenured				**0**				**0**
Barrett	Frank	Tenured	12			**12**	4			**4**
Boudreau	Mike	Non-TT	11		2	**13**	26		12	**38**
Brinkley	Doug	Non-TT	16			**16**	16			**16**
Brook	Doug	Untenured	22.5			**22.5**	18			**18**
Candreva	Phil	Non-TT	12			**12**	27			**27**
Coughlan	Pete	Untenured	16			**16**	8			**8**
Crawford	Alice	Non-TT	7			**7**	15.5			**15.5**
Cuskey	Jeff	Non-TT	28			**28**	33			**33**
Dew	Nick	Untenured	15			**15**	16			**16**
Dillard	John	Non-TT	17			**17**				**0**
Doerr	Ken	Tenured	20			**20**	22			**22**
Doyle	Dick	Tenured	6			**6**	15			**15**

Eitelberg	Mark	Tenured	22			**22**	25			**25**
Euske	Ken	Tenured	9			**9**	15			**15**
Ferrer	Geraldo	Untenured	16			**16**	16			**16**
Franck	Chip	Non-TT	19			**19**	25			**25**
Gates	Bill	Tenured	18			**18**	12			**12**
Gibbons	Deborah	Untenured	12			**12**	10			**10**
Hatch	Bill	Non-TT	27	2		**29**	4	2		**6**
Heath	Susan	Untenured				**0**	12			**12**
Henderson	David	Tenured	16.5			**16.5**	6			**6**
Hensel	Nayantara	Untenured	15			**15**	15			**15**
Hill	Kim	Non-TT				**0**		1		**1**
Hocevar	Susan	Tenured	6			**6**	4			**4**
Hudgens	Bryan	Military	19			**19**	37			**37**
Jones	Larry	Tenured	8			**8**	4			**4**
Kang	Keebom	Tenured	19			**19**	19			**19**
King	Cindy	Untenured	12			**12**	6			**6**
Laverson	Alan	Untenured				**0**	15			**15**
Lewis	Ira	Tenured	8			**8**	19			**19**
Matthews	Danny	Non-TT	27			**27**	4	4		**8**
Matthews	Dave	Non-TT	17.5		4	**21.5**	27		4	**31**
McCaffery	Jerry	Tenured	15			**15**				**0**
Mehay	Steve	Tenured	10			**10**	12			**12**
Moses	Doug	Tenured				**0**				**0**
Mutty	John	Non-TT	12			**12**	25			**25**
Naegle	Brad	Non-TT	13.5		10	**23.5**	19		8	**27**
Nalwasky	Richard	Military				**0**	10.5			**10.5**
Owen	Wally	Non-TT	4	6		**10**	5	8	2	**15**
Pema	Elda	Untenured	16.5			**16.5**	17.5			**17.5**
Petross	Diana	Non-TT				**0**	31.5			**31.5**
Potvin	Lisa	Military				**0**	6			**6**
Powley	Ned	Untenured				**0**	16			**16**
Rendon	Rene	Non-TT	17.5	1		**18.5**	16.5			**16.5**
Roberts	Ben	Non-TT				**0**	8			**8**
San Miguel	Joe	Tenured	3			**3**	8	4		**12**
Shen	Yu-Chu	Untenured	16.5			**16.5**	17			**17**
Simon	Cary	Non-TT	33			**33**	27.5			**27.5**
Snider	Keith	Tenured	8	1		**9**	15.5			**15.5**
Suchan	Jim	Tenured	12			**12**	12			**12**
Summers	Don	Non-TT	27			**27**	24			**24**
Thibodeau	Nicole	Untenured	16			**16**	16			**16**
Thomas	Gail	Tenured	8			**8**	8			**8**
Thomas	George	Tenured	16			**16**	16			**16**
Ventresca	Marc	Untenured				**0**	16			**16**
Wang	Chong	Untenured				**0**				**0**
Yoder	Cory	Non-TT	19		6	**25**	25	1	4	**30**
Zolin	Roxanne	Untenured	20			**20**	20			**20**

Standard 5.42 Research
Research, writing and publication

5.42A Purpose

One element in the mission statement for the Graduate School of Business and Public Policy is:

> *Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.*

As indicated by this statement, faculty research is an important faculty activity in the Graduate School of Business and Public Policy. This research program is integrated to the greatest possible extent with the educational process. Students are encouraged to participate in faculty projects and faculty research results are typically incorporated in classroom instruction.

5.42B Areas of Research

Because of the close link between our research and educational programs, research in the Graduate School of Business and Public Policy is largely driven by the school's curricula and the academic areas from which we draw faculty to support those educational programs.

Briefly, the Graduate School of Business and Public Policy has primary responsibility for seven graduate degrees. The largest program is the resident MBA program, with curricular concentration areas in acquisition management, logistics management, financial management, information management and defense management. The resident MS in Management degree program currently offers a concentration in Manpower Systems Analysis. A third resident degree, the Master of Executive Management (MEM) started July 2006.

The Graduate School of Business and Public Policy also offers three Distance learning graduate degree programs. The largest program is an Executive Masters of Business Administration (targeting senior Navy Lieutenants through Commanders, particularly from the Unrestricted Line communities who have middle-management level experience). The other two programs offer a Master of Science in Contract Management and a Master of Science in Program Management. These programs are primarily offered to

Department of Defense civilians at designated off-site locations. Through 2006 GSBPP also offered an MS in Leadership degree, which has now been discontinued.

Finally, the Graduate School of Business and Public Policy offers two certificate programs: the Practical Comptrollership Course, sponsored by the Assistant Secretary of the Navy (Financial Management and Comptroller), which targets individuals (civilian and military) occupying financial management positions; and the Advanced Acquisition Program, which provides Level III education certificate in Program Management for the Department of Defense acquisition workforce.

The faculty of the Graduate School of Business and Public Policy are drawn from a wide variety of academic disciplines in business and public sector management. The school's diverse, multidisciplinary character is reflected in the breadth and depth of issues addressed by faculty research, which has historically been concentrated in applied areas of interest to the Departments of Defense and Navy. The school's research program touches a wide range of distinct topics within the course of a year. These topics and issues can be grouped into five functional areas, related to the school's curricula. The school's five functional areas included the following:

- Acquisition and Contracting
- Economics and Manpower Systems Analysis
- Financial Management
- Logistics and Transportation
- Organization, Management, and Policy Analysis

5.42C Planning For the Future: General Guiding Principles

As noted, research in the Graduate School of Business and Public Policy is multidisciplinary and often widely diverse; but, this research is directed toward a common set of goals. As stated in the school's mission statement, the faculty conducts a variety of research to:

- Contribute knowledge to academic disciplines
- Support military decision-making, problem-solving, and policy-setting
- Improve administrative processes and organizational effectiveness
- Advance the mission of graduate education

The primary goal of the school's research program is to provide the Navy and DoD with the capability of managing defense systems efficiently and effectively. This includes the efficient and effective utilization of resources, which derive from an existing base of knowledge or may require the development of new concepts and theory. Thus, the school recognizes the importance of both basic and applied research to the Navy and DoD, and it seeks to balance both types of research.

The school's research program goals are further specified as follows on the Graduate School of Business and Public Policy "web" page: (http://www.nps.navy.mil/gsbpp/research.htm):

- Increase the quality and quantity of relevant defense-oriented research
- Catalyze a broad and robust research program
- Involve top researchers, practitioners and graduate students in defense-oriented research useful to DoD policy/decision making processes
- Augment and complement cooperative, interdisciplinary research activities
- Disseminate relevant, important results to researchers, sponsors, policy makers and practitioners
- Integrate defense-oriented research with education, DoD workforce training and standardize policy practices
- Establish and maintain a community of academic and professional scholars engaged in exploratory and applied research to address complicated defense issues from a number of perspectives, while integrating defense applications into familiar business disciplines

Concepts, theory, and existing knowledge can generally be identified with a particular functional area or discipline. Actual defense policy and management decisions or policies often require information or perspectives drawn from a variety of functional areas and professional expertise. Consequently, in addition to pursuing functional area research with a critical mass of faculty, the school actively seeks to engage in cooperative, interdisciplinary research. Such research places the school in a strong position to assist defense policy makers, since it allows for a coordinated, broad-based program under "one roof" — where researchers from diverse fields and professional experience can share information and findings in a unified and truly systematic fashion.

5.42D Planning for the Future: Research Opportunities by Functional Area

As the Graduate School of Business and Public Policy prepares for the challenges of the future, it is appropriate to consider research fields that would help the school achieve its program goals and simultaneously assist defense decision-makers. Fields of inquiry and research opportunities are discussed below by each of the school's five functional areas.

Acquisition and Contract Management. Defense acquisition and contract management represents a process of critical importance to the military, not only to reduce taxpayer costs, but to ensure the quality and performance of today's increasingly sophisticated weapon systems. Nevertheless, negligible academic research has been applied to systematically investigate, understand, and model the acquisition process; and current innovations in this domain—such as spiral development, open architecture, contract termination, process reengineering and acquisition reform—are uncoordinated, ad-

hoc, and performed largely on a trial-and-error basis. This is the case because many acquisition policy makers and executives have little or no benefit of theory or practice.

Beginning in 2002, the Graduate School of Business and Public Policy initiated an Acquisition Research Program to provide leadership in innovation, creative problem solving and an on-going dialogue to support the evolution of Department of Defense acquisition strategies. The program goals include:

- Establishing NPS acquisition research as an integral part of policy-making for Departments of Defense and Navy officials
- Creating a stream of relevant information concerning the performance of DoD acquisition policies with viable recommendations for continuous process improvement
- Preparing the workforce to participate in the continued evolution of the defense acquisition process
- Collaborating with other universities, think tanks, industry and Government in acquisition research

Supported primarily by the Graduate School of Business and Public Policy Acquisition Chair, currently held by Rear Admiral Jim Greene, USN, (Ret.), this research program initiated fifteen research projects in 2003, with the number increasing to well over 20 in 2004, and over 35 in 2005. These projects include several collaborative efforts with Dr. Jacques Gansler (former Under Secretary of Defense for Acquisition, Technology and Logistics) and other faculty members at the University of Maryland, as well as faculty members from universities across the United States. Primary research sponsors include: Assistant Secretary of the Navy (Research, Development and Acquisition), Naval Sea Systems Command, Program Executive Office (Ships), Program Executive Office (Integrated Warfare Systems) and the Defense Contract Management Agency (International). In 2006, this program grew further, adding significant support from the Under Secretary of Defense (Acquisition, Technology and Logistics) in a separate proposal process, funding an additional 10 proposals.

A significant portion of this research funding is open-ended, restricted only to research topics involving acquisition issues broadly defined. The Graduate School of Business and Public Policy has established a competitive internal proposal process to allocate these funds; the call for proposals is distributed to faculty from across the Naval Postgraduate School. Priority is given to proposals that involve collaboration between tenure-track and non-tenure-track faculty members and to proposals involving thesis students and MBA project teams. The objective is to encourage collaboration that exploits the school's academic as well as professional expertise, a collaboration that provides the Graduate School of Business and Public Policy a strong comparative advantage for defense acquisition policy research. This program has been growing rapidly, with four of five proposals funded in AY2004, nine of 11 proposals funded in AY2005, 10 of 27 proposals funded in AY2007 and 11 of 30 proposals funded in AY2008.

The Acquisition Research Program also hosts an annual research symposium in Monterey. The fourth symposium, in May 2007, involved well over 100 people, including researchers and acquisition policy and decision makers from across the United States. Mr. Shay D. Assad – Director, Defense Procurement and Acquisition Policy, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics) delivered the keynote address. Details for the Acquisition Research Program and symposium are on the Acquisition Research Program website (http://acquisitionresearch.org/index.php).

Logistics and Transportation. The primary mission of the Logistics and Transportation group is to educate military officers and DoD civilians in state-of-the-art concepts of logistics, transportation and supply chain management. Emphasis is placed on understanding both military and non-military applications, so that students will be prepared to perform effectively in a military environment and interact efficiently with civilian contractors and suppliers. The general research perspective of the group is focused on improving DoD logistics and transportation performance as well as management effectiveness. Major research areas include:

- DoD inventory policy
- Weapon system total ownership cost and life-cycle support
- Defense transportation and distribution systems
- Total Asset Visibility (TAV) and real-time logistics
- Metrics and Performance Based Logistics
- Spiral Development
- Modeling and simulation for logistics decision support
- Supply chain management and lean manufacturing
- Weapon system readiness and risk management
- Business case analysis for transportation and logistics technologies

Much of this work has been supported through the Acquisition Research Program and its associated sponsors. Additional sponsors have included the Office of Naval Research, NAVAIR, the Military Sealift Command, the US Transportation Command and the Naval Surface Warfare Center.

Financial Management and Budgeting. Research in the area of financial management has become increasingly important since the end of the Cold War and the events of 9-11. The Financial Management (FM) group has identified three major functional areas as targets of opportunity for future research. These are:

- Financial resource policy formulation, analysis and management
- Financial management and budgeting
- Organizational efficiency, managerial control and performance metrics

The first of these functional areas — financial resource policy formulation, analysis and management — covers a range of sub-areas: national defense and national security resource policy and management; resource planning, programming, budgeting and policy under the Planning, Programming, Budgeting and Execution System; and relationships between financial management, contracting, acquisition and other policy fields. Financial management and budgeting includes the following: federal, DoD and Navy budget formulation and execution; impacts of budget allocation, reallocation and reduction; implementation of Defense Resource Management Systems; and the Chief Financial Officer Act and federal financial management reforms. The research area of organizational efficiency, managerial control and performance metrics, in turn, covers the following: mapping, goals, and objectives to a defense organization's strategic themes using a balanced scorecard and performance metrics, examining the efficiency of defense sector consolidation and the cost –effectiveness of public-private partnerships.

In addition to the Acquisition Research Program, sponsors for this research have included: Assistant Secretary of the Navy (Research, Development and Acquisition), Program Executive Office (Ships); Program Executive Office (Integrated Warfare Systems); the Office of the Comptroller, COMNAVAIRPAC (CNAP); U.S. Department of Justice; and the Personnel Security Research Center (Department of Defense).

Manpower Systems Analysis. As noted above, the primary goal of the department's research programs is to provide defense policy makers with the capability of utilizing resources with maximum efficiency and effectiveness. This includes *human* resources, the focus of research in the Manpower Systems Analysis (MSA) group. Defense manpower policy makers have been faced with many challenges since the end of the Cold War and the events of 9-11. Key among these challenges include an over 30 percent reduction of the active-duty force, budget reductions in recruiting and advertising, a steady, high operational tempo and deployment schedule with fewer people, new missions, increasing pressure to change the "culture" of military service, renewed efforts toward population representation of women and racial/ethnic minorities throughout the force, a high rate of first-term attrition among new recruits, declining levels of personnel retention in certain critical areas, a number of high-profile "scandals" and others. As the active-duty force was reduced and missions changed, it soon became clear that a smaller military had to be even more skilled and adaptable than the one that witnessed the end of compulsory service and performed so successfully throughout the early 1980s and early 1990s. These challenges confronting defense manpower policy makers are recognized by the MSA group as opportunities for research that will have a lasting impact on the future of the force. MSA research areas can be summarized as follows:

- Manpower supply and force requirements
- Improvements in selection and classification of enlisted personnel
- Innovations in recruiting and the application of new technologies
- Improvements in selection of officers and pre-commissioning programs
- Effectiveness of equal opportunity and diversity management programs

- Training effectiveness and efficiency
- Innovations in instructional technologies
- Innovations in enlisted assignments and auctions for assignment incentive pay
- Personnel retention in critical fields and communities, including auction based approaches
- Reduction of first-term attrition rates among enlisted personnel
- Force management programs and planning
- Force structure and cost analysis
- Auction-based approaches to force shaping
- Career-force modeling
- Officer promotion and performance
- Civil-military relations and the All-Volunteer Force
- Manpower management in Reserve components

Sponsors for this research include: Office of the Chief of Naval Personnel (N-1, N-1H, N-1Z, N-12, N-13, and N-14), Navy Personnel Research, Studies and Technology and the Office of the Assistant Secretary of Defense.

Economics and Finance. GSBPP also maintains an expertise in general defense economics and finance. Rather than focusing on specific areas within the defense department, this capability represents a set of skills that has been applied to a wide range of applications over time. Past areas of interest have involved burden-sharing and the economics of defense alliances, game theory approaches to terrorists' decisions and defense strategy, defense requirements (e.g., aerial refueling and operational support aircraft), and incentives in defense decision-making. Current interest focuses on several areas:

- Transaction cost economics in defense acquisition
- Technology innovation and diffusion in the Department of Defense
- Business case analysis for new defense technologies
- Consolidation in the defense industrial base
- Discount rates and personal decision making in the defense sector
- Healthcare Economics, incentives, ownership and patient outcomes

Sponsors for this research have included the Acquisition Research Program, the Under Secretary of Defense (Advanced Systems and Concepts), internal NPS research funding and other external non-defense sponsors.

Organization, Management, and Policy Analysis. Faculty members in this functional area pursue basic and applied research on key management issues at a variety of organizational levels. Faculty members bring a strategic perspective to this work, seeking to identify courses of action that will best achieve organizational goals in a given setting. Individual faculty members are acknowledged experts who publish leading-edge research

on a variety of issues. Top management issues include strategy and entrepreneurship, appreciative inquiry and positive change, organizational design (including the use of self-managing groups), social network analysis, ethics, collaboration in teams, managerial communications and the development of culture.

There is a developing interest in management innovation in the defense sector, embodied in the recently formed Center for Defense Management Reform. This multi-disciplinary research center initially focused on personnel management initiatives, such as those enacted in the Homeland Security Act of 2002 and the National Security Personnel System. Interest is extending to other areas including budgeting and financial management, organizational resilience, and market-based approaches to workforce and acquisition-related issues.

In addition to their subject area and methodological expertise, faculty members have developed considerable knowledge of current military organizations through their research. Most of this work has been with Navy organizations, such as the NAVSUP, NAVAIR, CNET, NETWARCOM, Naval Reserves and CINCLANTFLEET. However, faculty members have also worked with organizations in other service branches, including extensive work with the U.S. Army Reserve Command and Coast Guard Headquarters. Recent DoD-wide research includes work for the Office of Force Transformation. Individual faculty have also conducted research for other US government agencies, including the Office of Personnel Management, the Department of Homeland Security and the Center for Disease Control, and consulted with state government agencies, the United Nations, and private-sector organizations. Supervising student theses has broadened this knowledge even more. This organizational expertise increases the value of faculty as applied researchers for DoN and DoD organizations.

5.42E Research Labs and Centers

In 2007, the Graduate School of Business and Public Policy was the "home" of two research centers: the Center for Defense Management Reform (Director – Professor Douglas Brook; Sponsors – Defense Logistics Agency, Office of Personnel Management); the center for Positive Change (Director – Professor Frank Barrett; Sponsors – NETWARCOM, NAVSUP IT, Office of Force Transformation and NETC).

5.42F Scholarly Productivity

Over the past four years (AY2003 – 2006) faculty productivity in the graduate School of Business and Public Policy has increased dramatically. This increase reflects two factors: new hires and a new Policy on Lecturer and Senior Lecturer Appointments. After several years with very limited new tenure-track faculty hires, the school has been involved in an aggressive hiring process. Supported by institutionally provided research

support during their first three years of employment, the new tenure-track hires have contributed significantly to the school's scholarly output. Much of this output is focused on mainstream academic journals, as required for a successful tenure decision. This complements the more applied defense policy research typically conducted by the tenured faculty.

In addition, the Graduate School of Business and Public Policy recently adopted a new Policy on Lecturer and Senior Lecturer Appointments. This policy specifies a scholarship expectation for non-tenure track faculty members, which emphasizes more applied research. Coupled with the concurrent increase in applied research funding through the Acquisition Research Program described above, the lecturers and senior lecturers have contributed significantly to scholarly output in the Graduate School of Business and Public Policy.

Over the four year evaluation period (2003-2006), faculty members in GSBPP have appeared as authors or co-authors for: 146 refereed journal publications (up from 74 in the last evaluation cycle); 74 conference papers (up from 32); 9 books (up from 3); 58 book chapters (up from 53), 146 technical reports (up from 25); and 105 non-refereed papers, case studies, notes, editorials, letters, etc. Conference presentations over this period numbered 298 (up from 169).

Table 5.42F shows that our faculty members are active and their work has increased over this period. This data indicates the two trends described above. The increase in journal publications largely reflects the recent increase in tenure-track hires; the increase in technical report and other publications, including non-refereed papers, largely reflects the contribution of the non-tenure track faculty in response to their new appointment policy and Acquisition Research Program funding. In this table, "participating faculty" refers to all nucleus faculty members who are expected to participate in scholarship. Essentially, this includes all civilian faculty members -- tenure-track and lecturers/senior lecturers. Excluded are faculty members who fill positions where there is, by the nature of the position, no scholarship expectation. This includes all active duty military faculty members, as well as a couple of retired military officers holding administrative faculty positions.

TABLE 5.42F

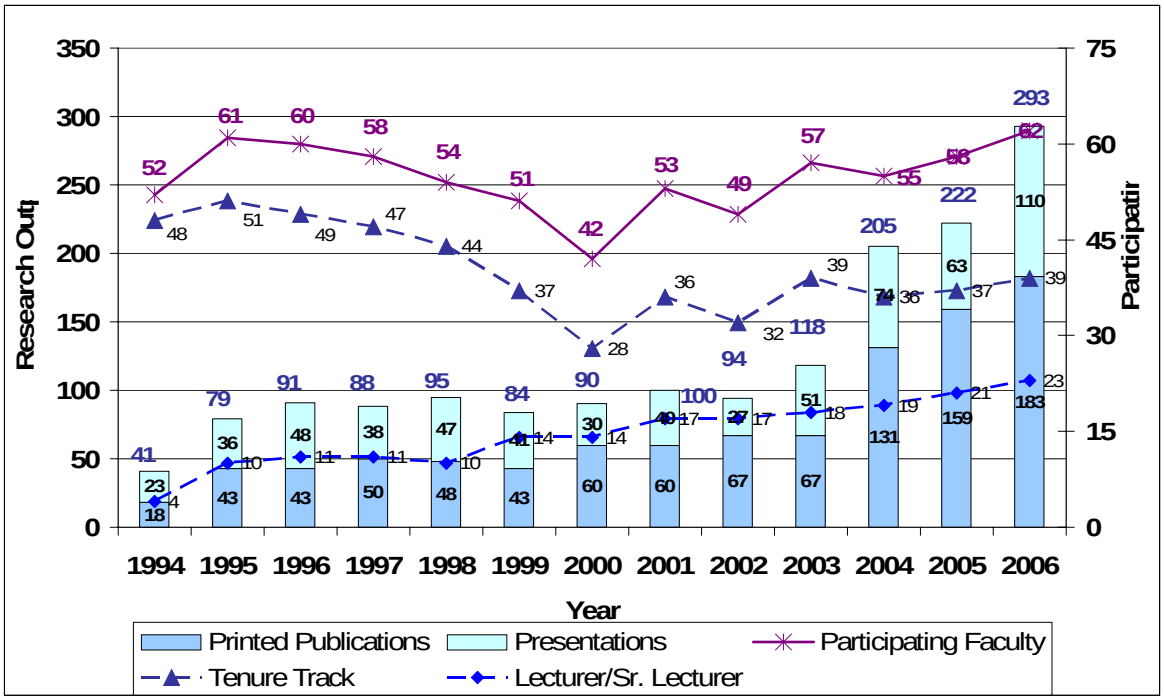
GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY
SCHOLARLY CONTRIBUTIONS
AY 2003-2006

	AY2003	AY2004	AY2005	AY2006
Journal Papers	24	44	51	27
Conference Papers	8	15	20	32
Books	1	3	4	1

Book Contributions	12	13	13	20
Technical Reports	17	26	46	57
Notes/Editorials/Others	5	30	25	46
Total Printed Output	**67**	**131**	**159**	**183**
Presentations	51	74	63	110
TOTAL OUTPUT	**118**	**205**	**222**	**293**
Participating Faculty	55	57	58	62
Output/Participating Faculty	**2.07**	**3.73**	**3.83**	**4.73**

Figure 5.42F below shows the number of full-time, faculty members expected to participate in scholarship in the Graduate School of Business and Public Policy superimposed over scholarly output over the period 1994 through 2006. As the graph illustrates, full-time faculty numbers have increased since the low in 2000. However, the significant increase in scholarly output over the study period is not the result of an increase in full time faculty; the number of full time faculty members averaged 58 over the current study period, essentially equivalent to the 58.25 average over the previous study period.

Figure 5.42F
GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY
SCHOLARLY CONTRIBUTIONS AND NUCLEUS FACULTY
AY 1994-2006



In fiscal 2006, Graduate School of Business and Public Policy faculty members received a total of $4.16 million in funding for research and other sponsored projects (including projects carried over from previous years). This funding supported over 40 projects. Of these projects, 7 were umbrella contracts secured by the Acquisition Chair for the Acquisition Research Program. Each of these umbrella contracts supported several additional faculty and student projects; a list of these projects can be found at the Acquisition Research Program's website: http://www.acquisitionresearch.org/.

In addition to this external funding, the Graduate School of Business and Public Policy distributed approximately $640 thousand in internal research funding to tenure-track faculty through the Workload Relief Funding Program. This program earmarks a particular funding line to support tenure-track faculty research. It is distributed to the four schools within NPS according to the number of tenure-track faculty in each school. The Graduate School of Business and Public Policy allocates its share of these funds as follows: all untenured tenure-track faculty are entitled to two months (44 days) of workload relief funding, if needed; all tenured tenure-track faculty equally share the remaining funds, as needed, after receiving approval for their proposed research program from the school's Faculty Research Committee. In AY2006, 18 tenured faculty members received 33 days in research funding through this process. This research funding primarily helps underwrite research projects supported by other sponsors, making NPS faculty proposals more competitive and cost-effective.

Finally, 10 newly hired tenure-track faculty were eligible for NPS Research Initiation Program (RIP) funding in AY2006. RIP funds six months of research labor for all tenure-track hires in their first two years at NPS. In addition, RIP candidates can submit proposals for non labor support, including travel, equipment, research assistance, etc., as required by their research. On average, the 10 RIP faculty members received $13,800 in non-labor funding for FY2006. The total value of the RIP funding exceeded $1.1M in FY2006 for the Graduate School of Business and Public Policy, and this funding was credited with supporting, at least in part, 21 different research projects. This funding varies by year depending on the number of eligible faculty members. RIP funding supported 7 faculty members in FY2004 and 10 faculty members in FY2005.

Detailed information for individual faculty's publications, conference presentations and research projects is presented in the Faculty Data Sheets - Volume II of this Self-Study report.

Standard 5.43 Experience and Service
Professional experience and public service with government, industry, non-profit agencies, or consulting assignments.

5.43 Experience and Service

Faculty from GSBPP have a broad range of professional experience as detailed in the Faculty Data Sheets - Volume II. From the self-reports in the Faculty Data sheets, more than 70% of the nucleus faculty members have significant practitioner experience that directly relates to their field of study. As would be expected, given their role in supporting the school's mission and programs, all (100%) of the non-tenure-track faculty have significant practitioner experience.

About 42% of the nucleus faculty report they are currently, or have recently been, engaged in public service activities. Scanning the kinds of public service activities reported by the faculty, in general, most of the reported activities outside of their regular professional or academic positions, often of a voluntary nature. An alternative way to think of public service is in terms of the jobs or careers the faculty members have pursued. Given that all faculty members at the Naval Postgraduate School are federal government employees, in a sense, all are engaged in public, governmental service by their current employment. Additionally, as noted before, a significant portion (41%) of the faculty have had prior service, or full careers, in the military, with military service representing a distinct form of public service.

About 37% of our faculty members report specific consulting activities in which they are currently, or have recently been, engaged. Participation is spread across all ranks of the nucleus faculty. Several faculty members serve as consultants to senior leaders within the Department of Defense. Most of this type of consulting is done is conjunction with research projects or as members of advisory boards, etc.

Standard 5.5 Faculty Diversity
There should be evidence that specific plans are being implemented to assure diversity of the composition of the faculty with respect to the representation of minorities, women, and persons with disabilities. Programs and plans to insure faculty diversity shall generally reflect NASPAA's Diversity Guidelines.

5.5A Diversity Plans

While GSBPP has no explicitly articulated program targeted to assure diversity in the faculty composition, we nonetheless have a serious commitment to achieving and maintaining a high level of faculty diversity. Although we have set no quotas or numerical goals, we actively strive to provide a supportive and positive atmosphere where diversity among the faculty and staff can thrive and grow. We have a shared philosophy among the School's leadership that guides our efforts in the area of diversity management. This philosophy requires and involves equitable recognition and reward for one's contributions, openness to individual difficulties (with students, programs, etc.) and sensitivity to

challenges that might affect one's feeling of effectiveness in their jobs and professional lives. We believe this is a continuing accomplishment in the School. We have no "second class citizens". Faculty members are recognized, treated and valued as faculty; not as "Adjunct" or "Military" or "Tenure Track"; not as "junior" or "senior"; and, certainly, not as "minorities", "women" or "handicapped".

In terms of how our faculty recruitment plans and efforts support faculty diversity, we often find that the uniqueness of our academic mission and our focus on defense-relevance works against us. In many instances, the types of experience and military-relevant perspective we seek in a faculty member dramatically restrict the total pool of applicants, and most certainly the possibility of finding a well-qualified diversity hire. For example, we have a frequent recruiting need in the Acquisition area. The necessity of a relevant experiential background in the area often means that plausible candidates will come principally from retired military officers or senior defense civilian employees. There are few minorities, women, and almost no handicapped candidates in these fields. While there has been an increasing number of women and minorities among the officer corps of the military, their percentages do not mirror the general public, and most of those that have reached retirement age are quickly recruited into industry at salaries well above our salary scales. There are somewhat analogous limitations when seeking faculty candidates in the Transportation and Logistics area, the Manpower area and the Defense Financial Management area. Nonetheless, we encourage all 'diversity candidates' in these specialized fields, using our current faculty members' contacts and taking advantage of the fact that the communities from which qualified candidates derive are small and usually well known to our senior faculty in these fields. The result is that despite the difficulties outlined, we have had only modest success at hiring women and minority faculty in these fields.

While we have difficulties in those fields with small candidate pools, we can and have been successful in hiring and retaining women in particular, and minorities to a lesser extent, in areas where the related candidate pool is large and mature enough to provide many competitive applicants. For example, we have had no serious difficulty in attracting 'diversity candidates' in areas such as Organization and Management, Managerial Communications and Accounting, where we've hired well qualified women and minority faculty colleagues.

In terms of recent changes in faculty diversity, Table 5.5A is a list of all new nucleus faculty hires during the past six years (2002-2007), indicating their diversity status.

Table 5.5A

GSBPP NUCLEUS FACULTY HIRES 2002 - 2007

Year of Hire	Academic Appointment	Status	NPS Start Date	Race/Ethnicity	Gender
2002	Assistant Professor	Resigned	10/7/2002	White	Female
2002	Assistant Professor	Untenured	7/29/2002	White	Female
2002	Professor	Untenured	7/1/2002	White	Male
2002	Assistant Professor	Resigned	2/11/2002	White	Female
2002	Assistant Professor	Resigned	4/8/2002	White	Female
2002	Lecturer	Resigned	9/1/2002	White	Female
2002	Lecturer	Retired	3/4/2002	White	Male
2002	Lecturer	Non-TT	2/11/2002	White	Female
2003	Assistant Professor	Untenured	8/11/2003	White	Male
2003	Assistant Professor	Untenured	8/25/2003	White	Female
2003	Assistant Professor	Resigned	6/16/2003	Black	Female
2003	Assistant Professor	Resigned	1/13/2003	White	Female
2003	Professor	Deceased	6/2/2003	White	Male
2004	Assistant Professor	Untenured	6/28/2004	Asian/Pacific Islander	Female
2004	Associate Professor	Untenured	6/28/2004	White	Male
2004	Associate Professor	Untenured	10/18/2004	White	Male
2004	Assistant Professor	Untenured	6/1/2004	White	Female
2004	Assistant Professor	Untenured	9/7/2004	White	Female
2004	Assistant Professor	Untenured	10/4/2004	White	Female
2004	Assistant Professor	Untenured	9/20/2004	Asian	Female
2004	Professor	Tenured	6/28/2004	Asian/Pacific Islander	Male
2004	Assistant Professor	Resigned	11/1/2004	White	Male
2004	Lecturer	Non-TT	10/12/2004	White	Male
2004	Lecturer	Non-TT	7/12/2004	Hispanic	Male
2004	Lecturer	Non-TT	5/3/2004	White	Male
2005	Assistant Professor	Untenured	6/27/2005	White	Female
2005	Senior Lecturer	Resigned	10/3/2005	White	Male
2006	Associate Professor	Untenured	9/20/2006	White	Male
2006	Assistant Professor	Untenured	9/20/2006	White	Male
2006	Assistant Professor	Untenured	9/20/2006	White	Female
2007	Lecturer	Non-TT	9/16/2006	White	Female
2007	Senior Lecturer	Non-TT	6/25/2007	White	Male
2007	Assistant Professor	Untenured	To start 9/07	Asian/Pacific Islander	Male
2007	Associate Professor	Untenured	To start 9/07	White	Male

As indicated in the table, GSBPP has been growing significantly during recent years, with a total of 34 nucleus faculty members hired since 2002. About 74% of the new faculty members have been hired as tenure-track faculty. As a result of this, the tenure-track proportion of the nucleus faculty has increased in recent years. Concerning diversity,

only 6 of the new faculty members (18%) are from racial/ethnic minorities, but 17, half, are women. Considering both race/ethnicity and gender, 59 percent (20/34) of the newly hired nucleus faculty members are diversity faculty.

The School is aware of the need to retain women and minority faculty members once recruited. The table also shows that eight of the 34 faculty members hired in the last six years have resigned to accept other job opportunities; five of the eight accepted university positions; three accepted industry positions. Six of the eight lost were diversity faculty members. We are personally and organizationally conscious of the importance and sensitivities of each faculty member and encourage behavior which respects that. Efforts directed toward retention of faculty apply to all faculty members and are based on faculty members' individual contributions.

5.5B Faculty Diversity Data

Table 5.5B provides data on the current diversity of the nucleus faculty. Nineteen faculty members are listed, representing 31% of the 61 total current nucleus faculty members.

Table 5.5B

NUCLEUS FACULTY DIVERSITY 2007

Faculty	Gender	Race/Ethnicity	Rank	Tenure Status
A	Male	Asian/Pacific Islander	Professor	Tenured
B	Male	Hispanic	Professor	Tenured
C	Female	White	Associate Professor	Tenured
D	Male	Asian/Pacific Islander	Associate Professor	Tenured
E	Female	White	Associate Professor	Tenured
F	Female	White	Assistant Professor	Untenured
G	Female	Asian/Pacific Islander	Assistant Professor	Untenured
H	Female	White	Assistant Professor	Untenured
I	Female	White	Assistant Professor	Untenured
J	Female	White	Assistant Professor	Untenured
K	Female	White	Assistant Professor	Untenured
M	Female	Asian	Assistant Professor	Untenured
N	Female	White	Assistant Professor	Untenured
P	Male	Asian/Pacific Islander	Assistant Professor	Untenured
Q	Female	White	Senior Lecturer	Non-TTrack
R	Male	Black	Senior Lecturer	Non-TTrack
S	Female	White	Lecturer	Non-TTrack
u	Female	White	Lecturer	Non-TTrack
v	Male	Hispanic	Lecturer	Non-TTrack

5.5C Faculty Searches

Because of the curricular and discipline diversity in the School, major responsibility for the development, implementation and monitoring of our affirmative action effort remains vested in the Dean, with the assistance of the Associate Deans and the five faculty members acting as Area Chairs. Faculty recruitment efforts are largely carried out by the faculty group involved, with the designated Area Chair as the lead person. The Senior Associate Dean assists the School's leadership team in determining hiring needs, monitoring the recruiting process and candidate hiring recommendations.

The Naval Postgraduate School's administration is actively supportive of the EEO/Affirmative Action efforts of all schools and departments. When GSBPP begins faculty recruitment, the Area Chairs who will lead each search coordinate with the Dean and Senior Associate Dean to plan search activities. EEO factors are discussed so that all advertisements and notices bear the proper invitation for attracting a diverse pool of applicants. When applications are received we ensure that women, minorities, or identifiable handicapped individuals are objectively considered and we make a special effort to invite a diverse range of candidates for on-campus interviews.

For any particular faculty position, the number of candidates invited for on-campus interviews will vary, depending on the size and strength of the candidate pool. After on-campus interviews of the set of candidates deemed most qualified, they are compared with one another so that we may judge the best qualified for the appropriate position. Since we recognize that "best" is a relative word, and since criteria are multiple, we examine all candidates to be sure we are not overlooking opportunities to add diversity to our faculty. If in our opinion other factors are approximately equal, we enhance diversity. Additionally, a report is compiled for each search that outlines the pool of applicants in terms of diversity characteristics and that report is included with the hiring requests forwarded to the Dean and Provost for action. (Admittedly, when screening possible candidates based on resumes, it may be difficult to identify all candidates who are members of a minority group, or handicapped.) Table 5.5C summarizes applicant data for faculty searches during the past five years.

Table 5.5.C

SEARCH HISTORY 2002 - 2007

Year of Search	Position Type	Position Area	Ethnicity of Hired	Gender of Hired	Total Apps/Intv	Women Apps/Intv	Minority Apps/Intv
2002	TTrack	Org. Behavior	White	Female	76/5	19/2	n/a
2002	TTrack	Acquisiton	White	Female	3/1	1/1	n/a
2002	TTrack	Professor	White	Male	?/3	?/0	n/a
2002	TTrack	Accounting	White	Female	30/2	6/2	n/a
2002	TTrack	Accounting	White	Female	30/2	6/2	n/a
2002	Non-TT	Acquisiton	White	Female	n/a	n/a	n/a
2002	Non-TT	Acquisiton	White	Male	2/2	1/1	0/0
2002	Non-TT	Marketing	White	Female	1/1	1/1	0/0
2003	TTrack	Strategy	White	Male	49/2	9/1	n/a
2003	TTrack	Economics	White	Female	56/10	13/5	1/1
2003	TTrack	Accounting	Black	Female	12/1	2/1	n/a
2003	TTrack	Operation Mgmt	White	Female	n/a	n/a	n/a
2003	TTrack	Accounting	White	Male	1/1	0/0	0/0
2004	TTrack	Operation Mgmt	Asian	Female	1/1	1/1	1/1
2004	TTrack	Economics	White	Male	n/a	n/a	n/a
2004	TTrack	Operation Mgmt	White	Male	140/1	35/0	n/a
2004	TTrack	Org. Behavior	White	Female	74/2	30/2	n/a
2004	TTrack	Finance	White	Female	1/1	1/1	0/0
2004	TTrack	Communications	White	Female	15/1	9/1	n/a
2004	TTrack	Economics	Asian	Female	24/1	7/1	?/1
2004	TTrack	Operation Mgmt	Asian	Male	140/3	35/1	n/a
2004	TTrack	Federal Budgeting	White	Male	n/a	n/a	n/a
2004	Non-TT	Manpower	White	Male	1/1	0/0	0/0
2004	Non-TT	Acquisiton	Hispanic	Male	1/1	0/0	1/1
2004	Non-TT	Acquisiton	White	Male	3/1	0/0	0/0
2005	TTrack	Accounting	White	Female	13/3	6/3	1/0
2005	Non-TT	Accounting	White	Male	11/6	3/1	3/1
2006	TTrack	Management	White	Male	74/3	30/2	n/a
2006	TTrack	Org. Behavior	White	Male	76/4	30/2	n/a
2006	TTrack	Operation Mgmt	White	Female	37/2	2/1	n/a
2007	Non-TT	Acquisiton	White	Female	2/2	1/1	0/0
2007	Non-TT	Accounting	White	Male	15/3	2/1	?/1
2007	TTrack	Accounting/Finc	Asian	Male	15/3	2/1	?/1
2007	TTrack	Economics	White	Male	95/3	22/2	n/a

STANDARD 6.0 -- ADMISSION OF STUDENTS

Standard 6.1 Admission Goals and Standards
Admission goals, policy and standards, including academic prerequisites, should be clearly and publicly stated, specifying any differences for pre-service or other categories of students.

6.1A Mission

The mandate for NPS is clearly stated by Congress. The purpose of the Naval Postgraduate School is to serve the Nation by educating military officers and DoD civilians in defense-focused business and public policy, by conducting scholarly research in defense management and public policy and by providing intellectual resources for leaders and organizations concerned with national defense management practice and policies.

With a focus on preparing military officers and government civilians for professional positions, NPS and the Graduate School of Business and Public Policy in conjunction with sponsoring agencies determine admission standards and processes.

6.1B Admission Processes

Admissions standards and processes reflect two dimensions: Academic and Professional. GSBPP/NPS set academic standards for admissions. The Navy, and other sponsoring agencies, select students -- who have met the academic standards -- for admission based on professional and career considerations. Thus admission to GSBPP/NPS is accomplished through the joint efforts of the School and students' sponsors.

During the earlier years of their career, all Navy officers have are initially screened for graduate study, based on their undergraduate academic performance (officer transcripts may be reviewed by the NPS Admissions Office). In addition to the academic admissions standards, U.S. Navy officers are reviewed for selection to graduate school based on their professional performance and promotion potential. Selection boards and Senior Officer Reviews occur annually to select eligible officers. The selection board evaluates both the officer's professional performance in the Navy and his/her prior academic record. Officers selected for graduate study are then offered the opportunity to attend a specific graduate curriculum. No one is ordered to graduate school against his/her will. Similar selection procedures are employed by the other U.S. services and by federal agencies wishing to nominate civilian employees for graduate study.

The Graduate School of Business and Public Policy does not select individual Navy students. However, in the case of prospective students from other services, including U.S. and allied nations, the appropriate Academic Associate reviews all individual transcripts and offers recommendations to the director of admissions about acceptance or rejection. The Academic Associate's recommendation is normally the determining factor in the admission decision.

6.1C Representation

As indicated above, selection of students originates with the sponsoring military service or agency, not with NPS. Given the mission and admissions process for GSBPP, diversity among GSBPP students, and within the MBA program, will be significantly influenced by diversity policies within the larger Navy, and the population of officers from which students will come.

US Navy Diversity Policy: Diversity is recognized as a strategic goal of the Navy and expressed as Navy policy:

Diversity is a strategic imperative for the United States Navy:

We defend the greatest nation in the world. It is a nation that welcomes, indeed encourages, the active participation of every citizen regardless of race, gender, creed or color - - a democracy founded on the promise of opportunity for all. It is also a nation whose demographic makeup continually changes, reflecting the influx of new immigrants and the growth of minority populations. The Navy must change with it. To the degree we truly represent our democracy, we are a stronger, more relevant armed force.

Diversity is critical to mission accomplishment:

Everyone in our Navy contributes to mission success, and everyone brings to that collective effort unique capabilities and individual talent. How we harness those capabilities and foster that talent bears considerable effect on our ability to successfully accomplish the mission. Like an organization in time of change, we thrive on the infusion of new ideas and the diversity of thought. This is particularly true today, when understanding the mores, customs, and ideals of diverse cultures, as well as the perspectives of other people, remains critical to winning the long war.

Diversity is a leadership issue, and everyone is a leader:

We will promote and engender a culture that embraces our diversity. Through our communications, education, policies, programs, and conduct, each of us will actively foster work environments where people are valued, respected, and provided the opportunity to reach their full personal and professional potential. We will recruit, develop, educate, and retain leaders from and for all parts of our Navy and nation.

We defend the greatest nation in the world. The strength of our diversity directly and irrefutably helps us do so. The Navy will stay committed to improving that strength. (US Navy Diversity Policy, Chief of Naval Operations)

Student Demographics: As indicated above, selection of individual students for admission originates with the sponsoring military service or agency, not with NPS. Hence GSBPP does not have direct influence on the diversity characteristics of students. Student diversity will depend significantly on the diversity characteristics of the wider Navy and Defense community.

Presented here are data on the diversity demographics of GSBPP's resident student population, as compared with the university (NPS) and the wider Navy officer Corp. Broadly speaking, GSBPP student characteristics with respect to Race/Ethnicity and to Gender are reflective of the university and defense community which it serves.

Table 6.1C1
RACE / ETHNICITY
Comparison of GSBPP / NPS / Navy Officer Corps

	GSBPP	NPS	Navy
Caucasian	73%	78%	81%
African American	12%	7%	8%
Hispanic	7%	6%	6%
Asian	8%	7%	4%
Other	<1%	<1%	1%

Table 6.1C2
GENDER
Comparison of GSBPP / NPS / Navy Officer Corps

	GSBPP	NPS	Navy
Male	88%	89%	85%
Female	12%	11%	15%

One way in which the student population in GSBPP will, by design, differ from the officer population in the wider U.S. defense community is through the recruitment and enrollment of international students. Through an admissions and selection process roughly analogous to that used for U.S. students, allied nations may select and send officer students to NPS. Through various programs, NPS actively seeks enrollment of international officers, and values the range of backgrounds and experiences they bring to the academic experience. Student representation for specific countries varies over time, as does the proportion of GSBPP students from other countries. Currently GSBPP enrolls students from 13 different nations, with international students comprising about 15% of the student population. The MBA Program is approximately 12% international students.

Table 6.1C3 CITIZENSHIP Comparison of MBA / GSBPP / NPS / Navy Officer Corps				
	MBA	**GSBPP**	**NPS**	**Navy**
U.S.	88%	85%	84%	~100%
International	12%	15%	16%	

No military students with significant physical handicaps have been admitted; the physically or mentally handicapped are not considered fully qualified to serve on active duty in the military services and therefore are not assessed into the force. Nothing precludes an academically qualified handicapped DoD civilian employee from attending.

Officers from foreign military services who enter the Graduate School of Business and Public Policy are expected to meet the same admission requirements as U.S. students. They must also demonstrate proficiency in English before enrolling

6.1D Admission Process for Beginning Part-time Graduate Students

A very small number of the officers and civilians assigned to the Naval Postgraduate School staff have taken courses on a part-time basis in a program leading to a master's degree. These persons must meet the same admission qualifications as full-time students. In addition, their enrollment must be approved by their immediate supervisor.

Standard 6.2 Baccalaureate Requirements
Admission shall normally be limited to applicants with a baccalaureate degree from a regionally accredited institution and appropriately evaluated applicants from non-US universities.

6.2 Baccalaureate Requirements

Admission to the Naval Postgraduate School is normally limited to military officers and other DoD employees with baccalaureate degrees.

Special Conditions: The Academic Council may approve the admission of students who do not hold baccalaureate degrees. Such applicants must have a minimum of 120 quarter hours of acceptable college credit. At least 100 hours must have been completed in accredited institutions and the applicant must have a B average for this work. No more than 20 semester hours of credit may be allowed for study in non-degree granting service schools. In addition, the applicant must have a score on the Graduate Record Examination high enough to indicate probable success in graduate study.

Standard 6.3 Admission Factors
Admission shall be limited to applicants that show good potential for success in professional graduate study and public service. Admission standards shall include several of the following factors about each applicant (a) performance on the aptitude part of the GRE or the GMAT, or equivalent tests; (b) undergraduate grade point average and trend of grades; (c) rank in graduating class; and (d) biographical and career interest data and essays; (e) evaluation of the quality of professional experience.

6.3A Admission Factors

Admission standards are determined by the Graduate School of Business and Public Policy based on discussions and agreement with school faculty, Deans and the Provost. In particular, the Dean, Senior Associate Dean, and the Academic Associates are responsible for the academic standards and programs offered within the school. Academic standards for all programs must be approved by NPS's Academic Council.

All military officers who are enrolled at NPS have been assigned an Academic Profile Code (APC) by the registrar's office. This code is a three-digit code that summarizes an officer's prior college performance. Each curriculum has a specified APC. The code is 345 for all curricula in the MBA program, which means a minimum of a baccalaureate degree with a 2.20 grade-point average, two or more pre-calculus courses with a B or better and no requirement for science courses. College algebra or trigonometry is considered to be the minimum mathematical preparation. In addition to meeting the established academic standards, students are screened by their sponsoring agencies. Selection by sponsoring agencies is based on outstanding professional performance and promotion potential

A summary of the NPS registrar's records which are presented in Table 6.3A show that 83% of the students enrolled the MBA program in AY2007 had GPAs of 2.60 or better.

Table 6.3A
UNDERGRADUATE GPAs FOR MBA STUDENTS
Enrolled 2007

NPS Academic Code 1st Digit	GPA	Number of Enrolled Students	Percent of Enrolled Students
0	3.60-4.00	36	14%
1	3.20-3.59	72	27%
2	2.60-3.19	109	41%
3	2.20-2.59	39	15%
4	1.90-2.19	6	2%
		263	

6.3B Admissions Record

As explained above, officers are screened for NPS each year. Many are considered to be unqualified and are quickly rejected. Hence, the total number of students screened is not a meaningful surrogate for the number of applications.

Officers selected for graduate study are given military orders to the School (in effect, admitted). Consequently, the numbers admitted and matriculated are equal. No data are available on the number of officers who decline the opportunity of graduate study. During AY 2007, a total of 337 officers entered degree programs in GSBPP; 124 of them into the MBA program. See Table 6.3B for the number of students entering the various programs in the Graduate School of Business and Public Policy AY2003-2007. The students in the MBA program are at the top of the table.

Table 6.3B
NUMBER OF STUDENTS ENTERING
GSBPP DEGREE PROGRAMS
AY 2003-2007

	2003	2004	2005	2006	2007
MBA Program					
Logistics Management	30	25	36	39	37
Acquisition Management	43	58	56	77	35
Financial Management	43	68	72	72	42
Defense Management	26	8	7	9	10
Information Management	1	1	3	0	0
TOTAL MBA	**143**	**160**	**174**	**202**	**124**
MSM Program					
Manpower Analysis	35	38	36	40	25
Defense Analysis					4
TOTAL MSM	**35**	**38**	**36**	**40**	**29**
Other Degree Programs					
EMBA	17	81	104	105	98
DL MS Degree Programs	17	52	42	0	84
MEM				5	2
TOTAL Other	**34**	**133**	**146**	**110**	**184**
TOTAL GSBPP	**212**	**331**	**356**	**352**	**337**

6.3C Probationary Students Assessments

Generally, no students are admitted to GSBPP on a "probationary" status. All admitted students are required to satisfy minimum admissions standards described above.

6.3D Enrollment/Size of Programs

For the most part, the number of students selected for the GSBPP resident curricula, and thus the MBA program, is determined by the military services. Each year a board convenes to establish a quota for students who will be sent for fully-funded education at the Naval Postgraduate School. Navy quotas are based on a complex system designed to determine the number of professionals requiring advanced education in the various subspecialties.

Table 6.3D1 displays the trends in student enrollment in the various GSBPP programs, and in the specific curricula in the resident MBA program. Due to the increased emphases on graduate education by the leadership of the U.S. military services over the past several years, overall enrollment in GSBPP programs has grown from 340 to 612, an 80% increase, during the past five years. The resident enrollment at NPS has increased by about 55% during that same period. Enrollment in the MBA Program shows growth up through 2006, but a decline in 2007, reflecting a pullback in the numbers of U.S. Air Force students. GSBPP continues to enroll more than 20% of the resident students at NPS.

Table 6.3D1
GSBPP STUDENTS ENROLLED -- BY PROGRAM
AY 2003-2007

	2003	2004	2005	2006	2007
MBA Program					
Logistics Management	57	57	58	63	68
Acquisition Management	75	82	97	118	98
Financial Management	71	95	113	128	73
Defense Management	30	12	8	9	24
Information Management	1	2	3	2	0
TOTAL MBA	**234**	**248**	**279**	**320**	**263**
MSM Program					
Manpower Analysis	55	70	73	71	60
Defense Analysis					4
TOTAL MSM	**55**	**70**	**73**	**71**	**64**
Other Degree Programs					

EMBA	39	102	187	192	199
DL MS Degree Programs	39	53	78	25	84
MEM				5	2
TOTAL Other	**78**	**155**	**265**	**222**	**285**
TOTAL GSBPP	**367**	**473**	**617**	**613**	**612**

Table 6.3D2 provides a breakdown of students in the combined resident MBA and MSM programs by their military service, and points to the source of the growth in the resident program. Overall, the number of students from most branches of the U.S. military services has remained relatively unchanged, with the notable exception of the U.S. Air Force. Air Force students have grown from a nominal amount to now represent, after the Navy, the second largest service in GSBPP. In 2002, the graduate institutions of the Navy and the Air Force, the Naval Postgraduate School and the Air Force Institute of Technology, formed a partnership to better serve the graduate education needs of their officer corps. As a result, NPS and GSBPP have seen a significant increase in Air Force officer enrollments. In GSBPP, the majority of this enrollment increase has been in the Acquisition Management and the Financial Management curricular areas. Starting in 2007, however, The Air Force has reduced its student input, with the resulting effect on total enrollment experienced in GSBPP.

Table 6.3D2
GSBPP RESIDENTS STUDENTS – BY SERVICE
JULY: AY 2003-2007

SERVICE	**2003**	**2004**	**2005**	**2006**	**2007**
US Navy	132	151	161	149	128
US Army	14	18	14	21	25
US Air Force	17	40	76	114	68
US Marine Corp	66	66	62	68	57
US Other	2	3	4	2	1
International	58	40	36	42	48
TOTAL MBA/MSM	**289**	**318**	**352**	**396**	**327**

STANDARD 7.0 -- STUDENT SERVICES

Standard 7.1 Advisement and Appraisal
Strong and continuous program advisement, career guidance, and progress appraisal shall be available for all students from the point of admission through graduation.

7.1A Advising System

Academic counseling is the responsibility of the Academic Associates, Program Officers, and the individual faculty members. The counseling program is designed to encourage students to seek assistance when advice is desired or the first indications of academic difficulties develop.

The Academic Associate (AA) is a Graduate School of Business and Public Policy faculty member who is assigned to a particular specialization curriculum, within the MBA Program. The AA is responsible for maintaining academic standards for the program. The Program Officer and staff support the school's mission and objectives by providing administrative support to accomplish Navy needs and academic requirements.

The Academic Associate reviews the records of all students assigned to the curricula under their purview and, in consultation with each student and based on academic background, develops a program of study within the framework of the established standard curricula. Student academic progress is monitored via the AA/Program Office Team and program changes or inter-curricular transfer made, when deemed necessary.

Both members of this team are responsible for the overall quality of a student's program. It is incumbent upon both members of the team to provide counseling for all students in the curricula under their purview. The Academic Associate will hold primary responsibility for the academic counseling of the student.

The Program Officer performs requisite administrative duties pertaining to the officer students, evaluates their military-related performance and counsels them on pertinent military matters.

Career guidance is not a need of the student at NPS since all students already have well-established careers.

7.1B Financial Assistance

None is needed since all students are on full salary.

7.1C Attrition

Data for AY 2006 was examined to determine the percentage of students who completed their degrees and those who did not. Of the 142 students eligible to graduate in AY 2006, all but one has graduated. The who did not graduate is female. Minority status data were not available. This student completed her coursework but did not complete her MBA project.

In general attrition in the MBA program is low, with efforts made to assist struggling students. When non-graduation does occur, the most common reason is non-completion of the project/ thesis requirement. According to NPS policy, students have up to three years to complete their project/thesis after leaving the school. If a student does not complete their project/thesis, no degree is awarded.

Standard 7.2 Placement Service
The program and/or the institution shall provide an adequate placement service oriented to public affairs and administration.

7.2A Number of Graduates

Table 7.2A provides data regarding the number of graduates per year in all GSBPP degree programs. Data for the MBA Program curricula are at the top. As mentioned earlier, the resident MBA program is six or seven quarters in length or 18-21 months long.

Table 7.2A
NUMBER OF GRADUATES – GSBPP DEGREE PROGRAMS
AY 2003-2007

	2003	2004	2005	2006	2007*
MBA Program					
Logistics Management	20	27	37	28	33
Acquisition Management	34	45	41	63	52
Financial Management	48	53	50	39	74
Defense Management	8	25	10	9	4
Information Management	1	0	1	2	0
TOTAL MBA	**111**	**150**	**139**	**141**	**163**
MSM Program					
Manpower Analysis	19	19	35	33	28
Defense Analysis					
TOTAL MSM	**19**	**19**	**35**	**33**	**28**

Other Degree Programs					
EMBA		29	32	92	41
DL MS Degree Programs	36	34	24	37	26
MEM					4
TOTAL Other	**36**	**63**	**56**	**129**	**71**
TOTAL GSBPP	**166**	**232**	**230**	**303**	**262**
***Partial year data.**					

7.2B Follow-up of Graduates

All Graduate School of Business and Public Policy graduates are employed by the U.S. government or by foreign governments and return to government service upon graduation. U.S. Navy officers make a commitment to remain on active duty after graduation for three years for their first year of graduate study and for one additional year for each subsequent year of graduate work. As a practical matter, most military officer graduates will remain on active duty until retirement (20 years after their date of first entry into the service). Frequent informal contacts are maintained between individual graduates and faculty members.

STANDARD 8.0 -- SUPPORT SERVICES AND FACILITIES

Standard 8.1 Budget
The program shall have the financial resources sufficient to support its stated objectives.

8.1A GSBPP Resources and Budget

The budget for the Graduate School of Business and Public Policy is composed of two main types of funds: "Mission" or "Direct" funds and "Reimbursable" funds. Mission/Direct funds are funds allocated directly from the Naval Postgraduate School from the annual budget it receives from the Navy. Reimbursable funds are received from organizations or agencies outside of NPS, by agreement, and in exchange for specified services (e.g., research or education programs) provided to those external organizations. In general, GSBPP activities will fall in one of four broad categories:

- Mission-Funded Education
- Mission-Funded Research
- Reimbursable Education
- Reimbursable Research

Mission Funded Budget: The mission funded budget is the main budget for day-to-day school operations. This includes instruction, thesis or project advising, faculty and staff development, travel and departmental management and administrative support of the School. As currently structured, the faculty workload plan, which includes consideration for instruction and project/thesis advising, is developed by the Senior Associate Dean, using input from the faculty. This forms the basis for the most significant portion of the GSBPP budget. It is reviewed by the School Dean prior to the start of the new fiscal year of October 1. Once approved by the Dean, it is submitted to the Office of Academic Planning for input into the overall GSBPP budget. The remainder of the mission funded budget is allocated to the School for the fiscal year that is reflective of GSBPP's 'fair share' of the Navy's overall allocation to the entire university, based on number of students served, faculty size and infrastructure support requirements. In essence, the total Naval Postgraduate School's mission allocation is divided among the four academic schools and the supporting structure, based on submitted needs, the constraint of the allocation received from the Navy, and the Deans' and Provost's determined priorities. In addition to faculty and staff salaries, categories included in the mission funded budget are:

- Supplies and materials, including computer peripherals and software, furniture
- Travel and honoraria
- Training and staff development programs
- Instructional laboratory equipment maintenance
- Faculty instructional & organizational development
- Service contracts

Mission funded budget dollars are made available to the School from two main sources: direct funds from the Naval Postgraduate School's overall mission funded account and indirect funds, collected by NPS on all reimbursable activities and allocated to the university's operating units through the NPS Sponsored Programs Office. Direct funds are related to the size of the nucleus faculty and the volume of instructional activities in the resident degree programs. Indirect funds are related to the size and nature of the School's reimbursable research programs or reimbursable education programs.

Mission-Funded Research Budget: NPS provides two categories of mission-funded research funds for use by each school annually. One category of funds supports research projects of new tenure-track faculty research and is known as the Research Initiation Program (RIP). The other category supports research work by tenure track and tenured faculty not on RIP and is known as Workload Relief (WR).

RIP research money is provided for new professors with less than two years of service. These professors must prepare formal research proposals and in turn receive two quarters of salary support annually as well as additional funds to purchase equipment, software, supplies and project-related travel. Proposals for RIP are submitted to the Dean of Research with the GSBPP Dean's endorsement 30 days prior to the quarter starting research.

Workload Relief funding is pro-rated across the campus based on numbers of tenured and tenure-track (non-RIP eligible) faculty in each school. Internal to the Business School, the untenured tenure-track faculty members are given priority and they receive two months of WR funding. Tenured faculty may then request up to two months of WR funding, as needed. All faculty members requesting such funding must submit a brief proposal describing their research and the research products expected from their work. The Faculty Research Committee reviews the research summaries and proposals for the tenured faculty and allocates the available WR funds based on both past research productivity and future promise.

Reimbursable Budget: The Reimbursable Budget is determined by the efforts that the School and faculty make to obtain funding from either Navy or non-Navy sponsors. Reimbursable funds may be for research activities (reimbursable research) or instruction programs (reimbursable education). Proposals for this type of funds may be submitted at any time during the fiscal year. The funds received from these sources may be used from a one-year period up to an indefinite period of time, depending on the nature of the agreement and financial arrangement with the sponsor, but funds with an expiration date within the current fiscal year comprise the vast majority of reimbursable funds.

For **reimbursable research**, the sponsor sets the dollar amount based upon the scope of the work and funding constraints. Reimbursable money may be used to fund any expenses necessary to complete the research project. These expenses may include support for students while conducting their theses/projects in the form of travel, equipment or software. Reimbursable research, while variable each year depending on research projects that may be

arranged, provides a substantial portion of the Business School's total support (see Table 8.1A).

For **reimbursable education**, GSBPP establishes a price necessary to recover the costs of program delivery, and announces the availability of programs and the opportunity for sponsorship and student enrollment. Different arrangements are possible whereby potential sponsors may "purchase" full degree programs, or individual courses, or "seats" within courses within degree programs (tuition). The distance education programs in GSBPP are generally reimbursably funded. These include the Master of Science in Program Management (MSPM), Master of Science in Contract Management (MSCM) and Advanced Acquisition Program (AAP). The distance learning Executive Master of Business administration program (EMBA) is something of a hybrid between a mission-funded program and a reimbursable program. Technically, the EMBA funds are mission/direct funds in that they are received as part of NPS's annual budget and then allocated down to GSBPP. But the annual funds are specifically set aside for the EMBA program, and provided by a sponsor for the intended delivery of a specified level of the program, and thus are operationally more like reimbursable funds.

Overall Budget for GSBPP: The following table summarizes the School's operating budget for the past four years.

Table 8.1A
GSBPP BUDGET
(in $1000)

	FY 04	FY 05	FY 06	FY 07*
Mission Operations				
Faculty Salaries	**4,519**	**5,800**	**5,698**	**6,052**
Support Staff Salaries	**663**	**824**	**946**	**1,117**
Non-Labor	**263**	**264**	**337**	**365**
	5,445	**6,888**	**6,981**	**7,534**
Mission-Funded Research				
Faculty Salaries	**1,148**	**1,244**	**1,370**	**1,245**
Non-Labor	**99**	**148**	**117**	**77**
	1,247	**1,392**	**1,487**	**1,322**
Total Mission Funding	**6,692**	**8,280**	**8,468**	**8,856**
EMBA Education				
Faculty Salaries	1,110	1,257	1,284	1,343
Support Staff Salaries	81	310	259	218
Non-Labor	307	196	174	226
	1,498	1,763	1,717	1,787
Reimbursable Education				
Faculty Salaries	1,042	1,213	639	799
Support Staff Salaries	119	85	60	50
Non-Labor	442	320	207	144
	1,603	1,618	906	993

Reimbursable Research				
Faculty Salaries	1,288	1,159	1,435	2,339
Support Staff Salaries	104	203	237	317
Non-Labor	1,511	1,279	1,855	1,279
	2,903	2,641	3,527	3,935
GSBPP TOTALS				
Faculty Salaries	**9,107**	**10,673**	**10,426**	**10,981**
Staff Salaries	**967**	**1,422**	**1,502**	**1,652**
Non-Labor	**2,622**	**2,207**	**2,690**	**1,947**
	12,696	**14,302**	**14,618**	**14,580**
# Tenure Track Faculty	36	37	38	38
FTE Faculty	60	69	70	71

*For FY 07, Reimbursable Education and Research amounts are the current Authorized amounts. Mission Operations, EMBA and Direct Research amounts are year-to-date obligations plus projected expenses for the remainder of the fiscal year.

MBA Program Budget: GSBPP does not plan, budget, or account for funds separately for the "MBA Program". GSBPP does, however, plan, budget and account separately for the "resident" instruction program. The resident instruction program consists of 1) MBA program courses and 2) MSM program courses (and a few service courses provided to other NPS degree programs outside of GSBPP). The delivery of the resident program is highly integrated in that the large majority of courses are attended by both MBA and MSM students and thus exist to support both programs. The budget number most directly applicable to the resident program is the Mission Operations budget, provided in the top panel of Table 8.1A ($7,534K in 2007). This is the funding allocated to GSBPP annually by NPS to provide for delivery of resident instruction -- and the student advising, administrative and support activities associated with that resident instruction. This then represents one measure of the budget available for the MBA Program. **MBA Program Budget 1 = $7,534K.**

If support for the research activities of the faculty is considered to be support for the instruction program, then Mission-Funded Research ($1,322K in 2007) should additionally be considered as part of the budget for the resident instruction programs. There is some sense to this perspective since the resources available for mission-funded research are, in some respects, amounts that remain available after having fully provided for the successful delivery of the resident instruction program. From this perspective, a second measure of the budget available for the MBA Program would include Mission Research. **MBA Program Budget 2 =** $7,534K + $ 1,322K **= $8,856K.**

It is possible to divide the Mission Operation total into a smaller amount associated "only" with the MBA Program, but this can be done only through use of a somewhat arbitrary proration. During 2007, approximately 88% of the courses delivered within the resident instruction program were attended by students who were enrolled in the MBA Program. Applying this percentage to the Mission Operations budget results in

a third measure of the budget available for the MBA Program. **MBA Program Budget 3 =** $7,534K x 88% **= $6,630K.**

8.1B Budget Sufficiency

Mission Budget: Overall the funding levels have been adequate to support the School's mission and objectives. As can be seen in Table 8.1A, both mission operations and direct research funding for faculty and staff have grown slightly over time. This follows the growth in full time equivalent faculty since FY04 and also parallels the increased volume of instruction (# of courses) that has occurred due to increased enrollments over the same period. Faculty salaries are always the largest component of the mission budget, and one where control can be exercised at most on the margins. Faculty salaries in GSBPP/NPS are Congressionally capped at their current rate, but the high cost of living in the local economy stresses these salaries, especially in the housing market.

Reimbursable Budget: Our reimbursable education numbers were down in FY06/07 primarily due to the requirement that reimbursable education programs increase their price in order to collect indirect costs. Both reimbursable education sponsors and our own DL operations have transitioned to this new price structure and the School's DL activity is expected to recover in 2008 to earlier levels. Our reimbursable research, however, has increased significantly in FY07 as the faculty continues to pursue opportunities for research in their respective academic areas and as our ties to our customer base strengthen and grow.

Non-Labor Costs: Allocations for travel and supplies have been a challenge, especially in keeping up with our increasing needs to establish and build partnership relations with other academic and sponsoring organizations. Additionally, we are experiencing sharply increased costs of instructional technology that our faculty and students have come to need and expect to enhance the quality of our classroom and distance learning educational experiences. It is our expectation that future revenue streams that support instructional technology (equipment, software, databases and staff support) will have to be developed. Developing such revenue streams is a priority for the Dean and the NPS leadership.

8.1C Salary Information

Table 8.1C presents the average and median 10-month salary for faculty in the Graduate School of Business and Public Policy. While the table presents 10-month salaries, almost all GSBPP faculty members work and are paid for a full 12 months each year. The management of GSBPP operations, and of faculty labor, assumes the objective of 12-month salaries for all faculty members who desire. The reimbursable activities of the School generally supplement the mission-funded activities, providing sufficient work

activities for 12-month compensation for faculty. Appendix 8.1 shows NPS's Faculty Salary Schedule, which was effective 7 January 2007.

Table 8.1C

2007 GSBPP AVERAGE 10-MONTH FACULTY SALARY

2007	# Faculty	Average	Median
Professor (Tenure Track)	11	$118,528	$118,528
Assoc. Professor (Tenure Track)	15	$117,770	$118,528
Assistant Professor (Tenure Track)	12	$107,137	$108,608
Senior Lecturer (Non-tenure Track)	13	$114,817	$115,568
Lecturer (Non-tenure Track)	6	$110,548	$112,096
Adjunct (Non-tenure Track)	26	$99,065	$102,776

Standard 8.2 Library Services
All students and faculty shall have reasonable access to library facilities and services that are recognized as adequate for master's level study in public affairs and administration. This would normally include texts, monographs, periodicals, serials, pamphlets, and research reports. The program faculty should have a major role in selecting library acquisitions for its program.

8.2A Overview of Dudley Knox Library's Resources and Services

The Dudley Knox Library (DKL), 2004 Federal Library of the Year, provides the Naval Postgraduate School (NPS) and the broader defense and security communities with an information rich environment supporting academic and research pursuits. DKL's annual budget of $3.5 million is used to provide a rich combination of collections, staff, and associated services that support and facilitate graduate education and research in all subject areas taught at NPS. DKL anticipates and responds to current and emerging requirements, and seeks innovative and creative ways to provide scholarly information to patrons by investing in leading edge technology and services. Level funding for the past 6 years in conjunction with spiraling inflationary increases for personnel and content

(databases, journals, and monographs), has impacted Library collections and services. In the current global economy, no library can stand alone. DKL actively partners with federal, special, and academic libraries—particularly the Consortium of Naval Libraries (CNL) and the National Research Library Alliance (NRLA)--to leverage limited budget dollars and invest jointly in collaborative acquisitions, joint-licensing agreements, and resource sharing that extend content offerings to NPS patrons beyond what we could afford alone.

DKL's staff of highly qualified librarians and support personnel is committed to providing excellent service to all faculty, staff and students and to developing and maintaining strong collections and services to support all areas of research at NPS. DKL has 9 full-time professional librarians who hold Masters in Library Science degrees and approximately 20 additional staff.

Five reference librarians serve as Subject Specialists providing collection development, research guidance, outreach and instructional support to all NPS Schools and curricula. One librarian serves this role for the Graduate School of Business & Public Policy (GSBPP). In addition, all reference librarians provide service at the reference desk and through DKL's Ask a Librarian Live virtual reference service, which has been in place since September 2004. In 2006, nearly 45% of reference questions were received and answered through DKL's *Ask a Librarian Live* chat reference service and e-mail.

The GSBPP Subject Specialist works closely with faculty and students to evaluate and select print and electronic materials, provide classroom and individual instruction on library resources and research skills and assist with research and teaching information needs. Because Public Administration is interdisciplinary and therefore can include political science and political theory, it is important to recognize that support to this area is covered not only through the Subject Specialist's relationship with the GSBPP but also by the Subject Specialist for National Security Affairs (NSA), who also works closely with GSBPP students and faculty depending on their research needs. In addition, DKL's acquisitions to support NSA are often relevant to GSBPP.

DKL's holdings include more than 600,000 print volumes, including bound journals and all books. DKL's usable space totals approximately 100,000 sq. ft. DKL provides photocopying, scanning and printing facilities, 135 individual study carrels and 19 group study rooms (collaboratories), and provides a telephone paging service. DKL is open for service 7 days a week, 343 days a year and is accessible to students an average of 81 hours a week with building hours being extended for study purposes the week prior to and during finals. DKL is closed on official federal holidays and reduces hours during school breaks.

Whenever possible, DKL is replacing traditional paper journals and indices with subscriptions to electronic journals and databases accessible from the user's desktop. Many of these databases provide information in full-text and/or image format. DKL's online catalog, web pages and database access is available to faculty, staff and students in

DKL, campus labs, classrooms, offices as well as from off campus. DKL continuously updates and adds links to individual journal titles through the online catalog as well as from a web page entitled "Find Journal Online". In late 2006 DKL implemented electronic resource management tools (ERM) including “link resolver” software (called SFX) that makes it easy for library patrons to determine whether DKL provides electronic access to journals and with a few keystrokes provides access at the full-text article level. Detailed information about DKL’s print and electronic journal subscriptions and electronic databases is provided below in the section on Library Support.

DKL has been a Federal Depository since 1964. Through the depository program, DKL selects and receives free materials from various government agencies, including Congress, the Congressional Budget Office, the Department of Commerce, the Department of Defense, the Government Accountability Office, the International Trade Administration and others. The Library staff includes a professional Documents Librarian who regularly reviews the materials available to DKL and assists students and faculty with specialized research questions that require an in-depth understanding of government documents.

To support classroom teaching, research and other NPS mission-related tasks, DKL provides Interlibrary Loan and Document Delivery (ILL) service to the school’s faculty, staff and students, including distance learning students. DKL loans more resources to libraries worldwide than must be borrowed for needs of our local patrons. Faculty, students and staff are regularly encouraged to make use of this service, which is provided at no cost to the end-user. GSBPP students and faculty currently account for approximately 15% of ILL requests. Table 8.2A below provides detailed information on GSBPP use of ILL.

In June 2005, DKL implemented ILLiad Interlibrary Loan management software to automate routine functions, increase staff productivity and reduce paperwork. This suite of software tools enables patron-initiated borrowing, is fully integrated with the Library’s online catalog and ERM systems and provides tools that allow patrons to: check against local resource holdings; place requests for items not owned by DKL; monitor the status of each request from copyright compliance to delivery; and retrieve e-documents as they are delivered. This service is available to authorized patrons 24/7, extending the Library’s ability to manage requests and deliver resources to patrons, including distance learners, regardless of their time zone/location.

Table 8.2A1
Interlibrary Loan Borrowing for GSBPP Subject Areas

NASPAA Statistics for GSBPP
Interlibrary Loan Borrowing Requests
Compiled June 2007

Curric (Students)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TOTALS	PERCENT of TOTAL
805 - Executive Master of Business Administration (DL)							0	0%
808 - Executive Management							0	0%
809 - Defense Business Management							0	0%
814 - Transportation Management	1	3	1	1	0	1	7	0%
815 - Acquisition & Contract Management	56	27	19	24	28	37	191	6%
816 - Systems Acquisition Management (STATS combined with 815)							0	0%
817 - Defense Systems Analysis	38	7	19	21	0	7	92	3%
818 - Defense Systems Management (International) (STATS combined with 817)							0	0%
819 - Supply Chain Management	3	0	0	2	3	29	37	1%
820 - Resource Planning & Management for International Defense	8	14	6	0	5	4	37	1%
827 - Material Logistics Support	20	4	3	3	3	4	37	1%
835 - Contract Management (DL)	18	6	8	0	6	9	47	1%
836 - Program Management (DL) (STATS combined with 835)							0	0%
837 - Financial Management	75	14	10	28	23	30	180	5%
847 - Manpower Systems Analysis	27	23	87	48	40	59	284	8%
870 - Information Systems Management							0	0%
Certificate (Students)								
211 - Advanced Acquisition Program Certificate (DL)	2	1	4	0	1	0	8	0%
212 - Acquisition Management Program Certificate (DL) (STATS cmbined with 211)							0	0%
Sub Totals	**248**	**99**	**157**	**127**	**109**	**180**	**920**	**27%**
Departments (Faculty/Staff)	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**FY 2006**	**TOTALS**	**PERCENT of TOTAL**
GSBPP	168	213	484	592	580	468	2505	73%
Sub Totals	**168**	**213**	**484**	**592**	**580**	**468**	**2505**	**73%**
GRAND TOTALS	**416**	**312**	**641**	**719**	**689**	**648**	**3425**	
Total ILL for FY	**2678**	**2904**	**3186**	**4495**	**4578**	**4449**	**22290**	
GSBPP % of Total ILL	**16%**	**11%**	**20%**	**16%**	**15%**	**15%**	**15%**	

Materials not owned by DKL are obtained as quickly as possible through a variety of resources including the Online Computer Library Center (OCLC), regional library consortia -- the Monterey Bay Area Cooperative Library System (MOBAC) and the Military Education Research Library Network (MERLN) -- as well as electronic and Web resources and document delivery vendors. The Subject Specialist is able to review the titles of items that have been requested so they can be considered for purchase for the Library collection. Most articles are posted to the Web or delivered by PDF attachment to the user's email. Turn-around times are fast – 45% of article requests are filled within 3 days, with 6% being filled within 1.6 hours. DKL responds quickly to "rush" requests

where faculty or students have an immediate need for books or papers and cannot wait for the normal purchase or Interlibrary Loan processes.

DKL has 52 computers and 14 circulating laptops available for public use. All provide access to the Internet and to a variety of programs including the Microsoft Office and Adobe suites. The Library Systems Department worked with our international students in 2006 to add additional languages to standard Library computer configurations to provide additional support for non-native English speakers. Many of DKL's study rooms and carrels provide wired network access. DKL provides nearly 100% wireless coverage as well, so that an increasing number of students and faculty connect via laptop while in the building.

DKL provides 19 group study rooms (collaboratories) as well as a large group study area. These spaces are heavily utilized by GSBPP students as their program of study involves many collaborative projects. Two of the public rooms and one in our Restricted Resources and Services Library are equipped with advanced technology including plasma screens, speakers, and dual laptop switchers to enhance patron experience and promote teamwork for assignments, study, and group projects.

DKL provides a secure, service-oriented environment for cataloging, preservation and access to classified and limited distribution resources through its Restricted Resources and Services (RRS) unit. RRS is accessible to approved members of the NPS community and provides retrieval and research support. RRS catalogs all received materials and is the repository of NPS generated restricted reports and theses. Many limited distribution reports held by RRS are relevant to the faculty and students in the GSBPP, including those published by agencies such as CNA (Center for Naval Analysis), Rand Corporation and LMI (Logistics Management Institute). DKL also provides access to the classified internet (SIPRNET) for those NPS personnel with the appropriate security clearance.

The online catalog (BOSUN) is available to anyone via the Internet. In addition to listing the materials DKL owns or provides electronic access to, it also includes a digital archive of NPS-produced documents as well as relevant full-text documents from other sources. The archive contains NPS theses and MBA Professional Reports, most of which are available as full-text PDF files if they were published after 1995. Other archived collections relevant to GSBPP include Congressional Research Service and Defense Science Board reports. As they become available, DKL adds and regularly updates web links to both journals and books that are concurrently, or in some cases, only available in electronic form.

BOSUN allows those with Library accounts to place holds and renew materials electronically, as well as link to ILL forms or make book purchasing suggestions to the appropriate Subject Specialist.

DKL's web pages can be used to access most Library resources and services, including: placing Interlibrary Loan/Document Delivery requests; accessing electronic

databases and electronic journals; contacting the reference desk with questions or contacting the appropriate Subject Specialist; and making book purchase suggestions. DKL's web site includes many pages developed by the subject specialist librarians to support specific areas of interest at NPS. Some of those that are relevant to GSBPP include: Acquisition and Contracting, Congressional Information Resources, Defense Budget Information, Military Manpower, Military Information, Military Publications, Finding Company and Industry Information, Marketing, and Military Transportation and Logistics.

As part of an ongoing effort to ensure that Library services, facilities and resources meet the needs and expectations of NPS students, faculty, and staff, DKL conducted a standardized survey assessing service quality (LibQual) in 2003 and 2005. Additionally, in early 2006 DKL developed and conducted a survey to assess whether reference service hours meet the needs of the NPS community. Input from these surveys has informed DKL's planning. In spring 2007, the GSBPP Subject Specialist provided reference and research consultations from an office in the department's building for four hours each week. DKL is currently reviewing the results of a recently conducted survey about this pilot outreach project.

8.2B Library Support: Relevant Library Collections and Expenditures

The Library's collection is one of the primary assets supporting both educational and research efforts across the campus. The main collection is comprised of monographs (books and reports), journals, theses, and maps/nautical charts, in print and digital formats. Resources are catalogued and access to metadata and full-text is provided via the BOSUN online catalog. DKL shares its bibliographic records with the international OCLC database so DKL materials are available for searching by anyone in the world. Digital copies of NPS theses, for example, are catalogued and accessible throughout the world within weeks of graduation. DKL has been a selective federal depository since 1963. DKL also houses a secure collection of classified and limited distribution resources in our Restricted Resources and Services department. Content, including journals, electronic databases and monograph expenditures averaging $1.6 million/year over the past four years comprise approximately 46% of DKL's annual budget. Journal expenditures average 36% of the total content budget; databases average 34%; and monograph expenditures average 30%.

Books/Monographs

Librarians are Subject Specialists who work with faculty to continuously review and evaluate requirements and select/acquire monographs to meet evolving curricular and research needs. Overall, DKL allocates fewer budget dollars to monographs than to databases and journals.

DKL's book budget is allocated by fund code to the Subject Specialists, who expend these funds based on regular review of publisher catalogs, use of the reviews

published in CHOICE magazine, book reviews in curriculum related journals and other appropriate professional sources. Specialists also solicit and consider input and suggestions from faculty, staff and students. GSBPP faculty provide significant input which ensures that DKL's collection continues to meet the needs of GSBPP students and faculty.

DKL holds more than 231,090 unique print monographic titles. This total does not include items in our Government Documents, theses or journals collections. Approximately 41% of the monograph budget supports GSBPP and other NASPAA-related areas (such as political science, national security affairs, and military).

Table 8.2B1 presents the number of GSBPP- and NASPAA-relevant books added to the DKL collection by Library of Congress (LC) classification areas -- of HA-HJ (Business and Economics) and J-JZ (political science). The figures listed in the ALL SUBJECTS column include all items within the LC classification areas plus all the materials added into DKL's Federal Document collection.

Table 8.2B1
NUMBER OF BOOKS ADDED 2000-2006

Year	HA-HJ	J-JZ	All Subjects
2000	953	236	14202
2001	1224	317	14470
2002	1367	271	24793
2003	1325	288	24336
2004	1394	474	26150
2005	1448	428	31527
2006	1186	1572	24492

Table 8.2B2 presents the figures for the funds allocated for the purchase of single title or monographic materials only and does not include additional publications DKL purchases that are considered to be publisher renewals or standing orders due to a regular publication cycle. There is often overlap in materials across related disciplines and the subject specialists can use their discretion about which fund code is appropriate for a particular purchase. To more accurately reflect DKL's ability to adequately cover the larger elements of public policy and political science, the expenditures of the three relevant fund codes are all listed in Table 8.2B2. The areas represented are: BIZ/BPP (Graduate School of Business & Public Policy), NSA (National Security Affairs) and MIL (Military Science). The MIL code is not curriculum specific but rather more of a "catch-all" area to ensure DKL is able to purchase items that might not fit well into any one curriculum or which, conversely, could be charged to several different curricula.

Table 8.2B2
FUNDS EXPENDED FOR PURCHASE OF MONOGRAPHIC MATERIALS
(Does not include standing orders or publishers' renewals*)

Fiscal Year	A BPP/BIZ Fund	B NSA fund	C MIL Fund	D BPP+BIZ+ NSA+MIL	All Funds	D as % of All Funds
2002	$9,129,25	$10,160.15	$5,841.46	$25,130.86	$69,249.88	36%
2003	$8,165.91	$12,297.32	$4,058.45	$24,521.68	$59,651.28	41%
2004	$9,571.51	$10,965.33	$3,731.72	$24,268.56	$78,156.05	31%
2005	$8,961.45	$9,641.12	$3,612.54	$22,215.11	$63,588.82	35%
2006	$5,392.38	$4,724.52	$1,790.93	$11,907.83	$29,027.55	41%

*does not include funds spent on Brookings Publications which the Library collects extensively and which are particularly relevant to NASPAA-related research.

Table 8.2 B3 below shows DKL circulation statistics for selected GSBPP areas.

Table 8.2B3
CIRCULATION

CIRCULATION STATISTICS FOR NASPAA
Compiled June 2007

		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TOTALS
HA	Statistics	26	39	19	25	24	38	**171**
HB	Economic Theory. Demography	82	91	77	103	110	194	**657**
HC	Economic History & Conditions	279	362	219	210	172	271	**1513**
HD	Industries. Land Use. Labor	612	735	507	838	734	958	**4384**
HE	Transprotation & Communications	27	29	18	24	33	53	**184**
HF	Commerce	282	350	202	307	215	266	**1622**
HG	Finance	54	73	50	45	48	63	**333**
HJ	Public Finance	33	33	11	34	20	59	**190**
J	General Legislative & Executive Papers	2	0	47	5	1	3	**58**
JA	Political Science (General)	14	20	27	22	36	49	**168**
JC	Political Theory	130	158	135	218	202	235	**1078**
JF	Political Institutions & Public Administration	58	71	103	123	96	152	**603**
JJ	Political Institutions & Public Administration (North America)	0	0	0	0	0	0	**0**
JK	Political Institutions & Public Administration (United States)	102	146	128	161	136	192	**865**
JL	Political Institutions & Public Administratuion (Canada, Latin America, Etc.)	44	72	32	62	32	31	**273**
JN	Political Institutions & Public Administration (Europe)	51	65	60	78	53	100	**407**
JQ	Political Institutions & Public Administration (Asia, Africa, Australia, Pacific Area, etc.)	75	97	54	140	106	160	**632**
JS	Loal Government. Municipal Government	1	4	6	4	6	8	**29**
JV	Colonies & Colonization. Emigration & Immigration. International Migration	8	14	9	9	15	10	**65**
JX	International Law, see JZ and KZ	278	319	186	304	178	298	**1563**
JZ	International Relations	88	127	113	157	175	222	**882**
	TOTALS	**2246**	**2805**	**2003**	**2869**	**2392**	**3362**	**15677**
	TOTAL CIRCULATION FOR FY	20130	25172	25924	31541	32611	28749	164127
	% of CIRC FOR LC CLASSES PRESENTED	11%	11%	8%	9%	7%	12%	10%

Periodicals

DKL has historically purchased print journals that support NPS curricular and research needs. The advent of online journals, coupled with steep price increases per title and changing publisher access models, have impacted libraries' ability to procure content, particularly in the fields of science and technology. The Association of Research Libraries reports journal unit price increases of 188% in the period 1986-2004 and a 2007 report demonstrates a 33% increase in the average price for business and economics journals and a 53% increase for political science journals in the last 4 years alone (Van Orsdel and Born, *Library Journal*, 4/15/2007). DKL is aggressively moving away from print in favor of licensing online access to current volumes and backfiles. Such access, which we procure locally as well as through library consortial licenses, extends access to critical journals 24/7. Table 8.2B4 gives a snapshot of DKL-licensed e-journals supporting GSBPP subject areas.

Table 8.2B4
NASPAA-Relevant E-Journals Accessible Through DKL (2007)

Subject	# Titles
Accounting & Auditing	113
Business Management	761
E-Commerce	59
Economics	877
Finance	434
Marketing & Sales	285
Material & Supply Chain Management	65
Operations Research	61
Organizational Change & Development	97
Organizational Communication	47
Organizational Psychology	55
Personnel Management & Training	131
Political Science	175
Public Policy & Administration	527
Quality Management	61
Strategic Management & Business Policy	119

DKL provides electronic access either by direct subscription or through one or more databases to the full-text of articles from many top scholarly journals. To provide a sense of this, a selective list of some of these titles in business, economics, and management is provided in Table 8.2B5.

Table 8.2B5 **Selective List of Top Business, Economics and Management Journals** Available Full-Text Online
Administrative Science Quarterly
Academy of Management Review
Academy of Management Journal
Administrative Science Quarterly
American Economic Review
Econometrica
Economic Policy
Harvard Business Review
Journal of Communication
Journal of Economic Literature
Journal of Economic Perspectives
Journal of Marketing
Journal of Political Economy
Journal of the Academy of Marketing Science
Leadership Quarterly
Management Science
Marketing Science
MIS Quarterly
Organization Science
Quarterly Journal of Economics
Sloan Management Review
Strategic Management Journal

DKL expended nearly $670,000 to fund periodicals for 2007 (excludes database subscriptions which are discussed below). Of this total, approximately $94,000 (14%) was for periodicals directly related to GSBPP. Many additional titles of a military, political science, or general nature also support GSBPP teaching and research needs.

Databases

Information discovery is facilitated by general and subject-specific databases, such as *ProQuest's ABI INFORM, EBSCO'S Business Source Complete, and the Web of Knowledge.* DKL provides access to a wide array of licensed and open access databases that support business and public policy and administration topics. Most of the databases contain or link out to full-text content via enhanced ERM services supported and maintained by DKL staff. DKL has expended approximately $605,000 on electronic databases for FY 2007. Of this, approximately $124,000 was spent on databases that directly support GSBPP (20%). These databases provide full-text access to articles from

more than 9,000 journals. A partial listing of databases most relevant to GSBPP students, faculty and staff is listed in Table 8.2B6.

In the past, GSBPP has collaborated with DKL to fund subscriptions to databases and other online resources such as *EBSCO's Business Source Complete*, *Inside Defense* and *CQ Budget Tracker*. These resources (and GSBPP funding of them in tight budget circumstances) have been critical to meeting the needs of NPS business, public policy and administration researchers.

Table 8.2B6 **SELECTIVE LIST OF DATABASES RELEVANT TO GSBPP ***
Sources listed below are available to all NPS students, faculty and staff on DKL's **Databases** page http://www.nps.edu/Library/Research/Article%20Databases/Databases.html
Cabell's Directory of Business Publishing Opportunities
Conference Board Business Knowledge Research
Congressional Staff Directory and Federal Staff Directory (from Congressional Quarterly)
CQ Budget Tracker, CQ Researcher, CQ Weekly
CSA (includes Applied Social Sciences Index & Abstracts, Computer & Information Systems Abstracts, EconLit, Management & Organization Studies: A Sage Full-Text Collection, PAIS International, Political Science: A SAGE Full-Text Collection, PsycINFO, World Political Science Abstracts, and more)
EBSCO Business Source Complete, SocINDEX with Full-text, Internet & Personal Computing Abstracts
Emerald Fulltext
Gallup Brain
INFORMS PubsOnline
Ingenta
Inside Defense
Jane's Online
JSTOR
LexisNexis Academic, LexisNexis lexis.com, LexisNexis nexis.com, Lexis Nexis Congressional, LexisNexis Statistical
Mergent Online
National Bureau of Economic Research (NBER)
NewsBank (includes Global NewsBank, Access UN, Armed Services and Government News, America's News Magazines and Military Periodicals).
Oxford Analytica
Policy Central (from National Journal)
Project MUSE
ProQuest (includes ABI Inform Global, Hoover's Company Records, OxResearch, ProQuest Computing, ProQuest Newspapers, ProQuest Research Library, ProQuest Military Module, and others).
Social Science Citation Index (through Web of Knowledge) – 1965-present
Wiley Interscience
*descriptions of these and other DKL databases are available at: http://www.nps.edu/Library/Research/Article%20Databases/ArticleDatabases.html#A

8.2C Program Role: Library Instruction and Outreach

Five Subject Specialist librarians share responsibility for providing reference and research assistance services, which are actively promoted to NPS students, faculty and staff in tours, classes, Blackboard, the NPS intranet, DKL web site and other means. Students and faculty are also encouraged to make appointments with their Subject Specialist for in-depth assistance.

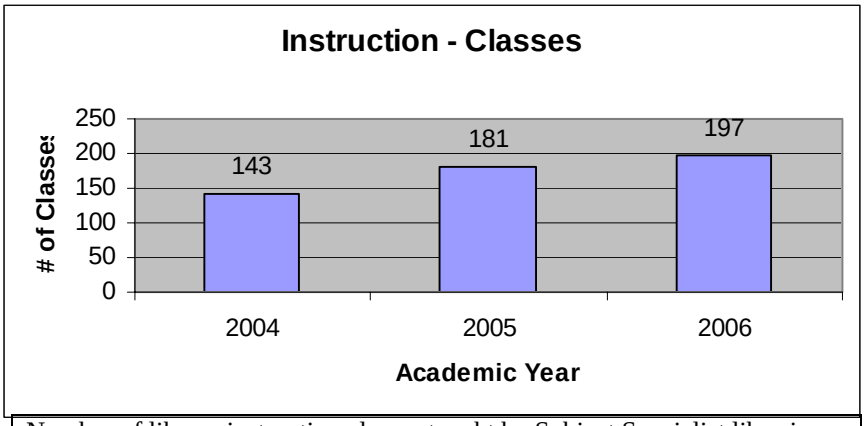
DKL provides instruction to resident GSBPP students in a variety of ways. All incoming resident GSBPP students participate in a mandatory tour of DKL's facilities and services. This is soon followed by a two hour "hands on" Library session which is regularly included in one of the required first quarter classes (Introduction to Information Technology). Many GSBPP students also later take an elective course (Managerial Inquiry) which includes an additional two hour segment on research skills. In addition, GSBPP faculty members occasionally include a specialized presentation from the subject specialist librarian in their courses.

To supplement these GSBPP-specific courses, many students take advantage of the numerous 50-90 minute drop-in classes offered by DKL on various research tools and techniques. These classes include both database-specific instruction (*BOSUN*, *ProQuest*, *LexisNexis*, *CSA*, Defense Technical Information Center *STINET*) and skills-specific classes (Using RefWorks to Manage Citations, Searching the Web, Searching the Deep Web, Finding Military Information, and Staying Current With RSS News Feeds).

GSBPP distance students also routinely receive Library instruction. Depending on the program, this may be in the form of face-to-face instruction while on campus, or via Video Teleconferencing or other technologies if they are at a remote location. Interested GSBPP faculty members receive instruction and support from DKL to ensure that their Blackboard course sites include information about appropriate Library resources and services.

Table 8.2C below provides information on the number of instruction sessions DKL has provided to NPS resident and distance students over the past few years.

Table 8.2C
Library Instruction (2004-2006)



Number of library instruction classes taught by Subject Specialist librarians. In 2006 more than 3,200 students and faculty (onsite and distributed attendees) participated in these classes.

DKL posts instructional materials on DKL's web site in a variety of formats (PDF handouts, *PowerPoint* presentations, *Flash* tutorials, web pages, links to vendor-created tutorials) so that NPS students will be able to better learn how to use Library resources at their point of need.

The GSBPP Subject Specialist interacts with the faculty in a variety of ways including regularly participating in faculty meetings, selectively e-mailing faculty members about new documents, services and resources of interest, and consulting with faculty on their research topics. The Subject Specialist works closely with interested faculty to ensure that Library resources and services are integrated into their Blackboard course sites.

The Subject Specialist encourages faculty members to provide book and journal purchase suggestions and if desired, they are notified as soon as recommended titles are available. The Subject Specialist also works closely with the faculty to identify and evaluate possible additions to DKL's online databases. DKL also regularly considers faculty input as part of the periodic review of print and online journal subscriptions.

The Subject Specialist provides guidance and support to faculty members involved in the Promotion, Tenure and Review process, using appropriate tools such as the *Social Science Citation Index* and other online sources providing the capability to do cited reference searches and journal "impact" analysis. DKL recently added significant back files and *Social Science Citation Index* coverage now goes back to 1965.

Standard 8.3 Support Personnel
Adequate secretarial and clerical personnel should be available to enable the program to meet its educational objectives.

8.3 Support Personnel

The Graduate School of Business and Public Policy currently employs 19 full-time staff personnel and 4 part time research assistants. Job functions are as follows:

Administrative Officer (1)
Sponsored Programs Financial Specialist (1)
Admin Support Service Specialist (1)
Information Technology Specialists (1)
Dean's Secretary (1)
Office Automation Assistants/Clerk (1)
Educational Technician (1)
Administrative Support Assistant (2)
Purchasing Agent (1)
Contractors Admin (6)
Contractors Financial (2)
Contractor Information Technology (1)
Research Assistants* (4)

*These research assistants support various faculty members.

In addition, the department maintains research and department support positions for students. These students work full-time during the summer and school breaks and part-time during the school year.

Standard 8.4 Instructional Equipment
Program faculty and students should have access to appropriate equipment for coursework and research including computer facilities, visual aid devices, audio and video tapes and films.

8.4A Computer Support

GSBPP Computer Lab 1 (I-224)

Current Configuration: This lab holds 18 student computers, one instructor station and two print servers, for a total of 21 systems. The standard computer configuration is a Pentium IV 2.8Ghz with 1GB RAM and 19" LCD monitor. The

instructor's station is also tied to a ceiling mounted projector.

Functional Requirements: The lab is heavily used by many MBA courses that employ statistical programs, spreadsheet programs, simulation programs and other specialized decision support programs. The lab is also used to teach various information technology courses such as Web design and networking.

GSBPP Computer Lab 2 (I-250)

Current Configuration: This lab holds 24 student computers, one instructor station and one print server, for a total of 26 systems. The standard computer configuration is a Pentium IV 2.8Ghz with 1GB RAM and 19" LCD monitor. The instructor's station is also tied to a ceiling mounted projector.

Functional Requirements: The lab is heavily used by many MBA courses that employ statistical programs, spreadsheet programs, simulation programs and other specialized decision support programs.

Applied Network Technology Lab (I-380)

Current Configuration: This lab holds 9 student computers, one multi-media workstation and one Windows Server. The standard student computer configuration is a Pentium IV 2.8Ghz with 1GB RAM and 19" LCD monitor.

Functional Requirements: This lab is used for hands-on computer hardware orientation and network design/installation. Students routinely install and remove various network-related hardware and software to experiment with multiple system configuration options. When not being used for instruction, this lab is also used to support student thesis and faculty research projects.

Smart Classroom (I-260)

Current Configuration: This classroom includes a dual projection system capable of displaying the same or different images on each screen. In addition to the standard instructor podium suite of equipment, each student seat includes a permanently mounted laptop computer tied to the school's network backbone. The classroom holds 45 students and serves as a substitute computer lab for those MBA courses too large for the traditional computer labs. The classroom is also equipped with VTC capability to facilitate guest lecturers from remote sites.

Functional Requirements: This classroom is used for multimedia-based instruction, including audio material, video material, computer-based analysis, Internet-based instruction, and VTC capability.

Smart Classroom (I-271)

Current Configuration: This classroom includes a dual projection system capable of displaying the same or different images on each screen. In addition to the standard instructor podium suite of equipment, each student seat includes a thin-client computer tied to the school's network backbone. The classroom holds 36 students and serves as a substitute computer lab for those MBA courses too large for the traditional computer labs.

Functional Requirements: This classroom is used for multimedia-based instruction, including audio material, video material, computer-based analysis, and Internet-based instruction.

8.4B Audio-Visual Support

GSBPP has set a priority on upgrading classrooms with instructional technology. The standard suite of equipment installed in each GSBPP classroom includes the following:

- Ceiling mounted multi-media projector
- Instructor podium with projector controls
- Internet ready instructor computer
- Document camera
- Combination DVD/VCR player

NPS has state of the art distance learning facilities to accommodate courses that are taught by VTC. These facilities include three studios that are equipped with PictureTel 4000 Video conferencing Systems using Integrated Services Digital Network, Basic Rate Interface (ISDN BRI) lines. This setup allows two-way, interactive audio and video between the distant sites and NPS classroom. The NPS-owned video bridge makes multi-point classes possible.

At the NPS end, three 26-student classrooms are equipped with VCRs, electronic whiteboards, document cameras, facsimile machines, and PCs for computer generated presentation. Student sites have a standards-based (H.320-compatible system) connection to a dial-up network (FTS2000).

Standard 8.5 Faculty Offices
The offices for faculty should provide adequate space and privacy for student counseling, course preparation, and other faculty responsibilities.

8.5 Faculty Offices

Each permanent faculty member in the Graduate School of Business and Public Policy has an individual office with reasonable space for a desk, computer, table, books and student or colleague meeting area.

Depending on availability, part-time faculty are housed in offices comparable in size to those occupied by permanent faculty or in a multi-office space that provides a desk, computer, table, and some book or storage space. For individuals in the latter office space, there are two conference rooms available for reservation should the faculty member desire complete privacy in meeting with students or colleagues.

Standard 8.6 Classrooms
Appropriate classrooms should be available for the courses being offered. This would normally include rooms suitable for seminars, case discussions, and simulation exercises, and lectures.

8.6 Classrooms

Overall, classrooms are the size and the type needed for graduate classes in management. The classrooms are various sizes, holding from 20-40 students, and are assigned by the NPS scheduler based upon class size and other requirements. While maintenance and upgrades to these rooms are not directly funded from GSBPP allocated resources, we have undertaken a classroom lifecycle management effort to reflect more clearly the needs within these rooms. This plan, which is a work in progress, will allow our business school leadership to provide ready documentation and cost estimates as opportunities arise for additional funding.

Standard 8.7 Meeting Area
An appropriate area should be available for students and faculty to meet informally and discuss class projects, internship experiences, and other program matters.

8.7 Meeting Area

Informal meetings between students and faculty to discuss course projects or other program matters usually occur in the faculty member's office or after class in the classroom. GSBPP has two conference rooms available for faculty and faculty/student meetings. Other conference rooms around campus are available upon request. Students have easy access to private study rooms in the library located next to Ingersoll Hall.

STANDARD 9.0 -- OFF-CAMPUS AND DISTANCE EDUCATION

Standard 9.1 Definition and Scope
Off-campus and distance education programs are offerings and arrangements in which (a) students are located in facilities or at sites other than the main [parent] campus of the program and/or (b) the students do not engage regularly in face-to-face interaction with an instructor who is in physical proximity. Off-campus and distance education programs can satisfy legitimate educational needs. When off-campus and distance education versions of the program serve different missions, student populations, or utilize education technology or learning methods that differ from the parent program, the burden is on the program to provide adequate information that demonstrates:

-the extent to which educational offerings are consistent with and contribute to the mission;

-the extent to which assessment and guidance processes ensure the comparability of the education offered;

-the effects of these differences on students, faculty, administrators, systems, processes, and the allocation of program resources and, therefore;

-the effects of these differences on the education received by all students in the program seeking accreditation regardless of where they are located.

9.1 Definition and Scope

The Graduate School of Business and Public Policy (GSBPP) has three active off-campus or distance learning (DL) degree programs:

- The Executive Master of Business Administration (EMBA)
- The Master of Science in Program Management (MSPM)
- The Master of Science in Contract Management (MSCM).

Until June 2006, GSBPP also offered a fourth DL program, which has since been contracted to another university.

- The Master of Science in Leadership and Human Resource Development (LEAD)

The NPS Academic Council has approved all of these programs. All of these programs are accredited by WASC and by AACSB.

Each of these programs is a distinct degree program by itself, and none is an off-campus or distance version of either the resident MBA Program or the resident MSM Program. **GSBPP does not seek NASPAA accreditation for any of the School's off-campus/distance programs**. As such, these programs are not presented here. For background, a full description of these programs, following the Standard 9 format, is provided in Appendix 9 of the Volume III Appendices document that accompanies this Self-Study report.

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NASPAA SELF-STUDY REPORT

August 31, 2007

MASTER OF SCIENCE IN MANAGEMENT PROGRAM

GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

Naval Postgraduate School
555 Dyer Road, Ingersoll-231
Monterey, CA 39343-5103

Certified by:

Robert N. Beck, Dean
Graduate School of Business & Public Policy
NASPAA Principal Representative

Certified by:

for Leonard A. Ferrari, Provost
Naval Postgraduate School
Chief Academic Officer

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MASTER OF SCIENCE IN MANAGEMENT (MSM) PROGRAM
NASPAA
Self Study for Re-Accreditation

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MASTER OF SCIENCE IN MANAGEMENT (MSM) PROGRAM
NASPAA
Self Study for Reaccreditation

List of Tables, Charts, Figures

Standard 3.0:

Standard 4.0:

Standard 5.0:

Standard 6.0:

Standard 7.0:

Standard 8.0:

In this Self-Study Volume: MSM Program

PROGRAM SUMMARY TABLE MASTER OF SCIENCE IN MANAGEMENT (MSM) DEGREE PROGRAM	
ITEM	**DATA**
1. Title of degree (1.3)	**MS in Management**
2. Off-Campus locations (9.1)	None
3. Number of credits normally required for degree (4.3-A)	95-111 quarter hours
4. Total credits in required courses (4.21-B)	55 quarter hours
5. Total credits in elective courses (4.22-A)	28-44 quarter hours
6. Specializations advertised as available (4.22-C)	Defense System Analysis Manpower Systems Analysis
7. Number of credits which can be reduced for prior undergraduate education (4.3-B)	Up to 12 quarter hours
8. Number of credits which can be reduced for significant professional experience (4.3-B)	None
9. Number in faculty nucleus (5.1-B)	61
10. Number of students in degree program (6.3-D)	64 full-time students
11. Is a thesis or major professional report required? (4.3-C)	Thesis required
12. Is a comprehensive examination required? (4.3-C)	None
13. Is an internship available? Is it required? (4.4-B)	No internship available or required

In a separate accompanying Self-Study Volume: MBA Program

PROGRAM SUMMARY TABLE DEFENSE-FOCUSED MASTER OF BUSINESS ADMINISTRATION (MBA) DEGREE PROGRAM	
ITEM	**DATA**
14. Title of degree (1.3)	**Defense-Focused MBA**
15. Off-Campus locations (9.1)	None
16. Number of credits normally required for degree (4.3-A)	84-103 quarter hours
17. Total credits in required courses (4.21-B)	54 quarter hours
18. Total credits in elective courses (4.22-A)	24-43 quarter hours
19. Specializations advertised as available (4.22-C)	Supply Chain Management Transportation Management Material Logistics Support Acquisition and Contract Mgmt Systems Acquisition Mgmt Financial Management Information Systems Management Defense Systems Mgmt Defense Business Mgmt Resource Planning and Management
20. Number of credits which can be reduced for prior undergraduate education (4.3-B)	Up to 12 quarter hours
21. Number of credits which can be reduced for significant professional experience (4.3-B)	None
22. Number in faculty nucleus (5.1-B)	61
23. Number of students in degree program (6.3-D)	263 full-time students
24. Is a thesis or major professional report required? (4.3-C)	Thesis or MBA Project required
25. Is a comprehensive examination required? (4.3-C)	No
26. Is an internship available? Is it required? (4.4-B)	No internships available or required

EMBA: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE EXECUTIVE MASTER OF BUSINESS ADMINISTRATION (EMBA) DEGREE PROGRAM	
ITEM	**DATA**
27. Title of degree (1.3)	**Executive MBA**
28. Off-Campus locations (9.1)	Video-tele-education
29. Number of credits normally required for degree (4.3-A)	54 quarter hours
30. Total credits in required courses (4.21-B)	54 quarter hours
31. Total credits in elective courses (4.22-A)	None
32. Specializations advertised as available (4.22-C)	None
33. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
34. Number of credits which can be reduced for significant professional experience (4.3-B)	None
35. Number in faculty nucleus (5.1-B)	61
36. Number of students in degree program (6.3-D)	199 part-time students
37. Is a thesis or major professional report required? (4.3-C)	Capstone project course required
38. Is a comprehensive examination required? (4.3-C)	No
39. Is an internship available? Is it required? (4.4-B)	No internship available or required

MSPM: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE MASTER OF SCIENCE IN PROGRAM MANAGEMENT (MSPM) DEGREE PROGRAM	
ITEM	**DATA**
40. Title of degree (1.3)	**MS in Program Management**
41. Off-Campus locations (9.1)	Video-tele-education
42. Number of credits normally required for degree (4.3-A)	50.5 quarter hours
43. Total credits in required courses (4.21-B)	50.5 quarter hours
44. Total credits in elective courses (4.22-A)	None
45. Specializations advertised as available (4.22-C)	None
46. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
47. Number of credits which can be reduced for significant professional experience (4.3-B)	None
48. Number in faculty nucleus (5.1-B)	61
49. Number of students in degree program (6.3-D)	58 part-time students
50. Is a thesis or major professional report required? (4.3-C)	Joint applied project required
51. Is a comprehensive examination required? (4.3-C)	No
52. Is an internship available? Is it required? (4.4-B)	No internship available or required

MSCM: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE MASTER OF SCIENCE IN CONTRACT MANAGEMENT (MSCM) DEGREE PROGRAM	
ITEM	**DATA**
53. Title of degree (1.3)	**MS in Contract Management**
54. Off-Campus locations (9.1)	Video-tele-education
55. Number of credits normally required for degree (4.3-A)	50.5 quarter hours
56. Total credits in required courses (4.21-B)	50.5 quarter hours
57. Total credits in elective courses (4.22-A)	None
58. Specializations advertised as available (4.22-C)	None
59. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
60. Number of credits which can be reduced for significant professional experience (4.3-B)	None
61. Number in faculty nucleus (5.1-B)	61
62. Number of students in degree program (6.3-D)	26 part-time students
63. Is a thesis or major professional report required? (4.3-C)	Joint applied project required
64. Is a comprehensive examination required? (4.3-C)	No
65. Is an internship available? Is it required? (4.4-B)	No internship available or required

MEM: Not reviewed for accreditation. Provided as background.

PROGRAM SUMMARY TABLE MASTER OF EXECUTIVE MANAGEMENT (MEM) DEGREE PROGRAM	
ITEM	**DATA**
66. Title of degree (1.3)	**Master of Executive Management**
67. Off-Campus locations (9.1)	Resident program. None off-campus
68. Number of credits normally required for degree (4.3-A)	64 quarter hours
69. Total credits in required courses (4.21-B)	49 quarter hours
70. Total credits in elective courses (4.22-A)	15-20 quarter hours
71. Specializations advertised as available (4.22-C)	None
72. Number of credits which can be reduced for prior undergraduate education (4.3-B)	None
73. Number of credits which can be reduced for significant professional experience (4.3-B)	None
74. Number in faculty nucleus (5.1-B)	61
75. Number of students in degree program (6.3-D)	2 part-time students
76. Is a thesis or major professional report required? (4.3-C)	Capstone Project Course required
77. Is a comprehensive examination required? (4.3-C)	No
78. Is an internship available? Is it required? (4.4-B)	No internship available or required

EXECUTIVE SUMMARY

Naval Postgraduate School

The Naval Postgraduate School (NPS) provides unique professional graduate education to mid-career military officers and civilian employees of the US Department of Defense. Owned and operated by the United States Navy, the School prides itself on its ability to maintain the highest academic standards while responding to the dynamic needs of the Navy and other military services agencies within the Department of Defense. NPS is constantly developing new educational programs and delivery methods, and modifying its existing programs, to meet the emerging requirements for the military services and other agencies within the Department of Defense.

Graduate School of Business and Public Policy

The Graduate School of Business and Public Policy was formally established in 2001, renamed and reorganized from the earlier Department of Systems Management. The degree of Master of Science in Management (MSM) was first awarded at the Naval Postgraduate School in 1960, and was the predominate management/administration degree awarded until 2002, when the resident program evolved to additionally award a Master of Business Administration (MBA) degree.

The MSM degree program was initially accredited by NASPAA in 1980 and reaccredited most recently in 2000. With the transition to the MBA degree in 2002, NASPAA accreditation was extended to the MBA. The Naval Postgraduate School's regional accreditation is from the Western Association of Schools and Colleges (WASC). The most recent WASC reaccreditation was conducted in 1998, resulting in full accreditation granted through 2009. The Graduate School of Business and Public Policy is also accredited by The Association to Advance Collegiate Schools of Business – International (AACSB), receiving accreditation in 2000, with a reaccreditation review anticipated in 2009.

Mission

The Graduate School of Business and Public Policy (GSBPP) has a clear mission and direction. The school's mission statement, originally developed in 1992, was the result of the entire faculty's participation. The mission statement was reaffirmed by the GSBPP faculty in 1998, and newly updated by the faculty in 2007. The most recent version of our mission statement follows:

Vision

To be recognized as the nation's premier school for defense-focused business management and public policy education and research. To be the institution that national leaders look to for education, research, information, and innovation in the management

of the business of defense. To be recognized by our students, alumni, and other stakeholders for our excellence in defense-focused education and research.

Mission:
To serve our Nation by educating US and allied military officers as well as defense civilians in defense-focused business and public policy, by conducting research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with defense business management practices and policies.

***Means**: We pursue our vision and perform our mission through graduate education, research, and professional service.*

- *In Education: Through resident and distance learning degree and non-degree programs, we develop students' abilities to analyze, think critically, and take intelligent actions so they can more effectively carry out their future professional responsibilities to manage organizations, resources, people, and programs in complex, sometimes life-threatening environments.*

- *In Research: Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.*

- *In Professional Service: Provide professional expertise that advances knowledge and business management within GSBPP, NPS, the Department of Navy, the Department of Defense, and other government agencies, as well as in our professional and academic organizations.*

Degree Programs and Curriculum

The Graduate School of Business and Public Policy (GSBPP) has graduate programs leading to six different master's degrees All of the programs are related and offered by the same faculty unit, using similar course offerings. These programs are predominately delivered by the same full-time resident faculty.

Two of the degrees, the Master of Science in Management (MSM) and the Master of Business Administration (MBA), are awarded from an integrated resident program. GSBPP seeks review and reaccreditation of both the MSM and MBA degree programs in 2008. This Self-Study Volume I covers the MSM program. A separate Self-Study Volume I has been prepared for the MBA program.

GSBPP additionally offers three part-time, distance learning degree programs, the Master of Science in Program Management (MSPM), the Master of Science in Contract

Management (MSCM) and the Executive Master of Business Administration (EMBA). Starting in 2006, GSBPP also offers a new one-year resident degree, the Master of Executive Management (MEM). GSBPP does not seek accreditation for these programs.

In general each degree program consists of three main parts: a common core of courses relevant broadly to the practice of public management, a specialization emphasizing a particular functional area, and a capstone project or thesis.

The major elements of the core of all Graduate School of Business and Public Policy curricula are those functional and analytical subjects that underlie effective management in all public organizations. These subjects include communication skills, information technology, economics, financial management, human and organizational behavior, management policy, public policy processes, and quantitative and qualitative analytical methods.

In addition to the core, with few exceptions students are enrolled in specialty programs designed to prepare them for management responsibilities in specific functional areas. Their programs include required courses in their areas of specialization. The project/thesis requirement allows students to demonstrate their abilities to integrate appropriate core and special curricular material through the analyses of issues and problems pertinent to their academic programs and their professional careers

All programs have a Navy (or other service) senior leader sponsor who participates in a needs assessment and biennial curriculum reviews. Academic Associates serve as program managers for each curriculum and assure that programs and courses are assessed on an ongoing basis and continuously improved. These assessments, in conjunction with NPS and the school's evaluation systems, allow us to operate high quality, unique, and military-relevant programs, and evolve these programs as changing academic and sponsor needs may require.

Research

Faculty research is an important component of the Graduate School of Business and Public Policy's mission, and is integrated to the greatest possible extent with the educational process. Students are encouraged to participate in faculty projects and faculty research results are incorporated in classroom instruction. The school's diverse, multidisciplinary character is reflected in the breadth and depth of issues addressed by faculty research, which have historically been concentrated in areas of interest to the Navy and the Departments of Defense (DoD). The school's research programs can be grouped into five functional areas, based on the school's specialty focuses: Acquisition and Contracting; Logistics and Transportation; Manpower Systems Analysis; Economics and Financial Management; and Organization, Management, and Policy Analysis.

The primary goal of the school's research program is to provide the Navy and DoD with the capability of managing defense systems efficiently and effectively. Some of this research applies an existing base of knowledge while other research requires the

development of new concepts and theory. Thus, the school recognizes the importance of both basic research and research applied to the Navy and DoD; it seeks to create a balance of both types of research in its research program.

Students

The Naval Postgraduate School operates year round. With a few exceptions, all resident students attend school full-time, 12 months a year, carrying 16 credit-hours of coursework per quarter. The resident program length for students in the Graduate School of Business and Public Policy is 18-21 months, depending on the student's curriculum. While Naval officers comprise the single largest group (45%), GSBPP enrolls students from all the U.S. military services, as well as international students (15%). All students have significant work experience and can be described as highly motivated and mature students. They are carefully selected for these programs and nearly all students complete their instructional programs within the time allotted. After completion of the program, students return to their military careers. Overall, GSBPP programs continue to enroll more than 20% of the students campus-wide.

Faculty

The school has 61 full-time nucleus faculty members who are drawn from a wide variety of academic disciplines. In addition to the academics, practitioners are an integral part of our faculty. In keeping with our mission, we employ highly qualified practitioners on a full-time basis to enhance the relevance and quality of our programs. All full-time practitioners have at least a master’s degree and have been recognized as accomplished professionals in their fields.

All GSBPP faculty members are expected to excel in teaching as well as conduct scholarly or practitioner research that is relevant to the Department of Defense. Almost all faculty members work year round; most typically teach two quarters and conduct research and/or engage in administrative work for the other two quarters.

As a group, our faculty members make significant contributions to the Navy and to other agencies in the Department of Defense through service on advisory boards, consulting to senior leaders, and teaching in management development programs. They are also active in their professional and academic communities, making significant contributions through published research, conference presentations and leadership with in their professional societies.

The Graduate School of Business and Public Policy is highly committed to providing high quality, unique, military-relevant, and cost effective programs for military officers and government civilian professionals. This goal directs our operations and provides direction for our future.

STANDARD 1.0 -- ELIGIBILITY FOR PEER REVIEW AND ACCREDITATION

Standard 1.1 Eligibility
These standards assume a commitment to the use of peer review procedures to assess educational quality. Formal peer review and accreditation processes of NASPAA are open to programs which meet criteria related to institutional accreditation, professional education, and program length as described in standards 1.2-1.4.

1.1 Eligibility

The programs in the Graduate School of Business and Public Policy (GSBPP) at the Naval Postgraduate School are eligible for peer review and accreditation.

Standard 1.2 Institutional Accreditation
The parent institution is accredited by its regional association.

1.2 Institutional Accreditation

The Naval Postgraduate School is accredited by the Western Association of Schools and Colleges. The most recent reaccreditation was conducted in 1998, resulting in full accreditation granted through 2009.

The Graduate School of Business and Public Policy is also accredited by The Association to Advance Collegiate Schools of Business – International (AACSB), receiving accreditation in 2000, with a reaccreditation review anticipated in 2009-10.

Standard 1.3 Professional Education
The primary objective is professional education preparing persons for leadership and management roles in public affairs/policy/administration.

1.3A Leadership and Management Objective

All programs offered by GSBPP are designed for students who are commissioned officers on active duty in the U.S. military services or in the military services of allied nations, as well as for civilian employees of the U.S. government.

Our programs prepare students for increasing levels of leadership and management responsibility in policy-making and professional management roles. Each of the programs

within GSBPP is designed to acquaint students with a broad overview of the functional disciplines of management. The design of each program also takes into account the environment in which the activities will be situated and the knowledge and skill base that will be required to function effectively in a specialization.

Each of our programs draws upon courses designed to provide professional public management education. These courses include management, budgeting and financial processes, information technology, quantitative and qualitative analysis, decision making, problem solving, and public policy processes.

In addition to the foundations of professional public management, each program offers unique specializations. These specializations include logistics, acquisition, contract management, program management, financial management, manpower, defense systems, information systems, defense management, and executive management.

1.3B Degree Specification

The Graduate School of Business and Public Policy has graduate programs leading to six different master's degrees All of the programs are closely related and offered by the same faculty unit, using similar course offerings, and resources. All of these programs are delivered predominately by the same full-time resident faculty.

Two of the degrees, the Master of Science in Management (MSM) and the Master of Business Administration (MBA), are awarded from a single, integrated resident program. There are currently 12 separate programs of study within the resident program, each termed a "curriculum", falling within several groups:

- Analysis Curricula:
  - Manpower Systems Analysis MSM
  - Defense Systems Analysis MSM
- Logistics Curricula:
  - Transportation Management MBA
  - Supply Chain Management MBA
  - Material Logistics Support MBA
- Acquisition Curricula:
  - Acquisition and Contract Management MBA
  - Systems Acquisition Management MBA
- Financial Curriculum:
  - Financial Management MBA
- Information Curriculum
  - Information Systems Management MBA
- Defense Management Curricula:
  - Defense Systems Management MBA
  - Resource Planning and Management MBA
  - Defense Business Management MBA

1.3B.1 Brief Overview of the GSBPP Resident Program, Resident Degrees, and NASPAA Accreditation

It is the resident program that was initially accredited by NASPAA in 1980 and most recently reaccredited in 2000. For most of the history of the resident program, the MSM degree was the single degree offered, and completion of any of the resident curricula resulted in the award of an MSM. Starting in 1993, a second degree, the Master of Science in Resource Planning and Management (MSRPM) was established, but only one of the resident curricula (Resource Planning and Management) led to the award of this degree. During the last accreditation process, in 2000, NASPAA awarded accreditation to both of the degrees (MSM, MSRPM) in the resident program.

During 2001-2002, GSBPP conducted a major review of the resident program, resulting in a significant revision of the common core portion of the degree programs. At that time, a new degree, the MBA, was established. At that time also, the individual curricula within the resident program shifted with respect to the degree awarded upon completion of each curriculum. All curricula shifted from awarding an MSM to awarding an MBA, except for the Manpower Systems Analysis curriculum. Students completing the Manpower curriculum continued to earn and be awarded the MSM. (The Resource Planning and Management curriculum, the only curriculum that had led to the MSRPM degree, shifted to awarding the MBA in 2002, and consequently the MSRPM degree was discontinued.)

These degree changes were reported to NASPAA in the 2002 Annual Report and, following review by COPRA, the MBA became a NASPAA-accredited degree. As a result of the changing degrees being awarded in the resident program, we believe there may be some ambiguity concerning the current NASPAA accreditation status of the MSM degree. We had presumed that, with the MSM having been accredited in 2000, that accreditation status had been "extended" to the new MBA degree when it was created in 2002, but that the MSM degree remained NASPAA accredited. Our more recent understanding is that accreditation may have been "transferred" to the MBA degree, resulting in the absence of continuing accreditation of the MSM degree. In any event, GSBPP seeks (re)accreditation of both the MBA and MSM degrees in the resident program.

GSBPP originally had been scheduled for reaccreditation during the 2006-2007 academic year. We completed a self-study of our programs, with 2005-2006 being the self-study year, and with our self-study document submitted August 2006. At that time we submitted a single self-study document, covering the "resident program", and incorporating both the MBA and MSM degrees. Discussions with COPRA following its review of our self-study document led to the conclusion that the reaccreditation process would be better facilitated if we were to provide separate self-study documents for the MBA and MSM degrees. We have re-conducted our self-study for the 2006-2007 academic year and are submitting separate documents for the MBA and MSM degrees,

but with parallel treatment throughout and, often, identical or very similar content. The places of most significant difference between the two self-study documents are:

- Different program mission statements, in Standard 2.1
- Differences in some details of the curriculum, in Standard 4. Particularly in the elements of the Common Curriculum (Stnd 4.21) and the Additional Curriculum Components (Stnd 4.22).
- Where applicable and available, separation of data for the MBA and MSM degree programs in tables throughout the document, with attention focused on the data associated with the program under review.

This self-study document contains the **MSM degree**.

A listing of GSBPP degree programs follows:

DEGREE TITLE:	**Master of Science in Management (MSM)**
LOCATION:	Monterey -- Resident Program
INITIAL OFFERING:	1960
FIRST GRADUATING CLASS:	1961
NASPAA ACCREDITATION:	Initial accreditation 1980 Last reaccreditation 2000 Requesting reaccreditation in 2008

DEGREE TITLE:	**Master of Business Administration (MBA)**
LOCATION:	Monterey -- Resident Program
INITIAL OFFERING:	Winter 2002
FIRST GRADUATING CLASS:	Spring 2003
NASPAA ACCREDITATION:	New degree awarded from the previously accredited program. Accreditation transferred 2002. Requesting reaccreditation in 2008

1.3B.2 GSBPP Programs Not NASPAA-Accredited

GSBPP additionally offers three distance learning degree programs, the Master of Science in Program Management (MSPM), the Master of Science in Contract Management (MSCM), and the Executive Master of Business Administration (EMBA) that are not accredited by NASPAA. Although these programs now satisfy the four-year program length standard, GSBPP does not request a separate review nor initial accreditation of these programs at this time.

Additionally, starting with initial enrollments in July 2006, GSBPP now offers a Master of Executive Management (MEM) degree program. This program does not meet the NASPAA program length standard, and no review of this program is requested.

None of these programs are versions of either the MBA or MSM degrees. None have a similar mission and none serve a similar student population. As such, these

programs are not discussed in this Self-Study document. A description of each, however, is provided in the Appendices (Volume III), which accompanies this Self-Study.

DEGREE:	**Master of Science in Program Management**
LOCATIONS:	Off-campus. Various sites via VTC
INITIAL OFFERING:	April 1999
FIRST GRADUATING CLASS:	June 2001
NASPAA ACCREDITATION:	Not requesting accreditation review

DEGREE:	**Master of Science in Contract Management**
LOCATIONS:	Off-campus. Various sites via VTC
INITIAL OFFERING:	October 1999
FIRST GRADUATING CLASS:	December 2001
NASPAA ACCREDITATION:	Not requesting accreditation review

DEGREE:	**Executive Master of Business Administration**
LOCATIONS:	Off-campus. Various sites via VTC
INITIAL OFFERING:	Summer 2002
FIRST GRADUATING CLASS:	Spring 2004
NASPAA ACCREDITATION:	Not requesting accreditation review

DEGREE:	**Master of Executive Management**
LOCATIONS:	Monterey – Resident Program
INITIAL OFFERING:	Summer 2006
FIRST GRADUATING CLASS:	June 2007
NASPAA ACCREDITATION:	Not requesting accreditation review

Standard 1.4 Program Length
The program must have been in operation at least four years to provide adequate data for evaluating program policies, procedures, and placement of graduates.

1.4 Program Length

Initiation dates and first graduation dates for all GSBPP programs were provided above. The MBA degree was initiated in 2002, but as a continuation of the resident program, extends back decades.

Standard 1.0 Eligibility

STANDARD 2.0 -- PROGRAM MISSION

Standard 2.1 Mission Statement
The program shall state clearly its educational philosophy and mission and have an orderly process for developing appropriate strategies and objectives consistent with its mission resources, and constituencies

2.1A Mission and History of Naval Postgraduate School

The Naval Postgraduate School (NPS) provides unique professional graduate education to US military officers, civilian employees of the US government and defense-oriented individuals from other countries. Owned and operated by the United States Navy, the NPS prides itself on its ability to maintain high academic standards while responding to the dynamic needs of the Navy, other military services, other agencies within the Department of Defense and other countries. NPS is constantly developing new educational programs and delivery methods, and modifying its existing programs, to meet the emerging requirements for programs sponsors and students.

In 1901, the Naval Postgraduate School was originally established as the Postgraduate Division of the U.S. Naval Academy when it was viewed that advanced education for U.S naval officers was intrinsically valuable to the Navy. Throughout its more than one hundred year history, the Naval Postgraduate School has evolved its organization and academic programs to meet the ever-changing needs of the Navy. In 1949, as part of Department of Defense reorganization, Congress moved the Naval Postgraduate School from Annapolis, Maryland, to Monterey, California. In 1951, it officially opened at its current location.

The Naval Postgraduate School specializes in education at the Master's degree level. Some Doctoral degrees are annually conferred by the various departments in NPS. The educational programs are designed to meet the needs of the Navy; however, curricula are developed within a framework of academic degrees with the goal of keeping the highest academic standards.

The majority of the officers attending NPS are practicing military professionals who receive a mid-career education directly relevant to the challenges and concerns of their military careers. The School's curricula are therefore focused on science, engineering, technology, policy, operations, management, and international relations as they are applied to the Navy, other military services, and defense-oriented civilians.

2.1B Institutional Setting

The Naval Postgraduate School is located near downtown Monterey, on a campus of approximately 615 acres. Formerly the grounds of the Del Monte Hotel, the site was leased by the Navy during World War II and purchased in 1946. The capital of old Spanish California, Monterey was best known as a fishing port as recently as the late-1930s. Today, tourism is the area's dominant industry, although the military installations and educational institutions are also major factors in the local economy. In the wider Monterey County area, agriculture is a major industry.

In addition to the Naval Postgraduate School, the Army's Defense Language Institute, the Monterey Institute of International Studies, Monterey Peninsula College, and a branch campus of Golden Gate University are located in Monterey. Fort Ord, once an important Army installation, is now home to California State University, Monterey Bay.

Over 200,000 people live in the greater area known as the Monterey Peninsula. While the entire economic spectrum is represented, the population tends to be relatively affluent. Many have chosen the area for retirement because of the moderate climate. The Monterey Peninsula is a well known tourist area and attracts visitors from all over the world. This gives the area an active international atmosphere and supports diverse cultural events.

2.1C History of Management Education at NPS

Management education at the Naval Postgraduate School began in 1956 with the creation of the Navy Management School. At that time, the management program was five months long and did not lead to a degree. The program was lengthened to 10 months (one academic year) in 1960 and the first Master of Science in Management degrees were awarded in the following year. In 1962, as part of a general reorganization of the NPS, the Management School became a department within the Naval Postgraduate School. The program was lengthened to 12 months in 1964 and the name of the department was changed to Business Administration and Economics. In 1971, this department was merged with the Department of Operations Analysis to form a new Department of Operations Research and Administrative Sciences. In 1972, the program was extended from 12 to 18 months (six academic quarters) and the thesis requirement was instituted.

In 1975, specialty curricula for the various functional areas of management (e.g.; financial, material, manpower, etc.), each drawing on a common core, were formally established. Prior to this, there had been one curriculum with several options in the functional areas. In 1976, the Department of Operations Research and Administrative Sciences split into two separate departments: Operations Research and Administrative Sciences.

In 1992, the Department of Administrative Sciences (AS) initiated a department process to review the department's scope and direction. As a result of this process, the Department clarified its mission, developed a mission statement, and renamed itself the Department of Systems Management (SM). In 1998, Information Technology Management (ITM), which had been housed in the Department of Systems Management since 1991, was renamed, redesigned and transferred to a different division within NPS, the division of Computer and Information Sciences and Operations. Many of the ITM faculty requested and were granted joint appointments with their new division and with the Department of Systems Management. As a result, there was excellent continuity for the students.

During academic year 2000-2001, the Naval Postgraduate School (NPS) underwent a significant reorganization. Previously, NPS contained 11 academic departments, organized into three divisions. The Department of Systems Management, along with three other departments, fell within the Division of Operational and Policy Science. The Chairman of Systems Management reported to the Dean of Operational and Policy Science, who reported to the NPS Provost. NPS reorganized all academic departments into four separate graduate schools. What was formerly the Department of Systems Management became, by itself, the Graduate School of Business and Public Policy (GSBPP). The head of GSBPP is the Dean, who reports directly to the Provost. GSBPP's original organization included three Associate Deans: Associate Dean for Resident Programs, Associate Dean for Distance Learning, and Associate Dean for Research.

The original name considered for the school was the Graduate School of Business, but the faculty rejected that because it did not reflect the strong public policy component needed to meet the sponsors' and the students' broader educational needs. After extensive discussion in a faculty meeting, the faculty adopted the name Graduate School of Business and Public Policy. This was approved by the NPS Provost and Superintendent. For reference, the three other graduate schools are the School of International Graduate Studies (SIGS), the Graduate School of Engineering and Applied Science (GSEAS), and the Graduate School of Operational and Information Science (GSOIS).

The current result of these various organizational changes is that management education and research at NPS is conducted in the separate Graduate School of Business and Public Policy (GSBPP). GSBPP oversees six degree programs and 17 curricula (~30% of NPS); enrolls about 500-600 students (~25% of NPS) and employs about 65-70 full-time faculty (~15% of NPS).

2.1D GSBPP Mission and Strategy Development Process

Mission: In 1992, the Department of Administrative Sciences (an early predecessor to GSBPP), initiated a departmental process to review the scope and direction of the Department's activities, and to develop a meaningful Mission Statement. The process adopted required that faculty approval for the mission statement be

unanimous, rather than by majority vote. After significant faculty discussion, a mission statement was adopted in September 1992 (the process details are contained in the September 1999 NASPAA accreditation documentation). That mission statement has been remarkably robust, and still forms the basis for the current GSBPP mission statement.

In late 1998, the Department of Systems Management (the immediate predecessor to GSBPP), initiated a departmental review of the mission statement, prompted by several changes in the previous six years: the splitting off of the Information Technology group, the establishment of new programs, the growth and changes in the international programs, and the movement of the SM Department into distance learning education. Again, after extensive faculty involvement, a modified Mission Statement was adopted in August 1999. With the exception of a few minor word changes to reflect current circumstances, that mission statement remained in effect into 2007.

Strategy: Starting in 2002 GSBPP began a school strategy process. A faculty offsite was initially held in April 2002, followed by the formation of an ad hoc school strategic planning committee. The strategic planning committee reported to the faculty in December 2002. During 2003 - 2004, the strategy process continued with recurring meetings of the GSBPP leadership team conducting a strategic analysis of the state of the school and the strategic issues it confronts. These processes resulted in two documents speaking to the strategic directions of GSBPP: A Dean's Strategic Report (2002) and a GSBPP Strategic Issues Report (2004). Copies of these documents are in Appendices 2.1I1 and 2.1I2. More recently, in 2006, the GSBPP Dean provided an updated SWOT analysis, based on his perceptions of GSBPP and the evolving external environment, and additionally provided a revised Statement of Dean's Vision and Goals. These documents are contained in Appendices 2.1I3 and 2.1I4.

The School's strategy process has continued in 2007. A GSBPP Ad Hoc Strategic Planning Committee was formed during fall 2006, initially focusing on a review and revision of the School's mission statement. A revised mission statement was adopted in February 2007, which is in effect today. This is presented in the next section, 2.1E. Building from the new mission statement and the 2004 Strategic Issues Report, the Committee developed a Strategic Directions document. This document outlines directions, initiatives and programs deserving of attention by the School and is expected to provide the focus for School efforts in the immediate future. The Strategic Directions document was endorsed by the Faculty in July 2007. A copy is provided in Appendix 2.1I5.

Program Mission: Another important activity during 2007, particularly in the context of this NASPAA reaccreditation review, concerns the development of mission statements at the level of individual degree programs. While GSBPP has long had a mission statement speaking to the School as a whole, GSBPP had not previously thought in terms of separate mission statements for each individual degree program. As noted

earlier in Standard 1.3B.1, GSBPP had submitted a single Self-Study document to NASPAA is 2006 encompassing both the resident MBA and MSM degrees, but is resubmitting self-studies this year, separately for the two degrees. This exercise of separation has beneficially caused us to identify the different purposes of the two NASPAA-accredited degree programs and to clarify their distinct missions. During 2007, the GSBPP Faculty Instruction Committee (FIC) drafted separate program mission statements for the MBA and the MSM degrees. While there is considerable overlap in the two degree programs, each does have a "slant" that is distinct. Somewhat oversimplifying, the MBA degree leans toward the "Managerial" and the MSM degree leans toward the "Analytical". Both GSBPP degrees are unique and do not have perfect correlates with "standard" NASPAA degrees, but the MBA might be characterized as akin to a degree in "Public Management", while the MSM might be characterized as more akin to a degree in "Public Policy Analysis".

The newly created mission statement for the MSM degree program is presented below in section 2.1H.

2.1E GSBPP Mission Statement

Vision

To be recognized as the nation's premier school for defense-focused business management and public policy education and research. To be the institution that national leaders look to for education, research, information, and innovation in the management of the business of defense. To be recognized by our students, alumni, and other stakeholders for our excellence in defense-focused education and research.

Mission:
To serve our Nation by educating US and allied military officers as well as defense civilians in defense-focused business and public policy, by conducting research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with defense business management practices and policies.

***Means**: We pursue our vision and perform our mission through graduate education, research, and professional service.*

- *In Education: Through resident and distance learning degree and non-degree programs, we develop students' abilities to analyze, think critically, and take intelligent actions so they can more effectively carry out their future professional responsibilities to manage organizations, resources, people, and programs in complex, sometimes life-threatening environments.*

- *In Research: Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.*

- *In Professional Service: Provide professional expertise that advances knowledge and business management within GSBPP, NPS, the Department of Navy, the Department of Defense, and other government agencies, as well as in our professional and academic organizations.*

2.1F GSBPP Objectives

Education Objective

Our objective is to provide high quality, relevant, graduate education to career military officers and other government civilians whose contribution to their service or command can most be enhanced by graduate level management education. Our goal is to prepare students for a wide variety of managerial positions in both field activities (e.g., naval stations, shipboards and shipyards, supply centers, etc.) and headquarters where they might be assigned in the future. Typical career specialties for which we prepare our students include financial management, comptrollership, acquisition, logistics, manpower planning and analysis, contracting, human resources, supply center management, and transportation management.

Research Objective

Our research objective is to create opportunities for individual faculty members to engage in original research directed toward advancing the frontiers of knowledge, and thereby to maintain the currency of knowledge which is essential to conducting graduate education and guiding graduate project and thesis work.

We also aspire to enrich our research and instructional programs by encouraging faculty members and students, through personal involvement, to become acquainted with and help solve the scientific and technological challenges facing the Navy and other organizations. We work well with the key personnel responsible for the programs attacking these problems.

We view the master's project or thesis as an important component of our program because it requires students to develop an ability to conduct independent, analytical investigations and present them in a professional way. We believe that the student who

completes a carefully guided master's project or thesis is better prepared both to engage in independent research and to evaluate the research products of others.

2.1G GSBPP Educational Philosophy

All degree programs within GSBPP are designed for mid-career professionals within the military or other DoD organizations. The underlying philosophy of the graduate degrees in GSBPP calls for all students, regardless of specialty, to become familiar with each of the functional disciplines so that they can (1) exercise leadership with an awareness of how their specialty fits in with the interdependent operational characteristics of modern, complex organizations and (2) perform as informed professionals should it be necessary to take on temporary duties within a functional discipline other than their own specialty.

In the resident degree programs (MBA and MSM), this philosophy is implemented via a core of instruction that is common to all students and a specialty in a specific functional management area. It is through the core that the faculty ensures each student's compliance with the common curriculum components detailed in NASPAA's Standard 4.21. The requirements of the student's specialty provide the additional knowledge and skills that build educational relevance into the sponsor's community.

The standards that GSBPP has set for all management programs are stated in the catalog and vary by program. The standard for all degrees is a minimum of 48 quarter credit hours of graduate-level courses, although curricula in the resident program have actual credit hours well in excess of this minimum to satisfy both degree and specialty requirements. All resident MBA and MSM degrees require the successful completion of an MBA project or master's thesis.

2.1H MSM Program Mission Statement

Master of Science in Management Program Mission

The mission Master of Science in Management degree program is to prepare graduates for management and leadership roles in the Defense establishment of the United States or allied nations. The program prepares graduates to manage in complex defense organizations and to conduct rigorous analyses of organizational problems, policies and operations. To accomplish these goals, the program places particular emphasis on developing students' quantitative and analytical skills and their ability to model complex phenomena. The program prepares graduates to

Managerial: *Be well grounded in fundamental areas of management, including accounting, financial management, operations, economics, acquisition, strategy, communications and organizational management.*

Environmental: *Understand the economic, political, governmental, defense and organizational environments that influence their decisions and the organizations in which they work.*

Professional*: Possess the specialized knowledge, skills and abilities to serve in positions of significant responsibility within a specified Defense Management field (Manpower Systems Analysis, Defense Systems Analysis).*

Analytical: *Apply advanced, quantitative, statistical and modeling methodologies to analyze significant defense-related policies and problems in a rigorous manner.*

Critical: *Be capable of thinking in a critical, creative, integrative and strategic manner*

2.1I GSBPP and MSM Program Student Body

The student body in GSBPP resident programs, and in the MSM program, is comprised of military officers and defense department civilians from all services of the United States, officers and civilians of other nations' militaries, and U.S. federal government employees. Students are generally enrolled in NPS only after completing five to eight years of military service or work experience. Students have demonstrated their professional competence and have already served in positions of significant responsibility.

Almost all of our resident students are full-time. While many of our students are graduates of the U.S. military academies, most of the students who enter the curricula offered by the Graduate School of Business and Public Policy obtained their baccalaureate degrees from civilian colleges and universities.

To be qualified for admission, a student must be a proven leader in his/her own service or command. The candidate must also hold a baccalaureate degree with at least a C+ average, and must have completed the prerequisites as required for each degree program. In addition, all international students must demonstrate English fluency. The graduate level curriculum requires dialogue and discussion both in the classroom and team projects; a good understanding of the English language is critical to success.

(The student body for our distance and off-campus education programs includes both military officers and DoD civilians. Military officers are comparable in rank to the students who attend the resident programs. DoD civilians are mid-career professionals who have obtained baccalaureate degrees, at least, from civilian colleges and universities.)

2.1J GSBPP and MSM Program Enrollment Trends

Student enrollment is monitored and, in some cases, limited to maintain reasonable numbers of students in each discipline. Care is exercised to maintain acceptable balances between resources and numbers of students. GSBPP has seen significant growth each year over the period of the past four-five years. Growth in GSBPP has been driven primarily by two factors: 1) Increased enrollment in the resident MBA program, primarily a result of increases in U.S. Air Force students, a group that was previously an insignificant portion of our student body. This growth has enriched classroom discussions. This growth in USAF students is, however, reversing in 2007 and is expected to lead to a noticeable reduction in resident enrollment. 2) Expansion in distance learning programs, primarily a result of the establishment of the DL Executive Master of Business Administration (EMBA) program, which has risen to a steady state enrollment of about 200 students since its beginning in 2002. Within GSBPP, enrollment for the MSM program has been stable during recent years. Enrollment in the MSM program will be affected by additional specialization curricula that may seek an analytically oriented degree. Table 6.3B, in the Standard 6 Student chapter of this report, provides details on the enrollment trends.

We have worked to match the growth in enrollment with a commensurate growth in faculty, support and material resources, though this has been a challenge. We see growth continuing at a moderate pace to meet the increasing demand for officers and civilians with the knowledge and tools to manage scarce human and capital resources in the defense sector. Future growth will likely occur primarily in the collective DL degree programs (not NASPAA-accredited) as opposed to the resident MBA and MSM degree programs (NASPAA-accredited).

2.1K GSBPP Instruction Program Guidance

The GSBPP faculty controls the content of the curricula leading to the degrees granted. Each of the specialty curricula in GSBPP has a sponsor. The civilian-world analogy of a sponsor would be the employer for whom the students will typically work after graduation. As an example, the sponsor for the Financial Management Curriculum is the Office of the Comptroller of the Navy. Sponsors work with GSBPP to help understand the educational needs of the students in their respective curricula. The MSM common core curriculum in the resident program is controlled by the faculty, but obtains required NPS Academic Council approval when required.

The Dean of the School, the Associate Deans, led by the Senior Associate Dean, the Academic Associates for the specific curriculum, and the Program Officer work closely with curriculum sponsors to determine educational skill requirements necessary to prepare students to serve within the sponsored specialty. There is regular and on-going contact with the sponsors, who participate in formal, on-campus biennial curriculum reviews to foster innovation and evolutionary change.

Internally within GSBPP, the Faculty Instruction Committee (FIC) acts as the agent of the Faculty for the oversight of instruction matters and the development of instruction policy and programs. The membership of the FIC consists of faculty representing GSBPP's various faculty areas, various curricula, and various degree programs. The FIC is GSBPP's initial body for consideration of matters involving 1) instruction policy and practices, 2) significant changes to the core curriculum of degree programs or degree program requirements, and 3) the creation of new degree or non-degree instruction programs. Appendix 3.4C contains a copy of the FIC's initial charter.

External to GSBPP, the school also has a GSBPP Advisory Committee, made up of senior military flag officers and government officials at the Assistant Secretary level. The Advisory Committee advises the Dean and faculty on current military issues and future needs, and helps direct us toward research issues and funding. Their personal involvement and support for both teaching and research is helpful for GSBPP to stay in front of the many changes that are occurring in the national security environment around the world. The GSBPP Advisory Committee was established in 2002. Intended to meet at least twice a year, the level of the Committee's involvement and attention to GSBPP has varied since its establishment, often depending on the Chairmanship and make up of the Committee. While continuing communication between the GSBPP Dean and members of the Committee – as individuals – occurs, there has been little activity of the Advisory Committee – as a Committee - during the past couple of years. At present the Advisory Committee represents unrealized potential for the benefit of GSBPP. Appendix 2.1G contains the Advisory Committee's initial charter.

Standard 2.2 Assessment
The program shall assess its students' performance and the accomplishment of its objectives. Assessment procedures and measures may take any form appropriate to the program and its circumstances, but each program shall develop and use procedures for determining how well it carries out its mission.

2.2A Overview of GSBPP Assessment and Review Procedures

Assessment practices flow from the school's mission: The mission of NPS is to provide advanced professional studies at the graduate level for military officers and defense officials from all services and other nations. To accomplish that mission in GSBPP, the educational programs are structured around a core curriculum as well as specialized curricula of study that fulfill the present and future needs of the defense community for officers educated in management. The various curricula are designed to educate the officers in specific Educational Skill Requirements (ESRs). ESRs define a particular set of educational skills that an officer should possess to function effectively as

a manager in a given specialization area. ESRs for a program are developed by curriculum sponsors in conjunction with NPS, especially with the faculty who teach in specialty areas.

The Graduate School of Business and Public Policy has various stakeholders, including students, alumni, faculty, program sponsors, and the broader defense and academic communities. The school relies on a number of procedures, both formal and informal, to obtain feedback from each of these groups to assess the school's performance and the accomplishment of its educational mission.

Formal systems include such items as surveys and questionnaires, which are routinely administered, primarily to current students. A survey for alumni, to be conducted by NPS, is in final draft stages. There are also formally assigned positions within the school that have central responsibility for assessment and management of curricula.

Informal systems include the network of contacts that exist between faculty and former students, military officers, and executives within the larger defense community. The various mechanisms used for assessment and review fall into three related areas – positions, processes, information - as follows:

- Managerial Positions with Assessment Responsibility
  - -Senior Associate Dean / Associate Dean for Instruction
  - -Academic Associate for the MBA/MSM Core
  - -Academic Associates for specialization curricula
  - -Program Officer
  - -Course Coordinators
- NPS and GSBPP Review Processes
  - -Curriculum Review Process
  - -Educational Skill Requirements (ESRs)
  - -Annual Faculty Review Process
  - -Faculty Instruction Committee
  - -Faculty Advisory Board
  - -Ad hoc program review committees
  - -Student Educational Representatives
- Assessment Information: Surveys and Questionnaires:
  - -NPS Student Opinion Forms
  - -GSBPP Core Curriculum Survey
  - -GSBPP Student Exit Curriculum Surveys
  - -Midterm Student Opinion Forms
  - -NPS Alumni Survey

All of these mechanisms play a role in assessment and will be discussed further below. However, unique to NPS, and central to assessment, are the position of Academic

Associate and the formal process of the Curriculum Review, so these mechanisms are described first.

2.2B Academic Associates and Curriculum Reviews

Academic Associates

Assessment practices are structured in terms of curricula. Once a curriculum is established, an Academic Associate is designated for each curriculum. This person has the primary responsibility for managing the curriculum. He/she is responsible for developing, maintaining, and updating curricula to accommodate the needs and academic requirements of the Navy and the Department of Defense. The Program Officer, an active duty naval officer assigned to GSBPP, assists the Academic Associate with administrative liaison with sponsors. The Academic Associate is a faculty member thoroughly familiar with NPS, the Navy and DoD, and is assigned part-time duty to this position. (Appendix 2.2B1, from the NPS Faculty Handbook, further describes the Academic Associate and Program Officer positions.)

The Academic Associate works with specialty sponsors and consultants to define pertinent needs, including professional objectives; to delineate projected utilization of program graduates; and to consult with GSBPP management and faculty to propose useful courses and curricula. These plans and projections consider the impact of developing technology, evolving bodies of knowledge (i.e., other graduate programs related to those under their purview), and the changing mission of the Navy. They are prepared, reviewed, and updated during sponsor reviews of curricula. The Academic Associate maintains a close relationship with the curriculum sponsor to ensure Navy requirements are linked to the academic ESRs.

The Academic Associate for the resident MSM core curriculum is responsible for working with faculty, students and GSBPP management to ensure the quality of the core courses. As will all Academic Associates, he/she has access to all assessment data collected and is responsible for formulating recommendations for suggested changes (such recommendations would go first to the Faculty Instruction Committee and subsequently to the faculty for vote).

<u>Academic Associates for the resident MSM curricula are as follows</u>:

Analysis Curricula

- Manpower Systems Analysis (847) — Steve Mehay
- Defense Systems Analysis (817) — Don Summers

Core Curriculum

- MSM Common Core — Jim Suchan

Academic Associates for the **resident MBA curricula** are as follows:

Logistics Management Curricula:	
• Transportation Management (814)	Keebom Kang
• Supply Chain Management (819)	Keebom Kang
• Material Logistics Support (827)	Keebom Kang
Acquisition Management Curricula	
• Acquisition and Contract Management (815)	Rene Rendon
• Systems Acquisitions Management (816)	Keith Snider
Financial Curriculum	
• Financial Management (837)	Larry Jones
Defense Management Curricula	
• Defense Systems Analysis International (818)	Alice Crawford
• Resource Planning & Mgnt for Intl Defense (820)	Alice Crawford
• Defense Business Management (809)	Jim Suchan
Information Management Curriculum	
• Information Systems Management (870)	Glenn Cook
Core Curriculum	
• MBA Common Core	Jim Suchan

Academic Associates for the **Executive Management** curricula are as follows:

Executive Masters in Business Administration (805)	John Mutty
Master of Executive Management (808)	Bryan Hudgens

Academic Associates for the **Distance Learning MS** curricula are as follows:

Contract Management (835)	Corey Yoder
Program Management (836)	Brad Naegle

In carrying out his or her responsibilities, each Academic Associate maintains ongoing contact with the students, faculty, sponsors and alumni of his/her curriculum. Academic Associates for all curricula have a similar responsibility, but each develops his/her own procedures for managing the curriculum. Routine practices cited by the Academic Associates who manage the resident curricula include:

Input from current students

Meetings with student Section Leaders
Evaluation meetings with current students in the curriculum
Formal exit questionnaires administered to graduating students
End of curricula exit interviews/critiques with graduating students
Academic advising sessions with students
Review of course evaluation (SOF) data

Input from curriculum sponsors
- Biennial Curriculum Review
- Sponsor campus visits
- Informal curriculum reviews with sponsor
- Ongoing ad hoc sponsor contact

Input from graduates/alumni:
- Ad hoc contact with graduates
- NPS Alumni survey planned

Input from Faculty
- Curriculum faculty meetings
- Supervision of Course Coordinators
- Review of course outlines

The Curricular Review Process

The Naval Postgraduate School is unique in that each curriculum exists to serve specified educational needs identified by a sponsor external to the school, but within the defense community. The content of each curriculum is assessed and revised every two years through a structured sequence of events culminating in a formal Curriculum Review with the curriculum sponsor. The purpose of the review is to validate ESRs and propose new ESRs if required; validate any joint stakeholder requirements; review degree requirements that may be independent of the ESRs; conduct an assessment of the design and execution of the curriculum (including a review of faculty and student research). Appendix 2.2B2 provides the formal NPS instruction for curriculum reviews.

Planned events in the review cycle leading up to the formal Review include the following:

Twelve months prior: the Academic Associate begins coordination with sponsors/stakeholders on issues for the next curricular review. They may be assisted in the logistics of this effort by the GSBPP Programs Officer (A Navy Commander who has military line authority over the students and is thoroughly familiar with the curriculum, the sponsors and Navy systems).

Eleven months prior: a review is conducted by program sponsors. This process is mostly external to NPS. The intent is for the program sponsor to review manpower and billets (jobs) and hence review needs for students educated within a given specialty area. The Academic Associate begins collecting required internal data such as exit interviews, survey results, and course content for analysis.

Seven months prior: the School Dean chairs an internal curriculum review. Participants include the NPS Director of Programs, the Academic Associate for the curriculum, the GSBPP Programs Officer, and the Associate Dean for Instruction. The objective is to assess the curriculum's quality and relevancy. The Academic Associate

conducts a curriculum self-study in preparing the Internal Review. One outcome of the Internal Review is a set of curriculum issues to be discussed with the program sponsor and become part of the formal review agenda.

Two months prior: the Academic Associate consults with the sponsors on the status of the review and gathers a set of expected issues. Action plans are drafted for the expected issues.

One-month prior: the Academic Associate pre-briefs the NPS President, Provost, Associate Provost for Academic Affairs, and the Director of Programs. The pre-brief reviews the issues and the proposed presentation to the sponsor. Issues are clearly defined and coordinated with the sponsor.

Formal Curriculum Review: joint review of the curriculum by NPS and the program sponsor. The review focuses on ESRs, curriculum content and resources necessary to support the curriculum. Actions necessary to change and improve the curriculum are identified and agreed upon. While the sponsor is on campus, he/she meets with students to get direct feedback on the curriculum.

2.2C Managerial Positions, Processes and Information

Managerial Positions

- Associate Dean for Instruction Responsible for managing the development and delivery of the Graduate School of Business and Public Policy's educational programs.
- Academic Associates / Program Officer Discussed above.
- Course Coordinators Faculty members assigned to each course. Course coordinators monitor course content and assure that courses are current and relevant.

Review Processes and Review Committees

- Curriculum Review Process and Educational Skill Requirements: discussed above
- Annual Faculty Review Process Annually, the school conducts a "Collegial Review" process for faculty who are not yet at the Full Professor or Senior Lecturer rank. All Full Professors, as a group, review tenured Associate Professors; tenured Professors, as a group, review untenured Professors and Lecturers; and Senior Lecturers review Lecturers. This process reviews and mentors faculty as they progress toward promotion and/or tenure in their career at GSBPP. But, secondarily, the review process assesses the manner in which faculty members contribute to the educational mission of the school.

- Faculty Instruction Committee The Faculty Instruction Committee (FIC) is a standing GSBPP faculty committee serving as the focal point for addressing matters related to instruction policy and practice in GSBPP. The FIC engages major curriculum issues within instructional programs. Specific roles and responsibilities include: studying and evaluating issues and proposed actions and making recommendations to the GSBPP faculty for consideration; making operational policy decisions relevant to instructional programs; providing consultation and advice for the GSBPP administration, particularly the Associate Dean for Instruction. The FIC is discussed further in standard 3.4C, within the GSBPP administrative organization.
- Faculty Advisory Board The Faculty advisory Board (FAB) is the standing faculty committee with the broadest perspective on school-wide issues and leads the processes of faculty governance in GSBPP. The primary role of the Faculty Advisory Board is to consult with and advise the Dean on GSBPP-wide issues of policy, strategy, and organization. FAB membership includes representatives of the various faculty groups in the school. The FAB is discussed further in standard 3.4C, within the GSBPP administrative organization
- Ad Hoc Faculty Program Review Committees It has been common practice in GSBPP that an ad hoc faculty review committee is established to provide an independent review of any newly proposed degree program or curricula. Such ad hoc committees report the findings of their review to the full GSBPP faculty as part of the new program approval process. (Since its recent establishment, the FIC has also played this role.) It is also common practice to establish a faculty program review committee at some period after initiating a new program, to assess the program's effectiveness once underway. Ad hoc faculty committees reviewed the MSCM and MSPM distance learning degree programs in 2003. Twice since its inception in 2002, faculty committees have reviewed the new MBA degree program. (Further comments on the review of the MBA will follow in standard 2.3, Guiding Performance.) GSBPP plans to conduct a faculty review of the EMBA program in the near future.
- Educational Representatives In 2002, GSBPP created the role of student Educational Representatives (Ed Reps) to assist the continuing assessment of the resident MBA/MSM program. The Ed Rep is selected during the first quarter by the other students in his/her entering cohort. The Ed Rep serves as a medium to facilitate communication between students, course instructors and GSBPP program administrators, thus encouraging ongoing dialogue directed toward improving the instructional programs.

Assessment Information

- Student Opinion Forms (SOFs) A questionnaire filled out by all NPS students at the completion of each course. It provides quantitative and qualitative course and instructor evaluation. It is used by instructors to revise and improve courses and

by GSBPP to evaluate faculty instructional performance. Appendix 2.2C contains a copy of the SOF. .

- GSBPP Core Curriculum Survey A student questionnaire conducted after students complete the common core curriculum in the resident MBA/MSM program (usually late in the students' third quarter or fourth quarter). This survey provides students' assessments of the value, defense-relevance and satisfaction associated with the common core curriculum courses. Rating and qualitative assessments are provided. It is used by the Associate Dean for Instruction and Academic Associate for the Core to improve the core curriculum. Appendix 2.2C contains a copy of the Core Survey.
- GSBPP Student Exit Surveys A questionnaire conducted when students complete the specialty part of the resident MBA/MSM program (late in students' final quarter at NPS). It provides students' assessments of the value, defense-relevance and satisfaction associated with the specialty curriculum courses. Rating and qualitative assessments are provided. These surveys are generally accompanied by exit briefs with graduating students to review the survey findings. It is used by Academic Associates to improve the curriculum. Appendix 2.2C contains an example subspecialty curriculum survey.
- Midterm Student Opinion Forms Some faculty members administer a course evaluation at the midterm. This may replicate the formal NPS SOF or it may be designed by the faculty member.
- NPS Alumni Survey An NPS survey has been designed and is ready to conduct. NPS plans call for initial administering of the survey during fall 2007. Appendix 2.2C contains a copy of this planned alumni survey.

Standard 2.3 Guiding Performance
The program shall use information about its performance in directing and revising program objectives, strategies, and operations

2.3A Overview of Program Changes Resulting from Assessment and Review Procedures

Significant curriculum changes have occurred during recent years due to assessment and review processes undertaken within GSBPP, as discussed in the preceding standard 2.2.

The school has reviewed and clarified its mission, principally through on-going work on the school strategy by the GSBPP management team and the Ad Hoc Strategy Committee in addition to many meetings held between sponsors/stakeholders and the Dean who entered in September 2005. This has resulted in new markets being identified, and new programs and curricula being evaluated and created. Program changes have

occurred that 1) significantly altered the resident MSM/MBA program, with emphasis in the core curriculum, 2) added and deleted specialty curricula, 3) modified the specialty curricula to better serve sponsor requirements, and 4) added and deleted degree programs. . The remainder of this section provides summary descriptions, with more detail concerning these program changes.

2.3B The MSM/MBA Resident Program -- Change in Core and Additional Degree

Resident Degree Change Starting in 2001, GSBPP conducted a comprehensive assessment of its main resident degree programs. In part, this review grew out of the previous years' NASPAA and AACSB accreditation visits. In part, it was the result of a long-standing faculty desire to comprehensively review its core curriculum. In part it was motivated by the initiative, encouragement and support from a new NPS Superintendent at the time. The assessment included the following:

- Contact and discussion with high-level Admirals throughout the US Navy to determine their needs and expectations concerning graduate level education
- Assimilation of curriculum sponsor and student evaluations of GSBPP resident curricula
- Survey of current students to determine the value they attached to particular degrees and degree programs
- Review of the existing resident degree programs by GSBPP faculty
- Bench marking of GSBPP degree programs against peer schools

The comprehensive review of GSBPP resident degree programs was lead by a representative committee of GSBPP faculty. The committee's recommendations were reviewed by an independent GSBPP evaluation committee. These results were presented to the full faculty for further discussion and modification. After extensive faculty input and debate, the GSBPP faculty adopted the resulting recommendations, which were then approved by the NPS Academic Council. This process led to several significant decisions and actions:

- Ground-up redesign of the core courses within the resident program
- Changing the name of the predominant degree earned in the resident program from Masters of Science in Management (MSM) to Masters of Business Administration (MBA); at the time of this name change, 11 of GSBPP's resident curricula changed to awarding a "Defense-Focused MBA" degree, while one curriculum continued to award the MSM degree
- Merging the Masters of Science in International Resource Management and Planning into the defense-focused MBA degree program

Detailed results of these changes were reported to NASPAA under standard 4.0 in the 2002 annual report. (Appendix 2.3C contains excerpts from NASPAA Annual Reports 2002-2004 describing curriculum changes.)

2002 Review The GSBPP faculty closely tracked the initial student cohorts that started in January 2002 to monitor all aspects of the program. This tracking involved substantial student input. It became clear early on that the new core design materially exacerbated a problem our students had been experiencing, to a lesser degree, for a number of years: excessive academic workload. In responding to evolving and increasing educational requirements from our specialized curricula sponsors, we had added several required specialty courses, many of them "small" course (less than the 4-credit hour standard). The cumulative effect of added requirements in the specialization curricula and the core redesign was to increase student workload beyond a level conducive to successful learning.

During fall 2002, a faculty committee examined the issue and suggested changes to correct the student workload problem. The process involved the faculty examining the core MBA program, the Academic Associates, in conjunction with faculty groups in each specialty area, examining the specialty portion of the program, and individual instructors examining the workload in their courses. The recommended changes were adopted by the larger faculty and approved by the NPS academic council as appropriate. Objectives were to:

- Reduce the absolute number of courses (particularly 2-credit hour courses)
- Reduce the total credit hours in specialization curricula
- Adjust student work assigned in individual courses to correspond to course credit hour size.

With these changes, the curricula now average somewhere around 16 +/- credit hours per quarter, a "normal" load. Detailed results of these changes were reported to NASPAA under standard 4.0 in the 2003 annual report.

2003-2004 Review When GSBPP adopted the MBA, the faculty pledged to systematically review the program after the first class graduated in June 2003. With the MBA and MSM programs and core having significant overlap, a review of the MBA is also a review of the MSM. This review was initiated during fall 2003 and completed in summer 2004. The review was lead by a GSBPP faculty committee. Their recommendations were adopted by the full GSBPP faculty and approved by the NPS Academic Council, as appropriate. The committee suggested modest adjustments to the core courses. These changes primarily involved repackaging the management and analytical core courses. Detailed results of these changes were reported to NASPAA under standard 4.0 in the 2004 annual report.

As described above, our curricula are periodically fine tuned to meet the changing needs of the students and program sponsors. Care is taken to maintain an integrated curriculum that is linked across each curriculum's educational objectives. This results in an effective student learning environment.

2.3C The MSM Program -- Addition of Specialty Curricula

In response to changing sponsor needs, interest in the MBA program by new sponsors, or changes in student enrollments, new individual specialty curricula may be created and older ones discontinued. During recent years, sponsors of some curricula have sought increased analytical content in rigor in their programs. One result of this has been a shift of the Defense Systems Analysis curriculum from the MBA degree program to the MSM degree program

Defense Systems Analysis: Defense Systems Analysis (DSA) has long been one of the curricula in the resident program. As for most resident curricula, an MSM degree was awarded prior to 2002, and the DSA curriculum then shifted to awarding the MBA degree upon its development in 2002. During 2006-2007, the DSA curriculum underwent a significant curriculum review with the sponsors, leading to a redefinition of the objectives of the curriculum. Sponsors wished to increase the emphasis and focus on developing the analytical skills and capabilities of the graduates. In response to this, quantitative methods and modeling courses were added to the DSA and a master's thesis became a required component. The objectives of this "new" DSA curriculum are better aligned with the MSM degree program rather than the MBA degree program, so the DSA curriculum now satisfies the requirements of the MSM degree and, starting with 2007, students following the DSA curriculum will earn and be awarded the MSM. DMA is no longer and MBA degree curriculum.

2.3D MSM Specialty Curricula Review and Changes

The school has assessed and reviewed the MSM specialization curricula, principally through the ongoing formal process of curriculum reviews of existing programs. This has resulted in continuing modification and adjustment to better satisfy academic and curriculum sponsor needs. Below is a summary of changes in specialty curricula that have occurred during recent (about three) years.

Manpower Systems Analysis Curriculum (847)

- Degree changed from an MBA to a MSM for U.S Navy Officer students, effective with September 2007 graduates
- Eliminated the January curriculum input
- The 2006 Curriculum review resulted in the following curriculum changes:

- Deleted MN 4118 (Modeling Decision Support in Manpower Systems)
- Deleted MN 4116 (Society of Human Resources)
- Deleted MN 4119 (Navy Manpower Requirements Process)
- Deleted MN 4130 (Marine Manpower Management)
- Deleted MA 1010 (Algebra and Trigonometry)
- Added MN 2039 (Basic Quantitative Methods in Management)
- Added OS 3401 (Human Factors in Information Warfare)
- Added MN 2113 (Human Resources II) for USMC students

·Embedded JPME for students required or who desire to complete JPME at NPS
·Deleted the elective requirement for International students

Defense Systems Analysis Curriculum (817)

- Added GB4510 (Strategic Resource Management) to required courses
- Deleted the data base management course from the required courses to allow selection of a more appropriate advanced course
- Replaced MN2221/2222 with MN3331 (Systems Acquisition and Project Management), which is required for all USMC MBAs
- Added required courses GB4550 (Advanced Financial Reporting) and GB4570 (Advanced Finance)
- From 2007 curriculum review, shifted from MBA core curriculum and award of MBA degree to MSM core curriculum and award of MSM degree.
  - Masters thesis required in place of MBA project
  - MN2039 (Basic Quant) and MN3111 (Multivariate Data Analysis) core courses added.
  - Deleted Defense Budget Practice (GB3510), Strategic Resource Management (GB4510), Advanced Finance (GB4570), Advanced Financial Reporting (GB4550) from required specialization courses.
  - Added Decision theory (OA3304), Simulation Modeling (GB4440), Spreadsheet Modeling (OA4801) to required specialization courses.

2.3E New and Deleted GSBPP Degree Programs

In addition to developments within the MSM (and MBA) degree programs, there have been four major additions and deletions to GSBPP degree programs during the past five years.

EMBA In 2002, GSBPP began a new Executive Master of Business Administration (EMBA) program. A continuing issue concerning graduate education for U.S. Naval officers is the difficulty of Unrestricted Line (URL) officers to devote lengthy periods of time away from operational careers to full-time graduate education. As a response to these circumstances, GSBPP created the part-time, distance learning EMBA program, providing management and administrative education without disrupting

officers' career paths. The EMBA program is offered to students by VTC at 13 sites around the country. The program currently has an enrollment of about 200 students. The EMBA is described in detail in the Volume III, Appendices, within Appendix 9.0.

MSRPM: The Master of Science in Resource Planning and Management (MSRPM) degree program had existed since 1993, and was the degree awarded to students (all international) who completed the Resource Planning and Management for International Defense curriculum. In 2002, following the revision of the resident core curriculum and the establishment of the MBA degree, sponsors for the Resource Planning curriculum decided to transition the curriculum to the MBA program. The set of courses in the Resource Planning curriculum were revised to incorporate all MBA core courses and satisfy MBA degree requirements. With this shift to the MBA, the MSRPM degree was discontinued.

MEM In 2006, GSBPP received approval from the NPS Academic Council to offer a new resident degree program, the Master of Executive Management (MEM). The MEM was developed at the request of the U.S. Air Force Acquisition community. Across the service, the USAF designates high-performing, mid-career officers for Intermediate Development Education (IDE) and sends such officers to graduate programs. The USAF Acquisition community requested that GSBPP develop a 1-year resident program to serve its IDE officer needs. Curriculum-wise, the MEM has been modeled on the EMBA program and is very similar with respect to objectives, curriculum content and courses. The MEM enrolled its first students (5) in July 2006. The MEM is described more fully in Appendix 4.1.

LEAD The Master of Science in Leadership and Human Resource Development (LEAD) program was designed and managed for the United States Naval Academy (USNA) by GSBPP for nine years. The program was delivered by NPS faculty, who traveled to USNA, in modularized courses one to two weeks long. During 2006, USNA conducted a review of their needs and decided to put the program up for competitive bids. In June 2006, USNA outsourced this program to the University of Maryland. While 2006 marked that last year for GSBPP delivery of the LEAD program, there is some possibility that the program could return to GSBPP at some point in the future. The LEAD program is discussed fully in Volume III, Appendices, within Appendix 9.0.

STANDARD 3.0 -- PROGRAM JURISDICTION

Standard 3.1 Administrative Organization
Within the framework of the university organization, responsibility for the professional masters degree program should rest with an identifiable component of faculty and an administrative organization capable of conducting the program effectively.

3.1A Administration Arrangement

The Naval Postgraduate School (the university) is organized into university-level administrative offices and the academic operating units. An NPS organization chart is provided below that depicts an overview of the university administration and the academic units. The major academic units are the four individual graduate schools, further divided into departments:

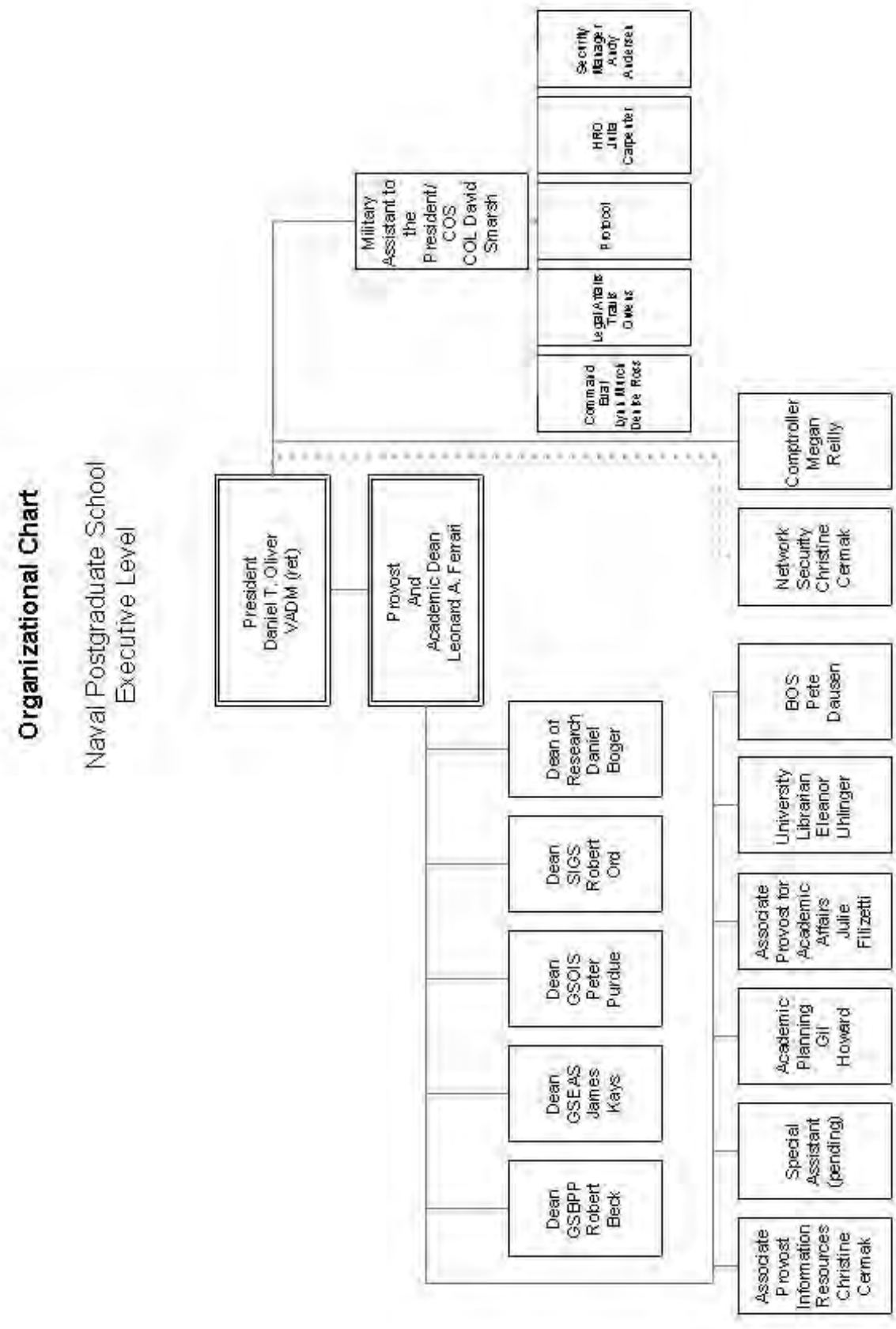
- The Graduate School of Engineering and Applied Sciences: Dean James Kays
  - -Applied Mathematics
  - -Oceanography
  - -Space Systems
  - -Systems Engineering
  - -Physics
  - -Meteorology
  - -Mechanical and Astronomical Engineering
  - -Electrical and Computer Engineering

- The Graduate School of Operational and Information Sciences: Dean Peter Purdue
  - -Operations Research
  - -Computer Science
  - -Information Sciences
  - -Defense Analysis

- The School of International Graduates Studies: Dean Robert Ord
  - -National Security Affairs
  - -Center for Homeland Defense and Security
  - -Center for Civil Military Relations
  - -Defense Resources Management Institute

- The Graduate School of Business and Public Policy: Dean Robert Beck

Besides the four graduate school deans, NPS has a Dean/Associate Provost of Research, providing oversight of NPS research program activities and administrative supervision of three NPS research institutes:


Organizational Chart
Naval Postgraduate School
Executive Level
President
Daniel T. Oliver
VADM (ret)
Provost
And
Academic Dean
Leonard A. Ferrari
Military Assistant to the President/ COS
COL David Smarsh
Protocol
HRO
Julie Carpenter
Security Manager
Andy Anderson
Legal Affairs Trial Counsel
Comptroller
Megan Reilly
Network Security
Christine Cermak
BOS
Pete Dausen
University Librarian
Eleanor Uhlinger
Associate Provost for Academic Affairs
Julie Filizetti
Academic Planning
Gil Howard
Special Assistant (pending)
Associate Provost Information Resources
Christine Cermak
Dean GSBPP
Robert Beck
Dean GSEAS
James Kays
Dean GSOIS
Peter Purdue
Dean SIGS
Robert Ord
Dean of Research
Daniel Boger

- Dean and Associate Provost of Research: Dan Boger, Acting
  - -Meyer Institute for Systems Engineering
  - -Modeling and Virtual Environments (MOVES) Institute
  - -Cebrowski Institute

Within the NPS academic units, department chairs report to the graduate school deans; the deans report to the Provost and Vice President of NPS. The Provost is responsible for the academic programs and their operations. He delegates responsibilities, as appropriate, to the respective deans and department chairmen. The current NPS Provost position is Dr. Leonard Ferrari. Formerly the NPS Dean of Research, Dr. Ferrari assumed the Provost position in early AY 2007.

The institution is headed by a President. Historically, the President (formerly Superintendent) of NPS has been an Admiral on active duty in the Navy. Historically, the President's term ranged from two to three years duration. The most recent President of NPS was Rear Admiral Richard Wells, Acting President from January-June 2006. During 2006, legislation was passed by the U.S. Congress permitting the President's position to additionally be filled by a civilian. The President's position was vacant until April 1, 2007, when the position was assumed by President Daniel T. Oliver. President Oliver is the first civilian President of NPS, with an initial term of five years. While a civilian, President Oliver is a retired Vice Admiral, having formerly served a full and accomplished career in the U.S. Navy.

3.1B Relationship with Other Academic Units

There are no significant formal relationships or joint agreements between GSBPP and other departments at NPS. There are, however, numerous situations in which GSBPP and other departments collaborate to deliver NPS degree programs or curricula. These arrangements are typically of the service type, providing courses either to or from other departments. The Operations Research, Information Sciences, National Security Affairs, and Systems Engineering Departments all offer courses designed for MBA and MSM students. Our faculty exercise considerable influence on this course content.

Standard 3.2 Recognized Program
There is a public affairs and administrative program with identifiable faculty membership, whose primary responsibility for the program is recognized at the next higher level of university organization.

3.2 Recognized Program

As shown in the GSBPP organizational chart below, Robert Beck was the Dean of the Graduate School of Business and Public Policy during the self-study year. Dean Beck

has overall responsibility for GSBPP's operation and for maintaining links with the school's external sponsors and stakeholders. Dean Beck is advised by the Faculty Advisory Board (FAB). The FAB is composed of elected representatives from all faculty groups and serves as the standing faculty committee with the broadest perspective on School-wide issues.

2A School Administration

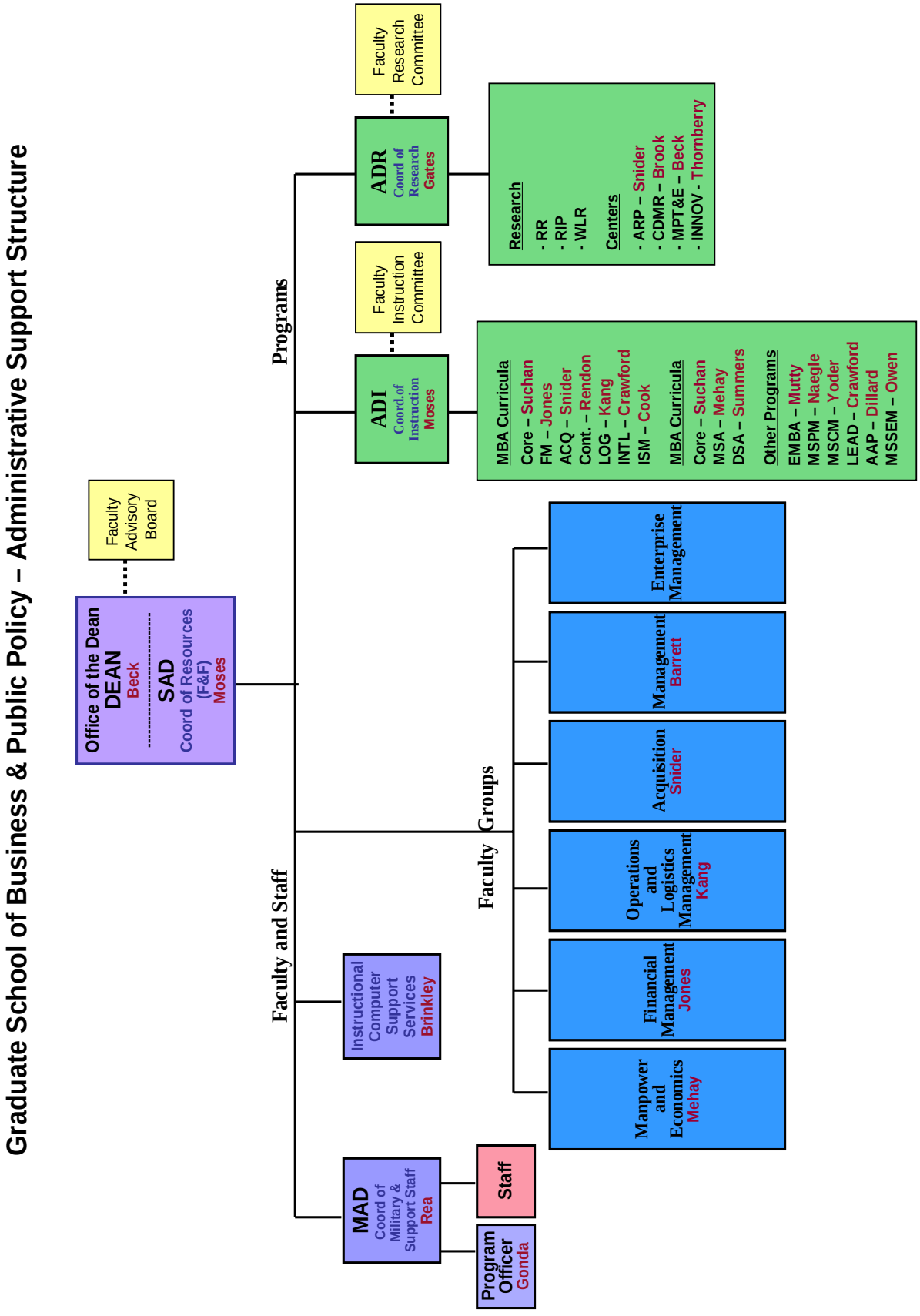
Dean Beck is assisted in his administrative duties by one Senior Associate Dean (Professor Doug Moses) and three Associate Deans; one for Instruction (Professor Doug Moses), one for Research (currently vacant); and one Military Associate Dean (Captain Terry Rea, USN). Professor Doug Brinkley serves as the department's Director of Instructional Computer Support, a part-time administrative role

Professor Doug Moses (Senior Associate Dean and Associate Dean-Instruction) assists the Dean with the overall internal operations of the Graduate School of Business and Public Policy, including budgeting oversight, faculty affairs (e.g., recruiting and hiring, collegial review process, etc.), instructional program coordination, and academic issues. As Associate Dean – Instruction, Professor Moses is responsible for assigning faculty to deliver the courses required by the various curricula. He also chairs the Faculty Instruction Committee (FIC) which exercises the oversight necessary to maintain consistent academic quality across the broad spectrum of curricula offered.

The Associate Dean-Research is charged with encouraging and facilitating scholarly activity on the part of our faculty. S/he oversees the processing of proposals for both internal and external research support and represents GSBPP on the NPS Research Board. S/he also chairs the Faculty Research Committee (FRC), which provides advice and guidance on GSBPP-wide issues of research policy and strategy, with the objective of continually improving GSBPP's scholarly productivity, broadly defined.

Captain Terry Rea, USN (Military Associate Dean) is the senior military officer in the school. Captain Riddle oversees military officers in the school and acts as a liaison with external military commands. In GSBPP, the Military Associate Dean also coordinates support functions and activities within the school and supervises staff members who provide those services. Included are secretarial services, supply and equipment purchasing, travel, word processing and graphic arts support, and contract services.

Professor Brinkley is responsible for coordination and operation of the school's classroom computers and computer labs, both research and instructional.


Graduate School of Business & Public Policy – Administrative Support Structure
Office of the Dean
DEAN
Beck
SAD
Coord of Resources (F&F)
Moses
Faculty Advisory Board
Programs
ADR
Coord of Research
Gates
Faculty Research Committee
Research
- RR
- RIP
- WLR
Centers
- ARP – Snider
- CDMR – Brook
- MPT&E – Beck
- INNOV - Thornberry
ADI
Coord.of Instruction
Moses
Faculty Instruction Committee
MBA Curricula
Core – Suchan
FM – Jones
ACQ – Snider
Cont. – Rendon
LOG – Kang
INTL – Crawford
ISM – Cook
MBA Curricula
Core – Suchan
MSA – Mehay
DSA – Summers
Other Programs
EMBA – Mutty
MSPM – Naegle
MSCM – Yoder
LEAD – Crawford
AAP – Dillard
MSSEM – Owen
Faculty and Staff
Faculty Groups
Enterprise Management
Management Barrett
Acquisition Snider
Operations and Logistics Management Kang
Financial Management Jones
Manpower and Economics Mehay
Instructional Computer Support Services Brinkley
MAD
Coord of Military & Support Staff
Rea
Staff
Program Officer
Gonda

3.2B Faculty Administration

GSBPP includes a number of administrative positions designated as "Academic Associates" (AAs). Each instructional program or curriculum within the school, and each of the major faculty groups within the school, is administered by a faculty member holding an Academic Associate position. Individual AAs may have program responsibility, faculty responsibility, or both. AAs with program responsibility oversee the curriculum content and the integrity of their academic programs and maintain relationships with program sponsors (including conducting curriculum reviews). AAs with faculty responsibility oversee the faculty members within their area, including teaching schedules, recruiting and hiring, and mentoring. The Academic Associates are nominated by the school's Dean and appointed by the NPS Provost.

Since 2006, reflecting an evolution in roles, the Academic Associates who have faculty responsibility have also been referred to as "area chairs". Staring July 2007, distinct administrative appointments as Area Chair have been extended to the five AA positions with responsibility for coordinating area faculty. They are:

Area Chair	Academic Area
• Professor Larry Jones	Financial Management Faculty
• Professor Steve Mehay	Economics and Manpower Faculty
• Professor Frank Barrett	Management Faculty
• Associate Professor Keith Snider	Acquisition Faculty
• Associate Professor Keebom Kang	Operations and Logistics Faculty

3.2C Administration of Research Activities

As noted above, GSBPP has an Associate Dean for Research whose central responsibility is coordination and administration related to the school's research programs and activities. Additionally, as part of the faculty governance structure (discussed more fully in section 3.4), the Faculty Research Committee provides the means for direct faculty participation in the school's research policies and practices.

Research programs within the school vary in size, breadth of faculty involvement, and continuity. With sufficient size, involvement and continuity, research programs may become established as having an individual identity and perhaps formal recognition as entities within the school. At present, six research programs exist as administrative entities in GSBPP:

• Acquisition Research Program	Jim Greene, Chair; Keith Snider, Prog. Mgr
• Center for Defense Mgnt Reform	Douglas Brook, Director
• Center for Innovation	Neil Thornberry, Chair
• Faculty Workload Fund	Associate Dean for Research, Coordinator
• Research Initiation Program	Associate Dean for Research, Coordinator
• MPT&E Research Program	Robert Beck, Dean, Program Manager

Standard 3.3 Program Administration
Responsibility for program administration is assigned to a dean, chairperson, director, or other single administrator who is appointed after appropriate consultation with the program faculty.

3.3A Dean

Overall responsibility for the Graduate School of Business and Public Policy and its programs is assigned to the Dean. The Dean's appointment is limited to a maximum term of three years, with possible renewals. When a Dean is to be appointed or reappointed, the NPS Provost appoints a faculty committee to poll the GSBPP faculty regarding reappointment or the need to conduct a search for a new Dean. A Dean search may include both inside and outside candidates.

An outside search begins with the formation of a committee composed of a cross-section of faculty from the Graduate School of Business and Public Policy and at least one representative from another school. The committee uses advertisements, notices, etc., in the same manner as a Dean search at a civilian university. Top candidates are brought in for interviews.

For inside candidates, individual faculty are interviewed by the Provost, as appropriate, to determine their concerns and preferences with regard to candidates. With the advice of the faculty, the NPS President and Provost confer and offer an individual the job as Dean. This process continues until a suitable person accepts and the new appointment is announced. In such a process the School faculty members have great influence on the Dean selection. In every search or reappointment since this policy was adopted, the successful candidate was supported by a majority of the School faculty.

3.3B Academic Associates

As indicated in section 3.2, the Associate Dean for Instruction is responsible for coordinating of the school's instruction programs, but each instructional program or curriculum within the school is administered by a faculty member holding an Academic Associate position. AAs with program responsibility oversee the curriculum content and the integrity of their academic programs and maintain relationships with program sponsors (including conducting curriculum reviews). The responsibilities of the curricular AAs were discussed in depth in section 2.2. Academic Associates are nominated by the school's Dean and appointed by the NPS Provost. Faculty currently acting as Academic Associates include:

For the <u>MSM program</u> and MSM curricula

- Professor Jim Suchan — MSM core curriculum
- Professor Steve Mehay — Manpower Systems Analysis curriculum
- Lecturer Don Summers — Defense Systems Analysis curriculum

For the MBA program and MBA curricula:

- Professor Jim Suchan — MBA core curriculum
- Professor Larry Jones — Financial Management curriculum
- Associate Professor Keith Snider — Systems Acquisition Management curriculum
- Senior Lecturer Rene Rendon — Acquisition and Contracting curriculum
- Associate Professor Keebom Kang — Logistics curricula
- Senior Lecturer Alice Crawford — International Student curricula
- Lecturer Glen Cook — Information Tech. Mgnt curriculum
- Professor Jim Suchan — Defense Business Management curriculum

For Other GSBPP programs and curricula:

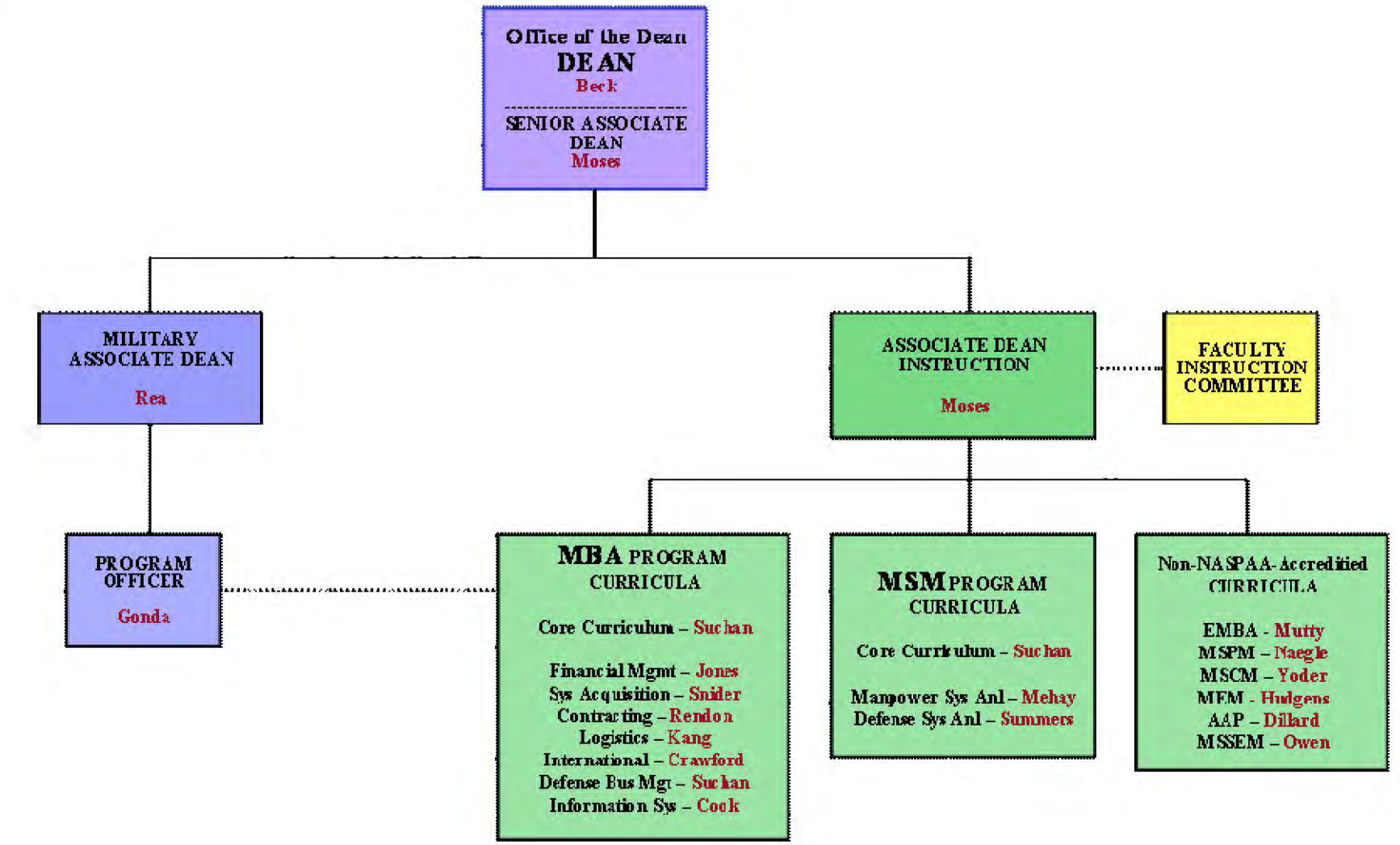
- Senior Lecturer John Mutty — Executive MBA
- Lecturer Bryan Hudgens — Master of Executive Management curriculum
- Senior Lecturer Brad Naegle — MS in Program Management
- Lecturer Cory Yoder — MS in Contract Management
- Senior Lecturer Wally Owen — MS in Systems Engineering Management

3.3C Program Officer

A unique position at the Naval Postgraduate School is the Program Officer. There are several Program Officers across NPS, one assigned to GSBPP. The Program Officer is an active duty military officer (typically at the O5 rank) with administrative responsibilities for a set of curricula. In GSBPP, the Program Officer has responsibility for student administration and administration of the school's formal curriculum review process. The Program Officer acts as a liaison between program sponsors and Academic Associates in overseeing the content of the school's resident curricula. Responsibilities of the Program Officer are noted in section 2.2. Commander Phil Gonda, USN, is the GSBPP Program Officer. Appendix 2.2B1 further describes the Program Officer position.

The following page contains a figure summarizing the GSBPP positions associated with administration of curricula and programs.

Graduate School of Business and Public Policy – Instruction Programs Administration



Standard 3.4 Scope of Influence
Within the framework of organization and process peculiar to the institution, the public affairs and administration faculty and/or administrator exercises initiative, and substantial determining influence with respect to general program policy and planning; degree requirements, new courses and curriculum changes; admissions, certification of degree candidates; course scheduling and teaching assignment; use of financial and other resources; appointment, promotion and tenuring of program faculty.

3.4A General Program Policy and Planning

The GSBPP faculty and administrators determine policy with respect to GSBPP issues. Within NPS's policy and procedures, GSBPP develops policy to facilitate the effective management of the school. Policies that have been developed or refined in the past several years include: The GSBPP Annual Review and Promotion & Tenure Processes (Appendix 3.4J1); The GSBPP Faculty Promotion & Tenure Voting Policy (Appendix 3.4J1); Policy On Lecturer and Senior Lecturer Appointments (Appendix 3.4J2); The GSBPP Policy on Recruiting and Appointment of Tenure Track Faculty (Appendix 3.4I1); and a policy establishing three faculty advisory boards, the Faculty Advisory Board (FAB), the Faculty Instruction Committee (FIC) and the Faculty Research Committee (FRC) (Appendix 3.4C).

3.4B The Senior Faculty Council

Growing out of discussions after the 1997 promotion and tenure deliberations and faculty mentoring sessions, the senior faculty (full professors) in GSBPP (then the Systems Management Department) expressed a collective desire to take more leadership and exert more influence on the governance of the Department. The Chairman at the time had encouraged this increased involvement by the senior faculty. As a result of a series of informal meetings, the Senior Faculty Council was formed in the fall of 1997. After transitioning from the Systems Management Department to the Graduate School of Business and Public Policy, the Senior Faculty Council's Charter became:

Objectives: to function as the advisory body to the School Dean in establishing policies in academic matters, including (1) programs, (2) curricula, (3) faculty evaluation and promotion, (4) collegiality, and (5) professional practice.

Membership: includes all faculty members in the school who hold the rank of full professor.

Structure and Process: The Senior Faculty Council will, after full discussion among its members, including the School Dean, make recommendations to the Dean about actions and policy making guidance. These recommendations will be based on a recorded vote of the members and are advisory to the Dean. The executive agent of the

Council is a four-person Executive Committee, consisting of three full professors selected by the Council and the Dean as an ex officio member. The three elected members will serve a one-year term and are eligible for reelection. A chairperson of the Executive Committee is selected to coordinate and chair all Executive Committee and Council meetings.

The tasks of the Executive Committee include the following:

- Solicit/entertain inputs from the faculty, students, and program sponsors regarding potential policy matters for the Senior Faculty Council to address.
- Decide whether or not a potential issue should be undertaken for further consideration, and the appropriate body (full professors, tenured faculty, full faculty, etc.) for final decision.
- Prepare specific recommendations for discussion and decision by the appropriate faculty body.
- Serve as the advisory body for the Dean on urgent academic-related matters.

When the GSBPP faculty approved the faculty governance initiatives, which included forming the Faculty Advisory Board (FAB), the Senior Faculty Council relinquished its routine advisory role in favor of the FAB, with its broader faculty representation. However, the Senior Faculty Council, now with the name of the Senior Advisors Council (SAC) continues to provide guidance as situations dictate.

3.4C GSBPP Faculty Governance Structure

The Graduate School of Business and Public Policy recently approved a faculty governance structure involving three faculty committees, the Faculty Advisory Board (FAB), the Faculty Instruction Committee (FIC) and the Faculty Research Committee (FRC). These committees serve the school's Dean, Associate Dean for Instruction and Associate Dean for Research, respectively, in both advisory and policy approval roles. The original proposals that outline the committees' membership, roles and responsibilities are provided in Appendix 3.4C.

The Faculty Advisory Board (FAB): The FAB is the standing faculty committee with the broadest perspective on school-wide issues and leads the processes of faculty governance in GSBPP. The primary role of the Faculty Advisory Board is to consult with and advise the Dean on GSBPP-wide issues of policy, strategy, and organization. Both the Dean and the FAB members can initiate and propose matters for discussion. FAB membership includes representatives of the various faculty groups as follows:

- Two members from the tenured faculty
- One member from the untenured, tenure track faculty
- Two members from the Senior Lecturer/Lecturer faculty

Members of the committee are selected for two-year staggered terms and are elected by each faculty group according to processes decided by each group.

The Faculty Instruction Committee (FIC): The FIC is a standing GSBPP faculty committee serving as the focal point for advising the Associate Dean for Instruction (ADI) on instructional matters. The FIC engages major curriculum issues within instructional programs. Specific roles and responsibilities include: studying and evaluating issues and proposed actions and making recommendations to the GSBPP faculty for consideration, as appropriate; making operational policy decisions relevant to instructional programs; providing consultation and advice for the GSBPP administration (particularly the ADI) to discuss instructional program issues and initiatives. Membership includes The ADI (chair), the five faculty area Academic Associates, the Academic Associate for International curricula, an Academic Associate from the DL programs and two at-large faculty members appointed by the Associate Dean for Instruction.

The Faculty Research Committee (FRC): The FRC is a standing GSBPP faculty committee serving as the principle faculty advisory body to the Associate Dean of Research (ADR). The FRC consults with and advises the ADR on GSBPP-wide issues of policy and strategy, with the objective of continually improving GSBPP's scholarly productivity. Both the ADR and the FRC members can initiate and propose matters for discussion. FRC membership includes the ADR (chair) and five faculty members representing the diversity of faculty in GSBPP, including: tenured professors/associate professors, untenured tenure-track faculty members, lecturers/senior lecturers.

3.4D Establishment of Curricula, Degree Requirements and New Courses

The MSM program and curricula that are under consideration in this review are developed in a two-pronged manner. Each program must meet both a) the education needs of the sponsor (the operating department or division for whose requirement the curriculum is maintained), and b) the academic degree requirements.

All degree requirements must be approved by the GSBPP faculty and the NPS Academic Council. The degree requirements are controlled by the faculty, and the curriculum requirements meet both the academic requirements established by the faculty and the educational skill requirements of the program sponsor.

Changes in degree requirements originate through various channels. Degree requirements or changes that may be proposed are reviewed by a committee of the faculty. In the past, ad hoc review committees composed of department faculty would be appointed by the chair. Since the adoption of the new faculty governance structure and the establishment of the Faculty Instruction Committee, the FIC has replaced ad hoc committees as the first level of faculty review. A separate ad hoc committee to review a particularly significant degree program matter may be recommended by the FIC. If, after extensive study of the question, the FIC votes to recommend the proposal, the FIC takes the proposal to a school faculty meeting for consideration, debate and vote by the full faculty. Appendix 4.1 is an example of a report that was recently produced for what became the Master of Executive Management (MEM) program.

If approved by the GSBPP faculty, the Dean then makes a recommendation to the NPS Academic Council through the school's representative. The Academic Council, which consists of representatives of all departments and seven ex-officio members, makes the final decision.

In defining functional management specialties, sponsors and Academic Associates often confer to design courses which have specific goals. Sponsors define these goals by specifying Educational Skill Requirements (ESRs). The faculty responds by designing academically sound courses which simultaneously meet the sponsor's objectives and contain scholarly substance.

The disciplines in the school contribute expertise for developing courses in a broad and relevant mix of subject matter. All new courses and revised courses must obtain approval from NPS's Academic Council. See Appendix 3.4D for the Council's approval guidelines.

3.4E Admission of Students to the Program

Students are admitted to the MSM Program in two basic ways. Officers are first reviewed for academic potential and performance using criteria established by the faculty and supplied through the Program Officer. Then they are screened by their particular service or command for professional performance and potential. The School provides academic ability determination advice in threshold situations, through the Academic Associate.

After an officer is selected to attend a given curriculum, contact is made through the Program Officer and Academic Associate for academic counseling. After a student arrives at the Naval Postgraduate School, the academic record is again reviewed and the Academic Associate who suggests validation of courses, as appropriate (which may be accomplished by examination or review of academic background). Throughout the curriculum, each student is again reviewed for academic performance and potential. Some individuals may be disenrolled, but the vast majority of students are able to continue to graduation.

Civilian employees of the Federal government, particularly the Department of Defense, are eligible to enroll at the Naval Postgraduate School. They are proposed to the School by their agency or activity. If the individuals proposed meet the academic standards, they are admitted.

3.4F Certification of Students for Graduation

The Academic Associate and Program Officer review the records of each individual based on the graduation policy of the Academic Council and the school. The proposed degree recipients are then reviewed by the Dean. If the Dean has any questions, he/she

consults the Academic Associate, the Program Officer, and other faculty as required. The Dean's recommendation is forward to the Academic Council for final review and award of the degree by the NPS President.

3.4G Course Schedules and Faculty Assignments

The Naval Postgraduate School is relatively conventional in its course scheduling and faculty assignment process. The Academic Associate and Program Officer assure a plan for each student's entire program is placed in the NPS student management system (PYTHON) when the student enters the program. This provides a forecast of required courses for students onboard. Future student enrollments are forecast by the Associate Dean for Instruction, in consultation with the Academic Associates. Generally, the school plans for required courses on an annual basis, summarized in the annual teaching plan. The Area Chairs for the major faculty areas coordinate the area faculty to cover the course requirements in the annual plan. The starting notion is that tenure-track faculty will teach for two quarters a year, non-tenure-track for three or four, but divergence from this standard is common as faculty may increase or decrease their teaching load depending on their involvement in research opportunities or administrative positions. Teaching requirements to deliver the school's instruction programs may change as the year proceeds, so the process of forecasting needs and coordination between the Associate Dean for Instruction, the Academic Associates, and area faculty continues iteratively throughout the year. One way in which NPS may differ from other universities is that course requirements are "demand driven". Students are sent to NPS for graduate programs of a specified length, so courses must be provided as the students' programs demand. Hence, the faculty teaching assignment process presumes that all courses demanded by students' programs will be provided. Appendix 3.4G contains the annual GSBPP Workload Planning guidelines.

3.4H Budget Preparation and Spending Authorization

The Graduate School of Business and Public Policy negotiates a budget (that covers faculty and staff salaries, operating support, supplies and travel) each year through the Director of Academic Planning, who sits as a member of NPS's Resources Planning Board. This Board recommends all Naval Postgraduate School resource allocations for the President's approval. The Board is chaired by the Provost. The Dean controls GSBPP operating expenditures.

Additional funding for faculty and staff salaries, travel, equipment and other school activities is generated through sponsored research and instructional activity. Additional funds for activities such as curriculum development, based on demonstrated needs and approved new programs, and are frequently awarded. These funds are allocated from the central NPS administration and then administered by the Dean and Associate Dean for Instruction. In recent years, funds through the International Military Education and Training program (IMET) have been available to specifically develop materials for educating international students.

3.4I Selection, Hiring, and Retention of Faculty

Upon receipt of hiring authority from the Provost, the Dean and the faculty in the relevant discipline(s) begin the recruiting process. EEO rules and procedures are reviewed by all who will participate in the effort. For reference, the GSBPP Policy on Recruiting and Appointment of Tenure Track Faculty is found at Appendix 3.4I1.

Advertising is done at professional meetings, through letters to universities, relevant print media including professional journals, through other more general media such as The Chronicle of Higher Education, and announced through the university's Human Resources website.

As vitae and recommendation letters are received they are passed to relevant faculty members for comment. Meetings are held to screen and select individuals to be invited for visits. The visitation process calls for broad exposure of the prospective new colleague to faculty and administrators. The candidate is also required to present a seminar to demonstrate his/her research abilities to all interested faculty. Upon the completion of visits, the faculty makes recommendations to the Dean about which individuals, if any, should be made offers. When a school decision is reached, the Dean confers with the candidate to ascertain his/her level of interest and salary requirement. He then formulates an offer, which is presented to the Provost for authorization. The offer can then be made by the Dean to the candidate who either accepts or rejects it. This process continues until the required individuals are hired. Operationally, the school's overall process of analyzing faculty needs, recruiting and hiring is coordinated through the Senior Associate Dean.

After an individual has joined the faculty, the Dean is responsible for performing annual performance reviews. Each year all faculty members submit a Faculty Activity Report. In the Graduate School of Business and Public Policy, it is the Dean's practice to form a performance review committee including the Associate Deans and the Dean to review all faculty, tenure-track, non-tenure-track and adjuncts, and to rate each faculty member's performance in terms of teaching, student advising, research, publications, professional and community service, colleague mentoring and administrative duties. The annual Faculty Activity Report Guidelines is in Appendix 3.4I2

These ratings, reached through discussion within the committee, are approved by the Dean and forwarded to the Provost to form the basis for the annual performance salary adjustments.

3.4J Faculty Mentoring and Annual Review Process

Each year all untenured tenure-track faculty members, tenured associate professors considering promotion to full professor or lecturers considering promotion to senior lecturer are eligible to participate in a collegial review process. This process involves submitting a

written summary and vitae that highlights the faculty member's teaching, research, and service accomplishments. Each faculty member has his or her case presented at a faculty meeting by a higher ranking colleague; all higher ranking faculty members are eligible to participate in this meeting. Discussions regarding expectations and "trajectory" toward a successful promotion and/or tenure decision ensue. After the final rounds of discussions, the reviewing faculty members complete an evaluation form. Summaries of these evaluations and discussions are provided to each reviewed faculty member by their faculty mentor. Specific recommendations for improvement are provided when an individual is not "on track". This process has provided a forum for open discussion regarding the criteria for tenure and promotion in GSBPP. Appendix 3.4J1 contains various guidelines and policies related to the annual review process.

For untenured tenure-track faculty following the normal "clock" for a tenure decision in their sixth year, collegial reviews would typically occur about three times prior to the formal tenure decision year. The initial tenure track appointment is typically for three years, so the third year review is a more rigorous evaluation leading to a faculty recommendation regarding continued employment. This recommendation provides input for the Dean's reappointment recommendations to the Provost. Faculty members considering promotion to Full Professor or Senior Lecturer are required to participate in at least two collegial reviews in the three years prior to initiating the promotion process. Non-tenure-track faculty are also reviewed as part of the annual collegial review process. In 2003 GSBPP adopted a policy on expectations related to retention and promotion of non-tenure-track faculty, contained in Appendix 3.4J2.

3.4K Promotion and Tenure of Faculty

Promotion policies at NPS are university-wide, encompassing all schools and departments. Policies differ according to the rank of faculty. Promotion from assistant to associate professor requires that one meet threshold performance criteria and exhibit scholarly accomplishments and future potential. At the time of a promotion or tenure decision, the school forms a Department Evaluation committee (DEC) that works with the candidate in preparing the promotion case. All faculty with the rank of associate professor and above then review the individual's case and make a recommendation to the Dean and Provost and to a school-wide committee composed of all Deans, Chairmen, and the Provost. Promotion to full professor is similar except that the review and recommendation is provided by only those faculty members holding the rank of Professor.

Tenure is regarded as the most important career decision point for all faculty members and the Naval Postgraduate School handles this in accordance with AAUP guidelines. A three-person committee reviews the individual's application and prepares complete documentation (which includes outside references). The school's tenured faculty then votes as a group. That vote and the GSBPP Dean's recommendation are presented to the university-wide committee described above. After this, the Deans and the Provost confer and the Provost makes a formal recommendation to the NPS President.

Further information about the mentoring, annual performance review and promotion and tenure processes are provided in Standard 5.3 Faculty Quality.

Standard 3.0 Program Jurisdiction

STANDARD 4.0 -- CURRICULUM

Standard 4.1 Purpose of the Curriculum
The purpose of the curriculum shall be to prepare students for professional leadership in public service.

4.1 Purpose

The basic objective of all of the GSBPP programs and curricula is to prepare military officers, government civilians, and international officers from allied nations for positions of middle and upper management in the defense establishment. Thus, the focus of the programs and curricula is on managing financial, human, material and information resources in the Federal government and, particularly, in the Department of Defense.

GSBPP has multiple degree programs and numerous specialized curricula, but in general each program consists of three main parts: a common core of courses relevant broadly to the practice of management, a specialization emphasizing a particular functional area, and a thesis or capstone project.

The major elements of the core in all GSBPP curricula are those functional and analytical subjects that underlie effective management in all public organizations. These subjects include communication skills, information technology, economics, budgeting and financial management, human resources and organizational behavior, management policy, public policy processes and analytical methods.

In addition to the core, with very few exceptions, all students are enrolled in special programs ("subspecialties" or "specializations") designed to prepare them for management responsibilities in specific functional areas. Their programs include required and/or elective courses in their areas of specialization. Finally, all students are required to prepare masters theses or applications projects designed to demonstrate their abilities to integrate appropriate core and special curricular material in the analyses of issues and problems pertinent to their academic programs and their professional careers.

Outline of Programs: Degrees and Curricula

GSBPP awards six different master's degrees and has 16 different fields of study (curricula). The dominant program, in terms of student enrollment, is the long-standing, resident program leading to either a Master of Business Administration (MBA) degree or a Master of Science in Management (MSM) degree. The other four degree programs have been created within recent years to serve particular student communities, typically non-resident. Each of these degree programs has only one curriculum associated with it. An outline of the GSBPP programs (degrees and curricula) is as follows:

Master of Science in Management (MSM) Program (2 curricula)

Analysis Curricula

- Manpower Systems Analysis (847)
- Defense Systems Analysis (817)

Master of Business Administration (MBA) Program (10 curricula)

Logistics Management

- Transportation Management (814)
- Supply Chain Management (819)
- Material Logistics Support Management (827)

Acquisition Management

- Acquisition and Contract Management (815)
- Systems Acquisitions Management (816)

Financial Management

- Financial Management (837)

Defense Management

- Defense Systems Management - International (818)
- Resource Planning and Mgmt for Intl Defense (820)
- Defense Business Management (809)

Information Management

- Information Systems Management (870)

Executive Degree Programs

- Executive Master of Business Administration (805)
- Master of Executive Management (808)

Master of Science Degree Programs

- Masters of Science in Program Management (836)
- Master of Science in Contract Management (835)

Coverage of Degree Programs in this Report:

This chapter will cover Standards 4.2 - 4.4 for the Master of Science in Management (MSM) degree program, including the (currently) two curricula within that program and which lead to the MSM degree.

A separate Self-Study document (Volume I) has been prepared for the Master of Business Administration (MBA) degree program, including the (currently) ten curricula within that program and which lead to the MBA degree.

An Appendix document (Volume III) provides an overview and description of the EMBA, MEM, MSPM, and MSCM degree programs, for reference. NASPAA accreditation of these program is not being sought, but collectively they represent about 30% of the instructional activity of GSBPP, and so are described in the Appendix for background purposes.

Standard 4.2 Curriculum Components for MSM Program
The curriculum components are designed to produce professionals capable of intelligent, creative analysis and communication, and action in public service. Courses taken to fulfill the common curriculum components shall be primarily for graduate students. Both the common and additional curriculum components need to be assessed as to their quality and consistency with the stated mission of the program.

4.2 Curriculum Components for MSM Degree Program

The central objective of the MSM degree program is to prepare military officers and defense civilians for positions of middle and upper management in the United States' military and defense establishment, and the military and defense establishments of allied nations. The educational objectives of the MSM program are reflected in the program mission statement (reproduced again here from Standard 2.1):

Master of Science in Management Program Mission

The mission Master of Science in Management degree program is to prepare graduates for management and leadership roles in the Defense establishment of the United States or allied nations. The program prepares graduates to manage in complex defense organizations and to conduct rigorous analyses of organizational problems, policies and operations. To accomplish these goals, the program places particular emphasis on developing students' quantitative and analytical skills and their ability to model complex phenomena. The program prepares graduates to

Managerial: *Be well grounded in fundamental areas of management, including accounting, financial management, operations, economics, acquisition, strategy, communications and organizational management.*

Environmental: *Understand the economic, political, governmental, defense and organizational environments that influence their decisions and the organizations in which they work.*

Professional*: Possess the specialized knowledge, skills and abilities to serve in positions of significant responsibility within a specified Defense Management field (Manpower Systems Analysis, Defense Systems Analysis).*

Analytical: *Apply advanced, quantitative, statistical and modeling methodologies to analyze significant defense-related policies and problems in a rigorous manner.*

Critical: *Be capable of thinking in a critical, creative, integrative and strategic manner*

4.2A Background Information

Credit System:	Quarter
Length of term:	12 weeks
Full time status:	16 credits per quarter
Credit Limits:	8 credit minimum, 20 credit maximum
Time limitations:	18-21 months, depending on curriculum
Class contact hours:	1 credit = 11 contact hours
Numbering system:	0000s = no credit 1000s = Lower division college 2000s = Upper division college 3000s = Upper division or graduate 4000s = Graduate

4.2B Course Credits Distribution

Table 4.2B
COURSE CREDITS DISTRIBUTION IN MSM PROGRAM

Course Level	Required Prerequisites	Required Graduate	Additional Components	Total
Lower Div.	0	0	0-7*	0-7
Upper Div.	0	4	0-3***	4-7
Up Div & Grad	0	31	9-17***	40-48
Graduate only	0	20	11-23***	31-43
Project / Thesis	0	12**	0	12
Total	0	67	28-44***	95-111

Two curricula are currently offered within the MSM. All MSM curricula share a common 15 course (55 credit) core. The variances in the table above are due to:

*Two orientation courses (Language & Communication; US Institutions) may be required for international students.
** The Master's thesis is nominally 12 credits.
***The variance in the Additional Components column is due to each curriculum having different requirements for specialization courses.

4.2C Capable Professionals

The MSM degree program is designed to create capable professionals by providing educational curricula (described below) designed to satisfy specific "Educational Skills Requirements." Degree programs and curricula are created at the

Naval Postgraduate School in response to educational needs identified by curriculum sponsors, the military commands that send students to attend the programs. The educational needs are formalized as a set of Educational Skills Requirements, which specify the educational objectives of each curriculum

4.2D Assessment and Guiding Performance

The curricula are monitored, assessed, reviewed and modified through several processes and mechanisms. Though there is overlap, some mechanisms are focused more on the common core of the MSM degree program, some more on the specially curricula within the degree program.

Core-Related Mechanisms:

- The managerial position of Academic Associate for the Core Curriculum: the Academic Associate is responsible for coordinating oversight of the objectives, content, assessment and quality of the core curriculum; this position is a recent addition and replaces previous faculty committees that provided core oversight
- The Student Feedback system: systematic interaction with students provides ongoing feedback concerning their assessment of the core curriculum; feedback occurs periodically throughout their program in the form of curriculum surveys and meetings with cohorts of students

Curricula-Related:

- The managerial position of Academic Associate, for each curriculum: a faculty member, acting as Academic Associate for a specific curriculum, is responsible for managing the curriculum; the Academic Associate is responsible for ongoing curriculum assessment and maintaining contact with Curriculum Sponsors to determine curriculum effectiveness in satisfying the sponsor's educational requirements
- The Curriculum Review Process: the ongoing review and assessment of each curriculum culminates in an official Curriculum Review by the Curriculum Sponsor every two years
- The Educational Skills Requirements (ESRs) system: ESRs are a statement of the objectives each curriculum is to satisfy; ESRs provide the focal point for determining if curricula meet sponsors' needs

The position of Academic Associate and the Curriculum Review Process were discussed further in this report in Standard 2.2 (Assessment). The ESRs for each curriculum are presented later in this section.

4.2E Graduate Classes

All courses in all programs are "primarily for graduate students" since NPS is exclusively a graduate school and GSBPP degree programs only enroll graduate students.

NPS academic policy requires a minimum of 12 credit hours in 4000-level ("exclusively graduate") courses for a master's degree. Actual 4000-level classes in the MSM, vary across the curricula, ranging from 31-43 credits.

4.2F Required Prerequisites

Two semesters of college algebra or trigonometry with a B or better is the only stated prerequisite for admission to the program. Literacy in common computer applications programs is also expected.

Standard 4.21 Common Curriculum Components for MSM Program
The common curriculum components shall enhance the student's values, knowledge and skills to act ethically and effectively:

-In the management of Public Service Organizations, the components of which include: Human Resources; Budgeting and financial processes; Information management, technology applications, and policy.

-In the application of Quantitative and Qualitative Techniques of Analysis, the components of which include: Policy and program formulation, implementation and evaluation; Decision-making and problem-solving.

-With an understanding of the Public Policy and Organizational Environment, the components of which include: Political and legal institutions and processes; Economic and social institutions and processes; Organization and management concepts and behavior.

4.21 Common Curriculum Components for MSM Program

The MSM degree program design is based on the premise that a quality management education must include both a solid broad-based foundation of knowledge and skill in several basic management disciplines and a focused, comprehensive exposure to knowledge and practical skills in one particular management specialty area.

The broad, multi-disciplinary exposure provides the graduate with the perspective and foundation knowledge needed throughout one's managerial career as problems and challenges requiring broader consideration are encountered, especially those typically faced at senior management and executive levels. The more focused and specialty education is intended to prepare the graduate for the more immediate and anticipatable assignments as functional managers and senior staff experts in a particular discipline. The MSM common core curriculum is designed to provide the broad-based, multi-disciplinary foundation needed for future management and policy analysis positions, while the specialty curriculum is designed to provide the necessary knowledge and skills to excel in one's chosen functional discipline.

Through completion of the MSM degree program, students will earn:

- Master's Degree: Accredited by NASPAA, AACSB, WASC
- Military Specializations:
  - US Navy Subspecialty Code
  - USMC Military Occupational Specialty
  - US ARMY Military Occupational Specialty
- Professional Certifications (optional):
  - Defense Acquisition University
  - Certified Management Accountant
  - Certified Defense Financial Manager
  - Certified Professional Contract Manager
- Military Certifications:
  - Joint Professional Military Education

Table 4.21
MSM PROGRAM DESIGN

MANAGEMENT & ANALYSIS CORE	
Organizations	Quantitative & Analytical Methods
Decision and Ops Analysis	Financial Management
Management	Information Technology
MISSION CORE	
DoD Mission and Structure	Strategy and Policy
DoD Resource Determination	Global Defense Economics
Economics for Defense Managers	
CURRENT CURRICULAR SPECIALIZATIONS (& AVAILABLE)	
Manpower Systems Analysis	Defense Systems Analysis
(Acquisition Management)	(Financial Management)
(Contracting)	(Information Systems Management)
(Logistics Management)	(Defense Management)
MASTER'S THESIS	
PROFESSIONAL CERTIFICATIONS	

4.21A Common Curriculum Courses

The following courses are required of students in the MSM degree program:

Table 4.21A
MSM CORE COURSES

Course Number	Course Title	Credits
GB3010	Managing for Organizational Effectiveness	(4-0)
GB3012	Communication for Managers	(3-0)
GB3013	Problem Analysis and Ethical Dilemmas	(0-2)
GB3020	Fundamentals of Information Technology	(4-0)
GB3040	Managerial Statistics	(4-0)
GB3042	Operations Management	(4-0)
GB3050	Financial Reporting and Analysis	(4-0)
GB3051	Cost Management	(3-0)
GB3070	Economics of the Global Defense Environment	(4-0)
GB4014	Strategic Management	(4-0)
GB4043	Business Modeling and Analysis	(3-0)
GB4053	Defense Budget and Financial Management Policy	(4-0)
GB4071	Economic Analysis and Defense Resource Allocation	(4-0)
MN2039	Basic Quantitative Methods in Economic Analysis	(4-0)
MN4110	Multivariate Data Analysis	(4-1)
NW3230	Strategy and Policy: The American Experience*	(4-2)

*Not required for International students. Non-DoN US officers may substitute service equivalent. Is an NPS requirement for all DoN officers.

The numbers in the credit column after a course title indicate both the class hours and the quarter credit hours for the course. The first digit indicates lecture hours per week and the second digit, lab hours. One credit hour is granted for each lecture hour, and one half of a credit hour for each lab hour.

The chart below shows the pre-requisite relationship among the required core courses, and additionally shows the placement of the core courses in a typical program.

Chart 4.21A1 MSM CORE CURRICULUM MATRIX					
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (4-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas
2 Sp/F	MN2039 (4-0) Basic Quant. Methods for Economic Analysis	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ Analysis & Defense Resource Allocation	
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4043 (3-0) Business Modeling Analysis	MN4110 (4-1) Multivariate Data Analysis	GB3042 (4-0) Operations Management	
4 Sp/F	GB4014 (4-0) Strategic Management	Thesis			
5 W/Sm	GB4053 (4-0) Defense Budget & Financial Mgmt Policy	Thesis	Curriculum Specialization Courses		
6 Sp/F	NW3230 (4-2) Strategy & Policy	Thesis			

Core Curriculum Design

The courses within the common MSM core were listed above. However, it might be appropriate to briefly summarize the design underlying the common curriculum. There are two ways to do this: first, in terms of broad areas the core course address; second, in terms of how the core courses topics prepare managers.

Broad Areas: Basically, the common curriculum addresses six broad areas that we feel are critical to effective management practice: organizations and organizational behavior, economics and policy analysis, financial management, quantitative methods and analysis, operations and information technology, and institutional processes and strategic management. How each of these elements is addressed is briefly described in the following few paragraphs. As compared to the sister MBA degree, the MSM is stronger on courses relating to quantitative and analytical methods.

Organization and organizational behavior considerations are the basic content of Managing for Organizational Effectiveness (GB3010) and are also important elements in Problem Analysis and Ethical Dilemmas (GB3013), Communication for Managers (GB3012) and Strategic Management (GB4014).

Economic analysis is emphasized in Economic of the Global Defense Environment (GB3070) while policy analysis using economic frameworks and tools is the central focus of Economic Analysis and Defense Resource Allocation (GB4071).

Concepts and techniques of financial management, including budgeting, accounting, resource management, financial analysis are addressed most explicitly in Financial Reporting and Analysis (GB3050), Cost Management (GB3051), and Defense Budget and Financial Management Policy (GB4053) which examines the federal budget process.

Quantitative and statistical methods are the principal focus of Quantitative Methods for Economic Analysis (MN2039), Managerial Statistics (GB3040), Business Modeling Analysis (GB4043), and Multivariate Data Analysis I (MN4110).

Operations Management (GB3042) and Fundamentals of Information Technology (GB3020) both address the management of organizations in today's technological world.

In the common core, political and legal institutional processes are addressed most directly in Defense Budget and Financial Management Policy (GB4053). The focus of this course is on the processes by which government policy is established and, in particular, on the federal budget process. Economic institutions and processes are studied in Economics of the Global Defense Environment (GB3070). Strategic management considerations are the primary emphasis of Strategic Management (GB4014), although strategic planning and implementation are also addressed in Economic Analysis and Defense Resource Allocation (GB4071) and Cost Management (GB3051).

Preparation of Managers: The design of the core assumes that managers need preparation in three areas: knowledge of the functional activities that occur in organizations, development of personal capabilities, and knowledge of the wider context in which organization exist and operate. Courses and topics within the core curriculum address these three aspects of preparing managers.

Chart 4.21A2 MSM CORE DESIGN	
MANAGERIAL FUNCTIONS (What gets done) Accounting Financial Management Production/Operations Planning and Budgeting Strategic Management Organizations	MANAGERIAL CAPABILITIES (What helps to do it) Quantitative Analysis Modeling & Economic Analysis Communications Information Technology Ethical Reasoning Decision Making Advanced Analytical Techniques
MANAGERIAL CONTEXT (What's the larger setting) Defense Strategy and Policy Global Economic Environment Government and Organizations	

4.21B Ethical Action: Analysis of the Common Core Courses

The above sections described our purposes and organizing framework in the design of the MSM common core. This section describes the treatment of Ethics within the common core. Ethics is taught in two distinct ways: first, as the central topic of GB3013, the Problem Analysis and Ethical Dilemmas course; second, as a theme that relates to all aspect of management and is revisited in individual courses in connection to the subjects of those courses.

The Problem Analysis and Ethical Dilemmas (PAED) course is distinct from all others in the MSM curriculum. During the first two days of the first quarter in attendance for all new MSM students, regular classes are suspended and the PAED seminar is held for the full period. The course is designed to be a "welcome to what graduate school is like" experience and to immediately present new students with complex, ill-defined, no-right-answer problems and the ethical dimensions inherent in such problems. Students learn frameworks for ethical reasoning that are intended to be of value throughout their curriculum and beyond. The remaining courses in the curriculum continue to raise ethical questions and themes in settings related to the courses' topics.

Table 4.21B offers an overview of Ethics in the common core courses. It lists brief examples of the manner or context in which Ethics is covered in core courses and provides rough estimates of the proportion of each course related to Ethics.

Table 4.21B ETHICS CONTENT WITHIN THE MSM CORE CURRICULUM		
"Enhances students' values, knowledge, and skills to act ethically"		
GB3013	**Problem Analysis and Ethical Dilemmas** As military officers advance to higher levels of responsibility, the organizational environments in which they operate become more complex and the decisions that they must make become more clouded by uncertainty. Senior government and business leaders face similar challenges. Under these conditions, ethical problems and issues often emerge in complex and uncertain ways leading to questions that go beyond simply "following the rules." The purpose of this seminar is to gain familiarity with problem analysis and the moral and ethical issues arising in the normal pursuit of public and private sector management practices. We accomplish this through the presentation, analysis, and discussion of representative case studies treating the ethical issues in society and within organizations. These cases illustrate the interdisciplinary character of moral dilemmas, and show how such dilemmas draw on insights from organizational and management theory, law, political science and social psychology, as well as from philosophical ethics. Thus, the seminar seeks to educate BPP students in theories and models of ethics, and to explore the application of this understanding of ethics to real problems of military leadership and Defense management.	100%
GB3010	**Managing for Organizational Effectiveness** Ethics in relation to leadership, change management, conflict management, negotiation, and power/influence	25%
GB3012	**Communication for Managers** Ethics in the context of persuasion. Ethics in writing and speaking assignments.	5%
GB3020	**Fundamentals of Information Technology** Information security and the protection of personal and organizational information	10%
GB3040	**Managerial Statistics** Ethical obligations of researchers and analysts toward human subjects. Ethical obligations for objective and unbiased analysis and findings.	5%
GB3042	**Operations Management** Ethical questions in the conduct of organizational operations. Environmentally responsible and socially beneficial operations.	5%
GB3050	**Financial Reporting and Analysis** Ethical issues in accounting and financial reporting. Ethical implications of corporate accounting scandals and financial manipulations and misrepresentation.	15%
GB3051	**Cost Management**	5%

	Professional standards for ethical conduct of management accountants.	
GB3070	**Economics of the Global Defense Environment**	2%
GB4014	**Strategic Management** Ethical obligations to organizational stakeholders. The right, appropriate and legitimate balancing of stakeholder interests as intrinsic in the process of strategic management.	15%
GB4043	**Business Modeling and Analysis** Ethical principles related to conducting analysis.	5%
GB4053	**Defense Budget and Financial Management Policy** Ethics in the context of budgetary strategy. Strategic representation and misrepresentation of needs and priorities in the budget process. Ethics related to power and influence in the DoD acquisition, procurement and contracting.	10%
GB4071	**Economic Analysis and Defense Resource Allocation** Ethics in the context of conducting and presenting the results of analysis and policy evaluation.	5%
MN2039	**Basic Quantitative Methods of Economic Analysis**	0%
MN4110	**Multivariate Data Analysis I** Ethical principles related to conducting valid data analysis	5%

4.21C Curriculum Coverage: Analysis of Common Core Courses

The above sections described our purposes and organizing framework in the design of the MSM common core. This section relates the core courses to the areas listed in standard 4.21. The primary intent here is to indicate, by listing, which courses contribute to each of the NASPAA topic areas. Secondarily, rough estimates of the proportion of each course that contributes to an area are provided.

Table 4.21C
RELATIONSHIP OF MSM CORE CURRICULUM TO STANDARD 4.21

The Management of Public Service Organizations, the components of which include:		
-Human Resources		
GB3010	Managing for Organizational Effectiveness	80%
GB3012	Communication for Managers	70%
GB3013	Problem Analysis and Ethical Dilemmas	20%
GB3020	Fundamentals of Information Technology	5%
GB3040	Managerial Statistics	5%
GB3042	Operations Management	20%
GB3050	Financial Reporting and Analysis	5%
GB3051	Cost Management	5%
GB4014	Strategic Management	5%
GB4043	Business Modeling and Analysis	5%

GB4053	Defense Budget and Financial Management Policy	5%
GB4071	Economic Analysis and Defense Resource Allocation	5%
MN4110	Multivariate Data Analysis	10%
-Budgeting and Financial Processes		
GB3010	Managing for Organizational Effectiveness	5%
GB3020	Fundamentals of Information Technology	5%
GB3040	Managerial Statistics	5%
GB3042	Operations Management	5%
GB3050	Financial Reporting and Analysis	100%
GB3051	Cost Management	29%
GB3070	Economics of the Global Defense Environment	5%
GB4014	Strategic Management	10%
GB4043	Business Modeling and Analysis	5%
GB4053	Defense Budget and Financial Management Policy	40%
MN2039	Basic Quantitative Methods of Economic Analysis	10%
MN4110	Multivariate Data Analysis	5%
-Information Management, technology applications, and policy		
GB3010	Managing for Organizational Effectiveness	30%
GB3012	Communication for Managers	5%
GB3020	Fundamentals of Information Technology	100%
GB3042	Operations Management	15%
GB3050	Financial Reporting and Analysis	20%
GB3051	Cost Management	5%
GB4014	Strategic Management	5%
GB4043	Business Modeling and Analysis	20%
GB4053	Defense Budget and Financial Management Policy	5%
The application of Quantitative and Qualitative Techniques of Analysis, the components of which include:		
-Policy and Program Formulation, Implementation, & Evaluation		
GB3010	Managing for Organizational Effectiveness	40%
GB3013	Problem Analysis and Ethical Dilemmas	10%
GB3020	Fundamentals of Information Technology	10%
GB3040	Managerial Statistics	10%
GB3042	Operations Management	20%
GB3051	Cost Management	4%
GB3070	Economics of the Global Defense Environment	15%
GB4014	Strategic Management	80%
GB4043	Business Modeling and Analysis	10%
GB4053	Defense Budget and Financial Management Policy	10%
GB4071	Economic Analysis and Defense Resource Allocation	100%
MN2039	Basic Quantitative Methods of Economic Analysis	100%
MN4110	Multivariate Data Analysis	100%

-Decision Making and Problem Solving		
GB3010	Managing for Organizational Effectiveness	80%
GB3012	Communication for Managers	45%
GB3013	Problem Analysis and Ethical Dilemmas	100%
GB3020	Fundamentals of Information Technology	10%
GB3040	Managerial Statistics	100%
GB3042	Operations Management	100%
GB3050	Financial Reporting and Analysis	25%
GB3051	Cost Management	43%
GB3070	Economics of the Global Defense Environment	10%
GB4014	Strategic Management	50%
GB4043	Business Modeling and Analysis	60%
GB4053	Defense Budget and Financial Management Policy	10%
GB4071	Economic Analysis and Defense Resource Allocation	50%
MN2039	Basic Quantitative Methods of Economic Analysis	50%
MN4110	Multivariate Data Analysis	100%
Understanding of Public Policy and Organization Environment, the components of which include		
-Political and Legal Institutions and Processes		
GB3010	Managing for Organizational Effectiveness	20%
GB3013	Problem Analysis and Ethical Dilemmas	50%
GB3020	Fundamentals of Information Technology	5%
GB3042	Operations Management	5%
GB3050	Financial Reporting and Analysis	10%
GB3051	Cost Management	2%
GB3070	Economics of the Global Defense Environment	5%
GB4014	Strategic Management	5%
GB4053	Defense Budget and Financial Management Policy	40%
MN4110	Multivariate Data Analysis	10%
-Economic and Social Institutions and Processes		
GB3010	Managing for Organizational Effectiveness	20%
GB3013	Problem Analysis and Ethical Dilemmas	50%
GB3020	Fundamentals of Information Technology	5%
GB3042	Operations Management	10%
GB3050	Financial Reporting and Analysis	10%
GB3051	Cost Management	2%
GB3070	Economics of the Global Defense Environment	100%
GB4014	Strategic Management	25%
GB4043	Business Modeling and Analysis	2%
GB4053	Defense Budget and Financial Management Policy	5%
GB4071	Economic Analysis and Defense Resource Allocation	100%
MN4110	Multivariate Data Analysis	10%

-Organization and Management Concepts and Behavior		
GB3010	Managing for Organizational Effectiveness	100%
GB3012	Communication for Managers	50%
GB3013	Problem Analysis and Ethical Dilemmas	100%
GB3020	Fundamentals of Information Technology	5%
GB3040	Managerial Statistics	5%
GB3042	Operations Management	30%
GB3050	Financial Reporting and Analysis	10%
GB3051	Cost Management	10%
GB3070	Economics of the Global Defense Environment	5%
GB4014	Strategic Management	25%
GB4053	Defense Budget and Financial Management Policy	5%

Standard 4.22 Additional Curriculum Components for MSM Program
Each program shall clearly define its objectives for additional work and the rationale for the objectives, and shall explain how the curriculum is designed to achieve those objectives. The statement of objectives shall include any program specializations or concentrations and the main category of students to be served (e.g., pre-service, in-service, full-time, part-time). If a program advertises its ability to provide preparation for a specialization or concentration in its catalog, bulletin, brochures, and/or posters, evidence shall be given that key courses in the specialization or concentration are offered on a regular basis by qualified faculty. Specialization or concentration courses may be offered by units other than the public affairs or administration program. The specialization or concentration courses shall not be substitutes for the common curriculum components.

4.22A Elective Design

In general within the MSM degree program, advanced coursework beyond the common core is intended to prepare students for management or analysis responsibilities in some particular functional area of management, a specialization. Virtually all students are sent to the Naval Postgraduate School by military sponsors who specify the functional specialties each student is to take. (The only exceptions are some, but not all, foreign military officers and U.S. government civilian employees, who are allowed to select their advanced courses, with the advice and approval of their faculty advisors. Even so, many of these students actually choose courses in one of the established specialty curricula.)

Some of the curricula have requirements such that all advanced courses beyond the common core are specified and required for students in that specialization. Some curricula may require a number of specific courses but permit the student to elect, perhaps one or two, other courses from a list of approved specialty courses. Finally, some curricula may permit the student to choose a free elective that could fall outside the specialty area. Regardless of these small differences in design, the intent of all the

advanced coursework beyond the core is to achieve a specialization rather than broad, advanced training.

Program length for one of the two current MSM curricula is 18 months (Defense Systems Analysis); program length for the other is 21 months (Manpower Systems Analysis). Since each curriculum shares the common MSM core (and MSM thesis requirement), their differences are in their specialization requirements. (Even within a given curriculum, the specialization requirement may differ slightly depending on the student and/or sponsor.) Required quarter credit hours, beyond the common core curriculum, to satisfy the specialization requirements are approximately as follows:

Analysis Curricula

- Manpower Systems Analysis (847) 44 credits
- Defense Systems Analysis (817) 27 credits

The nature of the advanced courses varies considerably, depending on both the specialization area and the particular course objectives. Some emphasize the application of analytical techniques to issues and problems in the specialization area. Others focus more on management processes in that area.

With the exception of a few seminars, used primarily for guest speakers and/or training and administrative matters, none of the advanced courses offered, either in the specialty curricula or as free electives, is listed at the undergraduate level. There are no undergraduate students in GSBPP programs, so undergraduate courses are largely absent from the programs.

4.22B Additional Curriculum Components: Specializations

Objectives, Educational Requirements & Courses for MSM Curricula

As was noted earlier, each specialty curriculum is designed to prepare students for functional management responsibilities in that specialization area. Each curriculum has its own objective. Most curricula have their own set of Educational Skill Requirements (ESRs), prepared by the faculty in consultation with the program sponsor. These skill requirements constitute the specific curriculum requirements. Each curriculum has its own required specialization courses and, perhaps, an optional course.

Descriptions of both of the current curricula in the MSM program are presented on the following pages. The descriptions include: curriculum objective, Educational Skills Requirements (ESRs), required curriculum specialization courses (along with the names of faculty who regularly teach each course), and a "course matrix." It may be noted that certain courses appear in more than one curriculum.

Additional curriculum specializations exist within GSBPP, beyond the two currently associated with the MSM Program. These include specializations related to

Financial Management, Acquisition, Contracting, Logistics, Information Technology and Management. It is possible to "build" any of these specialization curricula on top of the MSM Core Curriculum, should sponsors or students desire, in which case they also would become "MSM curricula" and relevant to this Additional Curriculum Components section of the Self-Study. In fact, prior to 2002, each of the other specialization curricula was an MSM curriculum. However, currently all of these other specialization curricula are "MBA curricula" and hence further description is not provided here.

Manpower Systems Analysis - Curriculum 847

Objective and Description

The Manpower Systems Analysis Curriculum (MSA), leading to the MSM degree, is designed for U.S. and international officers. Officers enrolled in the Manpower Systems Analysis curriculum at the Naval Postgraduate School undertake an academic program to fill leadership and analytical roles in military manpower personnel, training and education management. MSA specialists are responsible for developing and analyzing policies to ensure that the Navy and DoD are recruiting, training, utilizing and retaining personnel in the most efficient and effective ways possible. MSA is an analytical curriculum intended to develop the skills to perform and evaluate manpower analyses and manage the Navy's Human Resource community of interest. As such, the curriculum emphasizes mathematical, statistical and other quantitative and qualitative analysis methods. Successful completion of the curriculum yields an officer skilled in conducting manpower personnel, training and education policy analysis. The areas covered in the MSA curriculum include an understanding of manpower, personnel, training, education policy development, managing diversity, compensation systems, enlistment supply and retention models, manpower training models, manpower requirements determination processes, career mix, enlistment and reenlistment incentives, training effectiveness measures and hardware/manpower trade-offs. Students gain familiarity with current models and methods of manpower analysis and economics as well as military manpower organizations, information systems and issues.

Completion of this curriculum qualifies an officer as a Manpower Systems Analysis Subspecialist, subspecialty code 3130P. U.S. Marine Corps officers qualify for MOS 9640. Curriculum Sponsors are OPNAV, N-1, Chief of Naval Personnel and Subject Matter Expert, OPNAV, N14; Director of Strategic Planning and Analysis, Military Personnel Plans and Policy and Headquarters - United States Marine Corps (Manpower & Reserve Affairs)

Educational Skills Requirements (ESR): Curriculum 847

1. Management Fundamentals - Organization and Management The graduate will have the ability to apply contemporary management principles, organizational theory and social science methodology to the development, implementation and management of effective MPT&E polices and programs throughout DoN/DoD. The graduate will have the ability to use and understand computer systems in problem solving and will have a basic understanding of management information systems and E-Business.

2. Budgeting and Financial Controls The graduate will have an understanding of basic financial management practices of DoN/DoD and will be able to conduct cost benefit analyses and participate in the budgetary planning of commands and/or DoN programs. The graduate will have an understanding of the Planning, Programming, Budgeting and Execution System (PPBES) and the ability to

analyze the impact of budgetary changes on DoN/DoD manpower and personnel programs and polices.

3. Automated Data Analysis The graduate will possess the skills in data manipulation, statistics and exploratory data analysis to be able to formulate and execute analyses of a wide variety of manpower, personnel and training issues. The graduate will have proficiency in computing and interactively apply a variety of methods to large-scale DoN and DoD databases. The graduate will have a working understanding of the manpower information systems.

4. Management Fundamentals - Analytical Techniques The graduate will be able to apply mathematical, statistical, accounting, economic and other analytical techniques and concepts to day-to-day military management issues. The graduate will be able to gather and analyze qualitative data. The graduate will also be able to use these techniques and concepts as a participant in the long-range strategic planning efforts of the Navy and DoD.

5. Advanced Quantitative and Qualitative Analysis The graduate will have the ability to apply a wide range of advanced organizational, economics, statistical and mathematical techniques and concepts to manpower and personnel polices and issues. These include the use of econometric techniques in the quantitative analysis of large-scale DoN/DoD manpower and personnel databases, of qualitative techniques in the analysis of survey and personnel data, of manpower decision support systems and of Markov models in the analysis of force structure and manpower planning, forecasting and flow models.

6. Manpower Systems Analysis Fundamental Concepts The graduate will have an understanding of the fundamental concepts and basic functional areas of manpower, personnel, training and education (MPT&E) within DoN/DoD as listed below, as well as an understanding of the MPT&E systems and their interrelationships.

7. Manpower Requirements determination; billet authorizations; billet costs; end strength planning; and total force planning and programming.

8. Personnel Recruiting; accession plans and policies; officer and enlisted community management; attrition; retention; compensation; and readiness.

9. Training Applications of theories of learning; instructional technologies; the systems approach to training; evaluation of training effectiveness and cost; and the relationship between training and fleet readiness.

10. Manpower Systems Policy Analysis The graduate will have the ability to analyze critically the strengths and weaknesses of proposed manpower, personnel and

training polices and to suggest alternatives that recognize the potential impact on DoN/DoD program planning, resources, and objectives.

11. Joint Military Strategic Planning The graduate will have an understanding of the development and execution of military strategy, the effects of technical developments on warfare and the processes for formulating U.S. policy, the roles of military forces, joint planning and current issues in the defense organization. This understanding will include expertise on the combined use of active and reserve forces in joint warfare.

12. Evaluation, Innovation, and Creativity The graduate will demonstrate individual initiative and creativity in the application of the skills and knowledge gained from the Manpower Systems Analysis program. The graduate will select a manpower, personnel, training or education policy or management issue of importance to DoN/DoD, develop a plan to investigate the issue, analyze all of its aspects, suggest a solution as appropriate and report the significant findings and recommendations in writing by means of a thesis.

Required specialization Courses

Manpower Systems Analysis - Curriculum 847			
Course	**Credits**	**Course Title**	**Faculty**
MN2111	(2 - 0)	Navy Manpower, Personnel, and Training Systems I	Hill, Hatch
MN3111	(4 - 0)	Human Resource Management	Roberts, Hatch
MN3760	(4 - 0)	Manpower Economics I	Mehay, Pema
MN4111	(4 - 1)	Multivariate Data Analysis II	Pema
OS4701	(4 - 0)	Manpower and Personnel Models	Buttrey
MN4106	(4 - 0)	Manpower and Personnel Policy Analysis	Eitelberg
MN4761	(4 - 0)	Applied Manpower Analysis	Mehay
MN2112	(4 - 0)	HR Issues II	Hill, Hatch
OS3401	(3 - 0)	Human Factors Engineering	Miller, Shattuck
MN4118	(3 - 0)	Modeling for Decision Support in Manpower Systems	Hatch
MN4114	(4 - 0)	Sociology and Psychological Perspectives on Military Service	Eitelberg
MN4115	(4 - 0)	Training Foundations and Management	Crawford, Hatch

MANPOWER SYSTEMS ANALYSIS (847) MATRIX						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (3-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Information Technology	GB3070 (4-0) Economics of the Global Defense Environment	GB3013 (0-2) Problem Analysis & Ethical Dilemmas	
2 Sp/F	GB4071 (4-0) Econ Analysis & Defense Resource Allocation	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	MN2039 (4-0) Basic Quantitative Methods in Econ Analysis	MN2111 (2-0) HR Issues I	
3 W/Sm	GB3012 (3-0) Communications for Managers	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Models	MN4110 (4-1) Multivariate Manpower Data Analysis I		
4 Sp/F	GB4014 (4-0) Strategic Management		MN3111 (4-0) Analysis of Human Resource Management	MN3760 (4-0) Manpower Economics I	MN4111 (4-1) Multivariate Manpower Data Analysis II	
5 W/Sm	GB3042 (4-0) Operations Management	MN4761 (4-0) Applied Manpower Analysis	MN4106 (4-0) Manpower & Personnel Policy Analysis	OS4701 (4-0) Manpower & Personnel Models	MN2112 (0-2) HR Issues II	
6 Sp/F	MN0810 (0-8) Thesis Research	MN0810 (0-8) Thesis Research		OS3401 (3-0) Human Factors Engineering	MN4118*** (3-0) Modeling for Decision Support in Manpower Systems	
7 W/Sm	MN0810 (0-8) Thesis Research	MN0810 (0-8) Thesis Research	NW3230* (4-2) Strategy & Policy		MN4114 (4-0) Sociology & Psychological Perspectives on Military Service	

- * Not required for international students. Non-Navy students may validate by comparable Service course(s)
- ** International Students take IT1600, Communications Skills for International Officer (if needed) in the first quarter, and IT1500, American Life and Institutions in the second or third quarter.
- *** Replaced by MN4115, Training Foundations, during 2007.

Defense Systems Analysis - Curriculum 817

Objective and Description

This curriculum provides officers with the fundamental interdisciplinary techniques of quantitative problem-solving methods, behavioral and management science, economic analysis, and financial management. The curriculum educates students to evaluate others' research and analysis and to develop in them sound management and leadership skills. This curriculum is an interdisciplinary program that integrates mathematics, accounting, economics, behavioral science, management theory, operations/systems analysis, and a subspecialty into an understanding of the process by which the defense mission is accomplished.

This curriculum is also structured to give students the opportunity to design their own program of study. Concentration areas and courses are determined after consultation with the Academic Associate. U.S. Marine Corps officers completing this curriculum fulfill the requirements for MOS 9652. The curriculum sponsor is Marine Corp Systems Command, Program Analysis and Evaluation Directorate.

Educational Skills Requirements (ESR): Curriculum 817

Note: During 2007, the Defense Systems Analysis curriculum underwent a significant curriculum review, resulting in changed courses, requirement for a thesis, and a shift to the MSM degree. These ESRs have not been updated to reflect those changes.

1. Management Fundamentals The graduate will have the ability to apply quantitative techniques, accounting, economics, finance, organization theory, information technology and other state-of-the-art management techniques and concepts to military management problems. Also, the graduate will know basic management theory and practice, embracing leadership, ethics, written and oral communication, organization design, team building, human resource management, conflict resolution, quality assurance, cost-benefit analysis, risk analysis, stakeholder analysis and planning within military organizations, as well as military sub-units and activities. This ensures internal and external constituencies are considered in resource management.

2. Strategic Vision and Defense Budgeting The graduate will understand the roles of the executive and legislative branches in strategic planning, setting federal fiscal policy, allocating resources to national defense, budget formulation, budget negotiation, budget justification and budget execution strategies, including the principles of Federal Appropriations Law. In addition, the graduate will have knowledge of all aspects of the federal, defense, and navy budget cycles including the Planning, Programming, Budgeting, and Execution System with emphasis on budget formulation and execution.

3. Funds Management In support of approved programs, the graduate will be able to manage appropriated, revolving and non-appropriated funds in compliance with regulations of the Comptroller of the Navy and the federal government. Also, the graduate will be able to develop and review financial reports, analyze budget execution against operating and financial plans, develop alternate plans based on analyses of an activity's financial performance and prepare recommendations or make decisions regarding the reallocation or reprogramming of funds. The guidelines of the Defense Finance and Accounting System and the Federal Accounting Standards Advisory Board are relevant.

4. Accountability, Control, and Auditing The graduate will be able to acquire and analyze financial data and communicate the results to a diverse audience, including maintaining an integrated financial information system and appropriate internal controls to ensure timely, accurate and consistent financial information. In accordance with the auditing standards of the U.S. Government Accountability Office, the defense and navy audit organizations, and the professional standards of the American Institute of Certified Public Accountants, the graduate will learn to apply audit techniques that enforce sound internal accounting and administrative controls, safeguard defense assets and assure the completeness and integrity of financial reports.

5. Acquisition and Program Management The graduate will understand the purpose and concepts, fundamentals and philosophies of the defense systems acquisition process, and the practical application of program management methods within this process. This includes systems acquisition management; the systems acquisition life cycle; user-producer acquisition management disciplines and activities; and program planning, organizing, staffing, directing and controlling. This satisfies the Defense Acquisition University education equivalency requirements for defense acquisition professionals as specified in Congress' Defense Acquisition Workforce Improvement Act (DAWIA).

6. Economy, Efficiency, and Effectiveness The graduate will have the skills for solving complex and unstructured management problems in which alternatives must be identified, evaluated and selected in accordance with economical procurement of resources, efficient utilization of resources and effective accomplishment of overall defense and navy goals and objectives. This includes cost/benefit analysis, systems analysis, cost estimation, value engineering, business process reengineering and application of relevant OMB and defense regulations.

7. Cost Management and Analysis The graduate will be able to design, implement, and evaluate different costing systems encountered within defense and navy organizations and activities, as well as those found in private sector organizations conducting business with the federal government. In addition to private sector cost management policies and practices, the graduate will understand the

application of defense unit costing guidelines to functional business areas and the Office of Management and Budget's Cost Accounting Standards for major suppliers of goods and services to the federal government.

8. Strategic Resource Management The graduate will have knowledge of strategic vision and strategic core competency concepts for setting long-range goals and objectives; designing programs to achieve objectives; assigning individual responsibility for resource management, actions and decision making; measuring performance; reporting results; and evaluating and rewarding performance. This includes assessing customer needs and customer satisfaction, making recommendations and implementing improvements in the effective delivery of goods and services to customers or users.

9. Innovation and Creativity The graduate will demonstrate innovation and creativity in developing solutions to complex financial, budget and program management issues that increase program effectiveness and customer satisfaction, while controlling the efficient utilization of financial, physical and human resources. This involves the ability to identify problems and potential concerns, providing leadership and teaming with others in the decision-making process, and obtaining support for recommended decisions or courses of action.

10. Strategy and Policy Officers develop a graduate-level ability to think strategically, critically analyze past military campaigns and apply historical lessons to future joint and combined operations, in order to discern the relationship between a nation's policies and goals and the ways military power may be used to achieve them. Fulfilled by completing the first of the Naval War College series leading to Service Intermediate-level Professional Military Education (PME) and Phase I Joint PME credit.

Required Specialization Courses

Defense Systems Analysis - Curriculum 817			
Course	**Credits**	**Course Title**	**Faculty**
MN3331	(5 - 1)	System Acquisition and Project Management	Rendon, Snider, Matthews, Petross
OA4702	(4 - 0)	Cost Estimation	Mislick
OA3304	(4 - 0)	Decision Theory	Washburn
OA4801	(3 - 2)	Spreadsheet Modeling for Military OR	Boensel
GB4440	(3 - 0)	Models and Simulation for Decision Making	Kang
GB/MNxxxx	(3/4- 0)	Curriculum Elective Course	
GB/MNxxxx	(3/4- 0)	Curriculum Elective Course	

DEFENSE SYSTEMS ANALYSIS (817) MATRIX (USMC)						
1 W/Sm	GB3010 (4-0) Managing for Organizational Effectiveness	GB3050 (4-0) Financial Reporting & Analysis	GB3020 (4-0) Fundamentals of Inform. Technology	GB3070 (4-0) Econ. of Global Defense Environment	GB3013 (0-2) Prob. Analy. & Ethical Dilemmas	
2 Sp/F	GB4052 (3-0) Managerial Finance	GB3051 (3-0) Cost Management	GB3040 (4-0) Managerial Statistics	GB4071 (4-0) Econ. Analysis & Defense Res. Allocation	MN2039 (4-0) Basic Quantitative Methods in Econ Analysis	
3 W/Sm	GB3012 (3-0) Communication for Managers	GB4053 (4-0) Defense Budget & FM Policy	GB4043 (3-0) Business Modeling Analysis	GB3042 (4-0) Operations Management	MN4110 (4-1) Multivariate Manpower Data Analysis I	
4 Sp/F	Thesis	GB4014 (4-0) Strategic Management	MN3331 (5-1) Systems Acquisition & Proj. Mgt	Curriculum Elective# (3/4-0)		
5 W/Sm	Thesis	OA 4702 (4-0) Cost Estimation	GB4440 (3-0) Simulation Modeling for Mgmt Decision Making	OA3304 (4-0) Decision Theory		
6 Sp/F	Thesis	NW3230 * (4-2) Strategy & Policy	OA4801 (3-2) Spreadsheet Modeling for Military OR	Curriculum Elective# (3/4-0)		

- NW3230 is required for USMC officers but is waived by completing USMC Command & Staff.
- # Recommended Elective course for those assigned to Programs and Review: GB4530, Management Control systems; GB4510, Strategic Resource Management; GB3510, Defense Financial Management Practice; GB4560 Defense Financial Management

Standard 4.23 General Competencies for the MSM Program
The common and additional components shall develop in students general competencies that are consistent with the program mission.

4.23 MSM Program Competencies

The MSM program, and the curricula within, consist of three broad phases (core, specialization, thesis) and develop distinct competencies in each phase:

Common Core: Develops broad management competencies in six areas:

Quantitative Methods and Analysis
Organizations and Organizational Behavior
Economic and Policy Analysis
Financial Management
Operations and Information Technology
Institutional Processes and Strategic Management

Specializations: Develop specific functional competencies in one area:

Defense System Analysis	(817)
Manpower Systems Analysis	(847)

Master's Thesis: The thesis serves an integrating mechanism and develops competencies for analysis, integration and application. As examples, a list of the thesis topics that were completed for the last graduating class is provided in Appendix 4.23B.

Standard 4.3 Minimum Degree Requirements for the MSM degree:
Students with little or no educational background or professional experience in the common and additional curriculum components are expected to devote the equivalent of two academic years of full-time study to complete the professional masters degree program. Where students have had strong undergraduate preparation in the common curriculum requirements or have been engaged in significant managerial activities, some of the subject matter requirements might be appropriately waived or reduced. Even in such cases, students ordinarily must spend the equivalent of a calendar year in full-time study in formal academic work exclusive of an internship, to obtain the professional masters degree. A calendar year is defined as two semesters and a summer session at least eight weeks in duration or four quarters (exclusive of internship) of full-time academic work.

4.3 MSM Degree Requirements

Stated minimum requirements for MSM degree are contained in the Naval Postgraduate School catalog, and summarized here.

Table 4.3 MSM STATED DEGREE REQUIREMENTS	
Core	Completion or validation of the Management Fundamentals program, which consists of a total of 32-quarter hours of 2000 and 3000 level courses, including a minimum of the following hours by discipline: Accounting and Financial Management (6), Economics (6), Organization and Management (6), Quantitative Methods (8).
Credits	In addition to the Management Fundamentals, completion of a minimum of 48 hours of graduate-level courses, at least 12 of which are at the 4000 level.
Concentration	Completion of an approved sequence of courses in the student's area of concentration.
Capstone	Completion of an acceptable thesis.

4.3A Degree Minimum Credit Hours

Combining the core and concentration credit requirements, and assigning effective credits to the thesis (12) component of the degree, the theoretical minimum credits for the MSM degree (assuming complete validation of the 32-credit Fundamentals) is:

- MSM Degree: 48 graduate-level credits; 12 at 4000 level

In practice, practical limits on course validations and individual course requirements specified by each of the different curriculum concentrations result in all students completing programs well in excess of these stated minimums.

4.3B Degree Length

Potential program length, for students with:

- Little/no education background & exp. 6 quarters 18 months
- Significant background & exp 5 quarters 15 months

Most students require the full six or seven quarters allowed by their curriculum to complete their programs because of the time elapsed from their undergraduate work to their graduate work. Shorter programs are extremely rare and even students with significant

background will take the full quarters allowed. Rather than reduce program length, students with strong backgrounds will identify additional requirements they might accomplish (e.g., complete a second subspecialty or professional certifications).

4.3C Concluding Requirements – Master's Thesis

No comprehensive examination is required. All MSM students complete a master's thesis. Normally the students spend about 6-9 months working on their thesis. Two to four equivalent course blocks are identified in each student's curriculum, depending on the length of the curriculum. No academic course credit is given for the thesis, although the scope of the thesis effort should roughly translate to about 12 course credits. Students may not earn the MSM degree without satisfactorily completing a thesis.

4.3D Course Format

All courses at the Naval Postgraduate School follow an (X –Y) format, where X is the number of "lecture" credit hours and Y the number of "lab" credit hours. Contact hours (class meeting hours per week) are the sum of the lecture and lab hours. Courses offered by GSBPP, and courses contained in the GSBPP curricula, range from 2 – 6 contact hours, however the most common formats are (3-0) and (4-0) courses.

Courses of (4-0) size are predominant in the MSM program, although (3-0) courses are common also. Most (4-0) course are scheduled to meet for two 2-hour sessions per week and (3-0) courses to meet for two 1 ½-hour sessions, although instructors have the discretion to request an alternative scheduling pattern. All courses in the MSM program meet on a weekly basis throughout the normal NPS quarters, with the exception of the Problem Analysis and Ethical Dilemmas course (GB3013), which meets for a dedicated two-day period at the start of the first quarter of the MSM program.

All classes meet during the daytime. We do not offer evening or weekend courses. The resident MSM program parallels NPS's school year, which consists of four quarters with two two-week breaks at the end of June and December. All students in these programs complete four quarters of classes within a one-year period.

4.3E Student Transcript Analysis

Student transcript analyses were completed for the MSM degree program. At the time of the analysis, only students in the Manpower curriculum (847) were recent graduates of the MSM, so all students in the sample followed that specialization. Grades for the common curriculum components and additional curriculum components are provided. Table 4.3E1 provides a list of the students in the sample. Table 4.3E2 displays their grades in program courses. The principal factor that may result in the programs of individual students differing from the stated core and specialty curriculum set of courses is validation.

Validation of Courses: As with many graduate programs of administration and management, our students possess varied undergraduate education, including majors (or minors) in public or business administration or economics. In order to ensure that all of our graduates are well and broadly grounded in a range of management foundation disciplines, our degree requirements include foundation courses in financial management, economics, quantitative methods and organizational behavior. Many of our entering students with strong undergraduate preparation in these disciplines already possess such foundation knowledge in these disciplines. In those cases, students may attempt to 'validate' the requirements through examination and/or interview (and transcript review) conducted by a faculty member assigned as "course coordinator" for the course.

Naval Postgraduate School policy concerning validation is: "A student with the appropriate background may validate a course that is required for his/her curriculum. Validation will allow the student to omit that course from the program of study. However, no credit will be granted for a course that has been validated. The basic purpose of the course validation is to make optimal use of the student's time at the Naval Postgraduate School. Every validation must be justified by documented evidence of prior work in the area of the course to be validated."

Standard 4.4 Internships
A carefully planned internship experience shall be made available by the program and students who lack a significant professional work background shall be strongly encouraged to take advantage of it. The program shall provide on-going academic supervision. Internship programs shall generally reflect NASPAA's internship guidelines.

4.4 Internships

There is no requirement for an internship nor is there any provision for a student to elect one. All students, however, have significant professional experience in complex governmental organization.

Table 4.3.E1

LIST OF STUDENTS IN MSM TRANSCRIPT ANALYSIS

Student Number	Curric #	Curriculum	Degree	Grad. Date
1	847	Manpower Systems Analysis	MSM	3/30/2007
2	847	Manpower Systems Analysis	MSM	6/30/2007
3	847	Manpower Systems Analysis	MSM	3/30/2006
4	847	Manpower Systems Analysis	MSM	3/30/2006
5	847	Manpower Systems Analysis	MSM	3/30/2007
6	847	Manpower Systems Analysis	MSM	9/30/2006
7	847	Manpower Systems Analysis	MSM	9/30/2006
8	847	Manpower Systems Analysis	MSM	6/30/2007
9	847	Manpower Systems Analysis	MSM	3/30/2006
10	847	Manpower Systems Analysis	MSM	9/30/2006
11	847	Manpower Systems Analysis	MSM	3/30/2007
12	847	Manpower Systems Analysis	MSM	3/30/2007
13	847	Manpower Systems Analysis	MSM	6/30/2007
14	847	Manpower Systems Analysis	MSM	6/30/2007
15	847	Manpower Systems Analysis	MSM	3/30/2007
16	847	Manpower Systems Analysis	MSM	3/30/2007
17	847	Manpower Systems Analysis	MSM	3/30/2007
18	847	Manpower Systems Analysis	MSM	12/30/2006
19	847	Manpower Systems Analysis	MSM	6/30/2007
20	847	Manpower Systems Analysis	MSM	3/30/2007

*Student names withheld due to Privacy Act concerns. Can be made available during site visit.

Table 4.3.E

MSM PROGRAM -- STUDENT TRANSCRIPT ANALYSIS

Course No.	Course Title	Area	Credits	Course Grades for each of 20 students:																			
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REQUIRED GRADUATE COURSES		CORE																					
GE3010	Managing for Organizational Effectiveness	CORE	4-0	B	A	W	A	A	B	A-	A	A-	A	B	A	A	A	A-	A	A-	A	A	A-
GE3012	Communication for Managers	CORE	3-0	B+	A-	A	A	A	B+	B+	B+	A-	A-	A	A-	A-	A	B+	A-	A-	A	A	B+
GE3013	Problem Analysis & Ethical Dilemmas	CORE	0-2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GE3020	Fundamentals of Information Technology	CORE	4-0	A-	A-	W	A-	A	A-	A	A-	A-	A	A-	A	W	W	A	A-	A	A	A	A-
GE3040	Managerial Statistics	CORE	4-0	A	B-	W	A	A	A	A	B	A	A	A	A	A	B+	A	B+	A-	A	A	A-
GE3042	Operations Management	CORE	4-0	A-	C+	W	B+	A	B+	A-	B	A-	A	A	A	B	B+	B	W	B	A	A	B
GE3050	Financial Reporting and Analysis	CORE	4-0	B	B+	A	A	A	B+	B+	A	B+	A	A	A	W	A	B+	W	A-	W	A	A-
GE3051	Cost Management	CORE	3-0	A-	C-	A	A	A-	B+	A-	B+	A	A	A	A	W	B+	A	B	B	A	A	B+
GE3070	Economics of the Global Defense Environment	CORE	4-0	A-	A-	A	A	A	A	B	A-	A	A	A	A	W	A-	A	A-	B+	W	A	A-
GE4014	Strategic Management	CORE	4-0	B	A	W	A	A	B+	B+	B+	A-	A-	B+	A	A-	W	A	A-	B+	A	B+	A
GE4043	Business Modeling and Analysis	CORE	3-0	A	B	A	A	B+	A-	A	A-	B+	B+	A-	A	B+	B+	B+	W	B	A	A	A-
GE4052	Managerial Finance	CORE	3-0	A	B	A	B+	A	B+	A-	A	A-	A	A	A	W	A	A	A	A-	W		A
GE4053	Defense Budget and Financial Management Policy	CORE	4-0		A	A-	A	A-			A	A-			A	A-	A	A-	A-	A-			
GE4071	Economic Analysis and Defense Resource Allocation	CORE	4-0	A	B+	A	A	A	B+	A-	B	A	A	A	A	W	A	A-	A	A	A	A	A
MN2039	Basic Quantitative Methods in Management	CORE	4-0																			A	
MN4111	Multivariate Manpower Data Analysis II	CORE	4-1	A	A-	A	A	A	A	A	B+	A	A	A	A	A-	A	A-	A	A-	A	A	A-
NW3230	Strategy & Policy	CORE	4-2		A-	A-	A				B+	B-			A-	A-	A-	W	B+	B			
ADDITIONAL CURRICULUM COMPONENTS																							
GE4052	Managerial Finance	MBA	3-0	A	B	A	B+	A	B+	A-	A	A-	A	A	A	W	A	A	A	A-	W		A
GE3030	Marketing Management	MBA	3-0			W						A					A		B+				
GE4021	Strategic Management of IT	MBA	3-0					A															
MN2302	Seminar for Acquisition and Contracting Students	ACQ	0-2																				
MN2303	Seminar for Program Management Students	ACQ	0-2																				
MN3155	Financial Management for Acquisition Managers	ACQ	2-0																				
MN3301	Acquisition of Defense Systems	ACQ	4-0																				
MN3303	Principles of Acquisition and Contract Management	ACQ	4-0																				
MN3304	Contract Pricing and Negotiations	ACQ	5-1																				
MN3306	Strategic Purchasing	ACQ	3-0																				
MN3307	Entrepreneurship in Strategic Purchasing	ACQ	3-0																				
MN3309	Acquisition of Embedded Weapon Systems Software	ACQ	4-1																				

Table 4.3.E
MSM PROGRAM -- STUDENT TRANSCRIPT ANALYSIS (continued)

Course No.	Course Title	Area	Credits	Course Grades for each of 20 students:																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REQUIRED GRADUATE COURSES		**CORE**																					
MN3312	Contract Law	ACQ	4-0	P	P	W	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
MN3315	Acquisition Management and Contract Administration	ACQ	4-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN3318	Contingency Contracting	ACQ	3-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN3331	Principles of Acquisition and Program Management	ACQ	5-1	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
MN3384	Principles of Acquisition,Production and Quality Management	ACQ	5-1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN4304	Defense Systems Contracting	ACQ	2-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN4307	Program Management Policy and Control	ACQ	4-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN4371	Acquisition and Contracting Policy	ACQ	4-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN4374	Seminar in Acquisition Management: Strategic Purchasing	ACQ	3-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN4602	Test and Evaluation Management	ACQ	2-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
SM4011	Systems Engineering for Acquisition Managers	ACQ	3-2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB3510	Defense Financial Management Practice	FM	3-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB4510	Strategic Resource Management	FM	4-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB4520	Internal Control & Audit	FM	3-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB4530	Management Control Systems	FM	4-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB4540	Conrad Seminar	FM	2-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB4550	Advanced Financial Reporting	FM	4-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB4560	Defense Financial Management	FM	3-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB4570	Advanced Finance	FM	2-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN4157	Seminar in Management Accounting I	FM	3-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
QA4702	Cost Estimation	FM	4-0	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
GB3420	Supply Chain Management	LOG	4-0	P	P	P	P	P	P	P	P	P	P	P	P	B-	P	P	P	P	P	P	P
GB4410	Logistics Engineering	LOG	4-0	P	P	P	P	P	P	P	P	P	P	P	P	B+	P	P	P	P	P	P	P
GB4420	Technology and Information Systems for Logistics and Operations	LOG	4-0	P	P	P	P	P	P	P	P	P	P	P	P	A-	P	P	P	P	P	P	P
GB4430	Defense Transportation System	LOG	4-0	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
GB4440	Simulation Modeling for Management Decision Making	LOG	3-0	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
GB4450	Logistics Strategy	LOG	4-0	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
MN3370	Seminar on Leadership in Supply Chain Management	LOG	0-2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN2111	Navy Manpower, Personnel, and Training Systems I	MSA	2-0	P	P	W	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
MN2112	Seminar in Manpower, Personnel, and Training Issues II	MSA	0-2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Table 4.3.E

MSM PROGRAM -- STUDENT TRANSCRIPT ANALYSIS (continued)

Course No.	Course Title	Area	Credits	Course Grades for each of 20 students:																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REQUIRED GRADUATE COURSES		**CORE**																					
MN3111	Analysis of Human Resource Management	MSA	4-0	B	B+	W	A	A	B+	B+	B+	A-	A	A-	A	A-	B+	B+	A-	B+	A	A	B+
MN3760	Manpower Economics I	MSA	4-0	A-	B+	A	A	A	A-	A-	B+	A	A	A-	A	A	A-	A-	A-	A-	A	A	A
MN4106	Manpower/ Personnel Policy Analysis	MSA	4-0	A-	A	A	A	A	B+	B+	A-	A-	A	A-	A	A	A	A	A	A-	A	A	A-
MN4110	Multivariate Manpower Data Analysis I	MSA	4-1	A	B+	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A-	A	A	A
MN4114	Sociological and Psycological Perspectives on Military Service	MSA	4-0	B+	A-	A	A	A	A	A	B	A-	A	A	A-	B+	B+	B+	A	B	A	A	A
MN4115	Foundations of Education and Learning in DoD Organizations	MSA	4-0	B	A	A		A	B	B+	B+		A	A-	B+	A	A	A	A-	W	A	A	A-
MN4116	Society of Human Resource Management	MSA	0-3			P																	
MN4118	Modeling for Decision Support in Manpower Systems	MSA	3-2			A	A					A											
MN4119	Navy Manpower Requirements Process	MSA	3-0			A	A	W				A					W		W				
MN4120	Marine Manpower Management	MSA	3-0		A						A				A	A		A		A			
MN4761	Applied Manpower Analysis	MSA	4-0	A-	B+	A	A	A	B+	A-	B+	B+	A	A-	A-	B+	A-	A-	A	B	A	A	B+
OS3401	Human Factors Engineering	MSA	3-0																				
OS4701	Manpower and Personnel Models	MSA	4-0	A	B+	A	A-	A	A	A-	B+	B+	A	A	A	B+	A	A	A	A	A	A	A
NS3023	Introduction to Comparative Politics	RPM	4-0																				
NS3024	Introduction to International Relations	RPM	4-0																				
NS3025	Introduction to Civil-Military Relations	RPM	4-0																				
NS3030	American National Security Policy	RPM	4-0																				
NS3040	The Politics of Global Economic Relations	RPM	4-0																				
NS3041	Comparative Economic Systems	RPM	4-0																				
NS3900	International Law and Organizations	RPM	4-0																				
NS4032	Special Topics in International Relations	RPM	4-0																				
NS4235	Diplomacy & Strategic Coalitions - Operations other than War	RPM	4-0																				
NS4236	Stability Operations	RPM	4-0																				
NS4240	Seminar on Regional Security Planning Problems	RPM	4-0																				
NW3275	Joint Maritime Operations I		4-0			P					P	P					P	P	P				
NW3276	Joint Maritime Operations II		2-2			A-					A-						A-	A	A				
NW3285	National Security Decision Making		4-0			A-					A-						A-	A-	A-				
PREREQUISITES																							
MA1010	College Algebra		2-0	W	B	W	P	W	W	W	A	W	W	W	P	W	W	B	W	W	W	W	W
IT1500	American Life and Institutions	INTL	4-0	A					A	A			A	A							A	A	A
IT1600	Communication Skills for International Officers	INTL	3-0	A									W										A
IT1700	Academic Writing for International Officers	INTL	2-0						A														

STANDARD 5.0 -- THE FACULTY

Standard 5.1 Faculty Nucleus
There must be a faculty nucleus that accepts primary responsibility for the professional graduate program. This regular faculty should consist of a sufficient number of full-time faculty significantly involved with the program to support the set of teaching, research and service responsibilities appropriate to the size and structure of the program. In no case should this faculty nucleus be fewer than five full-time persons. The institution should specify how each regular member is involved in the teaching and related research and service aspects of the program. At least 50 percent of the courses covering the common curriculum components shall be taught by full-time faculty of the institution.

5.1 Defining the Faculty Nucleus

At the outset of discussing faculty, we see a question of definition and bounding that needs to be directly addressed: Who are the "Program Faculty?" Which individual faculty in GSBPP should be associated with a specific program (e.g., the MSM)? As the earlier chapters have described, GSBPP has six degree programs, with 16 curricula embedded within the degree programs. Two degree programs (MBA, MSM), with 12 curricula, are being reviewed for NASPAA reaccreditation, and one degree program (MSM), with 2 curricula, is the subject of this self-study volume. Should all faculty in the School be seen as "MSM Program faculty", or should there be an attempt to identify a smaller subset of the School's faculty, those whose recent assignments and experience have been most closely aligned with the MSM program, and define that subset as the "MSM Program faculty"?

Given this choice of an "all faculty" or "subset faculty" approach, we have elected the former as being more representative of the set of faculty that exists to support a program. Two examples may help to explain why:

1. Non-resident Teaching Assignments: GSBPP has a number of faculty, full-time regular faculty members within the School, whose instructional assignments have been almost exclusively in one of the School's distance learning programs, programs that are not seeking NASPAA accreditation. In terms of recent assignments, these faculty members have not been teaching in the MSM. But all of the School's non-MSM programs and curricula rely on courses that are similar to those taught in the MSM and the programs are built on a faculty base of expertise that is the same base that forms the foundation for the MSM program. Hence all of these faculty members are potential resources for the MSM program, even if their recent assignments have been elsewhere. Their association (or not) with the MSM program is more a matter of the teaching assignment process than any inherent non-connection with the MSM program and its mission.

2. Shifting Specialty Curriculum Alignment: GSBPP has groups of faculty who are associated with some of the individual specialty curricula. As described earlier, two specialty curricula are currently associated with the MSM degree, and students completing those curricula earn the MSM. Similarly, ten specialty curricula are currently associated with the MBA degree, and students completing those curricula earn the MBA. This might suggest that faculty who teach only within one specialty curriculum should be readily associated with either the MSM program or the MBA program, but not both. We think not. The group of "Manpower" faculty, who teach courses in the Manpower curriculum, provide an example. Currently students following the Manpower specialty curriculum earn an MSM degree, so faculty teaching Manpower courses only teach students in the MSM program (and thus these faculty members might be considered as "MSM Program faculty"). But the alignment of the Manpower curriculum (or any specialty curriculum) with the MSM degree (or any degree) is somewhat tentative and subject to change. Prior to 2002, the Manpower specialty curriculum fell under the MSM degree and all Manpower students earned an MSM. From 2002 to 2006, the alignment shifted so that some Manpower students earned the MBA degree (and the actual program of study for these students was altered so as to satisfy the degree requirements of the MBA). Starting 2006, the Manpower curriculum shifted back to being a solely MSM curriculum. Similarly, the Defense Systems Analysis curriculum was an MSM curriculum until 2002, an MBA curriculum from 2002 until 2007, and has now shifted back to being an MSM curriculum. In fact all resident curricula that have been in existence since 2001 have, at one time or another, been aligned with both the MSM and the MBA degrees.

This shifting is to be expected and is even desirable. It is the result of curriculum sponsors choosing to build their specialization on top of either the MSM core curriculum or the MBA core curriculum, whichever provides the focus the sponsors (of the moment) may deem most relevant to the education of the students they sponsor. What this means from the GSBPP standpoint is that all specialization curricula are available within either the MSM or MBA program, and hence all GSBPP faculty exist to support, and are relevant to, both the MSM and MBA degree programs

We have followed this "all faculty" approach in describing the Program Faculty in this chapter. But, if of value, additional data in various tables provides information about whether GSBPP faculty assignments during the self-study period, or particular courses taught, were associated with particular programs.

5.1A Critical Mass

GSBPP views its faculty size and background as a key strength. During the self-study year, 71 different full-time, nucleus faculty made significant contributions to GSBPP programs. Departures of 10 faculty members but the addition of 10 during the year leave 61 nucleus faculty members as of the time of this document (July 2007). This 61 includes

the addition of two new nucleus faculty members recently onboard for the start of the 2008 academic year.

GSBPP faculty are drawn from a wide variety of academic disciplines—including management, business and public administration, political science, economics, education, accounting, law, information systems, psychology, operations research, engineering and other fields—to meet the demands of the School's diverse programs and curricula. In addition, faculty members represent a number of sub-disciplines within academic areas. For example, in 2007, faculty with doctorates in economics specialized in labor economics, econometrics, microeconomics, political economy, strategy and public finance; faculty with graduate degrees in accounting included those with specializations in financial reporting, cost management, comptrollership, enterprise systems and management control systems.

Students are given maximum opportunity to interact with faculty in the numerous disciplines. Curricula are designed so that students have maximum exposure to different viewpoints both in their courses and in thesis or project work.

Faculty members within the School interact regularly as project/thesis advisors, on course/curriculum design, on research projects, and on issues of faculty governance.

5.1B Faculty Nucleus

Table 5.1B provides a list of the nucleus faculty within the Graduate School of Business and Public Policy. These faculty members are the nucleus available to support all of the School's degree programs. The faculty members in the table are identified as belonging to various groups, as follows:

- ACQ Acquisition
- ECON Economics
- MGT Organizations and Management
- FM Financial Management
- OLM Operations and Logistics Management
- MSA Manpower Systems Analysis
- IT Information Technology

Table 5.1B
GSBPP NUCLEUS FACULTY
Jul - 07

Last Name	First Name	Rank	Tenure Track Status	Deg.	Year of Deg.	University	Degree Field	Year at NPS	GSBPP Area
Apte	Uday	Professor	Tenured	PhD	1982	University of Pennsylvania	Operations Research	2004	OLM
Barrett	Frank	Professor	Tenured	PhD	1989	Case Western Reserve University	Organizational Behavior	1990	MGT
Brook	Doug	Professor	TTrack	PhD	2001	George Mason University	Public Administration / Public Policy	2002	FM
Eitelberg	Mark	Professor	Tenured	PhD	1979	New York University	Public Administration	1982	MSA
Euske	Ken	Professor	Tenured	PhD	1978	Arizona State University	Accounting	1978	FM
Jones	Larry	Professor	Tenured	PhD	1977	University of California at Berkeley	Budgeting / Finance	1987	FM
McCaffery	Jerry	Professor	Tenured	PhD	1972	University of Wisconsin	Political Science	1984	FM
Mehay	Steve	Professor	Tenured	PhD	1973	University of California at Los Angeles	Economics	1985	ECON
San Miguel	Joe	Professor	Tenured	PhD	1972	University of Texas	Accounting	1982	FM
Suchan	Jim	Professor	Tenured	PhD	1980	University of Illinois	English Literature	1986	MGT
Thomas	George	Professor	Tenured	PhD	1971	Purdue University	Economics	1978	OLM
Doerr	Ken	Associate Professor	Tenured	PhD	1994	University of Washington	Operations Management	2001	OLM
Doyle	Dick	Associate Professor	Tenured	PhD	1984	University of Washington	Political Science	1990	FM
Gates	Bill	Associate Professor	Tenured	PhD	1984	Yale University	Economics	1988	ECON
Henderson	David	Associate Professor	Tenured	PhD	1976	University of California at Los Angeles	Economics	1984	ECON
Hocevar	Susan	Associate Professor	Tenured	PhD	1989	University of Southern California	Business Administration	1990	MGT
Kang	Keebom	Associate Professor	Tenured	PhD	1984	Purdue University	Industrial Engineering	1988	OLM
Lewis	Ira	Associate Professor	Tenured	PhD	1992	Arizona State University	Business Administration	1998	OLM
Moses	Doug	Associate Professor	Tenured	PhD	1983	University of California at Los Angeles	Accounting	1985	FM
Snider	Keith	Associate Professor	Tenured	PhD	1997	Virginia Polytechnic Inst. & State Univ.	Public Administration	1993	ACQ
Thomas	Gail	Associate Professor	Tenured	PhD	1986	Arizona State University	Business / Education	1989	MGT
Arkes	Jeremy	Associate Professor	TTrack	PhD	1997	University of Wisconsin-Madison	Labor Economics	2007	ECON
Coughlan	Pete	Associate Professor	TTrack	PhD	1999	California Institute of Technology	Social Sciences / Economics	2004	ECON

Table 5.1B
GSBPP NUCLEUS FACULTY (continued)
Jul - 07

Last Name	First Name	Rank	Tenure Track Status	Deg.	Year of Deg.	University	Degree Field	Year at NPS	GSBPP Area
Ferrer	Geraldo	Associate Professor	TTrack	PhD	1997	INSEAD	Management	2004	OLM
Gibbons	Deborah	Associate Professor	TTrack	PhD	1996	Carnegie Mellon University	Organizational Behavior	2004	MGT
Ventresca	Marc	Associate Professor	TTrack	PhD	1995	Stanford University		2006	MGT
Apte	Aruna	Assistant Professor	TTrack	PhD	1997	Southern Methodist University	Decision Sciences / Ops Mgmt	2004	OLM
Dew	Nick	Assistant Professor	TTrack	PhD	2003	University of Virginia	Management	2003	MGT
Heath	Susan	Assistant Professor	TTrack	PhD	2006	University of Texas at Austin	Operations Management	2006	OLM
Hensel	Nayantara	Assistant Professor	TTrack	PhD	2001	Harvard University	Economics	2004	FM
King	Cindy	Assistant Professor	TTrack	PhD	2004	University of Washington	Communication	2004	MGT
Laverson	Alan	Assistant Professor	TTrack	PhD	1999	Rand Graduate School	Policy Analysis	2006	FM
Pema	Elda	Assistant Professor	TTrack	PhD	2003	Michigan State University	Economics	2003	ECON
Powley	Ned	Assistant Professor	TTrack	PhD	2005	Case Western Reserve University	Organizational Behavior	2006	MGT
Shen	Yu-Chu	Assistant Professor	TTrack	PhD	2001	Harvard University	Health Policy / Health Economics	2004	ECON
Thibodeau	Nicole	Assistant Professor	TTrack	PhD	2003	University of Pittsburgh	Accounting	2005	FM
Wang	Chong	Assistant Professor	TTrack	PhD	1998	Iowa State University	Economics	2007	FM
Zolin	Roxanne	Assistant Professor	TTrack	PhD	2002	Stanford University	Construction Engineering Management	2002	MGT
Boudreau	Mike	Senior Lecturer	Non-TT	MBA	1966	Santa Clara University	Management	1995	ACQ
Brinkley	Doug	Senior Lecturer	Non-TT	EdD	2003	Nova Southeastern University	Education / Instructional Technology	1998	IT
Candreva	Phil	Senior Lecturer	Non-TT	MS	1996	Naval Postgraduate School	Management	2002	FM
Crawford	Alice	Senior Lecturer	Non-TT	MA	1973	San Diego State University	Experimental Phychology	1988	MGT
Dillard	John	Senior Lecturer	Non-TT	MS	1985	University of Southern California	Systems Management	2000	ACQ
Franck	Chip	Senior Lecturer	Non-TT	PhD	1983	Harvard University	Economics	2000	ECON
Matthews	Dave	Senior Lecturer	Non-TT	MA	1974	Middle Tennessee State U.	Sociology	1994	ACQ
Matthews	Danny	Senior Lecturer	Non-TT	MS	1986	Naval Postgraduate School	Financial Management	2007	FM

Table 5.1B

GSBPP NUCLEUS FACULTY (continued)

Jul - 07

Last Name	First Name	Rank	Tenure Track Status	Deg.	Year of Deg.	University	Degree Field	Year at NPS	GSBPP Area
Mutty	John	Senior Lecturer	Non-TT	MS	1976	George Washington University	Finance	1995	FM
Naegle	Brad	Senior Lecturer	Non-TT	MS	1994	Naval Postgraduate School	Program Management	1997	ACQ
Owen	Wally	Senior Lecturer	Non-TT	MS	2002	Golden Gate University	Public Administration	1992	ACQ
Rendon	Rene	Senior Lecturer	Non-TT	DBA	2003	Argosy University	Business Administration	2004	ACQ
Roberts	Ben	Senior Lecturer	Non-TT	PhD	1977	The Pennsylvania State University	Sociology	1985	MSA
Cuskey	Jeff	Lecturer	Non-TT	MS	1993	Naval Postgraduate School	Acquisition	1997	ACQ
Hatch	Bill	Lecturer	Non-TT	MS	1991	Naval Postgraduate School	Manpower, Personnel & Training	2005	MSA
Petross	Diana	Lecturer	Non-TT	MPA	1991	University of Oklahoma	Public Policy and Administration	2006	ACQ
Simon	Cary	Lecturer	Non-TT	DBA	1997	U.S. International University	Organization Management	1997	MGT
Summers	Don	Lecturer	Non-TT	MS	1985	Naval Postgraduate School	Financial Management	2000	FM
Yoder	Cory	Lecturer	Non-TT	MS	1993	Naval Postgraduate School	Contract Management	2004	ACQ
Hill	Kim	Military Lecturer	Non-TT	MS		Naval Postgraduate School	Manpower, Personnel & Training	2006	MSA
Hudgens	Bryan	Military Lecturer	Military	MS	1997	Air Force Inst.of Technology	Contract Management	2005	ACQ
Nalwasky	Richard	Military Lecturer	Military	MBA	2003	Naval Postgraduate School	Acquisition	2007	ACQ
Potvin	Lisa	Military Lecturer	Military	MBA	1997	University of Denver	General MBA	2006	FM

5.1C Teaching Assignments

Table 5.1C lists courses taught by the nucleus faculty during the self-study year and the preceding year (AY2007 & AY2006). All of the nucleus faculty members are available and capable of teaching in the MSM program under review, but in any given year their actual teaching assignments may be in the MSM program, the MBA program, in one of the other degree programs in GSBPP (EMBA, MSCM, MSPM, MEM). The table indicates which courses, by virtue of current curriculum alignment, support MSM program, the MBA program, or both.

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Apte	Aruna	2006	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
		2007	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
Apte	Uday	2006	GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
		2007	GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
Barrett	Frank	2006	MN4125	4-0	Managing Planned Change in Complex Organizations	
			MN4125	4-0	Managing Planned Change in Complex Organizations	
			MN4125	4-0	Managing Planned Change in Complex Organizations	
		2007	MN4125	4-0	Managing Planned Change in Complex Organizations	
Bosque	Suzanne	2006	MN4119	3-0	Managing Planned Change in Complex Organizations	
			MN2111	2-0	Navy Manpower, Personnel, and Training Systems I	MSM
			MN2112	0-2	Seminar in Manpower, Personnel, and Training Issues II	MSM
			MN4119	3-0	Managing Planned Change in Complex Organizations	
Boudreau	Mike	2006	MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
			MN3363	2-0	Acquisition Manufacturing and Quality Management	
			MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
		2007	MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN4366	4-0	Program Management and Leadership	
			MN4366	4-0	Program Management and Leadership	
			MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
			MN3384	5-1	Principles of Acquisition Production and Quality Management	
			MN3363	2-0	Acquisition Manufacturing and Quality Management	
			MN3365	2-0	Acquisition Logistics and Program Sustainment	
			MN3384	5-1	Principles of Acquisition Production and Quality Management	MBA
			MN4307	4-0	Program Management Policy and Control	MBA
Brinkley	Doug	2006	GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
		2007	GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
			GB3020	4-0	Fundamentals of Information Technology	MBA & MSM
Brook	Douglas	2006	GB3013	0-2	Problem Analysis and Ethical Dilemmas Seminar (PAED)	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB3013	0-2	Problem Analysis & Ethical Dilemmas	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
		2007	GB3013	0-2	Problem Analysis and Ethical Dilemmas Seminar (PAED)	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB3013	0-2	Problem Analysis and Ethical Dilemmas Seminar (PAED)	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
Candreva	Phil	2006	MN3154	3-0	Financial Management in the Armed Forces	
			GB3510	3-0	Defense Financial Management Practice	MBA
			GB3510	3-0	Defense Financial Management Practice	MBA
			MN3154	3-0	Financial Management in the Armed Forces	
		2007	MN3154	3-0	Financial Management in the Armed Forces	
			MN3510	3-0	Defense Financial Management Practice	
			GB3510	3-0	Defense Financial Management Practice	MBA
			GB3510	3-0	Defense Financial Management Practice	MBA
			GE3510	3-0	Defense Financial Management Practice	
			GE3510	3-0	Defense Financial Management Practice	
			MN3154	3-0	Financial Management in the Armed Forces	
			GE3510	3-0	Defense Financial Management Practice	
			GE3510	3-0	Defense Financial Management Practice	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Coughlan	Pete	2006	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
		2007	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
Crawford	Alice	2006	GE3011	2-0	Management of Teams	
			GE3011	2-0	Management of Teams	
			MN3135	3-0	Instructional Systems Design	
		2007	GE4100	3-7	Collaborative Decision Making	
			GE4100	7-0	Seminar in Defense Management	
Crawford / Hatch	Alice / Bill	2007	MN4115	4-0	Foundations of Education and Learning in DoD Organizations	MSM
Crouch	Thom	2006	MN4602	2-0	Test and Evaluation Management	MBA
			MN4602	2-0	Test and Evaluation Management	
			MN4602	2-0	Test and Evaluation Management	MBA
Cuskey	Jeff	2006	MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN4304	2-0	Defense Systems Contracting	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			MN4371	4-0	Acquisition and Contracting Policy	
		2007	MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN4304	2-0	Defense Systems Contracting	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN4371	4-0	Acquisition and Contracting Policy	MBA
			GE3221	3-0	Principles of Acquisition and Program Management I	
Dew	Nick	2006	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GE4016	3-0	Managing Strategic Change	
		2007	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GE4016	4-0	Managing Strategic Change	
			GE4016	4-0	Managing Strategic Change	
Dillard	John	2006	GE3222	3-0	Principles of Acquisition and Program Management II	
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN4307	4-0	Program Management Policy and Control	MBA
			MN4307	4-0	Program Management Policy and Control	MBA
			GE3222	3-0	Principles of Acquisition and Program Management II	
Doerr	Ken	2006	GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
		2007	GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GE3042	4-0	Operations Management	
			GE3042	4-0	Operations Management	
Doyle	Richard	2006	MN3172	3-0	Resourcing National Security: Policy and Process	
			GE4053	3-0	DoD Mission & Resource Determination	
		2007	MN3172	3-0	Resourcing National Security: Policy and Process	
			MN4053	4-0	Defense Budget & Financial Management Policy	
			GE4053	4-0	DoD Mission & Resource Determination	
			GE4053	4-0	DoD Mission & Resource Determination	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Eitelberg	Mark	2006	MN4106	4-0	Manpower/ Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			MN4106	4-0	Manpower/ Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
		2007	MN4106	4-0	Manpower/Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			MN4106	4-0	Manpower/Personnel Policy Analysis	MSM
			MN4114	4-0	Sociological and Psycological Perspectives on Military Service	MSM
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
Engelbeck	Marshall	2006	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3315	4-0	Acquisition Management and Contract Administration	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN4304	2-0	Defense Systems Contracting	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
		2007	MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN3341	4-2	Advanced Contracting Principles	
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	
Euske	Ken	2006	GE3050	3-0	Financial Reporting and Analysis	
			GE3050	3-0	Financial Reporting and Analysis	
			GE3050	3-0	Financial Reporting and Analysis	
		2007	GB4530	4-0	Management Control Systems	MBA
			GB4530	4-0	Management Control Systems	MBA
			GB3051	3-0	Cost Management	MBA & MSM
			GB4530	4-0	Management Control Systems	MBA
Ferrer	Geraldo	2006	GB3420	4-0	Supply Chain Management I	MBA
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
		2007	GB3420	4-0	Supply Chain Management I	MBA
			GB3420	4-0	Supply Chain Management I	MBA
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
Franck	Chip	2006	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GE3070	3-0	Economics for Defense Managers	
			GE3070	3-0	Economics for Defense Managers	
			MN3102	2-0	Military Leadership	
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
		2007	MN3001	3-0	Economics for Acquisition Managers	
			MN3001	3-0	Economics for Acquisition Managers	
			GE3070	3-0	Economics for Defense Managers	
			GE3070	3-0	Economics for Defense Managers	
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			MN3001	3-0	Economics for Acquisition Managers	
Gates	Bill	2006	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
		2007	GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
Gibbons	Deborah	2006	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
		2007	GE3010	3-0	Organizations as Systems and Structures	
			GE3010	3-0	Organizations as Systems and Structures	
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Hatch	Bill	2006	MN4130	3-0	Marine Manpower Management	MSM
			MN3111	4-0	Analysis of Human Resource Management	MSM
			MN4115	4-0	Foundations of Education and Learning in DoD Organizations	MSM
			MN4118	3-2	Modeling for Decision Support in Manpower Systems	MSM
			MN2111	2-0	Navy Manpower, Personnel, and Training Systems I	MSM
			MN3111	4-0	Analysis of Human Resource Management	MSM
			MN4115	4-0	Foundations of Education and Learning in DoD Organizations	MSM
			MN4118	3-2	Modeling for Decision Support in Manpower Systems	MSM
		2007	MN3111	4-0	Analysis of Human Resource Management	MSM
			MN2111	2-0	Navy Manpower, Personnel, and Training Systems I	MSM
Heath	Susan	2007	GB4043	3-0	Business Modeling and Analysis	MBA & MSM
			GB4043	3-0	Business Modeling and Analysis	MBA
			GB4440	3-0	Simulation Modeling for Management Decision Making	MBA
			GB4440	3-0	Simulation Modeling for Management Decision Making	MBA
Henderson	David	2006	MN4900	V-1	Readings in Management	MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB4071	4-0	Economic Analysis and Defense Resource Allocation	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
		2007	GE3070	3-0	Economics for Defense Managers	
			GE3070	3-0	Economics for Defense Managers	
Hensel	Nayantara	2006	GB4570	2-0	Advanced Finance	MBA
			GB4570	2-0	Advanced Finance	MBA
			GB4570	2-0	Advanced Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
		2007	GB4052	3-0	Managerial Finance	MBA
			GB4570	3-0	Advanced Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
Hill	Kim	2007	MN2112	0-2	Seminar in Manpower, Personnel, and Training Issues II	MSM
Hocevar	Susan	2006	MN3118	4-0	Strategies for Building Consensus	
			MN4080	2-0	Research Colloquium	
		2007	MN3118	4-0	Strategies for Building Consensus	
Howard	Randall	2006	GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4540	2-0	Conrad Seminar	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
Hudgens	Bryan	2006	GB3042	4-0	Operations Management	MBA & MSM
			MN3307	3-0	Entrepreneurship in Strategic Purchasing	MBA
			MN3306	3-0	Strategic Purchasing	MBA
			GE3306	3-0	Strategic Purchasing	
			GE3306	3-0	Strategic Purchasing	
			MN3306	3-0	Strategic Purchasing	MBA
		2007	GB3042	4-0	Operations Management	MBA & MSM
			MN3307	3-0	Entrepreneurship in Strategic Purchasing	MBA
			MN3306	3-0	Strategic Purchasing	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			MN3306	3-0	Strategic Purchasing	MBA
			MN4374	3-0	Seminar in Acquisition Management: Strategic Purchasing	MBA
			GE3306	3-0	Strategic Purchasing	
			GE3306	3-0	Strategic Purchasing	
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GB4044	3-0	Defense-Focused Managerial Inquiry	MBA
			GE4460	3-0	Defense Supply Chain Management	
			GE4460	3-0	Defense Supply Chain Management	
Hughes	Thomas	2006	GB4540	2-0	Conrad Seminar	MBA
			GB4540	2-0	Conrad Seminar	MBA
		2007	GB4540	2-0	Conrad Seminar	MBA
			GB4540	2-0	Conrad Seminar	MBA

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Jones	Becky	2006	GB3030	3-0	Marketing Management	MBA
			GB3030	3-0	Marketing Management	MBA
			MN3145	4-0	Marketing Management	
			GB3030	2-0	Marketing Management	MBA
			GB3030	2-0	Marketing Management	MBA
		2007	GB3030	3-0	Marketing Management	MBA
			GB3030	3-0	Marketing Management	MBA
			MN3145	4-0	Marketing Mgmt	
			GB3030	3-0	Marketing Management	MBA
			GB3030	3-0	Marketing Management	MBA
Jones, L.	Larry	2006	GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
		2007	GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
Kang	Keebom	2006	GB4410	4-0	Logistics Engineering	MBA
			GB4410	4-0	Logistics Engineering	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			GB4410	4-0	Logistics Engineering	MBA
			GB4440	3-0	Logistics Strategy	MBA
			GB4440	3-0	Logistics Strategy	MBA
		2007	GB4410	4-0	Logistics Engineering	MBA
			GB4410	4-0	Logistics Engineering	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			GB4410	4-0	Logistics Engineering	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			MN3370	0-2	Seminar on Leadership in Supply Chain Management	MBA
			GE4460	3-0	Defense Supply Chain Management	
King	Cindy	2006	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
		2007	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
Kros	Todd	2007	MN3301	4-0	Acquisition of Defense Systems	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Laverson	Alan	2007	GE4052	3-0	Managerial Finance	
			GE4052	3-0	Managerial Finance	
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
			GB4052	3-0	Managerial Finance	MBA
Lewis	Ira	2006	GB4430	4-0	Defense Transportation System	MBA
			GB4430	4-0	Defense Transportation System	MBA
		2007	GB4430	4-0	Defense Transportation System	MBA
			GB4430	4-0	Defense Transportation System	MBA
			GB3042	4-0	Operations Management	MBA & MSM
			GB3042	4-0	Operations Management	MBA & MSM
			GE4460	3-0	Defense Supply Chain Management	
Malina	Mary	2006	GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
Matthews	Danny	2006	GB4530	4-0	Management Control Systems	MBA
			GB4530	4-0	Management Control Systems	MBA
			GE4052	3-0	Managerial Finance	
			GE4052	3-0	Managerial Finance	
			GE3051	3-0	Cost Management	
			GB4530	4-0	Management Control Systems	MBA
			GE4052	3-0	Managerial Finance	
			GE4052	3-0	Managerial Finance	
		2007	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			MN2155	4-0	Accounting for Management	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Matthews	Dave	2006	MN4366	4-0	Program Management and Leadership	
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
		2007	MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN3222	3-0	Principles of Acquisition and Program Management II	
			MN3221	3-0	Principles of Acquisition and Program Management I	
			MN4366	4-0	Program Management and Leadership	
			GE3222	3-0	Principles of Acquisition and Program Management II	
			GE3221	3-0	Principles of Acquisition and Program Management I	
McCaffery	Jerry	2006	GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GE3510	3-0	Defense Financial Management Practice	
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
Mehay	Stephen	2006	MN4761	4-0	Applied Manpower Analysis	MSM
			MN4761	4-0	Applied Manpower Analysis	MSM
			MN4143	2-0	Defense Manpower and Personnel Analysis	
		2007	MN4761	4-0	Applied Manpower Analysis	MSM
			MN4761	4-0	Applied Manpower Analysis	MSM
			MN3760	4-0	Manpower Economics I	MSM
Mirano	Dave	2006	MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3301	4-0	Acquisition of Defense Systems	MBA
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3303	4-0	Principles of Acquisition and Contract Management	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
		2007	MN3315	4-0	Acquisition Management and Contract Administration	MBA
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN3301	4-0	Acquisition of Defense Systems	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Motherway	Daniel	2006	MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3301	4-0	Acquisition of Defense Systems	
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Mutty	John	2006	GB4560	3-0	Defense Financial Management	MBA
			GE3510	3-0	Defense Financial Management Practice	
			GB4560	3-0	Defense Financial Management	MBA
			GE3510	3-0	Defense Financial Management Practice	
		2007	GE4053	4-0	DoD Mission & Resource Determination	
			GE4053	4-0	DoD Mission & Resource Determination	
			GB4560	3-0	Defense Financial Management	MBA
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB4053	4-0	Defense Budget and Financial Management Policy	MBA & MSM
			GB3510	3-0	Defense Financial Management Practice	MBA
			GB4560	3-0	Defense Financial Management	MBA
Naegle	Brad	2006	MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN3361	2-0	Software Acqusition Management	
			MN3361	2-0	Software Acqusition Management	
			MN3361	2-0	Software Acqusition Management	
			MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN3309	4-1	Acquisition of Embedded Weapon Systems Software	
			MN4366	4-0	Program Management and Leadership	
		2007	MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN4366	4-0	Program Management and Leadership	
			MN4602	2-2	Test and Evaluation Management	MBA
			MN3361	2-0	Software Acquisition Management	
			MN3361	2-0	Software Acquisition Management	
			MN3309	4-1	Acquisition of Embedded Weapon Systems Software	MBA
			MN4602	2-2	Test and Evaluation Management	MBA
			MN4307	4-0	Program Management Policy and Control	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Nalwasky	Richard	2007	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3342	4-1	Advanced Contract Management	
Owen	Wally	2006	MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN4602	2-0	Test and Evaluation Management	
		2007	MN2304	0-4	Seminar in Product Development	
			MN3155	2-0	Financial Management for Acquisition Managers	
			MN3364	2-0	Business Financial and Contract Management	
			MN4602	2-2	Test and Evaluation Management	
			MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
			MN2304	0-4	Seminar in Product Development	
Pema	Elda	2006	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			MN3760	4-0	Manpower Economics I	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
		2007	MN3760	4-0	Manpower Economics I	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
			MN4111	4-1	Multivariate Manpower Data Analysis II	MSM
Petross	Diana	2007	MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			GB4450	4-0	Logistics Strategy	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
Potvin	Lisa	2007	GB3510	3-0	Defense Financial Management Practice	MBA
			GB3510	3-0	Defense Financial Management Practice	MBA
Powley	Edward	2007	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
Rendon	Rene	2006	GE4310	3-0	Strategic Acquisition Management	
			GE4310	3-0	Strategic Acquisition Management	
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	MBA & MSM
			GE4310	3-0	Strategic Acquisition Management	
			GE4310	3-0	Strategic Acquisition Management	
		2007	MN4304	2-0	Defense Systems Contracting	MBA
			MN3302	2-0	Advanced Program Management	
			MN4304	2-0	Defense Systems Contracting	MBA
			GB3031	2-0	Principles of Acquisition Management	MBA
			MN3331	5-1	Principles of Acquisition and Program Management	
			GE4460	3-0	Defense Supply Chain Management	
Roberts, B.	Ben	2007	MN3111	4-0	Analysis of Human Resource Management	MSM
			MN3111	4-0	Analysis of Human Resource Management	MSM
San Miguel	Joe	2006	GB4550	3-0	Advanced Financial Reporting	MBA
		2007	GB4510	4-0	Strategic Resource Management	MBA
			GB4510	4-0	Strategic Resource Management	MBA
			MN2155	4-0	Accounting for Management	
Sekerka	Leslie	2006	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
		2007	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
Shank	John	2006	GB4510	4-0	Strategic Resource Management	MBA
Shen	Yu-Chu	2006	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			MN4110	4-1	Multivariate Manpower Data Analysis I	MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
		2007	GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			GB3070	4-0	Economics of the Global Defense Environment	MBA & MSM
			MN4110	4-1	Multivariate Manpower Data Analysis I	MSM
			MN4110	4-1	Multivariate Manpower Data Analysis I	MSM

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Simon	Cary	2006	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			MN4105	3-0	Strategic Management	
			GE4016	4-0	Managing Strategic Change	
			GE4016	4-0	Managing Strategic Change	
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			GE4016	3-0	Managing Strategic Change	
			MN3117	4-0	Organizational Processes	
			MN4120	3-0	Managing Diversity	
		2007	GB3010	4-0	Managing for Organizational Effectiveness	MBA & MSM
			MN4125	4-0	Managing Planned Change in Complex Organizations	
			GE3011	2-0	Management of Teams	
			GE3010	3-0	Organizations as Systems and Structures	
			GE3010	3-0	Organizations as Systems and Structures	
			GB4014	4-0	Strategic Management	MBA & MSM
			MN3117	4-0	Organizational Processes	
			MN4474	3-1	Organizational Analysis	
Snider	Keith	2006	MN3392	4-0	Software Acqusition Management	
			MN2303	0-2	Seminar for Program Management Students	MBA
			MN3301	4-0	Acquisition of Defense Systems	MBA
		2007	MN3392	4-0	Systems & Project Mgmt	
			GE3222	3-0	Principles of Acquisition and Program Management II	
			GE3221	3-0	Principles of Acquisition and Program Management I	
			MN3331	5-1	Principles of Acquisition and Program Management	
Suchan	Jim	2006	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
		2007	MN3012	3-0	Communication Strategies for Effective Leadership	
			MN3012	3-0	Communication Strategies for Effective Leadership	
			GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
Summers	Don	2006	GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
			MN4157	3-0	Seminar in Management Accounting I	MBA
			GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			GB3051	3-0	Cost Management	MBA & MSM
			GB3051	3-0	Cost Management	MBA & MSM
		2007	GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			MN4157	3-0	Seminar in Management Accounting I	MBA
			GE3051	3-0	Cost Management	
			GE3051	3-0	Cost Management	
			GB3051	3-0	Cost Management	MBA & MSM
			MN4157	3-0	Seminar in Management Accounting I	MBA
			GB3051	3-0	Cost Management	MBA & MSM
Thibodeau	Nicole	2006	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
		2007	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
Thomas, G.F.	Gail Fann	2006	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GE3011	2-0	Management of Teams	
		2007	GB3012	3-0	Communication for Managers	MBA & MSM
			GB3012	3-0	Communication for Managers	MBA & MSM
			GE3011	2-0	Management of Teams	

Table 5.1C

COURSES TAUGHT BY FACULTY NUCLEUS 2006-2007 (continued)

LAST NAME	FIRST NAME	AY	COURSE	CR	COURSE TITLE	Program
Thomas, Geo.	George	2006	GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
		2007	GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
			GB3040	4-0	Managerial Statistics	MBA & MSM
Troy	Carmelita	2006	GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB4550	4-0	Advanced Financial Reporting	MBA
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
		2007	GE3050	3-0	Financial Reporting and Analysis	
			GE3050	3-0	Financial Reporting and Analysis	
			GB3050	4-0	Financlal Reporting and Analysis	MBA & MSM
Tudor	Ron	2006	MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3312	4-0	Contract Law	MBA
			MN3312	4-0	Contract Law	MBA
			MN3315	4-0	Acquisition Management and Contract Administration	MBA
			MN3315	4-0	Acquisition Management and Contract Administration	MBA
		2007	MN3312	4-0	Contract Law	MBA
Ventresca	Marc	2007	GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
			GB4014	4-0	Strategic Management	MBA & MSM
Yoder	Cory	2006	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN3364	2-0	Business Financial and Contract Management	
			MN3364	2-0	Business Financial and Contract Management	
			MN3364	2-0	Business Financial and Contract Management	
			MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	2-0	Contingency Contracting	MBA
			MN3318	2-0	Contingency Contracting	MBA
		2007	MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN3364	2-0	Business Financial and Contract Management	
			MN3364	2-0	Business Financial and Contract Management	
			MN3304	5-2	Contract Pricing and Negotiations	MBA
			MN3318	3-0	Contingency Contracting	MBA
			MN2302	0-2	Seminar for Acquisition and Contracting Students	MBA
			MN3315	4-0	Acquisition Management And Contract Administration	MBA
Zolin	Roxanne	2006	GE4100	5-0	Seminar in Defense Management	
			GE4100	5-0	Seminar in Defense Management	
			GE4100	5-0	Seminar in Defense Management	
			GE4100	5-0	Seminar in Defense Management	
		2007	GE4100	3-7	Collaborative Decision Making	
			GE4100	3-7	Seminar in Defense Management	
			GE4100	7-0	Seminar in Defense Management	

5.1D Course Load

The normal course load per year for full-time tenure-track faculty is 8 course credit-hours per teaching quarter or 16 course credit-hours per year. Most faculty members teach two quarters per calendar year, with two quarters of research release per year. Tenure-track faculty (beyond their third year) are generally expected to secure funding for their two research quarters either from external sources or from internal programs available to support research activity. Tenure-track faculty without such funding may request to do additional teaching. Student thesis or project advising is considered to be part of a faculty member's normal instructional activities. While actual experience will vary widely, on average faculty would be involved with advising 2-4 students on projects/theses for each quarter they are teaching. Some faculty will serve in academic administrative positions (e.g., Academic Associate, Associate Dean). These administrative duties, or above or below average advising activity, may cause variation in a faculty member's teaching load.

Table 5.1D provides a list of the faculty members who had research, administrative or other assignments in lieu of teaching during AY2007.

Table 5.1D
NON-TEACHING ASSIGNMENTS FOR FACULTY NUCLEUS

Name	Rank	Tenure Status	Additional Assignment	Type	% of Year	Periods of non-teaching assignments
APTE, ARUNA U.	Associate Professor	TTrack	Research - RIP	Rsch	50	Fall / Spring
BROOK, DOUGLAS	Professor	TTrack	Director -- Ctr for Defense Mgmt Reform	Admin	10	Throughout year
			Research - RIP	Rsch	40	Fall / Spring
COUGHLAN, PETER J.	Associate Professor	TTrack	Research - DFR	Rsch	50	Fall / Winter
			Research - WLR	Rsch	20	Fall / Winter
			Research - ARP	Rsch	13	Fall / Winter
DEW, NICHOLAS	Assistant Professor	TTrack	Research - WLR	Rsch	20	Winter / Summer
			Research - ARP	Rsch	15	Winter
FERRER, GERALDO L.	Associate Professor	TTrack	Faculty Development - IDL	Inst	10	Fall
			Research - DFR	Rsch	10	Fall / Summer
			Research - WLR	Rsch	20	Fall / Summer
			Research - ARP	Rsch	15	Fall / Summer
GIBBONS, DEBORAH E.	Assistant Professor	TTrack	Research - DFR	Rsch	40	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
HEATH, SUSAN	Assistant Professor	TTrack	Faculty Development - IDL	Inst	10	Fall
			Research - RIP	Rsch	50	Fall / Spring
HENSEL, NAYANTARA D.	Assistant Professor	TTrack	Research - WLR	Rsch	20	Winter / Summer
			Research - ARP	Rsch	18	Winter / Summer
KING, CYNTHIA L.	Assistant Professor	TTrack	Research - DFR	Rsch	50	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
			Research - RR	Rsch	25	Summer
LAVERSON, ALAN J.	Assistant Professor	TTrack	Research - RIP	Rsch	50	Winter / Summer
PEMA, ELDA	Assistant Professor	TTrack	Instructional Development - IMET	Inst	20	Winter / Summer
			Research - WLR	Rsch	20	Winter / Summer
POWLEY, EDWARD H.	Assistant Professor	TTrack	Research - RIP	Rsch	50	Fall / Spring
SEKERKA, LESLIE E.	Assistant Professor	TTrack	Research - DFR	Rsch	30	Fall / Spring
			Research - WLR	Rsch	20	Fall
			Research - RR	Rsch	10	Fall / Spring
SHEN, YU CHU	Assistant Professor	TTrack	Research - DFR	Rsch	15	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
			Research - RR	Rsch	20	Fall / Spring
THIBODEAU, NICOLE	Assistant Professor	TTrack	Research - RIP	Rsch	50	Fall / Spring
TROY, CARMELITA J.	Assistant Professor	TTrack	Instructional Development - IMET	Inst	10	Fall / Spring
			Research - WLR	Rsch	20	Fall / Spring
VENTRESCA, MARC J.	Associate Professor	TTrack	Research - RIP	Rsch	50	Winter / Summer
ZOLIN, ROXANNE V.	Assistant Professor	TTrack	Research - WLR	Rsch	20	Fall / Spring
			Research - RR	Rsch	10	Fall / Spring
APTE, UDAY	Professor	Tenured	Research - RIP	Rsch	50	Fall / Spring
BARRETT, FRANK	Professor	Tenured	Area Chair -- Management	Admin	25	Throughout year
			Executive Education - CEE	Inst	30	Winter
			Research - RR	Rsch	25	Summer
			Research - WLR	Rsch	10	Summer

Table 5.1D
NON-TEACHING ASSIGNMENTS FOR FACULTY NUCLEUS (continued)

Name	Rank	Tenure Status	Additional Assignment	Type	% of Year	Periods of non-teaching assignments
DOERR, KENNETH H.	Associate Professor	Tenured	Research - WLR	Rsch	10	Winter / Summer
DOYLE, RICHARD B.	Associate Professor	Tenured	Instructional Development - CEE	Inst	35	Throughout year
			Research - WLR	Rsch	10	Summer
EITELBERG, MARK J.	Professor	Tenured	Research - WLR	Rsch	10	Winter / Summer
EUSKE, KENNETH J.	Professor	Tenured	Research - WLR	Rsch	10	Winter
			Research - RR	Rsch	25	Winter / Summer
GATES, WILLIAM R.	Associate Professor	Tenured	Associate Dean - Research	Admin	50	Throughout year
			Research - RR	Rsch	10	Winter / Summer
			Research - ARP	Rsch	5	Winter / Summer
HENDERSON, DAVID R.	Associate Professor	Tenured	Sabbatical	Admin	40	Spring / Summer
			Research - WLR	Rsch	10	Winter
HOCEVAR, SUSAN P.	Associate Professor	Tenured	Executive Education - CEE	Inst	12	
			Instructional Development - CEE	Inst	15	Fall / Winter
			Research - WLR	Rsch	10	Fall / Winter / Summer
			Research - RR	Rsch	35	Fall / Winter / Summer
			Research - ARP	Rsch	10	Fall / Winter / Summer
JONES, LAWRENCE R.	Professor	Tenured	Research - RR	Rsch	25	Winter / Spring
			Research - ARP	Rsch	12	Spring
KANG, KEEBOM	Associate Professor	Tenured	Area Chair -- Ops & Logistics	Admin	25	Throughout year
			Executive Education - IDARM	Inst	10	
			Research - WLR	Rsch	10	Winter
LEWIS, IRA A.	Associate Professor	Tenured	Research - WLR	Rsch	10	Fall
			Research - ARP	Rsch	25	Spring
MCCAFFERY, JERRY L.	Professor	Tenured	Instructional Development - IMET	Inst	10	Summer
			Research - WLR	Rsch	10	Spring
			Research - ARP	Rsch	25	Winter
MEHAY, STEPHEN	Professor	Tenured	Area Chair -- Management	Admin	25	Throughout year
			Instructional Development - IMET	Inst	10	Spring
			Research - WLR	Rsch	10	Winter
			Research - RR	Rsch	8	Spring
MOSES, ORRIN D.	Associate Professor	Tenured	Senior Associate Dean	Admin	50	Throughout year
			Associate Dean - Instruction	Admin	50	Throughout year
SAN MIGUEL, JOSEPH G.	Professor	Tenured	Conrad Committee	Admin	25	Throughout year
			Academic Associate - FM	Admin	5	Fall
			Research - WLR	Rsch	10	Fall / Spring
			Research - RR	Rsch	15	Spring
			Research - ARP	Rsch	8	Fall / Spring
SNIDER, KEITH F.	Associate Professor	Tenured	Area Chair -- Acquisition	Admin	25	Throughout year
			Program Manager - ARP	Admin	25	Throughout year
			Research - ARP	Rsch	25	Winter / Spring

Table 5.1D
NON-TEACHING ASSIGNMENTS FOR FACULTY NUCLEUS (continued)

Name	Rank	Tenure Status	Additional Assignment	Type	% of Year	Periods of non-teaching assignments
SUCHAN, JAMES E.	Professor	Tenured	Assurance of Learning POC	Admin	10	Spring
			Academic Associate - Core	Admin	25	Throughout year
			Research - WLR	Rsch	10	Fall / Spring
THOMAS, GAIL FANN	Associate Professor	Tenured	Executive Education - CEE	Inst	30	Throughout year
			Research - DFR	Rsch	8	Throughout year
			Research - WLR	Rsch	10	Throughout year
			Research - RR	Rsch	25	Throughout year
			Research - ARP	Rsch	10	Throughout year
THOMAS, GEORGE W.	Professor	Tenured	Research - WLR	Rsch	10	Winter / Summer
			Research - RR	Rsch	20	Winter / Summer
BRINKLEY, DOUGLAS E.	Senior Lecturer	Non-TT	Director of IT	Admin	25	Throughout year
			Instructional Development - IMET	Inst	20	Throughout year
CANDREVA, PHILIP J.	Senior Lecturer	Non-TT	Course Development - MSA	Inst	20	Spring
			Executive Education - CEE	Inst	20	Fall
CRAWFORD, ALICE M.	Senior Lecturer	Non-TT	Acadecmic Associate - Intl	Admin	25	Throughout year
			CEE Coordinator	Admin	5	Throughout year
			Research - RR	Rsch	15	Fall / Spring
DILLARD, JOHN T.	Senior Lecturer	Non-TT	Program Manager - AAP	Admin	25	Throughout year
			Course Development - MSA	Inst	25	Summer
			Research - ARP	Rsch	25	Fall / Winter
ENGELBECK, R. MARSHALL	Lecturer	Non-TT	Executive Education - IDARM	Inst	5	
FRANCK, RAYMOND	Senior Lecturer	Non-TT	Research - ARP	Rsch	10	
HATCH, WILLIAM D.	Lecturer	Non-TT	Program Manager -- EMBA	Admin	90	Throughout year
MUTTY, JOHN E.	Senior Lecturer	Non-TT	NPS Faculty Chair	Admin	5	Fall
			Conrad Committee	Admin	25	Throughout year
			Academic Associate - EMBA	Admin	25	Throughout year
NAEGLE, BRAD R.	Senior Lecturer	Non-TT	Academic Associate - MSPM	Admin	25	Throughout year
			Research - ARP	Rsch	13	Winter
OWEN, WALTER E.	Senior Lecturer	Non-TT	Program Manager - MSCM, MSPM, MSSEM, MSSE, MSA, AMDLP	Admin	100	Throughout year
			Business Development - OCL	Inst	10	Throughout year
PETROSS, DIANA F.	Lecturer	Non-TT	Executive Education - IDARM	Inst		
RENDON, RENE G.	Lecturer	Non-TT	Executive Education - IDARM	Inst	5	
			Research - ARP	Rsch	35	Spring
ROBERTS, BENJAMIN J.	Senior Lecturer	Non-TT	Assistant Program Manager - MSCM, MSPM, MSSEM, MSSE, MSA, AMDLP	Admin	80	Throughout year
			Business Development - OCL	Inst	12	Throughout year
			Research - RR	Rsch	5	
SUMMERS, DONALD C.	Lecturer	Non-TT	Academic Associate - DSA	Admin	10	Throughout year
			Research - ARP	Rsch	10	Spring / Summer
TUDOR, RONNIE B.	Lecturer	Non-TT	Research - RR	Rsch	25	Winter
YODER, ELLIOT C.	Lecturer	Non-TT	Academic Associate - MSCM	Admin	25	Throughout year
			Research - ARP	Rsch	10	Throughout year
HUDGENS, BRYAN J.	Lecturer	Military	Academic Associate - MEM	Admin	10	Throughout year
POTVIN, LISA	Lecturer	Military	Program Manager - PCC	Admin	80	Throughout year

5.1E Other Full-Time Faculty

Table 5.1E provides a list of faculty who are full-time at the Naval Postgraduate School but do not have primary responsibility for teaching in the program under review. GSBPP does rely on some faculty outside of GSBPP for teaching in some areas. The most common examples are the use of faculty from the Department of Information Technology (IT) to teach in information systems courses; faculty from the Operations Research Department (OR) to teach in statistics and quantitative methods courses; and faculty from the Defense Resource Management Institute (DRMI) to teach in economics courses.

Table 5.1E

ADDITIONAL FULL-TIME FACULTY

Last Name	First Name	Rank	Tenure Status	NPS Academic Unit	Degree	University	Degree Field	Program
Airola	James	Assistant Professor	TTrack	DRMI (Def. Res. Mgt. Inst.)	PhD	University of Houston	Econ	MBA & MSM
Buttrey	Sam	Associate Professor	Tenured	Ops. Research Dept.	PhD	University of California at Berkeley	Statistics	MBA & MSM
Cook	Glenn	Lecturer	Non-TT	Information Sciences Dept.	MS	Naval Postgraduate School	Information Technology Mgmt	MBA
Housel	Tom	Professor	Tenured	Information Sciences Dept.	PhD	University of Utah	Information Technology	MBA
Kendall	Tony	Lecturer	Non-TT	Information Sciences Dept.	MS	Naval Postgraduate School	Manpower / HRM	MBA & MSM
Nissen	Mark	Associate Professor	Tenured	Information Sciences Dept.	PhD	University of Southern California	Decision Sciences / Ops Mgmt	MBA & MSM
Regnier	Eva	Associate Professor	Tenured	DRMI (Def. Res. Mgt. Inst.)	PhD	Georgia Institute of Technology	Industrial Engineering	MSM
Roberts	Ben	Senior Lecturer	Non-TT	Systems Engineering Dept.	PhD	Penn State University	Sociology	MSM
Roberts	Nancy	Professor	Tenured	Defense Analysis Dept.	PhD	Stanford University	Education	MBA & MSM
Tsolis	Kristen	Research Associate Professor	Non-TT	Information Sciences Dept.	MA	Monterey Institute of Int'l Studies	Public Admin in Int'l Mgmt	MBA & MSM
Vitalich	John	Lecturer	Non-TT	Information Sciences Dept.	MS	Naval Postgraduate School	Business Administration	MBA & MSM
McNab	Bob	Associate Professor	Tenured	DRMI (Def. Res. Mgt. Inst.)	PhD	Georgia State University	Economics	MBA & MSM

Standard 5.2 Professional Qualifications

At least 75% of the professional graduate program's full-time faculty should hold an earned doctorate or other equivalent terminal professional degree in their field. Any full-time faculty member lacking a terminal degree must have a record of outstanding professional or academic experience directly relevant to the faculty member's assigned responsibilities. Full-time faculty actively pursuing appropriate terminal degrees are to be included in the 25 percent not holding a terminal degree.

5.2 Professional Qualifications

Seventy percent (43/61 = 70%) of the nucleus full-time faculty hold terminal academic degrees. Those full-time faculty members who lack a terminal degree have a record of outstanding professional experience as evidenced in the faculty data sheets - Volume II. All GSBPP faculty members teach in areas that are relevant to their professional education.

Seven percent (4/61 = 7%) of the nucleus full-time faculty are military instructors, accomplished practitioners in their fields. Military officers bring expertise to GSBPP programs in such areas as defense contracting, program management and financial management. All military faculty members hold masters degrees in their professional field. Military faculty members are sent to the School for 2 - 3 years. GSBPP reviews officers who may be sent to the school as military faculty, but GSBPP does not hire the military faculty in the traditional sense. If military faculty members are excluded from the nucleus faculty, then seventy-five percent (43/57 = 75%) of the nucleus faculty hold terminal academic degrees.

We examined all courses taught to students in the MBA program during the past two academic years (2006-2007) with respect to the degree held by instructors. Table 5.2A shows the breakdown. For the required Common Curriculum (Core) courses in the MSM program, 86% of all courses were taught by instructors with a terminal degree. When courses from the Additional Curriculum Components (Specialization) are additionally considered, the percentage of doctorally qualified instructors across the complete set of MSM courses falls to 78%. The table suggests the ready explanation for this. Only a slight majority (52%) of courses in the Additional Curriculum Components (the Specialization) were taught by doctorally qualified faculty during the 2006-2007 self-study period. This pattern – doctorally-qualified faculty more heavily in the Common Core of the degree program and master-qualified faculty more heavily in the Specialization Component of the program – is to be expected, given the mission of GSBPP, the mission of the MSM degree program, and the structure of the specialized programs of study within the degree program.

One element from the MSM Program mission statement is repeated here:

- ***Professional****: The program prepares graduates to possess the specialized knowledge, skills and abilities to serve in positions of significant responsibility within a specified Defense Management field (Manpower Systems Analysis, Defense Systems Analysis).*

This element of the program mission directly influences both the structure of the curriculum and the qualifications and composition of the faculty. As reported in Standard 4, the Common Core Curriculum component of the MSM program is a minimum of 55

credit hours. Specializations are constructed on the common core foundation, ranging from 28 to 44 additional credit hours, depending on the curriculum. Because of the mission of the program, these specializations will be oriented toward a distinct set of Defense Management professional fields. And, of importance with respect to the composition of the School's faculty, masters-qualified faculty, who additionally possess significant professional experience, may be the most appropriate faculty for some of the professionally-focused courses within the Specialization component.

Table 5.2A
COURSES TAUGHT IN MSM & MBA PROGRAMS:
BY INSTRUCTOR DEGREE LEVEL

	Doctoral Qualified	Masters Qualified
MSM Program		
All MSM Program Courses	78%	22%
MSM Common Curriculum (Core) Courses	86%	14%
Additional Component (Specialization) Courses	52%	48%
MBA Program		
All MBA Program Courses	66%	34%
MBA Common Curriculum (Core) Courses	86%	14%
Additional Component (Specialization) Courses	36%	64%

Other full-time faculty members are defined as those who teach at least one-graduate course and are employed full-time by the NPS. These are generally faculty whose home is in another School or Department at NPS. As mentioned above, GSBPP utilizes some NPS faculty from outside GSBPP to teach individual courses in the MSM and/or MBA programs. All have at least a Masters degree in a related field. Sixty-seven percent (8/12) of the other full-time NPS faculty who taught in GSBPP courses hold terminal degrees. Table 5.2B below indicates the proportion of GSBPP courses taught by the GSBPP nucleus faculty and other faculty types. For the courses in the MSM Program, about 8% of courses were taught by NPS faculty from outside GSBPP. About another 9% were taught by adjunct faculty, generally hired from among faculty at other universities.

Table 5.2B PERCENT OF COURSES TAUGHT BY DIFFERENT FACULTY TYPE			
	% of MSM Program Courses	**% of MBA Program Courses**	**% of All GSBPP Courses**
Faculty Type			
GSBPP Nucleus Faculty	**83%**	89%	83%
Other NPS Full-time Faculty	**8%**	5%	8%
Part-time Adjuncts	**9%**	6%	9%

Standard 5.3 Practitioner Involvement
The involvement of practitioners is integral to the activities of a professional master's degree program. The institution shall specify how it involves practitioners in its program. Where practitioners teach courses, there shall be satisfactory evidence of the quality of their academic qualifications, professional experience, and teaching ability.

5.3 Practitioner Involvement

Practitioners are an integral part of the programs in GSBPP. In fact, GSBPP and NPS consciously employ practitioners on a full-time basis to enhance the relevancy of the academic programs. The full-time practitioners include military instructors and retired senior military officers who serve in various capacities. All full-time practitioners have master's degrees in their respective areas and have been recognized as accomplished professionals in their fields.

The military officers generally are assigned to NPS for a three-year tour. Their assignments while in GSBPP include teaching courses, advising student projects or theses, and working with civilian faculty on various projects. Military faculty members are scheduled to teach courses for which they are academically and professionally qualified to teach. Military faculty members are evaluated on teaching performance just as are civilian faculty.

Former senior military personnel also play an important role in the delivery of our programs. At this time, sixteen of the non-tenure-track faculty members among the

nucleus faculty are retired military. Retired Flag and General-level officers are present in the School, both as members of the nucleus faculty and as visiting faculty or associates.

Practitioners participate in numerous phases of the programs in GSBPP including program development, teaching, student advising and assessment.

In addition to the functions mentioned above, all curricula rely on practitioners as guest speakers to bring relevance to the content areas. Guest speakers range from analyst-type personnel to high ranking senior officers and civilians.

GSBPP uses few part-time faculty because of the requirement for high-quality, relevant content. Our experience has been that few part-timers are able to possess the required level of disciplinary expertise, DoD expertise and an ability to teach to mid-level career officers. Part-time faculty members who taught in the program under review during the past two years are provided in Table 5.3. All faculty members are evaluated at the end of each course. Those faculty members who receive below average evaluations are not asked to return.

Table 5.3

ADJUNCT PART-TIME FACULTY TEACHING IN MBA/MSM 2006-2007

Last Name	First Name	Job Title / Agency	Deg.	Field	Year	Course	Course Title	Program
Doty	Lon	Adjunct, San Jose State Univ.	MBA	Organizational Behavior	2006	GB3010	Managing for Organizational Effectiveness	MBA & MSM
Kirby	Gail	Lecturer, Santa Clara Univ.	PhD	Marketing, Economics	2007	GB4071	Economic Analysis and Defense Resource Allocation	MBA & MSM
Landry	Steve	Professor, Monterey Inst. Of Intl. Studies	PhD	Accounting	2007	GB4550	Advanced Financial Reporting	MBA
Lindsey	Lisa	Adjunct	PhD	Communications	2007	GB3012	Communication for Managers	MBA & MSM
Means	Tom	Professor, San Jose State Univ.	PhD	Economics	2007	GB3040	Managerial Statistics	MBA & MSM
Means	Tom	Professor, San Jose State Univ.	PhD	Economics	2006	GB3070	Economics of the Global Defense Environment	MBA & MSM
Rendon	Juanita	Certified Public Accountant	MS	Accounting, Finance	2006	GB3050	Financial Reporting and Analysis	MBA & MSM
Rendon	Juanita	Certified Public Accountant	MS	Accounting, Finance	2007	GB4520	Internal Control & Auditing	MBA
Jones	Becky	Lecturer	MBA	Marketing, Real Estate	2006-7	GB3030	Marketing Management	MBA

Roberts	David	Professor, Monterey Inst. Of Intl. Studies	PhD	Economics	2007	GB3070	Economics of the Global Defense Environment	MBA & MSM
Roberts	David	Professor, Monterey Inst. Of Intl. Studies	PhD	Economics	2007	MN2039	Basic Quantitative Methods in Management	MSM
Tudor	Ron	Consultant	JD	Law	2007	MN3312	Contract Law	MBA
Eaton	Don	RADM, USN (ret.)	MS	Logistics	2006	GB4450	Logistics Strategy	MBA
Liao	Woody	Professor, Univ. of California, Irvine	PhD	Accounting	2006	GB4510	Strategic Resource Management	MBA
Mullane	Joe	Financial Manager	MS	Accounting	2007	GB3051	Cost Management	MBA & MSM
Savage	James	Professor, Univ. of Virginia	PhD	Public Policy	2007	GB4053	Defense Budget and Financial Management Policy	MBA & MSM
Sherman	David	Professor, Northeastern Univ.	PhD	Accounting	2007	GB3051	Cost Management	MBA & MSM
Sherman	David	Professor, Northeastern Univ.	PhD	Accounting	2007	GB4550	Advanced Financial Reporting	MBA

Standard 5.4 Faculty Quality
In addition to the above, the qualitative adequacy of faculty members shall be demonstrated by their previous and current instruction, research, experience and service.

5.4A Faculty Data Sheets

Faculty Data sheets are contained in Volume II of this self-study report.

5.4B Promotion and Tenure

NPS Promotion and Tenure Process

Before a faculty member is recommended for promotion in rank or award of tenure on the Naval Postgraduate School faculty, there is a review of professional qualifications by a Department Evaluation Committee (DEC), appointed by the Dean for this purpose. (For NPS's formal promotion and tenure process, GSBPP is seen as a Department.)

The DEC consists of at least three faculty members who are senior to the candidate's current position; one member must be from outside the candidate's Department. The DEC submits its report to the Department Faculty Promotion Council (DFPC).

The specific procedure for this colleague-review is at the discretion of the individual Department, within policy guidelines provided annually by the Provost to ensure equitable treatment of all faculty members. (Guidelines on the P&T Process and Documentation for 2007 (32 pages) are available on request.)

The Department Faculty Promotion Council (DFPC) convenes to consider the case of each candidate within their purview and makes a recommendation on each case by secret ballot. The results of the secret ballot are advisory to the Dean and must be included (along with any comments from the DFPC discussion) in the Dean's recommendation on each individual case.

The Dean makes a recommendation to the Provost. This recommendation is supported by appropriate documentation specified by the Provost and will include the written report of the candidate's DEC.

Annually during the winter quarter, there is a series of meetings of the Faculty Promotion Council (FPC) to consider all recommendations. The FPC is made up of all Department and Academic Group Chairs, all School Deans, and the Provost. The Chairman of the Professional Practices Committee of the NPS Faculty Council is an ex-officio member. The participants in the meetings shall have received copies of the Department/Group DEC and Chairman's recommendations, as well as the documentation for all candidates. At these meetings, the Department Chairman, or substitute, answers any questions about the candidate's qualifications. After full discussion, the participants in the meetings (with the exception of the Chairman of the Professional Practices Committee) individually make their recommendations regarding all candidates to the Provost.

The Provost considers the recommendations and then meets with the Deans Promotion Council (DPC) for further considerations. The NPS President is invited to be present at these meetings. Finally, the recommendations of the Provost are presented to the President in the presence of the Deans Promotion Council (DPC).

There may be cases where a faculty member is denied promotion or tenure after being positively recommended by the Department faculty, by the Chairman/Dean, or by the FPC. In that case, the Provost meets with the appropriate faculty of that Department to discuss the reasons for denial and to determine if further deliberations are appropriate. The faculty member, colleagues and/or Chairman may request the assistance of the Professional Practices Committee in appealing this adverse decision, if they feel that the decision process was flawed. The Committee shall determine whether such an appeal is justified and, if so, shall make recommendations to the Provost as to how it should be pursued.

Promotion and Tenure Evaluation Criteria

Faculty members at NPS are judged in two general categories for pay, promotion and tenure: 1) internal service to NPS and 2) external visibility which demonstrably enhances NPS's reputation in either the academic community or DoD (or both).

Tenure-track faculty members at NPS are expected to be strong contributors to high quality, relevant instruction and to be active in their profession and service to DoD. Adequate performance in these areas does not automatically qualify an individual for promotion or tenure. For example, doing an adequate, even exemplary, job of teaching courses and making only a minimal impact on the world outside NPS should not qualify a faculty member for advancement. Impact on the outside world can be achieved in any area of faculty performance, including instruction. The quality and quantity of performance above acceptable will determine the rate at which an individual progresses through the academic ranks. Promotion to Professor additionally requires that the person demonstrates consistent leadership in at least one area of faculty activity and has meritorious performance in both internal and external service. Further guidance on the evaluation of the scholarly products of faculty is found in the "Marto" Report and the Report of the Committee on Nontraditional Productivity. (Lengthy report available by request.)

Judging an individual's qualifications for advancement should be on the basis of his/her meritorious performance. This means performance in both internal and external service that are worthy of note. Listed below are some typical examples of internal and external activities that indicate such meritorious performance. The implication is not that a person should pick "one from column A and two from column B" and get promoted, but that the successful faculty member should be engaged in a significant amount of meritorious work.

Internal Activities

- Demonstration of quality and flexibility in instructing graduate-level and applications-oriented courses
- Introduction of new material in curricula and development of new courses, particularly special topics courses with DoD relevance
- Development or implementation of creative teaching methods (such as computer-aided instructional materials) to improve upon student learning efficiency
- Development of extensive instructional material
- Leadership in developing and/or refining curricula
- Development of instructional laboratories, including specifying equipment and designing experiments
- Service as academic associate, associate chairman, chairman of a school-wide committee, etc.
- Contributions to interdisciplinary research projects

- Direction of high-quality research efforts by thesis students
- Tutoring students who need remedial work
- Teaching capstone courses in applied areas
- Teaching in operations oriented curricula

External Activities

- Creation of products of direct use to Navy operations, both shore and sea-based
- Publication of research results in refereed archival journals and conference proceedings at a regular rate
- Service in a professional society through elected offices, committee work, conference planning, editorial work, peer/proposal review, etc.
- Participation in fleet exercises
- Participation in a Navy, multi-laboratory research project
- Publication of a textbook that receives acceptance external to NPS
- Offering on-campus and off-campus short courses to DoD personnel
- Creation of instructional material that receives significant use outside NPS, (e.g., textbooks, course notes, teaching methodologies, etc.)
- Acting as a consultant for operational commands and other DoD organizations
- Service in high-level position in DoD
- Publication of technical reports, either unclassified or classified, from a DoD or non- DoD research program (For this work to be a significant factor in promotion and tenure actions, timely external peer review is essential.)
- Contributing chapters in research monographs
- Presentation of research results to operational commands and other DoN organizations
- Participation in research with operational units, laboratories, systems commands, and headquarters of the Navy and Marine Corps
- Service to DoD by participation in workshops, on panels, advisory boards, and liaison with laboratories

The initial appointment of all Federal Civil Service employees encompasses a one-year probationary period. This is applicable to the civilian members of the faculty at the Naval Postgraduate School. The Naval Postgraduate School accepts a maximum of three years of prior experience as a full-time teaching faculty member in an accredited collegiate institution in consideration of individual faculty members for promotion and tenure. The Postgraduate School may consider other significant professional experience in lieu of teaching experience in making promotions and in granting tenure.

Recent Experience in Tenure and Promotion

During the most recent five year period from 2003 to 2007, GSBPP received actions on eight promotion and/or tenure cases. Specifically, there have been two cases of

review for promotion to the rank of Professor, three cases of review for the award of tenure, and three cases for review for promotion from Lecturer to Senior Lecturer. In all eight cases, the candidates were successful and received the desired awards.

Standard 5.41 Instruction
Efforts to improve the instructional program, including student advisement, teaching methods, course content, and innovative curricula development.

5.41A Quality of Instruction

As mentioned in Standard 2.2-Assessment, all programs in GSBPP rely on a number of procedures, both formal and informal, to obtain feedback from numerous sources to assess the School's performance.

Formal systems include such items as surveys and questionnaires which are routinely administered, primarily to current students. There are also formally assigned positions within the School which have central responsibility for assessment and management of curricula. These include the Associate Dean for Instruction, Academic Associates, Program Officer, and the Course Coordinators. A new position, Academic Associate for the Core, was just created (July 2006) to provide a focus for oversight and coordination of both the MSM and MBA common curriculum core courses. The School also has a school committee, the Faculty Instruction Committee, responsible for instructional policy.

Informal systems include the network of contacts that exist between faculty and former students, military officers and executives within the larger defense community. The various mechanisms used for assessment and review fall into three broad areas, as follows:

Managerial Positions with Assessment Responsibility:
- Associate Dean for Instruction
- Academic Associates / Curricular Officer
- Course Coordinators

Program Review Processes:
- Curriculum Review Process
- MSM/MBA Core ad hoc curriculum review committees

Surveys and Questionnaires:
- Student Opinion Forms (at completion of each course)
- Student Core Survey (at completion of the core curriculum)
- Student Exit Surveys (at completion of program)

All of these processes are explained in Standard 2.2. These processes allow all curricula to undergo constant, continuous improvement. Evidence-based data often result in changes to a particular curriculum. Changes to curricula over the past few years are also explained in detail in Section 2.3.

Individual course quality is maintained via similar processes. Student evaluation forms are monitored quarterly by the Associate Dean for Instruction and the Dean. Faculty members who fall above or below a specified threshold are noted. Those faculty members who are evaluated in the upper range are recognized by announcement for their achievement. Those who fall in the lower range may be asked to discuss their performance with the Dean. Plans are made to improve performance.

Feedback about the quality of students' learning is also obtained from GSBPP faculty. For example, follow-on course instructors may report that students do not have the prerequisite skill level for their class. If so, the Dean and/or Associate Dean for Instruction confirm the report and take corrective action as required.

Faculty, student, and sponsor feedback is taken seriously. Formal and informal processes allow the School to monitor quality and take corrective action in a timely manner.

5.41B Workload Policy

All full-time faculty members are expected to carry equitable teaching workloads. During teaching quarters, full-time faculty members are expected to complete 11 credits-hours of instructional work. For most faculty, this typically means teaching two 4-credit-hour graduate courses (with 20-30 students each) and serving as a thesis or project advisor for 2-4 graduating students.

The number of course preparations per year varies across the faculty depending on a faculty member’s teaching expertise and student demand for particular courses. Some faculty who teach the core courses may only have one preparation. Faculty who teach specialized courses often prepare two courses per year. Occasionally a faculty member may have more than two preps. This would be most common for non-tenure-track faculty who carry a heavier teaching load.

Over a year's time, a full-time faculty member must earn 44 credit-hours. In addition to teaching and thesis work, faculty members meet their workload requirements through research or internal administrative assignments. (See Appendix 3.4G.)

All full-time faculty have a written annual workload plan and agreement that specifies on a quarter-by-quarter basis what the faculty member's workload (teaching,

research, administration, projects) will be over the entire academic year. Before the start of an academic year, the workload agreement is signed by each faculty member acknowledging that the School and the faculty member agree to the stated workload plan.

5.41C Class Sizes

Table 5.41C provides information about class size. Part I of the table shows the distribution of class size across all the GSBPP programs for the 2002-2006 period. Most classes fall in the 10-29 class size range, with class size in the 20s clearly being the mode. This is an expected consequence of the planning and scheduling of classes in accordance with GSBPP guidelines. For planning purposes, the maximum class size in GSBPP is nominally 30, with an attempt always made to break a course into multiple sections when enrollment exceeds the 30 level. In the MSM program, class size may depend on whether a course is part of the Common Core Curriculum or a Specialization. Students are grouped into distinct cohorts, which are maintained through the Common Core Curriculum. The input of students during 2007 translated to six sections of core courses during the year, with class size typically from 20-30. Beyond the core, both the, currently, two MSM curricula has curriculum-specific courses. Depending on the number of students enrolled in a particular specialized curriculum, class size in concentration courses may often be less than 30.

Part II of Table 5.41C, provides class size data for only 2007, but disaggregated by degree program. (Similar disaggregated data is not readily available for the years prior to the 2007 self-study year, but may be constructed retro-actively should such be deemed important.). Part II shows great similarity of the class size distribution between MSM Program courses, MBA program courses, and GSBPP courses in the aggregate. As in previous years, classes with size in the 20s dominate the distribution. This similarity across programs and similarity with earlier years is to be expected given that the same policy and scheduling practices are followed.

Table 5.41C – Part I

CLASS SIZES – GSBPP 2003-2006

	Number of Course Sections			
Class Size	**AY2003**	**AY2004**	**AY2005**	**AY2006**
1-9	21	14	14	30
10-19	111	113	120	69
20-29	134	145	180	210
30-39	50	51	53	47
40-49	1	7	8	7
Over 50	2	8	6	4
Total Sections	**319**	**338**	**381**	**367**

Table 5.41C – Part II CLASS SIZES – 2007 BY PROGRAM			
	Number (Percentage) of Course Sections		
Class Size	**All GSBPP Courses**	**MBA Program Courses**	**MSM Program Courses**
1-9	17 (5%)	4 (2%)	7 (5%)
10-19	49 (15%)	43 (22%)	21 (15%)
20-29	211 (63%)	114 (59%)	88 (63%)
30-39	49 (15%)	27 (14%)	20 (14%)
40-49	6 (2%)	4 (2%)	1 (1%)
Over 50	2 (1%)	2 (1%)	2 (2%)
Total Sections	**334**	**194**	**139**

5.41D Actual Credit Hours Taught

Table 5.41D shows total credit hours taught by each nucleus faculty for the self study year and preceding year.

Table 5.41D CREDIT HOURS TAUGHT BY FACULTY NUCLEUS										
			AY 2006				AY 2007			
Last Name	**First Name**	**Status**	Grad.	Under Grad	Cont Ed	**Total**	Grad.	Under Grad	Cont Ed	**Total**
Apte	Aruna	Untenured	15			**15**	6			**6**
Apte	Uday	Tenured	16			**16**	13.5			**13.5**
Arkes	Jeremy	Untenured				**0**				**0**
Barrett	Frank	Tenured	12			**12**	4			**4**
Boudreau	Mike	Non-TT	11		2	**13**	26		12	**38**
Brinkley	Doug	Non-TT	16			**16**	16			**16**
Brook	Doug	Untenured	22.5			**22.5**	18			**18**
Candreva	Phil	Non-TT	12			**12**	27			**27**
Coughlan	Pete	Untenured	16			**16**	8			**8**
Crawford	Alice	Non-TT	7			**7**	15.5			**15.5**
Cuskey	Jeff	Non-TT	28			**28**	33			**33**
Dew	Nick	Untenured	15			**15**	16			**16**
Dillard	John	Non-TT	17			**17**				**0**
Doerr	Ken	Tenured	20			**20**	22			**22**
Doyle	Dick	Tenured	6			**6**	15			**15**

Eitelberg	Mark	Tenured	22			**22**	25			**25**
Euske	Ken	Tenured	9			**9**	15			**15**
Ferrer	Geraldo	Untenured	16			**16**	16			**16**
Franck	Chip	Non-TT	19			**19**	25			**25**
Gates	Bill	Tenured	18			**18**	12			**12**
Gibbons	Deborah	Untenured	12			**12**	10			**10**
Hatch	Bill	Non-TT	27	2		**29**	4	2		**6**
Heath	Susan	Untenured				**0**	12			**12**
Henderson	David	Tenured	16.5			**16.5**	6			**6**
Hensel	Nayantara	Untenured	15			**15**	15			**15**
Hill	Kim	Non-TT				**0**		1		**1**
Hocevar	Susan	Tenured	6			**6**	4			**4**
Hudgens	Bryan	Military	19			**19**	37			**37**
Jones	Larry	Tenured	8			**8**	4			**4**
Kang	Keebom	Tenured	19			**19**	19			**19**
King	Cindy	Untenured	12			**12**	6			**6**
Laverson	Alan	Untenured				**0**	15			**15**
Lewis	Ira	Tenured	8			**8**	19			**19**
Matthews	Danny	Non-TT	27			**27**	4	4		**8**
Matthews	Dave	Non-TT	17.5		4	**21.5**	27		4	**31**
McCaffery	Jerry	Tenured	15			**15**				**0**
Mehay	Steve	Tenured	10			**10**	12			**12**
Moses	Doug	Tenured				**0**				**0**
Mutty	John	Non-TT	12			**12**	25			**25**
Naegle	Brad	Non-TT	13.5		10	**23.5**	19		8	**27**
Nalwasky	Richard	Military				**0**	10.5			**10.5**
Owen	Wally	Non-TT	4	6		**10**	5	8	2	**15**
Pema	Elda	Untenured	16.5			**16.5**	17.5			**17.5**
Petross	Diana	Non-TT				**0**	31.5			**31.5**
Potvin	Lisa	Military				**0**	6			**6**
Powley	Ned	Untenured				**0**	16			**16**
Rendon	Rene	Non-TT	17.5	1		**18.5**	16.5			**16.5**
Roberts	Ben	Non-TT				**0**	8			**8**
San Miguel	Joe	Tenured	3			**3**	8	4		**12**
Shen	Yu-Chu	Untenured	16.5			**16.5**	17			**17**
Simon	Cary	Non-TT	33			**33**	27.5			**27.5**
Snider	Keith	Tenured	8	1		**9**	15.5			**15.5**
Suchan	Jim	Tenured	12			**12**	12			**12**
Summers	Don	Non-TT	27			**27**	24			**24**
Thibodeau	Nicole	Untenured	16			**16**	16			**16**
Thomas	Gail	Tenured	8			**8**	8			**8**
Thomas	George	Tenured	16			**16**	16			**16**
Ventresca	Marc	Untenured				**0**	16			**16**
Wang	Chong	Untenured				**0**				**0**
Yoder	Cory	Non-TT	19		6	**25**	25	1	4	**30**
Zolin	Roxanne	Untenured	20			**20**	20			**20**

Standard 5.42 Research
Research, writing and publication

5.42A Purpose

One element in the mission statement for the Graduate School of Business and Public Policy is:

> *Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.*

As indicated by this statement, faculty research is an important faculty activity in the Graduate School of Business and Public Policy. This research program is integrated to the greatest possible extent with the educational process. Students are encouraged to participate in faculty projects and faculty research results are typically incorporated in classroom instruction.

5.42B Areas of Research

Because of the close link between our research and educational programs, research in the Graduate School of Business and Public Policy is largely driven by the school's curricula and the academic areas from which we draw faculty to support those educational programs.

Briefly, the Graduate School of Business and Public Policy has primary responsibility for seven graduate degrees. The largest program is the resident MBA program, with curricular concentration areas in acquisition management, logistics management, financial management, information management and defense management. The resident MS in Management degree program currently offers a concentration in Manpower Systems Analysis. A third resident degree, the Master of Executive Management (MEM) started July 2006.

The Graduate School of Business and Public Policy also offers three Distance learning graduate degree programs. The largest program is an Executive Masters of Business Administration (targeting senior Navy Lieutenants through Commanders, particularly from the Unrestricted Line communities who have middle-management level experience). The other two programs offer a Master of Science in Contract Management and a Master of Science in Program Management. These programs are primarily offered to

Department of Defense civilians at designated off-site locations. Through 2006 GSBPP also offered an MS in Leadership degree, which has now been discontinued.

Finally, the Graduate School of Business and Public Policy offers two certificate programs: the Practical Comptrollership Course, sponsored by the Assistant Secretary of the Navy (Financial Management and Comptroller), which targets individuals (civilian and military) occupying financial management positions; and the Advanced Acquisition Program, which provides Level III education certificate in Program Management for the Department of Defense acquisition workforce.

The faculty of the Graduate School of Business and Public Policy are drawn from a wide variety of academic disciplines in business and public sector management. The school's diverse, multidisciplinary character is reflected in the breadth and depth of issues addressed by faculty research, which has historically been concentrated in applied areas of interest to the Departments of Defense and Navy. The school's research program touches a wide range of distinct topics within the course of a year. These topics and issues can be grouped into five functional areas, related to the school's curricula. The school's five functional areas included the following:

- Acquisition and Contracting
- Economics and Manpower Systems Analysis
- Financial Management
- Logistics and Transportation
- Organization, Management, and Policy Analysis

5.42C Planning For the Future: General Guiding Principles

As noted, research in the Graduate School of Business and Public Policy is multidisciplinary and often widely diverse; but, this research is directed toward a common set of goals. As stated in the school's mission statement, the faculty conducts a variety of research to:

- Contribute knowledge to academic disciplines
- Support military decision-making, problem-solving, and policy-setting
- Improve administrative processes and organizational effectiveness
- Advance the mission of graduate education

The primary goal of the school's research program is to provide the Navy and DoD with the capability of managing defense systems efficiently and effectively. This includes the efficient and effective utilization of resources, which derive from an existing base of knowledge or may require the development of new concepts and theory. Thus, the school recognizes the importance of both basic and applied research to the Navy and DoD, and it seeks to balance both types of research.

The school's research program goals are further specified as follows on the Graduate School of Business and Public Policy "web" page: (http://www.nps.navy.mil/gsbpp/research.htm):

- Increase the quality and quantity of relevant defense-oriented research
- Catalyze a broad and robust research program
- Involve top researchers, practitioners and graduate students in defense-oriented research useful to DoD policy/decision making processes
- Augment and complement cooperative, interdisciplinary research activities
- Disseminate relevant, important results to researchers, sponsors, policy makers and practitioners
- Integrate defense-oriented research with education, DoD workforce training and standardize policy practices
- Establish and maintain a community of academic and professional scholars engaged in exploratory and applied research to address complicated defense issues from a number of perspectives, while integrating defense applications into familiar business disciplines

Concepts, theory, and existing knowledge can generally be identified with a particular functional area or discipline. Actual defense policy and management decisions or policies often require information or perspectives drawn from a variety of functional areas and professional expertise. Consequently, in addition to pursuing functional area research with a critical mass of faculty, the school actively seeks to engage in cooperative, interdisciplinary research. Such research places the school in a strong position to assist defense policy makers, since it allows for a coordinated, broad-based program under "one roof" — where researchers from diverse fields and professional experience can share information and findings in a unified and truly systematic fashion.

5.42D Planning for the Future: Research Opportunities by Functional Area

As the Graduate School of Business and Public Policy prepares for the challenges of the future, it is appropriate to consider research fields that would help the school achieve its program goals and simultaneously assist defense decision-makers. Fields of inquiry and research opportunities are discussed below by each of the school's five functional areas.

Acquisition and Contract Management. Defense acquisition and contract management represents a process of critical importance to the military, not only to reduce taxpayer costs, but to ensure the quality and performance of today's increasingly sophisticated weapon systems. Nevertheless, negligible academic research has been applied to systematically investigate, understand, and model the acquisition process; and current innovations in this domain—such as spiral development, open architecture, contract termination, process reengineering and acquisition reform—are uncoordinated, ad-

hoc, and performed largely on a trial-and-error basis. This is the case because many acquisition policy makers and executives have little or no benefit of theory or practice.

Beginning in 2002, the Graduate School of Business and Public Policy initiated an Acquisition Research Program to provide leadership in innovation, creative problem solving and an on-going dialogue to support the evolution of Department of Defense acquisition strategies. The program goals include:

- Establishing NPS acquisition research as an integral part of policy-making for Departments of Defense and Navy officials
- Creating a stream of relevant information concerning the performance of DoD acquisition policies with viable recommendations for continuous process improvement
- Preparing the workforce to participate in the continued evolution of the defense acquisition process
- Collaborating with other universities, think tanks, industry and Government in acquisition research

Supported primarily by the Graduate School of Business and Public Policy Acquisition Chair, currently held by Rear Admiral Jim Greene, USN, (Ret.), this research program initiated fifteen research projects in 2003, with the number increasing to well over 20 in 2004, and over 35 in 2005. These projects include several collaborative efforts with Dr. Jacques Gansler (former Under Secretary of Defense for Acquisition, Technology and Logistics) and other faculty members at the University of Maryland, as well as faculty members from universities across the United States. Primary research sponsors include: Assistant Secretary of the Navy (Research, Development and Acquisition), Naval Sea Systems Command, Program Executive Office (Ships), Program Executive Office (Integrated Warfare Systems) and the Defense Contract Management Agency (International). In 2006, this program grew further, adding significant support from the Under Secretary of Defense (Acquisition, Technology and Logistics) in a separate proposal process, funding an additional 10 proposals.

A significant portion of this research funding is open-ended, restricted only to research topics involving acquisition issues broadly defined. The Graduate School of Business and Public Policy has established a competitive internal proposal process to allocate these funds; the call for proposals is distributed to faculty from across the Naval Postgraduate School. Priority is given to proposals that involve collaboration between tenure-track and non-tenure-track faculty members and to proposals involving thesis students and MBA project teams. The objective is to encourage collaboration that exploits the school's academic as well as professional expertise, a collaboration that provides the Graduate School of Business and Public Policy a strong comparative advantage for defense acquisition policy research. This program has been growing rapidly, with four of five proposals funded in AY2004, nine of 11 proposals funded in AY2005, 10 of 27 proposals funded in AY2007 and 11 of 30 proposals funded in AY2008.

The Acquisition Research Program also hosts an annual research symposium in Monterey. The fourth symposium, in May 2007, involved well over 100 people, including researchers and acquisition policy and decision makers from across the United States. Mr. Shay D. Assad – Director, Defense Procurement and Acquisition Policy, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics) delivered the keynote address. Details for the Acquisition Research Program and symposium are on the Acquisition Research Program website (http://acquisitionresearch.org/index.php).

Logistics and Transportation. The primary mission of the Logistics and Transportation group is to educate military officers and DoD civilians in state-of-the-art concepts of logistics, transportation and supply chain management. Emphasis is placed on understanding both military and non-military applications, so that students will be prepared to perform effectively in a military environment and interact efficiently with civilian contractors and suppliers. The general research perspective of the group is focused on improving DoD logistics and transportation performance as well as management effectiveness. Major research areas include:

- DoD inventory policy
- Weapon system total ownership cost and life-cycle support
- Defense transportation and distribution systems
- Total Asset Visibility (TAV) and real-time logistics
- Metrics and Performance Based Logistics
- Spiral Development
- Modeling and simulation for logistics decision support
- Supply chain management and lean manufacturing
- Weapon system readiness and risk management
- Business case analysis for transportation and logistics technologies

Much of this work has been supported through the Acquisition Research Program and its associated sponsors. Additional sponsors have included the Office of Naval Research, NAVAIR, the Military Sealift Command, the US Transportation Command and the Naval Surface Warfare Center.

Financial Management and Budgeting. Research in the area of financial management has become increasingly important since the end of the Cold War and the events of 9-11. The Financial Management (FM) group has identified three major functional areas as targets of opportunity for future research. These are:

- Financial resource policy formulation, analysis and management
- Financial management and budgeting
- Organizational efficiency, managerial control and performance metrics

The first of these functional areas — financial resource policy formulation, analysis and management — covers a range of sub-areas: national defense and national security resource policy and management; resource planning, programming, budgeting and policy under the Planning, Programming, Budgeting and Execution System; and relationships between financial management, contracting, acquisition and other policy fields. Financial management and budgeting includes the following: federal, DoD and Navy budget formulation and execution; impacts of budget allocation, reallocation and reduction; implementation of Defense Resource Management Systems; and the Chief Financial Officer Act and federal financial management reforms. The research area of organizational efficiency, managerial control and performance metrics, in turn, covers the following: mapping, goals, and objectives to a defense organization's strategic themes using a balanced scorecard and performance metrics, examining the efficiency of defense sector consolidation and the cost –effectiveness of public-private partnerships.

In addition to the Acquisition Research Program, sponsors for this research have included: Assistant Secretary of the Navy (Research, Development and Acquisition), Program Executive Office (Ships); Program Executive Office (Integrated Warfare Systems); the Office of the Comptroller, COMNAVAIRPAC (CNAP); U.S. Department of Justice; and the Personnel Security Research Center (Department of Defense).

Manpower Systems Analysis. As noted above, the primary goal of the department's research programs is to provide defense policy makers with the capability of utilizing resources with maximum efficiency and effectiveness. This includes *human* resources, the focus of research in the Manpower Systems Analysis (MSA) group. Defense manpower policy makers have been faced with many challenges since the end of the Cold War and the events of 9-11. Key among these challenges include an over 30 percent reduction of the active-duty force, budget reductions in recruiting and advertising, a steady, high operational tempo and deployment schedule with fewer people, new missions, increasing pressure to change the "culture" of military service, renewed efforts toward population representation of women and racial/ethnic minorities throughout the force, a high rate of first-term attrition among new recruits, declining levels of personnel retention in certain critical areas, a number of high-profile "scandals" and others. As the active-duty force was reduced and missions changed, it soon became clear that a smaller military had to be even more skilled and adaptable than the one that witnessed the end of compulsory service and performed so successfully throughout the early 1980s and early 1990s. These challenges confronting defense manpower policy makers are recognized by the MSA group as opportunities for research that will have a lasting impact on the future of the force. MSA research areas can be summarized as follows:

- Manpower supply and force requirements
- Improvements in selection and classification of enlisted personnel
- Innovations in recruiting and the application of new technologies
- Improvements in selection of officers and pre-commissioning programs
- Effectiveness of equal opportunity and diversity management programs

- Training effectiveness and efficiency
- Innovations in instructional technologies
- Innovations in enlisted assignments and auctions for assignment incentive pay
- Personnel retention in critical fields and communities, including auction based approaches
- Reduction of first-term attrition rates among enlisted personnel
- Force management programs and planning
- Force structure and cost analysis
- Auction-based approaches to force shaping
- Career-force modeling
- Officer promotion and performance
- Civil-military relations and the All-Volunteer Force
- Manpower management in Reserve components

Sponsors for this research include: Office of the Chief of Naval Personnel (N-1, N-1H, N-1Z, N-12, N-13, and N-14), Navy Personnel Research, Studies and Technology and the Office of the Assistant Secretary of Defense.

Economics and Finance. GSBPP also maintains an expertise in general defense economics and finance. Rather than focusing on specific areas within the defense department, this capability represents a set of skills that has been applied to a wide range of applications over time. Past areas of interest have involved burden-sharing and the economics of defense alliances, game theory approaches to terrorists' decisions and defense strategy, defense requirements (e.g., aerial refueling and operational support aircraft), and incentives in defense decision-making. Current interest focuses on several areas:

- Transaction cost economics in defense acquisition
- Technology innovation and diffusion in the Department of Defense
- Business case analysis for new defense technologies
- Consolidation in the defense industrial base
- Discount rates and personal decision making in the defense sector
- Healthcare Economics, incentives, ownership and patient outcomes

Sponsors for this research have included the Acquisition Research Program, the Under Secretary of Defense (Advanced Systems and Concepts), internal NPS research funding and other external non-defense sponsors.

Organization, Management, and Policy Analysis. Faculty members in this functional area pursue basic and applied research on key management issues at a variety of organizational levels. Faculty members bring a strategic perspective to this work, seeking to identify courses of action that will best achieve organizational goals in a given setting. Individual faculty members are acknowledged experts who publish leading-edge research

on a variety of issues. Top management issues include strategy and entrepreneurship, appreciative inquiry and positive change, organizational design (including the use of self-managing groups), social network analysis, ethics, collaboration in teams, managerial communications and the development of culture.

There is a developing interest in management innovation in the defense sector, embodied in the recently formed Center for Defense Management Reform. This multi-disciplinary research center initially focused on personnel management initiatives, such as those enacted in the Homeland Security Act of 2002 and the National Security Personnel System. Interest is extending to other areas including budgeting and financial management, organizational resilience, and market-based approaches to workforce and acquisition-related issues.

In addition to their subject area and methodological expertise, faculty members have developed considerable knowledge of current military organizations through their research. Most of this work has been with Navy organizations, such as the NAVSUP, NAVAIR, CNET, NETWARCOM, Naval Reserves and CINCLANTFLEET. However, faculty members have also worked with organizations in other service branches, including extensive work with the U.S. Army Reserve Command and Coast Guard Headquarters. Recent DoD-wide research includes work for the Office of Force Transformation. Individual faculty have also conducted research for other US government agencies, including the Office of Personnel Management, the Department of Homeland Security and the Center for Disease Control, and consulted with state government agencies, the United Nations, and private-sector organizations. Supervising student theses has broadened this knowledge even more. This organizational expertise increases the value of faculty as applied researchers for DoN and DoD organizations.

5.42E Research Labs and Centers

In 2007, the Graduate School of Business and Public Policy was the "home" of two research centers: the Center for Defense Management Reform (Director – Professor Douglas Brook; Sponsors – Defense Logistics Agency, Office of Personnel Management); the center for Positive Change (Director – Professor Frank Barrett; Sponsors – NETWARCOM, NAVSUP IT, Office of Force Transformation and NETC).

5.42F Scholarly Productivity

Over the past four years (AY2003 – 2006) faculty productivity in the graduate School of Business and Public Policy has increased dramatically. This increase reflects two factors: new hires and a new Policy on Lecturer and Senior Lecturer Appointments. After several years with very limited new tenure-track faculty hires, the school has been involved in an aggressive hiring process. Supported by institutionally provided research

support during their first three years of employment, the new tenure-track hires have contributed significantly to the school's scholarly output. Much of this output is focused on mainstream academic journals, as required for a successful tenure decision. This complements the more applied defense policy research typically conducted by the tenured faculty.

In addition, the Graduate School of Business and Public Policy recently adopted a new Policy on Lecturer and Senior Lecturer Appointments. This policy specifies a scholarship expectation for non-tenure track faculty members, which emphasizes more applied research. Coupled with the concurrent increase in applied research funding through the Acquisition Research Program described above, the lecturers and senior lecturers have contributed significantly to scholarly output in the Graduate School of Business and Public Policy.

Over the four year evaluation period (2003-2006), faculty members in GSBPP have appeared as authors or co-authors for: 146 refereed journal publications (up from 74 in the last evaluation cycle); 74 conference papers (up from 32); 9 books (up from 3); 58 book chapters (up from 53), 146 technical reports (up from 25); and 105 non-refereed papers, case studies, notes, editorials, letters, etc. Conference presentations over this period numbered 298 (up from 169).

Table 5.42F shows that our faculty members are active and their work has increased over this period. This data indicates the two trends described above. The increase in journal publications largely reflects the recent increase in tenure-track hires; the increase in technical report and other publications, including non-refereed papers, largely reflects the contribution of the non-tenure track faculty in response to their new appointment policy and Acquisition Research Program funding. In this table, "participating faculty" refers to all nucleus faculty members who are expected to participate in scholarship. Essentially, this includes all civilian faculty members -- tenure-track and lecturers/senior lecturers. Excluded are faculty members who fill positions where there is, by the nature of the position, no scholarship expectation. This includes all active duty military faculty members, as well as a couple of retired military officers holding administrative faculty positions.

TABLE 5.42F

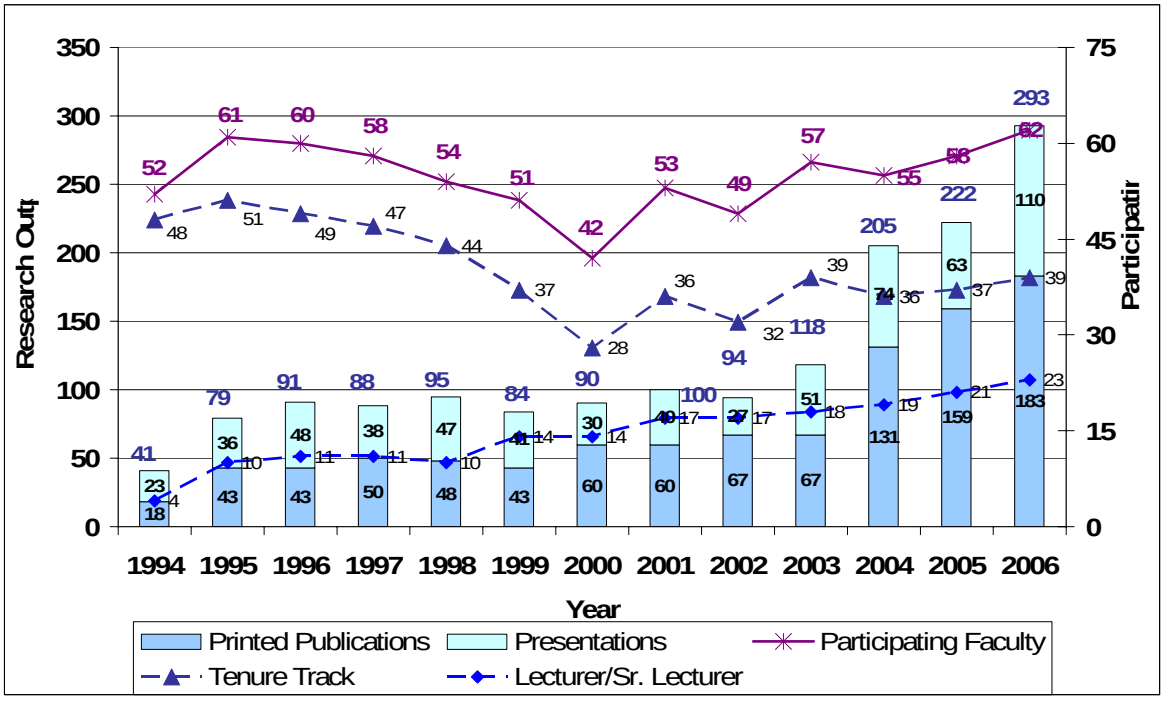
GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY
SCHOLARLY CONTRIBUTIONS
AY 2003-2006

	AY2003	AY2004	AY2005	AY2006
Journal Papers	24	44	51	27
Conference Papers	8	15	20	32
Books	1	3	4	1

Book Contributions	12	13	13	20
Technical Reports	17	26	46	57
Notes/Editorials/Others	5	30	25	46
Total Printed Output	**67**	**131**	**159**	**183**
Presentations	51	74	63	110
TOTAL OUTPUT	**118**	**205**	**222**	**293**
Participating Faculty	55	57	58	62
Output/Participating Faculty	**2.07**	**3.73**	**3.83**	**4.73**

Figure 5.42F below shows the number of full-time, faculty members expected to participate in scholarship in the Graduate School of Business and Public Policy superimposed over scholarly output over the period 1994 through 2006. As the graph illustrates, full-time faculty numbers have increased since the low in 2000. However, the significant increase in scholarly output over the study period is not the result of an increase in full time faculty; the number of full time faculty members averaged 58 over the current study period, essentially equivalent to the 58.25 average over the previous study period.

Figure 5.42F
GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY
SCHOLARLY CONTRIBUTIONS AND NUCLEUS FACULTY
AY 1994-2006



In fiscal 2006, Graduate School of Business and Public Policy faculty members received a total of $4.16 million in funding for research and other sponsored projects

(including projects carried over from previous years). This funding supported over 40 projects. Of these projects, 7 were umbrella contracts secured by the Acquisition Chair for the Acquisition Research Program. Each of these umbrella contracts supported several additional faculty and student projects; a list of these projects can be found at the Acquisition Research Program's website: http://www.acquisitionresearch.org/.

In addition to this external funding, the Graduate School of Business and Public Policy distributed approximately $640 thousand in internal research funding to tenure-track faculty through the Workload Relief Funding Program. This program earmarks a particular funding line to support tenure-track faculty research. It is distributed to the four schools within NPS according to the number of tenure-track faculty in each school. The Graduate School of Business and Public Policy allocates its share of these funds as follows: all untenured tenure-track faculty are entitled to two months (44 days) of workload relief funding, if needed; all tenured tenure-track faculty equally share the remaining funds, as needed, after receiving approval for their proposed research program from the school's Faculty Research Committee. In AY2006, 18 tenured faculty members received 33 days in research funding through this process. This research funding primarily helps underwrite research projects supported by other sponsors, making NPS faculty proposals more competitive and cost-effective.

Finally, 10 newly hired tenure-track faculty were eligible for NPS Research Initiation Program (RIP) funding in AY2006. RIP funds six months of research labor for all tenure-track hires in their first two years at NPS. In addition, RIP candidates can submit proposals for non labor support, including travel, equipment, research assistance, etc., as required by their research. On average, the 10 RIP faculty members received $13,800 in non-labor funding for FY2006. The total value of the RIP funding exceeded $1.1M in FY2006 for the Graduate School of Business and Public Policy, and this funding was credited with supporting, at least in part, 21 different research projects. This funding varies by year depending on the number of eligible faculty members. RIP funding supported 7 faculty members in FY2004 and 10 faculty members in FY2005.

Detailed information for individual faculty's publications, conference presentations and research projects is presented in the Faculty Data Sheets - Volume II of this Self-Study report.

Standard 5.43 Experience and Service
Professional experience and public service with government, industry, non-profit agencies, or consulting assignments.

5.43 Experience and Service

Faculty from GSBPP have a broad range of professional experience as detailed in the Faculty Data Sheets - Volume II. From the self-reports in the Faculty Data sheets, more than 70% of the nucleus faculty members have significant practitioner experience that directly relates to their field of study. As would be expected, given their role in supporting the school's mission and programs, all (100%) of the non-tenure-track faculty have significant practitioner experience.

About 42% of the nucleus faculty report they are currently, or have recently been, engaged in public service activities. Scanning the kinds of public service activities reported by the faculty, in general, most of the reported activities outside of their regular professional or academic positions, often of a voluntary nature. An alternative way to think of public service is in terms of the jobs or careers the faculty members have pursued. Given that all faculty members at the Naval Postgraduate School are federal government employees, in a sense, all are engaged in public, governmental service by their current employment. Additionally, as noted before, a significant portion (41%) of the faculty have had prior service, or full careers, in the military, with military service representing a distinct form of public service.

About 37% of our faculty members report specific consulting activities in which they are currently, or have recently been, engaged. Participation is spread across all ranks of the nucleus faculty. Several faculty members serve as consultants to senior leaders within the Department of Defense. Most of this type of consulting is done is conjunction with research projects or as members of advisory boards, etc.

Standard 5.5 Faculty Diversity
There should be evidence that specific plans are being implemented to assure diversity of the composition of the faculty with respect to the representation of minorities, women, and persons with disabilities. Programs and plans to insure faculty diversity shall generally reflect NASPAA's Diversity Guidelines.

5.5A Diversity Plans

While GSBPP has no explicitly articulated program targeted to assure diversity in the faculty composition, we nonetheless have a serious commitment to achieving and maintaining a high level of faculty diversity. Although we have set no quotas or numerical goals, we actively strive to provide a supportive and positive atmosphere where diversity among the faculty and staff can thrive and grow. We have a shared philosophy among the School's leadership that guides our efforts in the area of diversity management. This philosophy requires and involves equitable recognition and reward for one's contributions, openness to individual difficulties (with students, programs, etc.) and sensitivity to

challenges that might affect one's feeling of effectiveness in their jobs and professional lives. We believe this is a continuing accomplishment in the School. We have no "second class citizens". Faculty members are recognized, treated and valued as faculty; not as "Adjunct" or "Military" or "Tenure Track"; not as "junior" or "senior"; and, certainly, not as "minorities", "women" or "handicapped".

In terms of how our faculty recruitment plans and efforts support faculty diversity, we often find that the uniqueness of our academic mission and our focus on defense-relevance works against us. In many instances, the types of experience and military-relevant perspective we seek in a faculty member dramatically restrict the total pool of applicants, and most certainly the possibility of finding a well-qualified diversity hire. For example, we have a frequent recruiting need in the Acquisition area. The necessity of a relevant experiential background in the area often means that plausible candidates will come principally from retired military officers or senior defense civilian employees. There are few minorities, women, and almost no handicapped candidates in these fields. While there has been an increasing number of women and minorities among the officer corps of the military, their percentages do not mirror the general public, and most of those that have reached retirement age are quickly recruited into industry at salaries well above our salary scales. There are somewhat analogous limitations when seeking faculty candidates in the Transportation and Logistics area, the Manpower area and the Defense Financial Management area. Nonetheless, we encourage all 'diversity candidates' in these specialized fields, using our current faculty members' contacts and taking advantage of the fact that the communities from which qualified candidates derive are small and usually well known to our senior faculty in these fields. The result is that despite the difficulties outlined, we have had only modest success at hiring women and minority faculty in these fields.

While we have difficulties in those fields with small candidate pools, we can and have been successful in hiring and retaining women in particular, and minorities to a lesser extent, in areas where the related candidate pool is large and mature enough to provide many competitive applicants. For example, we have had no serious difficulty in attracting 'diversity candidates' in areas such as Organization and Management, Managerial Communications and Accounting, where we've hired well qualified women and minority faculty colleagues.

In terms of recent changes in faculty diversity, Table 5.5A is a list of all new nucleus faculty hires during the past six years (2002-2007), indicating their diversity status.

Table 5.5A

GSBPP NUCLEUS FACULTY HIRES 2002 - 2007

Year of Hire	Academic Appointment	Status	NPS Start Date	Race/Ethnicity	Gender
2002	Assistant Professor	Resigned	10/7/2002	White	Female
2002	Assistant Professor	Untenured	7/29/2002	White	Female
2002	Professor	Untenured	7/1/2002	White	Male
2002	Assistant Professor	Resigned	2/11/2002	White	Female
2002	Assistant Professor	Resigned	4/8/2002	White	Female
2002	Lecturer	Resigned	9/1/2002	White	Female
2002	Lecturer	Retired	3/4/2002	White	Male
2002	Lecturer	Non-TT	2/11/2002	White	Female
2003	Assistant Professor	Untenured	8/11/2003	White	Male
2003	Assistant Professor	Untenured	8/25/2003	White	Female
2003	Assistant Professor	Resigned	6/16/2003	Black	Female
2003	Assistant Professor	Resigned	1/13/2003	White	Female
2003	Professor	Deceased	6/2/2003	White	Male
2004	Assistant Professor	Untenured	6/28/2004	Asian/Pacific Islander	Female
2004	Associate Professor	Untenured	6/28/2004	White	Male
2004	Associate Professor	Untenured	10/18/2004	White	Male
2004	Assistant Professor	Untenured	6/1/2004	White	Female
2004	Assistant Professor	Untenured	9/7/2004	White	Female
2004	Assistant Professor	Untenured	10/4/2004	White	Female
2004	Assistant Professor	Untenured	9/20/2004	Asian	Female
2004	Professor	Tenured	6/28/2004	Asian/Pacific Islander	Male
2004	Assistant Professor	Resigned	11/1/2004	White	Male
2004	Lecturer	Non-TT	10/12/2004	White	Male
2004	Lecturer	Non-TT	7/12/2004	Hispanic	Male
2004	Lecturer	Non-TT	5/3/2004	White	Male
2005	Assistant Professor	Untenured	6/27/2005	White	Female
2005	Senior Lecturer	Resigned	10/3/2005	White	Male
2006	Associate Professor	Untenured	9/20/2006	White	Male
2006	Assistant Professor	Untenured	9/20/2006	White	Male
2006	Assistant Professor	Untenured	9/20/2006	White	Female
2007	Lecturer	Non-TT	9/16/2006	White	Female
2007	Senior Lecturer	Non-TT	6/25/2007	White	Male
2007	Assistant Professor	Untenured	To start 9/07	Asian/Pacific Islander	Male
2007	Associate Professor	Untenured	To start 9/07	White	Male

As indicated in the table, GSBPP has been growing significantly during recent years, with a total of 34 nucleus faculty members hired since 2002. About 74% of the new faculty members have been hired as tenure-track faculty. As a result of this, the tenure-track proportion of the nucleus faculty has increased in recent years. Concerning diversity,

only 6 of the new faculty members (18%) are from racial/ethnic minorities, but 17, half, are women. Considering both race/ethnicity and gender, 59 percent (20/34) of the newly hired nucleus faculty members are diversity faculty.

The School is aware of the need to retain women and minority faculty members once recruited. The table also shows that eight of the 34 faculty members hired in the last six years have resigned to accept other job opportunities; five of the eight accepted university positions; three accepted industry positions. Six of the eight lost were diversity faculty members. We are personally and organizationally conscious of the importance and sensitivities of each faculty member and encourage behavior which respects that. Efforts directed toward retention of faculty apply to all faculty members and are based on faculty members' individual contributions.

5.5B Faculty Diversity Data

Table 5.5B provides data on the current diversity of the nucleus faculty. Nineteen faculty members are listed, representing 31% of the 61 total current nucleus faculty members.

Table 5.5B

NUCLEUS FACULTY DIVERSITY 2007

Faculty	Gender	Race/Ethnicity	Rank	Tenure Status
A	Male	Asian/Pacific Islander	Professor	Tenured
B	Male	Hispanic	Professor	Tenured
C	Female	White	Associate Professor	Tenured
D	Male	Asian/Pacific Islander	Associate Professor	Tenured
E	Female	White	Associate Professor	Tenured
F	Female	White	Assistant Professor	Untenured
G	Female	Asian/Pacific Islander	Assistant Professor	Untenured
H	Female	White	Assistant Professor	Untenured
I	Female	White	Assistant Professor	Untenured
J	Female	White	Assistant Professor	Untenured
K	Female	White	Assistant Professor	Untenured
M	Female	Asian	Assistant Professor	Untenured
N	Female	White	Assistant Professor	Untenured
P	Male	Asian/Pacific Islander	Assistant Professor	Untenured
Q	Female	White	Senior Lecturer	Non-TTrack
R	Male	Black	Senior Lecturer	Non-TTrack
S	Female	White	Lecturer	Non-TTrack
u	Female	White	Lecturer	Non-TTrack
v	Male	Hispanic	Lecturer	Non-TTrack

5.5C Faculty Searches

Because of the curricular and discipline diversity in the School, major responsibility for the development, implementation and monitoring of our affirmative action effort remains vested in the Dean, with the assistance of the Associate Deans and the five faculty members acting as Area Chairs. Faculty recruitment efforts are largely carried out by the faculty group involved, with the designated Area Chair as the lead person. The Senior Associate Dean assists the School's leadership team in determining hiring needs, monitoring the recruiting process and candidate hiring recommendations.

The Naval Postgraduate School's administration is actively supportive of the EEO/Affirmative Action efforts of all schools and departments. When GSBPP begins faculty recruitment, the Area Chairs who will lead each search coordinate with the Dean and Senior Associate Dean to plan search activities. EEO factors are discussed so that all advertisements and notices bear the proper invitation for attracting a diverse pool of applicants. When applications are received we ensure that women, minorities, or identifiable handicapped individuals are objectively considered and we make a special effort to invite a diverse range of candidates for on-campus interviews.

For any particular faculty position, the number of candidates invited for on-campus interviews will vary, depending on the size and strength of the candidate pool. After on-campus interviews of the set of candidates deemed most qualified, they are compared with one another so that we may judge the best qualified for the appropriate position. Since we recognize that "best" is a relative word, and since criteria are multiple, we examine all candidates to be sure we are not overlooking opportunities to add diversity to our faculty. If in our opinion other factors are approximately equal, we enhance diversity. Additionally, a report is compiled for each search that outlines the pool of applicants in terms of diversity characteristics and that report is included with the hiring requests forwarded to the Dean and Provost for action. (Admittedly, when screening possible candidates based on resumes, it may be difficult to identify all candidates who are members of a minority group, or handicapped.) Table 5.5C summarizes applicant data for faculty searches during the past five years.

Table 5.5.C

SEARCH HISTORY 2002 - 2007

Year of Search	Position Type	Position Area	Ethnicity of Hired	Gender of Hired	Total Apps/Intv	Women Apps/Intv	Minority Apps/Intv
2002	TTrack	Org. Behavior	White	Female	76/5	19/2	n/a
2002	TTrack	Acquisiton	White	Female	3/1	1/1	n/a
2002	TTrack	Professor	White	Male	?/3	?/0	n/a
2002	TTrack	Accounting	White	Female	30/2	6/2	n/a
2002	TTrack	Accounting	White	Female	30/2	6/2	n/a
2002	Non-TT	Acquisiton	White	Female	n/a	n/a	n/a
2002	Non-TT	Acquisiton	White	Male	2/2	1/1	0/0
2002	Non-TT	Marketing	White	Female	1/1	1/1	0/0
2003	TTrack	Strategy	White	Male	49/2	9/1	n/a
2003	TTrack	Economics	White	Female	56/10	13/5	1/1
2003	TTrack	Accounting	Black	Female	12/1	2/1	n/a
2003	TTrack	Operation Mgmt	White	Female	n/a	n/a	n/a
2003	TTrack	Accounting	White	Male	1/1	0/0	0/0
2004	TTrack	Operation Mgmt	Asian	Female	1/1	1/1	1/1
2004	TTrack	Economics	White	Male	n/a	n/a	n/a
2004	TTrack	Operation Mgmt	White	Male	140/1	35/0	n/a
2004	TTrack	Org. Behavior	White	Female	74/2	30/2	n/a
2004	TTrack	Finance	White	Female	1/1	1/1	0/0
2004	TTrack	Communications	White	Female	15/1	9/1	n/a
2004	TTrack	Economics	Asian	Female	24/1	7/1	?/1
2004	TTrack	Operation Mgmt	Asian	Male	140/3	35/1	n/a
2004	TTrack	Federal Budgeting	White	Male	n/a	n/a	n/a
2004	Non-TT	Manpower	White	Male	1/1	0/0	0/0
2004	Non-TT	Acquisiton	Hispanic	Male	1/1	0/0	1/1
2004	Non-TT	Acquisiton	White	Male	3/1	0/0	0/0
2005	TTrack	Accounting	White	Female	13/3	6/3	1/0
2005	Non-TT	Accounting	White	Male	11/6	3/1	3/1
2006	TTrack	Management	White	Male	74/3	30/2	n/a
2006	TTrack	Org. Behavior	White	Male	76/4	30/2	n/a
2006	TTrack	Operation Mgmt	White	Female	37/2	2/1	n/a
2007	Non-TT	Acquisiton	White	Female	2/2	1/1	0/0
2007	Non-TT	Accounting	White	Male	15/3	2/1	?/1
2007	TTrack	Accounting/Finc	Asian	Male	15/3	2/1	?/1
2007	TTrack	Economics	White	Male	95/3	22/2	n/a

STANDARD 6.0 -- ADMISSION OF STUDENTS

Standard 6.1 Admission Goals and Standards
Admission goals, policy and standards, including academic prerequisites, should be clearly and publicly stated, specifying any differences for pre-service or other categories of students.

6.1A Mission

The mandate for NPS is clearly stated by Congress. The purpose of the Naval Postgraduate School is to serve the Nation by educating military officers and DoD civilians in defense-focused business and public policy, by conducting scholarly research in defense management and public policy and by providing intellectual resources for leaders and organizations concerned with national defense management practice and policies.

With a focus on preparing military officers and government civilians for professional positions, NPS and the Graduate School of Business and Public Policy in conjunction with sponsoring agencies determine admission standards and processes.

6.1B Admission Processes

Admissions standards and processes reflect two dimensions: Academic and Professional. GSBPP/NPS set academic standards for admissions. The Navy, and other sponsoring agencies, select students -- who have met the academic standards -- for admission based on professional and career considerations. Thus admission to GSBPP/NPS, and the MSM Program, is accomplished through the joint efforts of the School and students' sponsors.

During the earlier years of their career, all Navy officers have are initially screened for graduate study, based on their undergraduate academic performance (officer transcripts may be reviewed by the NPS Admissions Office). In addition to the academic admissions standards, U.S. Navy officers are reviewed for selection to graduate school based on their professional performance and promotion potential. Selection boards and Senior Officer Reviews occur annually to select eligible officers. The selection board evaluates both the officer's professional performance in the Navy and his/her prior academic record. Officers selected for graduate study are then offered the opportunity to attend a specific graduate curriculum. No one is ordered to graduate school against his/her will. Similar selection procedures are employed by the other U.S. services and by federal agencies wishing to nominate civilian employees for graduate study.

The Graduate School of Business and Public Policy does not select individual Navy students. However, in the case of prospective students from other services, including U.S. and allied nations, the appropriate Academic Associate reviews all individual transcripts and offers recommendations to the director of admissions about acceptance or rejection. The Academic Associate's recommendation is normally the determining factor in the admission decision.

6.1C Representation

As indicated above, selection of students originates with the sponsoring military service or agency, not with NPS. Given the mission and admissions process for GSBPP, diversity among GSBPP students, and within the MSM program, will be significantly influenced by diversity policies within the larger Navy, and the population of officers from which students will come.

US Navy Diversity Policy: Diversity is recognized as a strategic goal of the Navy and expressed as Navy policy:

Diversity is a strategic imperative for the United States Navy:

We defend the greatest nation in the world. It is a nation that welcomes, indeed encourages, the active participation of every citizen regardless of race, gender, creed or color - - a democracy founded on the promise of opportunity for all. It is also a nation whose demographic makeup continually changes, reflecting the influx of new immigrants and the growth of minority populations. The Navy must change with it. To the degree we truly represent our democracy, we are a stronger, more relevant armed force.

Diversity is critical to mission accomplishment:

Everyone in our Navy contributes to mission success, and everyone brings to that collective effort unique capabilities and individual talent. How we harness those capabilities and foster that talent bears considerable effect on our ability to successfully accomplish the mission. Like an organization in time of change, we thrive on the infusion of new ideas and the diversity of thought. This is particularly true today, when understanding the mores, customs, and ideals of diverse cultures, as well as the perspectives of other people, remains critical to winning the long war.

Diversity is a leadership issue, and everyone is a leader:

We will promote and engender a culture that embraces our diversity. Through our communications, education, policies, programs, and conduct, each of us will actively foster work environments where people are valued, respected, and provided the opportunity to reach their full personal and professional potential. We will recruit, develop, educate, and retain leaders from and for all parts of our Navy and nation.

We defend the greatest nation in the world. The strength of our diversity directly and irrefutably helps us do so. The Navy will stay committed to improving that strength. (US Navy Diversity Policy, Chief of Naval Operations)

Student Demographics: As indicated above, selection of individual students for admission originates with the sponsoring military service or agency, not with NPS. Hence GSBPP does not have direct influence on the diversity characteristics of students. Student diversity will depend significantly on the diversity characteristics of the wider Navy and Defense community.

Presented here are data on the diversity demographics of GSBPP's resident student population, as compared with the university (NPS) and the wider Navy officer Corp. Broadly speaking, GSBPP student characteristics with respect to Race/Ethnicity and to Gender are reflective of the university and defense community which it serves.

Table 6.1C1
RACE / ETHNICITY
Comparison of GSBPP / NPS / Navy Officer Corps

	GSBPP	NPS	Navy
Caucasian	73%	78%	81%
African American	12%	7%	8%
Hispanic	7%	6%	6%
Asian	8%	7%	4%
Other	<1%	<1%	1%

Table 6.1C2
GENDER
Comparison of GSBPP / NPS / Navy Officer Corps

	GSBPP	NPS	Navy
Male	88%	89%	85%
Female	12%	11%	15%

One way in which the student population in GSBPP will, by design, differ from the officer population in the wider U.S. defense community is through the recruitment and enrollment of international students. Through an admissions and selection process roughly analogous to that used for U.S. students, allied nations may select and send officer students to NPS. Through various programs, NPS actively seeks enrollment of international officers, and values the range of backgrounds and experiences they bring to the academic experience. Student representation for specific countries varies over time, as does the proportion of GSBPP students from other countries. Currently GSBPP enrolls students from 13 different nations, with international students comprising about 15% of the student population. The MSM Program is approximately 20% international students.

Table 6.1C3 CITIZENSHIP Comparison of MSM / GSBPP / NPS / Navy Officer Corps				
	MSM	**GSBPP**	**NPS**	**Navy**
U.S.	80%	85%	84%	~100%
International	20&	15%	16%	

No military students with significant physical handicaps have been admitted; the physically or mentally handicapped are not considered fully qualified to serve on active duty in the military services and therefore are not assessed into the force. Nothing precludes an academically qualified handicapped DoD civilian employee from attending.

Officers from foreign military services who enter the Graduate School of Business and Public Policy are expected to meet the same admission requirements as U.S. students. They must also demonstrate proficiency in English before enrolling

6.1D Admission Process for Beginning Part-time Graduate Students

A very small number of the officers and civilians assigned to the Naval Postgraduate School staff have taken courses on a part-time basis in a program leading to a master's degree. These persons must meet the same admission qualifications as full-time students. In addition, their enrollment must be approved by their immediate supervisor.

Standard 6.2 Baccalaureate Requirements
Admission shall normally be limited to applicants with a baccalaureate degree from a regionally accredited institution and appropriately evaluated applicants from non-US universities.

6.2 Baccalaureate Requirements

Admission to the Naval Postgraduate School is normally limited to military officers and other DoD employees with baccalaureate degrees.

Special Conditions: The Academic Council may approve the admission of students who do not hold baccalaureate degrees. Such applicants must have a minimum of 120 quarter hours of acceptable college credit. At least 100 hours must have been completed in accredited institutions and the applicant must have a B average for this work. No more than 20 semester hours of credit may be allowed for study in non-degree granting service schools. In addition, the applicant must have a score on the Graduate Record Examination high enough to indicate probable success in graduate study.

Standard 6.3 Admission Factors
Admission shall be limited to applicants that show good potential for success in professional graduate study and public service. Admission standards shall include several of the following factors about each applicant (a) performance on the aptitude part of the GRE or the GMAT, or equivalent tests; (b) undergraduate grade point average and trend of grades; (c) rank in graduating class; and (d) biographical and career interest data and essays; (e) evaluation of the quality of professional experience.

6.3A Admission Factors

Admission standards are determined by the Graduate School of Business and Public Policy based on discussions and agreement with school faculty, Deans and the Provost. In particular, the Dean, Senior Associate Dean, and the Academic Associates are responsible for the academic standards and programs offered within the school. Academic standards for all programs must be approved by NPS's Academic Council.

All military officers who are enrolled at NPS have been assigned an Academic Profile Code (APC) by the registrar's office. This code is a three-digit code that summarizes an officer's prior college performance. Each curriculum has a specified APC. The code is 345 for all curricula in the MSM program, which means a minimum of a baccalaureate degree with a 2.20 grade-point average, two or more pre-calculus courses with a B or better and no requirement for science courses. College algebra or trigonometry is considered to be the minimum mathematical preparation. In addition to meeting the established academic standards, students are screened by their sponsoring agencies. Selection by sponsoring agencies is based on outstanding professional performance and promotion potential

A summary of the NPS registrar's records which are presented in Table 6.3A show that 84% of the students enrolled the MSM program in AY2007 had GPAs of 2.60 or better.

Table 6.3A
UNDERGRADUATE GPAs FOR MSM STUDENTS
Enrolled 2007

NPS Academic Code 1st Digit	GPA	Number of Enrolled Students	Percent of Enrolled Students
0	3.60-4.00	8	14%
1	3.20-3.59	15	26%
2	2.60-3.19	26	45%
3	2.20-2.59	8	14%
4	1.90-2.19	1	2%
Unknown		6	
	Total	**64**	100%

6.3B Admissions Record

As explained above, officers are screened for NPS each year. Many are considered to be unqualified and are rejected. Hence, the total number of students screened is not a meaningful surrogate for the number of applications.

Officers selected for graduate study are given military orders to the School (in effect, admitted). Consequently, the numbers admitted and matriculated are equal. No data are available on the number of officers who decline the opportunity of graduate study. During AY 2007, a total of 337 officers entered degree programs in GSBPP; 29 of them into the MSM program. See Table 6.3B for the number of students entering the various programs in the Graduate School of Business and Public Policy AY2003-2007. The students in the MSM program are at the top of the table.

Table 6.3B
NUMBER OF STUDENTS ENTERING
GSBPP DEGREE PROGRAMS
AY 2003-2007

	2003	2004	2005	2006	2007
MSM Program					
Manpower Analysis	35	38	36	40	25
Defense Analysis					4
TOTAL MSM	**35**	**38**	**36**	**40**	**29**
MBA Program					
Logistics Management	30	25	36	39	37
Acquisition Management	43	58	56	77	35
Financial Management	43	68	72	72	42
Defense Management	26	8	7	9	10
Information Management	1	1	3	0	0
TOTAL MBA	**143**	**160**	**174**	**202**	**124**
Other Degree Programs					
EMBA	17	81	104	105	98
DL MS Degree Programs	17	52	42	0	84
MEM				5	2
TOTAL Other	**34**	**133**	**146**	**110**	**184**
TOTAL GSBPP	**212**	**331**	**356**	**352**	**337**

6.3C Probationary Students Assessments

Generally, no students are admitted to GSBPP on a "probationary" status. All admitted students are required to satisfy minimum admissions standards described above.

6.3D Enrollment/Size of Programs

For the most part, the number of students selected for the GSBPP resident curricula, and thus the MSM program, is determined by the military services. Each year a board convenes to establish a quota for students who will be sent for fully-funded education at the Naval Postgraduate School. Navy quotas are based on a complex system designed to determine the number of professionals requiring advanced education in the various subspecialties.

Table 6.3D1 displays the trends in student enrollment in the various GSBPP programs, and in the specific curricula in the resident MSM program. Due to the increased emphases on graduate education by the leadership of the U.S. military services over the past several years, overall enrollment in GSBPP programs has grown from 340 to 612, an 80% increase, over the past five years. The resident enrollment at NPS has increased by about 55% during that same period. Enrollment in the MSM Program has remained stable over that period. GSBPP continues to enroll more than 20% of the resident students at NPS.

Table 6.3D1
GSBPP STUDENTS ENROLLED -- BY PROGRAM
AY 2003-2007

	2003	2004	2005	2006	2007
MSM Program					
Manpower Analysis	55	70	73	71	60
Defense Analysis					4
TOTAL MSM	**55**	**70**	**73**	**71**	**64**
MBA Program					
Logistics Management	57	57	58	63	68
Acquisition Management	75	82	97	118	98
Financial Management	71	95	113	128	73
Defense Management	30	12	8	9	24
Information Management	1	2	3	2	0
TOTAL MBA	**234**	**248**	**279**	**320**	**263**
Other Degree Programs					
EMBA	39	102	187	192	199
DL MS Degree Programs	39	53	78	25	84
MEM				5	2
TOTAL Other	**78**	**155**	**265**	**222**	**285**
TOTAL GSBPP	**367**	**473**	**617**	**613**	**612**

Table 6.3D2 provides a breakdown of students in the combined resident MSM and MBA programs by their military service, and points to the source of the growth in the resident program. Overall, the number of students from most branches of the U.S. military services has remained relatively unchanged, with the notable exception of the U.S. Air Force. Air Force students have grown from a nominal amount to now represent, after the Navy, the second largest service in GSBPP. In 2002, the graduate institutions of the Navy and the Air Force, the Naval Postgraduate School and the Air Force Institute of Technology, formed a partnership to better serve the graduate education needs of their officer corps. As a result, NPS and GSBPP have seen a significant increase in Air Force officer enrollments. In GSBPP, the majority of this enrollment increase has been in the Acquisition Management and the Financial Management curricular areas. Starting in 2007, however, The Air Force has reduced its student input, with the resulting effect on total enrollment experienced in GSBPP.

Table 6.3D2
GSBPP RESIDENTS STUDENTS – BY SERVICE
JULY: AY 2003-2007

SERVICE	**2003**	**2004**	**2005**	**2006**	**2007**
US Navy	132	151	161	149	128
US Army	14	18	14	21	25
US Air Force	17	40	76	114	68
US Marine Corp	66	66	62	68	57
US Other	2	3	4	2	1
International	58	40	36	42	48
TOTAL MBA/MSM	**289**	**318**	**352**	**396**	**327**

STANDARD 7.0 -- STUDENT SERVICES

Standard 7.1 Advisement and Appraisal
Strong and continuous program advisement, career guidance, and progress appraisal shall be available for all students from the point of admission through graduation.

7.1A Advising System

Academic counseling is the responsibility of the Academic Associates, Program Officers, and the individual faculty members. The counseling program is designed to encourage students to seek assistance when advice is desired or the first indications of academic difficulties develop.

The Academic Associate (AA) is a Graduate School of Business and Public Policy faculty member who is assigned to a particular specialization curriculum, within the MSM Program. The AA is responsible for maintaining academic standards for the program. The Program Officer and staff support the school's mission and objectives by providing administrative support to accomplish Navy needs and academic requirements.

The Academic Associate reviews the records of all students assigned to the curricula under their purview and, in consultation with each student and based on academic background, develops a program of study within the framework of the established standard curricula. Student academic progress is monitored via the AA/Program Office Team and program changes or inter-curricular transfer made, when deemed necessary.

Both members of this team are responsible for the overall quality of a student's program. It is incumbent upon both members of the team to provide counseling for all students in the curricula under their purview. The Academic Associate will hold primary responsibility for the academic counseling of the student.

The Program Officer performs requisite administrative duties pertaining to the officer students, evaluates their military-related performance and counsels them on pertinent military matters.

Career guidance is not a need of the student at NPS since all students already have well-established careers.

7.1B Financial Assistance

None is needed since all students are on full salary.

7.1C Attrition

Data for AY 2006 was examined to determine the percentage of students who completed their degrees and those who did not. Of the 35 students in the MSM Program eligible to graduate in AY 2006, all but two did graduate. The two non-graduating students were disenrolled from the MSM Program for violation of military rules, rather than for academic reasons. One of the two was female. Minority status data were not available.

In general attrition in the MSM program is low, with efforts made to assist struggling students. When non-graduation does occur, the most common reason is non-completion of the master's thesis requirement. According to NPS policy, students have up to three years to complete their project/thesis after leaving the school. If a student does not complete their project/thesis, no degree is awarded. .

Standard 7.2 Placement Service
The program and/or the institution shall provide an adequate placement service oriented to public affairs and administration.

7.2A Number of Graduates

Table 7.2A provides data regarding the number of graduates per year in all GSBPP degree programs. Data for the MSM Program curricula are at the top. As mentioned earlier, the resident MSM program is six or seven quarters in length or 18-21 months long.

Table 7.2A
NUMBER OF GRADUATES – GSBPP DEGREE PROGRAMS
AY 2003-2007

	2003	2004	2005	2006	2007*
MSM Program					
Manpower Analysis	19	19	35	33	28
Defense Analysis					
TOTAL MSM	**19**	**19**	**35**	**33**	**28**
MBA Program					
Logistics Management	20	27	37	28	33
Acquisition Management	34	45	41	63	52
Financial Management	48	53	50	39	74
Defense Management	8	25	10	9	4
Information Management	1	0	1	2	0
TOTAL MBA	**111**	**150**	**139**	**141**	**163**

Other Degree Programs					
EMBA		29	32	92	41
DL MS Degree Programs	36	34	24	37	26
MEM					4
TOTAL Other	**36**	**63**	**56**	**129**	**71**
TOTAL GSBPP	**166**	**232**	**230**	**303**	**262**
***Partial year data.**					

7.2B Follow-up of Graduates

All Graduate School of Business and Public Policy graduates are employed by the U.S. government or by foreign governments and return to government service upon graduation. U.S. Navy officers make a commitment to remain on active duty after graduation for three years for their first year of graduate study and for one additional year for each subsequent year of graduate work. As a practical matter, most military officer graduates will remain on active duty until retirement (20 years after their date of first entry into the service). Frequent informal contacts are maintained between individual graduates and faculty members.

STANDARD 8.0 -- SUPPORT SERVICES AND FACILITIES

Standard 8.1 Budget
The program shall have the financial resources sufficient to support its stated objectives.

8.1A GSBPP Resources and Budget

The budget for the Graduate School of Business and Public Policy is composed of two main types of funds: "Mission" or "Direct" funds and "Reimbursable" funds. Mission/Direct funds are funds allocated directly from the Naval Postgraduate School from the annual budget it receives from the Navy. Reimbursable funds are received from organizations or agencies outside of NPS, by agreement, and in exchange for specified services (e.g., research or education programs) provided to those external organizations. In general, GSBPP activities will fall in one of four broad categories:

- Mission-Funded Education
- Mission-Funded Research
- Reimbursable Education
- Reimbursable Research

Mission Funded Budget: The mission funded budget is the main budget for day-to-day school operations. This includes instruction, thesis or project advising, faculty and staff development, travel and departmental management and administrative support of the School. As currently structured, the faculty workload plan, which includes consideration for instruction and project/thesis advising, is developed by the Senior Associate Dean, using input from the faculty. This forms the basis for the most significant portion of the GSBPP budget. It is reviewed by the School Dean prior to the start of the new fiscal year of October 1. Once approved by the Dean, it is submitted to the Office of Academic Planning for input into the overall GSBPP budget. The remainder of the mission funded budget is allocated to the School for the fiscal year that is reflective of GSBPP's 'fair share' of the Navy's overall allocation to the entire university, based on number of students served, faculty size and infrastructure support requirements. In essence, the total Naval Postgraduate School's mission allocation is divided among the four academic schools and the supporting structure, based on submitted needs, the constraint of the allocation received from the Navy, and the Deans' and Provost's determined priorities. In addition to faculty and staff salaries, categories included in the mission funded budget are:

- Supplies and materials, including computer peripherals and software, furniture
- Travel and honoraria
- Training and staff development programs
- Instructional laboratory equipment maintenance
- Faculty instructional & organizational development
- Service contracts

Mission funded budget dollars are made available to the School from two main sources: direct funds from the Naval Postgraduate School's overall mission funded account and indirect funds, collected by NPS on all reimbursable activities and allocated to the university's operating units through the NPS Sponsored Programs Office. Direct funds are related to the size of the nucleus faculty and the volume of instructional activities in the resident degree programs. Indirect funds are related to the size and nature of the School's reimbursable research programs or reimbursable education programs.

Mission-Funded Research Budget: NPS provides two categories of mission-funded research funds for use by each school annually. One category of funds supports research projects of new tenure-track faculty research and is known as the Research Initiation Program (RIP). The other category supports research work by tenure track and tenured faculty not on RIP and is known as Workload Relief (WR).

RIP research money is provided for new professors with less than two years of service. These professors must prepare formal research proposals and in turn receive two quarters of salary support annually as well as additional funds to purchase equipment, software, supplies and project-related travel. Proposals for RIP are submitted to the Dean of Research with the GSBPP Dean's endorsement 30 days prior to the quarter starting research.

Workload Relief funding is pro-rated across the campus based on numbers of tenured and tenure-track (non-RIP eligible) faculty in each school. Internal to the Business School, the untenured tenure-track faculty members are given priority and they receive two months of WR funding. Tenured faculty may then request up to two months of WR funding, as needed. All faculty members requesting such funding must submit a brief proposal describing their research and the research products expected from their work. The Faculty Research Committee reviews the research summaries and proposals for the tenured faculty and allocates the available WR funds based on both past research productivity and future promise.

Reimbursable Budget: The Reimbursable Budget is determined by the efforts that the School and faculty make to obtain funding from either Navy or non-Navy sponsors. Reimbursable funds may be for research activities (reimbursable research) or instruction programs (reimbursable education). Proposals for this type of funds may be submitted at any time during the fiscal year. The funds received from these sources may be used from a one-year period up to an indefinite period of time, depending on the nature of the agreement and financial arrangement with the sponsor, but funds with an expiration date within the current fiscal year comprise the vast majority of reimbursable funds.

For **reimbursable research**, the sponsor sets the dollar amount based upon the scope of the work and funding constraints. Reimbursable money may be used to fund any expenses necessary to complete the research project. These expenses may include support for students while conducting their theses/projects in the form of travel, equipment or software. Reimbursable research, while variable each year depending on research projects that may be

arranged, provides a substantial portion of the Business School's total support (see Table 8.1A).

For **reimbursable education**, GSBPP establishes a price necessary to recover the costs of program delivery, and announces the availability of programs and the opportunity for sponsorship and student enrollment. Different arrangements are possible whereby potential sponsors may "purchase" full degree programs, or individual courses, or "seats" within courses within degree programs (tuition). The distance education programs in GSBPP are generally reimbursably funded. These include the Master of Science in Program Management (MSPM), Master of Science in Contract Management (MSCM) and Advanced Acquisition Program (AAP). The distance learning Executive Master of Business administration program (EMBA) is something of a hybrid between a mission-funded program and a reimbursable program. Technically, the EMBA funds are mission/direct funds in that they are received as part of NPS's annual budget and then allocated down to GSBPP. But the annual funds are specifically set aside for the EMBA program, and provided by a sponsor for the intended delivery of a specified level of the program, and thus are operationally more like reimbursable funds.

Overall Budget for GSBPP: The following table summarizes the School's operating budget for the past four years.

Table 8.1A
GSBPP BUDGET
(in $1000)

	FY 04	FY 05	FY 06	FY 07*
Mission Operations				
Faculty Salaries	**4,519**	**5,800**	**5,698**	**6,052**
Support Staff Salaries	**663**	**824**	**946**	**1,117**
Non-Labor	**263**	**264**	**337**	**365**
	5,445	**6,888**	**6,981**	**7,534**
Mission-Funded Research				
Faculty Salaries	**1,148**	**1,244**	**1,370**	**1,245**
Non-Labor	**99**	**148**	**117**	**77**
	1,247	**1,392**	**1,487**	**1,322**
Total Mission Funding	**6,692**	**8,280**	**8,468**	**8,856**
EMBA Education				
Faculty Salaries	1,110	1,257	1,284	1,343
Support Staff Salaries	81	310	259	218
Non-Labor	307	196	174	226
	1,498	1,763	1,717	1,787
Reimbursable Education				
Faculty Salaries	1,042	1,213	639	799
Support Staff Salaries	119	85	60	50
Non-Labor	442	320	207	144
	1,603	1,618	906	993

Reimbursable Research	1,288	1,159	1,435	2,339
Faculty Salaries	104	203	237	317
Support Staff Salaries	1,511	1,279	1,855	1,279
Non-Labor	2,903	2,641	3,527	3,935
GSBPP TOTALS				
Faculty Salaries	**9,107**	**10,673**	**10,426**	**10,981**
Staff Salaries	**967**	**1,422**	**1,502**	**1,652**
Non-Labor	**2,622**	**2,207**	**2,690**	**1,947**
	12,696	**14,302**	**14,618**	**14,580**
# Tenure Track Faculty	36	37	38	38
FTE Faculty	60	69	70	71
*For FY 07, Reimbursable Education and Research amounts are the current Authorized amounts. Mission Operations, EMBA and Direct Research amounts are year-to-date obligations plus projected expenses for the remainder of the fiscal year.				

MSM Program Budget: GSBPP does not plan, budget, or account for funds separately for the "MSM Program". GSBPP does, however, plan, budget and account separately for the "resident" instruction program. The resident instruction program consists of 1) MSM program courses and 2) MBA program courses (and a few service courses provided to other NPS degree programs outside of GSBPP). The delivery of the resident program is highly integrated in that the large majority of courses are attended by both MSM and MBA students and thus exist to support both programs. The budget number most directly applicable to the resident program is the Mission Operations budget, provided in the top panel of Table 8.1A ($7,534K in 2007). This is the funding allocated to GSBPP annually by NPS to provide for delivery of resident instruction -- and the student advising, administrative and support activities associated with that resident instruction. This then represents one measure of the budget available for the MSM Program. **MSM Program Budget 1 = $7,534K.**

If support for the research activities of the faculty is considered to be support for the instruction program, then Mission-Funded Research ($1,322K in 2007) should additionally be considered as part of the budget for the resident instruction programs. There is some sense to this perspective since the resources available for mission-funded research are, in some respects, amounts that remain available after having fully provided for the successful delivery of the resident instruction program. From this perspective, a second measure of the budget available for the MSM Program would include Mission Research. **MSM Program Budget 2 =** $7,534K + $ 1,322K **= $8,856K.**

It is possible to divide the Mission Operation total into a smaller amount associated "only" with the MSM Program, but this can be done only through use of a somewhat arbitrary proration. During 2007, approximately 62% of the courses delivered within the resident instruction program were attended by students who were enrolled in

the MSM Program. Applying this percentage to the Mission Operations budget results in a third measure of the budget available for the MSM Program. **MSM Program Budget 3** = $7,534K x 62% = **$4,671K.**

8.1B Budget Sufficiency

Mission Budget: Overall the funding levels have been adequate to support the School's mission and objectives. As can be seen in Table 8.1A, both mission operations and direct research funding for faculty and staff have grown slightly over time. This follows the growth in full time equivalent faculty since FY04 and also parallels the increased volume of instruction (# of courses) that has occurred due to increased enrollments over the same period. Faculty salaries are always the largest component of the mission budget, and one where control can be exercised at most on the margins. Faculty salaries in GSBPP/NPS are Congressionally capped at their current rate, but the high cost of living in the local economy stresses these salaries, especially in the housing market.

Reimbursable Budget: Our reimbursable education numbers were down in FY06/07 primarily due to the requirement that reimbursable education programs increase their price in order to collect indirect costs. Both reimbursable education sponsors and our own DL operations have transitioned to this new price structure and the School's DL activity is expected to recover in 2008 to earlier levels. Our reimbursable research, however, has increased significantly in FY07 as the faculty continues to pursue opportunities for research in their respective academic areas and as our ties to our customer base strengthen and grow.

Non-Labor Costs: Allocations for travel and supplies have been a challenge, especially in keeping up with our increasing needs to establish and build partnership relations with other academic and sponsoring organizations. Additionally, we are experiencing sharply increased costs of instructional technology that our faculty and students have come to need and expect to enhance the quality of our classroom and distance learning educational experiences. It is our expectation that future revenue streams that support instructional technology (equipment, software, databases and staff support) will have to be developed. Developing such revenue streams is a priority for the Dean and the NPS leadership.

8.1C Salary Information

Table 8.1C presents the average and median 10-month salary for faculty in the Graduate School of Business and Public Policy. While the table presents 10-month salaries, almost all GSBPP faculty members work and are paid for a full 12 months each year. The management of GSBPP operations, and of faculty labor, assumes the objective of 12-month salaries for all faculty members who desire. The reimbursable activities of the School generally supplement the mission-funded activities, providing sufficient work

activities for 12-month compensation for faculty. Appendix 8.1 shows NPS's Faculty Salary Schedule, which was effective 7 January 2007.

Table 8.1C

2007 GSBPP AVERAGE 10-MONTH FACULTY SALARY

2007	# Faculty	Average	Median
Professor (Tenure Track)	11	$118,528	$118,528
Assoc. Professor (Tenure Track)	15	$117,770	$118,528
Assistant Professor (Tenure Track)	12	$107,137	$108,608
Senior Lecturer (Non-tenure Track)	13	$114,817	$115,568
Lecturer (Non-tenure Track)	6	$110,548	$112,096
Adjunct (Non-tenure Track)	26	$99,065	$102,776

Standard 8.2 Library Services
All students and faculty shall have reasonable access to library facilities and services that are recognized as adequate for master's level study in public affairs and administration. This would normally include texts, monographs, periodicals, serials, pamphlets, and research reports. The program faculty should have a major role in selecting library acquisitions for its program.

8.2A Overview of Dudley Knox Library's Resources and Services

The Dudley Knox Library (DKL), 2004 Federal Library of the Year, provides the Naval Postgraduate School (NPS) and the broader defense and security communities with an information rich environment supporting academic and research pursuits. DKL's annual budget of $3.5 million is used to provide a rich combination of collections, staff, and associated services that support and facilitate graduate education and research in all subject areas taught at NPS. DKL anticipates and responds to current and emerging requirements, and seeks innovative and creative ways to provide scholarly information to patrons by investing in leading edge technology and services. Level funding for the past 6 years in conjunction with spiraling inflationary increases for personnel and content

(databases, journals, and monographs), has impacted Library collections and services. In the current global economy, no library can stand alone. DKL actively partners with federal, special, and academic libraries—particularly the Consortium of Naval Libraries (CNL) and the National Research Library Alliance (NRLA)--to leverage limited budget dollars and invest jointly in collaborative acquisitions, joint-licensing agreements, and resource sharing that extend content offerings to NPS patrons beyond what we could afford alone.

DKL's staff of highly qualified librarians and support personnel is committed to providing excellent service to all faculty, staff and students and to developing and maintaining strong collections and services to support all areas of research at NPS. DKL has 9 full-time professional librarians who hold Masters in Library Science degrees and approximately 20 additional staff.

Five reference librarians serve as Subject Specialists providing collection development, research guidance, outreach and instructional support to all NPS Schools and curricula. One librarian serves this role for the Graduate School of Business & Public Policy (GSBPP). In addition, all reference librarians provide service at the reference desk and through DKL's Ask a Librarian Live virtual reference service, which has been in place since September 2004. In 2006, nearly 45% of reference questions were received and answered through DKL's *Ask a Librarian Live* chat reference service and e-mail.

The GSBPP Subject Specialist works closely with faculty and students to evaluate and select print and electronic materials, provide classroom and individual instruction on library resources and research skills and assist with research and teaching information needs. Because Public Administration is interdisciplinary and therefore can include political science and political theory, it is important to recognize that support to this area is covered not only through the Subject Specialist's relationship with the GSBPP but also by the Subject Specialist for National Security Affairs (NSA), who also works closely with GSBPP students and faculty depending on their research needs. In addition, DKL's acquisitions to support NSA are often relevant to GSBPP.

DKL's holdings include more than 600,000 print volumes, including bound journals and all books. DKL's usable space totals approximately 100,000 sq. ft. DKL provides photocopying, scanning and printing facilities, 135 individual study carrels and 19 group study rooms (collaboratories), and provides a telephone paging service. DKL is open for service 7 days a week, 343 days a year and is accessible to students an average of 81 hours a week with building hours being extended for study purposes the week prior to and during finals. DKL is closed on official federal holidays and reduces hours during school breaks.

Whenever possible, DKL is replacing traditional paper journals and indices with subscriptions to electronic journals and databases accessible from the user's desktop. Many of these databases provide information in full-text and/or image format. DKL's online catalog, web pages and database access is available to faculty, staff and students in

DKL, campus labs, classrooms, offices as well as from off campus. DKL continuously updates and adds links to individual journal titles through the online catalog as well as from a web page entitled "Find Journal Online". In late 2006 DKL implemented electronic resource management tools (ERM) including “link resolver” software (called SFX) that makes it easy for library patrons to determine whether DKL provides electronic access to journals and with a few keystrokes provides access at the full-text article level. Detailed information about DKL’s print and electronic journal subscriptions and electronic databases is provided below in the section on Library Support.

DKL has been a Federal Depository since 1964. Through the depository program, DKL selects and receives free materials from various government agencies, including Congress, the Congressional Budget Office, the Department of Commerce, the Department of Defense, the Government Accountability Office, the International Trade Administration and others. The Library staff includes a professional Documents Librarian who regularly reviews the materials available to DKL and assists students and faculty with specialized research questions that require an in-depth understanding of government documents.

To support classroom teaching, research and other NPS mission-related tasks, DKL provides Interlibrary Loan and Document Delivery (ILL) service to the school’s faculty, staff and students, including distance learning students. DKL loans more resources to libraries worldwide than must be borrowed for needs of our local patrons. Faculty, students and staff are regularly encouraged to make use of this service, which is provided at no cost to the end-user. GSBPP students and faculty currently account for approximately 15% of ILL requests. Table 8.2A below provides detailed information on GSBPP use of ILL.

In June 2005, DKL implemented ILLiad Interlibrary Loan management software to automate routine functions, increase staff productivity and reduce paperwork. This suite of software tools enables patron-initiated borrowing, is fully integrated with the Library’s online catalog and ERM systems and provides tools that allow patrons to: check against local resource holdings; place requests for items not owned by DKL; monitor the status of each request from copyright compliance to delivery; and retrieve e-documents as they are delivered. This service is available to authorized patrons 24/7, extending the Library’s ability to manage requests and deliver resources to patrons, including distance learners, regardless of their time zone/location.

Table 8.2A1
Interlibrary Loan Borrowing for GSBPP Subject Areas

NASPAA Statistics for GSBPP
Interlibrary Loan Borrowing Requests
Compiled June 2007

Curric (Students)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TOTALS	PERCENT of TOTAL
805 - Executive Master of Business Administration (DL)							0	0%
808 - Executive Management							0	0%
809 - Defense Business Management							0	0%
814 - Transportation Management	1	3	1	1	0	1	7	0%
815 - Acquisition & Contract Management	56	27	19	24	28	37	191	6%
816 - Systems Acquisition Management (STATS combined with 815)							0	0%
817 - Defense Systems Analysis	38	7	19	21	0	7	92	3%
818 - Defense Systems Management (International) (STATS combined with 817)							0	0%
819 - Supply Chain Management	3	0	0	2	3	29	37	1%
820 - Resource Planning & Management for International Defense	8	14	6	0	5	4	37	1%
827 - Material Logistics Support	20	4	3	3	3	4	37	1%
835 - Contract Management (DL)	18	6	8	0	6	9	47	1%
836 - Program Management (DL) (STATS combined with 835)							0	0%
837 - Financial Management	75	14	10	28	23	30	180	5%
847 - Manpower Systems Analysis	27	23	87	48	40	59	284	8%
870 - Information Systems Management							0	0%
Certificate (Students)								
211 - Advanced Acquisition Program Certificate (DL)	2	1	4	0	1	0	8	0%
212 - Acquisition Management Program Certificate (DL) (STATS cmbined with 211)							0	0%
Sub Totals	**248**	**99**	**157**	**127**	**109**	**180**	**920**	**27%**
Departments (Faculty/Staff)	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**FY 2006**	**TOTALS**	**PERCENT of TOTAL**
GSBPP	168	213	484	592	580	468	2505	73%
Sub Totals	**168**	**213**	**484**	**592**	**580**	**468**	**2505**	**73%**
GRAND TOTALS	**416**	**312**	**641**	**719**	**689**	**648**	**3425**	
Total ILL for FY	**2678**	**2904**	**3186**	**4495**	**4578**	**4449**	**22290**	
GSBPP % of Total ILL	**16%**	**11%**	**20%**	**16%**	**15%**	**15%**	**15%**	

Materials not owned by DKL are obtained as quickly as possible through a variety of resources including the Online Computer Library Center (OCLC), regional library consortia -- the Monterey Bay Area Cooperative Library System (MOBAC) and the Military Education Research Library Network (MERLN) -- as well as electronic and Web resources and document delivery vendors. The Subject Specialist is able to review the titles of items that have been requested so they can be considered for purchase for the Library collection. Most articles are posted to the Web or delivered by PDF attachment to the user's email. Turn-around times are fast – 45% of article requests are filled within 3 days, with 6% being filled within 1.6 hours. DKL responds quickly to "rush" requests

where faculty or students have an immediate need for books or papers and cannot wait for the normal purchase or Interlibrary Loan processes.

DKL has 52 computers and 14 circulating laptops available for public use. All provide access to the Internet and to a variety of programs including the Microsoft Office and Adobe suites. The Library Systems Department worked with our international students in 2006 to add additional languages to standard Library computer configurations to provide additional support for non-native English speakers. Many of DKL's study rooms and carrels provide wired network access. DKL provides nearly 100% wireless coverage as well, so that an increasing number of students and faculty connect via laptop while in the building.

DKL provides 19 group study rooms (collaboratories) as well as a large group study area. These spaces are heavily utilized by GSBPP students as their program of study involves many collaborative projects. Two of the public rooms and one in our Restricted Resources and Services Library are equipped with advanced technology including plasma screens, speakers, and dual laptop switchers to enhance patron experience and promote teamwork for assignments, study, and group projects.

DKL provides a secure, service-oriented environment for cataloging, preservation and access to classified and limited distribution resources through its Restricted Resources and Services (RRS) unit. RRS is accessible to approved members of the NPS community and provides retrieval and research support. RRS catalogs all received materials and is the repository of NPS generated restricted reports and theses. Many limited distribution reports held by RRS are relevant to the faculty and students in the GSBPP, including those published by agencies such as CNA (Center for Naval Analysis), Rand Corporation and LMI (Logistics Management Institute). DKL also provides access to the classified internet (SIPRNET) for those NPS personnel with the appropriate security clearance.

The online catalog (BOSUN) is available to anyone via the Internet. In addition to listing the materials DKL owns or provides electronic access to, it also includes a digital archive of NPS-produced documents as well as relevant full-text documents from other sources. The archive contains NPS theses and MBA Professional Reports, most of which are available as full-text PDF files if they were published after 1995. Other archived collections relevant to GSBPP include Congressional Research Service and Defense Science Board reports. As they become available, DKL adds and regularly updates web links to both journals and books that are concurrently, or in some cases, only available in electronic form.

BOSUN allows those with Library accounts to place holds and renew materials electronically, as well as link to ILL forms or make book purchasing suggestions to the appropriate Subject Specialist.

DKL's web pages can be used to access most Library resources and services, including: placing Interlibrary Loan/Document Delivery requests; accessing electronic

databases and electronic journals; contacting the reference desk with questions or contacting the appropriate Subject Specialist; and making book purchase suggestions. DKL's web site includes many pages developed by the subject specialist librarians to support specific areas of interest at NPS. Some of those that are relevant to GSBPP include: Acquisition and Contracting, Congressional Information Resources, Defense Budget Information, Military Manpower, Military Information, Military Publications, Finding Company and Industry Information, Marketing, and Military Transportation and Logistics.

As part of an ongoing effort to ensure that Library services, facilities and resources meet the needs and expectations of NPS students, faculty, and staff, DKL conducted a standardized survey assessing service quality (LibQual) in 2003 and 2005. Additionally, in early 2006 DKL developed and conducted a survey to assess whether reference service hours meet the needs of the NPS community. Input from these surveys has informed DKL's planning. In spring 2007, the GSBPP Subject Specialist provided reference and research consultations from an office in the department's building for four hours each week. DKL is currently reviewing the results of a recently conducted survey about this pilot outreach project.

8.2B Library Support: Relevant Library Collections and Expenditures

The Library's collection is one of the primary assets supporting both educational and research efforts across the campus. The main collection is comprised of monographs (books and reports), journals, theses, and maps/nautical charts, in print and digital formats. Resources are catalogued and access to metadata and full-text is provided via the BOSUN online catalog. DKL shares its bibliographic records with the international OCLC database so DKL materials are available for searching by anyone in the world. Digital copies of NPS theses, for example, are catalogued and accessible throughout the world within weeks of graduation. DKL has been a selective federal depository since 1963. DKL also houses a secure collection of classified and limited distribution resources in our Restricted Resources and Services department. Content, including journals, electronic databases and monograph expenditures averaging $1.6 million/year over the past four years comprise approximately 46% of DKL's annual budget. Journal expenditures average 36% of the total content budget; databases average 34%; and monograph expenditures average 30%.

Books/Monographs

Librarians are Subject Specialists who work with faculty to continuously review and evaluate requirements and select/acquire monographs to meet evolving curricular and research needs. Overall, DKL allocates fewer budget dollars to monographs than to databases and journals.

DKL's book budget is allocated by fund code to the Subject Specialists, who expend these funds based on regular review of publisher catalogs, use of the reviews

published in CHOICE magazine, book reviews in curriculum related journals and other appropriate professional sources. Specialists also solicit and consider input and suggestions from faculty, staff and students. GSBPP faculty provide significant input which ensures that DKL's collection continues to meet the needs of GSBPP students and faculty.

DKL holds more than 231,090 unique print monographic titles. This total does not include items in our Government Documents, theses or journals collections. Approximately 41% of the monograph budget supports GSBPP and other NASPAA-related areas (such as political science, national security affairs, and military).

Table 8.2B1 presents the number of GSBPP- and NASPAA-relevant books added to the DKL collection by Library of Congress (LC) classification areas -- of HA-HJ (Business and Economics) and J-JZ (political science). The figures listed in the ALL SUBJECTS column include all items within the LC classification areas plus all the materials added into DKL's Federal Document collection.

Table 8.2B1
NUMBER OF BOOKS ADDED 2000-2006

Year	HA-HJ	J-JZ	All Subjects
2000	953	236	14202
2001	1224	317	14470
2002	1367	271	24793
2003	1325	288	24336
2004	1394	474	26150
2005	1448	428	31527
2006	1186	1572	24492

Table 8.2B2 presents the figures for the funds allocated for the purchase of single title or monographic materials only and does not include additional publications DKL purchases that are considered to be publisher renewals or standing orders due to a regular publication cycle. There is often overlap in materials across related disciplines and the subject specialists can use their discretion about which fund code is appropriate for a particular purchase. To more accurately reflect DKL's ability to adequately cover the larger elements of public policy and political science, the expenditures of the three relevant fund codes are all listed in Table 8.2B2. The areas represented are: BIZ/BPP (Graduate School of Business & Public Policy), NSA (National Security Affairs) and MIL (Military Science). The MIL code is not curriculum specific but rather more of a "catch-all" area to ensure DKL is able to purchase items that might not fit well into any one curriculum or which, conversely, could be charged to several different curricula.

Table 8.2B2
FUNDS EXPENDED FOR PURCHASE OF MONOGRAPHIC MATERIALS
(Does not include standing orders or publishers' renewals*)

Fiscal Year	A BPP/BIZ Fund	B NSA fund	C MIL Fund	D BPP+BIZ+ NSA+MIL	All Funds	D as % of All Funds
2002	$9,129,25	$10,160.15	$5,841.46	$25,130.86	$69,249.88	36%
2003	$8,165.91	$12,297.32	$4,058.45	$24,521.68	$59,651.28	41%
2004	$9,571.51	$10,965.33	$3,731.72	$24,268.56	$78,156.05	31%
2005	$8,961.45	$9,641.12	$3,612.54	$22,215.11	$63,588.82	35%
2006	$5,392.38	$4,724.52	$1,790.93	$11,907.83	$29,027.55	41%

*does not include funds spent on Brookings Publications which the Library collects extensively and which are particularly relevant to NASPAA-related research.

Table 8.2 B3 below shows DKL circulation statistics for selected GSBPP areas.

Table 8.2B3
CIRCULATION

CIRCULATION STATISTICS FOR NASPAA
Compiled June 2007

		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TOTALS
HA	Statistics	26	39	19	25	24	38	**171**
HB	Economic Theory. Demography	82	91	77	103	110	194	**657**
HC	Economic History & Conditions	279	362	219	210	172	271	**1513**
HD	Industries. Land Use. Labor	612	735	507	838	734	958	**4384**
HE	Transprotation & Communications	27	29	18	24	33	53	**184**
HF	Commerce	282	350	202	307	215	266	**1622**
HG	Finance	54	73	50	45	48	63	**333**
HJ	Public Finance	33	33	11	34	20	59	**190**
J	General Legislative & Executive Papers	2	0	47	5	1	3	**58**
JA	Political Science (General)	14	20	27	22	36	49	**168**
JC	Political Theory	130	158	135	218	202	235	**1078**
JF	Political Institutions & Public Administration	58	71	103	123	96	152	**603**
JJ	Political Institutions & Public Administration (North America)	0	0	0	0	0	0	**0**
JK	Political Institutions & Public Administration (United States)	102	146	128	161	136	192	**865**
JL	Political Institutions & Public Administratuion (Canada, Latin America, Etc.)	44	72	32	62	32	31	**273**
JN	Political Institutions & Public Administration (Europe)	51	65	60	78	53	100	**407**
JQ	Political Institutions & Public Administration (Asia, Africa, Australia, Pacific Area, etc.)	75	97	54	140	106	160	**632**
JS	Loal Government. Municipal Government	1	4	6	4	6	8	**29**
JV	Colonies & Colonization. Emigration & Immigration. International Migration	8	14	9	9	15	10	**65**
JX	International Law, see JZ and KZ	278	319	186	304	178	298	**1563**
JZ	International Relations	88	127	113	157	175	222	**882**
	TOTALS	**2246**	**2805**	**2003**	**2869**	**2392**	**3362**	**15677**
	TOTAL CIRCULATION FOR FY	20130	25172	25924	31541	32611	28749	164127
	% of CIRC FOR LC CLASSES PRESENTED	11%	11%	8%	9%	7%	12%	10%

Periodicals

DKL has historically purchased print journals that support NPS curricular and research needs. The advent of online journals, coupled with steep price increases per title and changing publisher access models, have impacted libraries' ability to procure content, particularly in the fields of science and technology. The Association of Research Libraries reports journal unit price increases of 188% in the period 1986-2004 and a 2007 report demonstrates a 33% increase in the average price for business and economics journals and a 53% increase for political science journals in the last 4 years alone (Van Orsdel and Born, *Library Journal*, 4/15/2007). DKL is aggressively moving away from print in favor of licensing online access to current volumes and backfiles. Such access, which we procure locally as well as through library consortial licenses, extends access to critical journals 24/7. Table 8.2B4 gives a snapshot of DKL-licensed e-journals supporting GSBPP subject areas.

Table 8.2B4
NASPAA-Relevant E-Journals Accessible Through DKL (2007)

Subject	# Titles
Accounting & Auditing	113
Business Management	761
E-Commerce	59
Economics	877
Finance	434
Marketing & Sales	285
Material & Supply Chain Management	65
Operations Research	61
Organizational Change & Development	97
Organizational Communication	47
Organizational Psychology	55
Personnel Management & Training	131
Political Science	175
Public Policy & Administration	527
Quality Management	61
Strategic Management & Business Policy	119

DKL provides electronic access either by direct subscription or through one or more databases to the full-text of articles from many top scholarly journals. To provide a sense of this, a selective list of some of these titles in business, economics, and management is provided in Table 8.2B5.

Table 8.2B5 **Selective List of Top Business, Economics and Management Journals** Available Full-Text Online
Administrative Science Quarterly
Academy of Management Review
Academy of Management Journal
Administrative Science Quarterly
American Economic Review
Econometrica
Economic Policy
Harvard Business Review
Journal of Communication
Journal of Economic Literature
Journal of Economic Perspectives
Journal of Marketing
Journal of Political Economy
Journal of the Academy of Marketing Science
Leadership Quarterly
Management Science
Marketing Science
MIS Quarterly
Organization Science
Quarterly Journal of Economics
Sloan Management Review
Strategic Management Journal

DKL expended nearly $670,000 to fund periodicals for 2007 (excludes database subscriptions which are discussed below). Of this total, approximately $94,000 (14%) was for periodicals directly related to GSBPP. Many additional titles of a military, political science, or general nature also support GSBPP teaching and research needs.

Databases

Information discovery is facilitated by general and subject-specific databases, such as *ProQuest's ABI INFORM, EBSCO'S Business Source Complete, and the Web of Knowledge.* DKL provides access to a wide array of licensed and open access databases that support business and public policy and administration topics. Most of the databases contain or link out to full-text content via enhanced ERM services supported and maintained by DKL staff. DKL has expended approximately $605,000 on electronic databases for FY 2007. Of this, approximately $124,000 was spent on databases that directly support GSBPP (20%). These databases provide full-text access to articles from

more than 9,000 journals. A partial listing of databases most relevant to GSBPP students, faculty and staff is listed in Table 8.2B6.

In the past, GSBPP has collaborated with DKL to fund subscriptions to databases and other online resources such as *EBSCO's Business Source Complete*, *Inside Defense* and *CQ Budget Tracker*. These resources (and GSBPP funding of them in tight budget circumstances) have been critical to meeting the needs of NPS business, public policy and administration researchers.

Table 8.2B6 **SELECTIVE LIST OF DATABASES RELEVANT TO GSBPP ***
Sources listed below are available to all NPS students, faculty and staff on DKL's **Databases** page http://www.nps.edu/Library/Research/Article%20Databases/Databases.html
Cabell's Directory of Business Publishing Opportunities
Conference Board Business Knowledge Research
Congressional Staff Directory and Federal Staff Directory (from Congressional Quarterly)
CQ Budget Tracker, CQ Researcher, CQ Weekly
CSA (includes Applied Social Sciences Index & Abstracts, Computer & Information Systems Abstracts, EconLit, Management & Organization Studies: A Sage Full-Text Collection, PAIS International, Political Science: A SAGE Full-Text Collection, PsycINFO, World Political Science Abstracts, and more)
EBSCO Business Source Complete, SocINDEX with Full-text, Internet & Personal Computing Abstracts
Emerald Fulltext
Gallup Brain
INFORMS PubsOnline
Ingenta
Inside Defense
Jane's Online
JSTOR
LexisNexis Academic, LexisNexis lexis.com, LexisNexis nexis.com, Lexis Nexis Congressional, LexisNexis Statistical
Mergent Online
National Bureau of Economic Research (NBER)
NewsBank (includes Global NewsBank, Access UN, Armed Services and Government News, America's News Magazines and Military Periodicals).
Oxford Analytica
Policy Central (from National Journal)
Project MUSE
ProQuest (includes ABI Inform Global, Hoover's Company Records, OxResearch, ProQuest Computing, ProQuest Newspapers, ProQuest Research Library, ProQuest Military Module, and others).
Social Science Citation Index (through Web of Knowledge) – 1965-present
Wiley Interscience
*descriptions of these and other DKL databases are available at: http://www.nps.edu/Library/Research/Article%20Databases/ArticleDatabases.html#A

8.2C Program Role: Library Instruction and Outreach

Five Subject Specialist librarians share responsibility for providing reference and research assistance services, which are actively promoted to NPS students, faculty and staff in tours, classes, Blackboard, the NPS intranet, DKL web site and other means. Students and faculty are also encouraged to make appointments with their Subject Specialist for in-depth assistance.

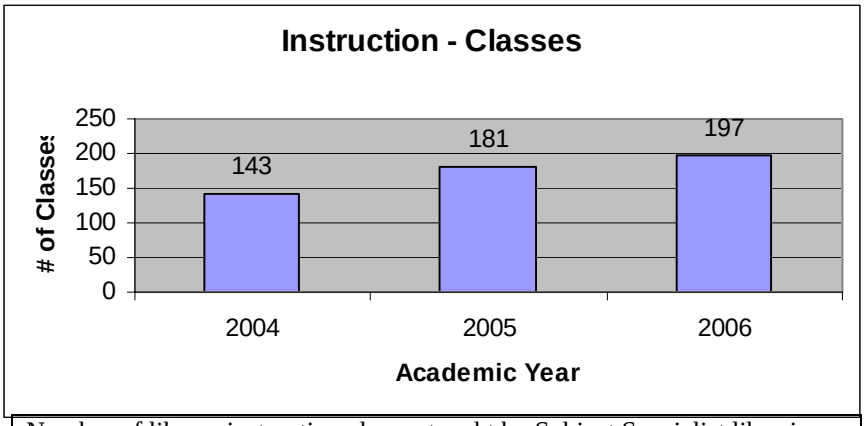
DKL provides instruction to resident GSBPP students in a variety of ways. All incoming resident GSBPP students participate in a mandatory tour of DKL's facilities and services. This is soon followed by a two hour "hands on" Library session which is regularly included in one of the required first quarter classes (Introduction to Information Technology). Many GSBPP students also later take an elective course (Managerial Inquiry) which includes an additional two hour segment on research skills. In addition, GSBPP faculty members occasionally include a specialized presentation from the subject specialist librarian in their courses.

To supplement these GSBPP-specific courses, many students take advantage of the numerous 50-90 minute drop-in classes offered by DKL on various research tools and techniques. These classes include both database-specific instruction (*BOSUN*, *ProQuest*, *LexisNexis*, *CSA*, Defense Technical Information Center *STINET*) and skills-specific classes (Using RefWorks to Manage Citations, Searching the Web, Searching the Deep Web, Finding Military Information, and Staying Current With RSS News Feeds).

GSBPP distance students also routinely receive Library instruction. Depending on the program, this may be in the form of face-to-face instruction while on campus, or via Video Teleconferencing or other technologies if they are at a remote location. Interested GSBPP faculty members receive instruction and support from DKL to ensure that their Blackboard course sites include information about appropriate Library resources and services.

Table 8.2C below provides information on the number of instruction sessions DKL has provided to NPS resident and distance students over the past few years.

Table 8.2C
Library Instruction (2004-2006)



Number of library instruction classes taught by Subject Specialist librarians. In 2006 more than 3,200 students and faculty (onsite and distributed attendees) participated in these classes.

DKL posts instructional materials on DKL's web site in a variety of formats (PDF handouts, *PowerPoint* presentations, *Flash* tutorials, web pages, links to vendor-created tutorials) so that NPS students will be able to better learn how to use Library resources at their point of need.

The GSBPP Subject Specialist interacts with the faculty in a variety of ways including regularly participating in faculty meetings, selectively e-mailing faculty members about new documents, services and resources of interest, and consulting with faculty on their research topics. The Subject Specialist works closely with interested faculty to ensure that Library resources and services are integrated into their Blackboard course sites.

The Subject Specialist encourages faculty members to provide book and journal purchase suggestions and if desired, they are notified as soon as recommended titles are available. The Subject Specialist also works closely with the faculty to identify and evaluate possible additions to DKL's online databases. DKL also regularly considers faculty input as part of the periodic review of print and online journal subscriptions.

The Subject Specialist provides guidance and support to faculty members involved in the Promotion, Tenure and Review process, using appropriate tools such as the *Social Science Citation Index* and other online sources providing the capability to do cited reference searches and journal "impact" analysis. DKL recently added significant back files and *Social Science Citation Index* coverage now goes back to 1965.

Standard 8.3 Support Personnel
Adequate secretarial and clerical personnel should be available to enable the program to meet its educational objectives.

8.3 Support Personnel

The Graduate School of Business and Public Policy currently employs 19 full-time staff personnel and 4 part time research assistants. Job functions are as follows:

Administrative Officer (1)
Sponsored Programs Financial Specialist (1)
Admin Support Service Specialist (1)
Information Technology Specialists (1)
Dean's Secretary (1)
Office Automation Assistants/Clerk (1)
Educational Technician (1)
Administrative Support Assistant (2)
Purchasing Agent (1)
Contractors Admin (6)
Contractors Financial (2)
Contractor Information Technology (1)
Research Assistants* (4)

*These research assistants support various faculty members.

In addition, the department maintains research and department support positions for students. These students work full-time during the summer and school breaks and part-time during the school year.

Standard 8.4 Instructional Equipment
Program faculty and students should have access to appropriate equipment for coursework and research including computer facilities, visual aid devices, audio and video tapes and films.

8.4A Computer Support

GSBPP Computer Lab 1 (I-224)

Current Configuration: This lab holds 18 student computers, one instructor station and two print servers, for a total of 21 systems. The standard computer configuration is a Pentium IV 2.8Ghz with 1GB RAM and 19" LCD monitor. The

instructor's station is also tied to a ceiling mounted projector.

Functional Requirements: The lab is heavily used by many MBA courses that employ statistical programs, spreadsheet programs, simulation programs and other specialized decision support programs. The lab is also used to teach various information technology courses such as Web design and networking.

GSBPP Computer Lab 2 (I-250)

Current Configuration: This lab holds 24 student computers, one instructor station and one print server, for a total of 26 systems. The standard computer configuration is a Pentium IV 2.8Ghz with 1GB RAM and 19" LCD monitor. The instructor's station is also tied to a ceiling mounted projector.

Functional Requirements: The lab is heavily used by many MBA courses that employ statistical programs, spreadsheet programs, simulation programs and other specialized decision support programs.

Applied Network Technology Lab (I-380)

Current Configuration: This lab holds 9 student computers, one multi-media workstation and one Windows Server. The standard student computer configuration is a Pentium IV 2.8Ghz with 1GB RAM and 19" LCD monitor.

Functional Requirements: This lab is used for hands-on computer hardware orientation and network design/installation. Students routinely install and remove various network-related hardware and software to experiment with multiple system configuration options. When not being used for instruction, this lab is also used to support student thesis and faculty research projects.

Smart Classroom (I-260)

Current Configuration: This classroom includes a dual projection system capable of displaying the same or different images on each screen. In addition to the standard instructor podium suite of equipment, each student seat includes a permanently mounted laptop computer tied to the school's network backbone. The classroom holds 45 students and serves as a substitute computer lab for those MBA courses too large for the traditional computer labs. The classroom is also equipped with VTC capability to facilitate guest lecturers from remote sites.

Functional Requirements: This classroom is used for multimedia-based instruction, including audio material, video material, computer-based analysis, Internet-based instruction, and VTC capability.

Smart Classroom (I-271)

Current Configuration: This classroom includes a dual projection system capable of displaying the same or different images on each screen. In addition to the standard instructor podium suite of equipment, each student seat includes a thin-client computer tied to the school's network backbone. The classroom holds 36 students and serves as a substitute computer lab for those MBA courses too large for the traditional computer labs.

Functional Requirements: This classroom is used for multimedia-based instruction, including audio material, video material, computer-based analysis, and Internet-based instruction.

8.4B Audio-Visual Support

GSBPP has set a priority on upgrading classrooms with instructional technology. The standard suite of equipment installed in each GSBPP classroom includes the following:

- Ceiling mounted multi-media projector
- Instructor podium with projector controls
- Internet ready instructor computer
- Document camera
- Combination DVD/VCR player

NPS has state of the art distance learning facilities to accommodate courses that are taught by VTC. These facilities include three studios that are equipped with PictureTel 4000 Video conferencing Systems using Integrated Services Digital Network, Basic Rate Interface (ISDN BRI) lines. This setup allows two-way, interactive audio and video between the distant sites and NPS classroom. The NPS-owned video bridge makes multi-point classes possible.

At the NPS end, three 26-student classrooms are equipped with VCRs, electronic whiteboards, document cameras, facsimile machines, and PCs for computer generated presentation. Student sites have a standards-based (H.320-compatible system) connection to a dial-up network (FTS2000).

Standard 8.5 Faculty Offices
The offices for faculty should provide adequate space and privacy for student counseling, course preparation, and other faculty responsibilities.

8.5 Faculty Offices

Each permanent faculty member in the Graduate School of Business and Public Policy has an individual office with reasonable space for a desk, computer, table, books and student or colleague meeting area.

Depending on availability, part-time faculty are housed in offices comparable in size to those occupied by permanent faculty or in a multi-office space that provides a desk, computer, table, and some book or storage space. For individuals in the latter office space, there are two conference rooms available for reservation should the faculty member desire complete privacy in meeting with students or colleagues.

Standard 8.6 Classrooms
Appropriate classrooms should be available for the courses being offered. This would normally include rooms suitable for seminars, case discussions, and simulation exercises, and lectures.

8.6 Classrooms

Overall, classrooms are the size and the type needed for graduate classes in management. The classrooms are various sizes, holding from 20-40 students, and are assigned by the NPS scheduler based upon class size and other requirements. While maintenance and upgrades to these rooms are not directly funded from GSBPP allocated resources, we have undertaken a classroom lifecycle management effort to reflect more clearly the needs within these rooms. This plan, which is a work in progress, will allow our business school leadership to provide ready documentation and cost estimates as opportunities arise for additional funding.

Standard 8.7 Meeting Area
An appropriate area should be available for students and faculty to meet informally and discuss class projects, internship experiences, and other program matters.

8.7 Meeting Area

Informal meetings between students and faculty to discuss course projects or other program matters usually occur in the faculty member's office or after class in the classroom. GSBPP has two conference rooms available for faculty and faculty/student meetings. Other conference rooms around campus are available upon request. Students have easy access to private study rooms in the library located next to Ingersoll Hall.

STANDARD 9.0 -- OFF-CAMPUS AND DISTANCE EDUCATION

Standard 9.1 Definition and Scope
Off-campus and distance education programs are offerings and arrangements in which (a) students are located in facilities or at sites other than the main [parent] campus of the program and/or (b) the students do not engage regularly in face-to-face interaction with an instructor who is in physical proximity. Off-campus and distance education programs can satisfy legitimate educational needs. When off-campus and distance education versions of the program serve different missions, student populations, or utilize education technology or learning methods that differ from the parent program, the burden is on the program to provide adequate information that demonstrates:

-the extent to which educational offerings are consistent with and contribute to the mission;

-the extent to which assessment and guidance processes ensure the comparability of the education offered;

-the effects of these differences on students, faculty, administrators, systems, processes, and the allocation of program resources and, therefore;

-the effects of these differences on the education received by all students in the program seeking accreditation regardless of where they are located.

9.1 Definition and Scope

The Graduate School of Business and Public Policy (GSBPP) has three active off-campus or distance learning (DL) degree programs:

- The Executive Master of Business Administration (EMBA)
- The Master of Science in Program Management (MSPM)
- The Master of Science in Contract Management (MSCM).

Until June 2006, GSBPP also offered a fourth DL program, which has since been contracted to another university.

- The Master of Science in Leadership and Human Resource Development (LEAD)

The NPS Academic Council has approved all of these programs. All of these programs are accredited by WASC and by AACSB.

Each of these programs is a distinct degree program by itself, and none is an off-campus or distance version of either the resident MBA Program or the resident MSM Program. **GSBPP does not seek NASPAA accreditation for any of the School's off-campus/distance programs**. As such, these programs are not presented here. For background, a full description of these programs, following the Standard 9 format, is provided in Appendix 9 of the Volume III Appendices document that accompanies this Self-Study report.

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Graduate School of Business
& Public Policy

NAVAL POSTGRADUATE SCHOOL

August 2007

Master of Business Administration
Program
&
Master of Science in Management
Program

VOLUME II

Faculty Data Sheets & Course Abstracts

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Faculty Data Sheets

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Volume II Part II
Course Abstracts

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Faculty Data Sheets

Aruna Apte
AD-03, Assistant Professor
June 2005

Academic Degrees:

1992 - 97 **Southern Methodist University**, Dallas, TX.

Ph.D. in Operations Research with minors in operations management and mathematics. GPA: 3.95

Dissertation: Disjunctive Programming Methods for Interval Flow Networks.

Research Fellowship with Naval Research Grants.

1978 - 82 **Temple University**, Philadelphia, PA,

Ph. D. student in Mathematics. Teaching and Research Fellowships.

Master of Arts in Mathematics (1980).

Primary Teaching Areas:

Operations management, operations research, and mathematics courses at the undergraduate and graduate levels.

Graduate Teaching Experience

Naval Postgraduate School, Monterey, Ca

Sum 2005 - Present Assistant Professor, **Graduate School of Business and Public Policy.**
Naval Postgraduate School, Monterey, Ca

Fall 2004 Visiting Lecturer, **Graduate School of Business and Public Policy.**

1999 - 05 **Southern Methodist University**, Dallas, TX.

Lecturer, **Cox School of Business**. Teaching core operations management course in the executive education, graduate, and undergraduate programs using spreadsheets and interactive games as vehicles of learning.

1994 - 97 Instructor, **School of Engineering and Applied Science**. Taught operations research courses in the graduate and undergraduate programs.

Publications, Papers, Presentations:

Refereed Journal Articles

- Apte, A., U. Apte, and N. Venugopal, "Focusing on Customer Service in Field Service Delivery: A Normative Approach," Production and Operations Management, *Forthcoming* 2007.
- Apte, A., Apte, U., Beatty, R., Semple, J., and Sarkar, I, "The Impact of Check Sequencing on NSF Fees," Interfaces, Volume 34 (Number 2). March-April 2004, 97 – 105.
- Apte, A., Jayasuriya, A., Kennington, J., Krass, I., Mohamed, R., Sorensen, S., and Whitler, J., "Class Scheduling Algorithm for Navy Training Schools", Naval Research Logistics Volume 45, 1998, 535 - 551.

- **"**Disjunctive Programming Methods for Interval-Flow Networks," Ph.D. Dissertation, Southern Methodist University, Dallas, TX, 1997. **Unfunded** Research Project

Refereed Proceedings

- Apte, A., "An Interval Pivoting Heuristics for Finding Quality Solutions to Variable-Bound Interval-Flow Transportation Problem," Submitted to the Proceedings of Regional and Global Logistics and Supply Chain Management, 2nd International Conference on Operations and Supply Chain Management. *Accepted and Forthcoming.*

Technical Reports

- Apte, A. and E. Dutkowski, "Microwave Power Tube Reduction in Total Ownership Cost (R-TOC) Initiative", Acquisition Research Sponsored Report Series, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA. October 2006.
- Apte, A., "Spiral Development: A Perspective", Acquisition Research Sponsored Report Series, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA. June 2005.
- Apte, A., "Optimizing Phalanx Weapon System Life-Cycle Support," Acquisition Research Sponsored Report Series, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA. January 2005.

Submitted Papers

- Apte, A., R. S. Barr and R. Jones, "An Interval-Pivoting Heuristic Algorithm for Uniform-Bound Interval-Flow Transportation Problem," Submitted to European Journal of Operational Research, First Review.

Submitted Patents

- "SONET Ring Designer Tool", (with N. Venugopal)

Working Papers Based on Research Projects

- "Optimal Force Sizing and Prepositioning for Natural Disasters," (with Javier Salrmeron and Ee Shen Tean), Working Paper, Naval Postgraduate School, Monterey, CA. To be submitted to Production and Operations Management.
- "Supply Chain Network for Perishable and Essential Commodities: Design and Vulnerability," Working Paper, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA. To be submitted to Manufacturing and Service Operations Management.
- "A Review of Applications of the Traveling Salesman Subtour Problem," (with Susan Heath), Working Paper, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA. To be submitted to Operations Research.

Presentations

- May 2007, Paper presented at the 2nd International Conference in Logistics and Supply Chain Management
- May 2007, 3 Papers presented at the Production and Operations Management Annual Conference
- June 2006, Paper presented at the 4th US-European Workshop on Logistics and Supply Chain Management

- April 2006, Paper presented at the Production and Operations Management Annual Conference
- May 2005. Paper presented at the NPS's 2nd Annual Acquisition Research Symposium

Significant Practitioner Experience:

Consulting Engagements

- 2000 - 2002 **MCI,** Richardson, TX

  Primarily responsible for researching and developing high-level algorithm designs and mathematical models for optimally allocating MCI resources to the telecommunications network. Provide expertise for continually improving other software tools that have already been released.

Academic and Professional Associations:

- Member of the Institute Operations Research and Management Science (INFORMS), Production and Operations Management Society (POMS), and Decision Sciences Institute (DSI).

Uday Apte
Professor of Operations Management
Initial date of appointment at NPS: June 28, 2004

Academic Degrees:

- Ph.D. in Decision Sciences (1982) with specialization in Operations Management.
  Wharton School, University of Pennsylvania, Philadelphia, PA.
  Ph.D. Dissertation Topic – "Decision Models for Regional Industrial Planning".
- Master of Business Administration (1975) (General Management)
  Asian Institute of Management, Makati, Philippines.
- Bachelor of Technology (1973) (Chemical Engineering)
  Indian Institute of Technology, Bombay, India.

Primary Teaching Areas:

- Operations and Logistics Management

Graduate Teaching Experience:

- Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA(2004 -).
  Professor of Operations Management, Logistics and Operations Management.
- Cox School of Business, Southern Methodist University, Dallas, TX (1990 – 2005).
  Department Chairperson (1998 – 99) and Associate Professor, Information Technology and Operations Management Department.
- Helsinki School of Economics and Business, Helsinki, Finland.
  Visiting Professor (Fall 1998), Logistics and Operations Management.
- The Wharton School, University of Pennsylvania, Philadelphia, PA.
  Visiting Associate Professor (Spring 1994), Adjunct Faculty (1980 – 90), Operations and Information Management Department.

Publications, Papers, Presentations:

Books

- Managing in the Information Economy: Current Research Issues (with U. S. Karmarkar), Springer-Verlag (Forthcoming 2006).
- Manufacturing Automation, (with M. A. Cohen), Irwin (McGraw Hill), New York, NY, 1997.

Refereed Articles Published/Forthcoming in Journals/Books

- "Size, Structure and Growth of the US Information Economy," (with H. Nath). Accepted for publication in U. S. Karmarkar and U. M. Apte, eds., Managing in the Information Economy: Current Research Issues, Kluwer Academic Publishing (Forthcoming 2006).
- "Business Process Outsourcing (BPO) and Globalization of Information Intensive Services," Accepted for publication in U. S. Karmarkar and U. M. Apte, eds., Managing in the Information Economy: Current Research Issues, Kluwer Academic Publishing (Forthcoming 2006).

- "OM In the Information Economy: Information Products, Processes and Chains," (with U. S. Karmarkar). Accepted for Publication, Journal of Operations Management (Forthcoming 2006).
- "History of Research in Service Operations: What is the Big Idea?," (with R. B. Chase). Accepted for Publication, Journal of Operations Management (Forthcoming 2006).
- "Analysis and Improvement of Delivery Operations at San Francisco Public Library," (with F. Mason). Journal of Operations Management (2005).
- "The Impact of Check Sequencing on NSF Fees," (with A. Apte, R. Beatty, I. Sarkar and J. Semple). Interfaces, Vol. 34 (2), March-April 2004, pp. 97-105.
- "Assessing Cross-Industry Effects of B2B e-Commerce," (with H. Nath). Journal of Strategic E-commerce., Vol. X(X), Fall 2004
- "Applying Lean Manufacturing Principles to Information-Intensive Services," (with C. Goh). International Journal of Service Technology and Management. Fall 2004.
- "Using Knowledge to Transform Enterprises," (with R.O. Mason), in Kahin, Brian, et al., eds., Transforming Enterprises, Boston: MIT Press, 2004.
- "Supply Chain Management at TI: A Study Focusing on Procurement Solutions." (with S. Joshi and V. Vellanki). Review of the Electronic and Industrial Distribution Industries, Vol. 2, No. 2, 2004, pp. 72-96.

Presentations

- "Managing the Service Supply Chain in the U.S. Department of Defense: Opportunities and Challenges", Conference of the POMS College of Service Operations, Carmel, CA (June 2006).
- "Managing the Service Supply Chain in the U.S. Department of Defense: Opportunities and Challenges", 3rd Annual Symposium on Acquisition Research: Creating Synergy for Informed Change, Naval Postgraduate School, Monterey, CA (May 2006).
- "Focusing on Customer Time in Field Service". Annual POMS Conference, Boston, MA (May 2006).
- "A Decision Support Model for Valuing Proposed Improvements in Component Reliability", 2nd Annual Symposium on Acquisition Research: Creating Synergy for Informed Change, Naval Postgraduate School, Monterey, CA (May 2005).
- "Analysis and Improvement of Delivery Operations at San Francisco Public Library," Research Seminar, Marshall School of Business, University of Southern California, Los Angeles, CA (May 2005).
- "Process Drivers and Performance Indicators for Insurance Claims Operations: An Empirical Investigation," (With R. Cavaliere and S. Kulkarni) POMS College of Service Operation Conference at Columbia University, New York, NY. (December 2004).
- "A Model Focusing on Customer Time in Field Service Delivery" and "Analysis and Improvement of Delivery Operations at San Francisco Public Library," Annual POMS Conference, Cancun, Mexico (May 2004).

- "The Impact of Check Sequencing on NSF Fees" S. J. Mehta School of Management, Indian Institute of Technology, Bombay, India (September 2003).

Research Projects:

- "A Decision Support Model for valuing Proposed Improvements in Component Reliability." (2006) (Joint Sponsors: PEO Ships and PEO Integrated Warfare Systems).
- "Managing the service supply chain in DoD: Opportunities and Challenges," (2006) (Joint Sponsors: NPS RIP and PEO Ships).
- "What is the right RFID for your process?" (2006) (Sponsor: PEO Integrated Warfare Systems).
- "A Decision Support Model for valuing Proposed Improvements in Component Reliability." (2005) (Joint Sponsors: PEO Ships and PEO Integrated Warfare Systems).

Significant Practitioner Experience:

- **CIGNA Corporation** (1984 – 90), Philadelphia.

  -As **Director**, **Planning and Finance** in Claims Division, prepared annual plan and budget for this division of 4000+ people. Developed analytical models for estimating staffing needs and instituted Variable Budgeting Process in the Division. Responsible for monitoring and control of operational and financial performance of the Division. Conducted numerous analytical studies.

  -As **Director**, **Electronic Distribution Channel** in Systems Division, developed conceptual architecture of Electronic Distribution Channel (EDC). Managed design, development, and implementation of the File Transfer Facility for Individual Insurance Products. Managed Turnkey Expert Systems for analysis of underwriting operations. As Strategic Systems Planner, developed Strategic Technology Plan for the Division.

- **Mellon Bank** (1982 – 84), Information Management & Research, Philadelphia.

  -As **Manager of Systems Planning Unit**, led seven senior professionals. Designed systems architecture and developed prototype of the bank's next-generation transaction processing system. Promoted to Assistant Vice President.

- **The World Bank** (1979, 1980), Washington, D.C.

  -As **Summer** Intern in the Industrial Projects Department, evaluated project involving production of Alcohol from Molasses in Sudan, and studied economics of Petrochemical Industry in the Andean Group Countries.

Academic and Professional Associations:

Institute for Operations Research and Management Science
Production and Operations Management Society
Decision Sciences Institute

Public Service Activities:

- None.

Consulting Activities:

- **San Francisco Public Library**, Study of the delivery system operations (2005)
- **Kinko's**, Development of Operations Strategy (2004)

Frank J. Barrett
Professor
September 1990.

Academic Degrees

- Ph.D. in Organizational Behavior. Case Western Reserve University. Graduation: January 1990.
- M.A. in English with minor in Music. University of Notre Dame. August 1977
- B.A. in Government and International Relations. University of Notre Dame. May 1975

Primary Teaching Areas:
Management of Change in Complex Organizations
Organizational Behavior

Graduate Teaching Experience

- 1996- 2006 Associate Professor of Management, Graduate School of Business and Public Policy
- Boer and Croon Chair of Change Management, TIAS Business School, Tilburg University
- Visiting Associate Professor of Applied Economics, Department of Applied Economics Katholieke University of Leuven, Leuven Belgium
- 1997 - 2000 Adjunct Professor , Department of Organizational Development, Benedictine University, Lisle, Illinois.
- Instructor of Management, Penn State University , Behrend College, Erie, Pennsylvania

Publications, Papers, Presentations:

Book

Barrett, F and R. Fry. (2005). Appreciative Inquiry: A Positive Approach to Building Cooperative Capacity. Taos, New Mexico: Taos Institute Press.

Edited Books

Fry, R; F. J. Barrett; J. Seiling, and D. Whitney (eds). Appreciative Inquiry and Organizational Transformation. Vermont: Greenwood Books, 2002.

Whitehead, S. and F. J. Barrett (eds). The Masculinities Reader. Cambridge: Polity Press, 2001.

Chapters in books

- Barrett, F. and T. R. Sarbin. 2006. "The Rhetoric of Terror: 'War' as Misplaced Metaphor." In Arquilla, J. (ed). Information Strategy and Netwars.

- Barrett, F. 2006. "Toward an Aesthetic of Cooperation." In Piderit S;, R. Fry; and D Cooperrider (eds). A Handbook for Transformative Cooperation: New Designs and Dynamics. Palo Alto: Stanford Univ Press.

- Barrett, F, D. Cooperrider and R. Fry. 2005. "Bringing every mind into the game to realize the positive revolution in Strategy: The Appreciative Inquiry Summit." In Rothwell, B and Sullivan, R. (eds). Practicing Organizational Change and Development: A Guide for Consultants. San Francisco: Jossey-Bass.

- Barrett, F. 2005. "Living in Organizations: Lessons from Jazz Improvisation." In Hosking, D. and S. McNamee (Eds.) Constructing Organization: Social Constructionist Approaches to Organizational Behavior. Norway: Liber Press.

- Gergen, M; Gergen F., and Barrett, F. 2004. "Appreciative Inquiry as Dialogue: Generative and Transformative." In Cooperrider, D. and M. Avital (Eds.) Constructive Discourse and Human Organization. Advances in Appreciative Inquiry Series, Volume 1, Oxford: Elsevier Science.

- Gergen, K and F. J. Barrett. 2003. "Social Constructionism and Distributed Learning." In DiStefino A., Rudestam, K., Silverman, R., and Taira, S. (Eds.) Encyclopedia of Distributed Learning. Thousand Oaks, CA: Sage.

- Gergen, K., Gergen, M., and Barrett F. J. 2003. "Dialogue: Life and Death of the Organization." In Grant, D; C. Hardy; N. Oswick; N. Phillips; and L. Putnam (Eds.) Handbook of Organizational Discourse, Thousand Oaks, CA: Sage.

Refereed journal articles.

- Barrett, F. "Just Do the Opposite of What a Girl Would Do: Gender Strategies of Women Naval Officers." Submitted to Organization Studies**.** In revision after very favorable reviews.

- Bright, D; R Fry; F. Barrett; E. Powley; D. Cooperrider. "Generativity: Appreciating Relational Spaces and the Need for Mindfulness." Submitted to Academy of Management Review. In revision after very favorable reviews.

- Sarbin, T and F. Barrett. 2006. "Honor as a Moral Category: A Historico-linguistic Analysis." Theory and Psychology.

- Balachandra, L; F Barrett; H Bellman; C Fisher; and L Susskind. 2005. "Improvisation and Mediation: Balancing Acts." Negotiation Journal. October, 2005, pp. 425-434.

- Barrett, F; E. Powley; D. Bright. 2005. "Transforming Collective Identity through the Appreciative Inquiry Summit." Danish Business Journal. Vol. 3, No. 1. pp 38-55.

- Olson, J. and F. Barrett. 2005. "Inventing the Joint Strike Fighter: Applying Appreciative Inquiry to Collaborative Start-Ups." Organizational Development Practitioner. Vol. 37, No. 1, pp. 29 – 35.

- Powley, E; R. Fry; F. Barrett; D. Bright. 2004. "Dialogic Democracy Meets Command and Control: Transformation through the Appreciative Inquiry Summit." Academy of Management Executive. Vol. 18, no. 3, pp. 67 – 80.

- Gergen, K; S. McNamee, and F. Barrett. 2003. "Transformativer Dialog." Zeitschrift fur systemische Therapie, 21: 69 - 89.

Research Projects

- Leadership, Empowerment and Large Scale Change. Research Sponsor: Naval Education and Training Command. 2001-2005

- Acquisition Research. 2006.

Academic and Professional Associations

- Elected to Executive Committee of Division of Organizational Development and Change, National Academy of Management.
- Member Academy of Management Division of Organizational Development and Change 1988 - present.
- Member of Managerial and Organizational Cognition Interest Group, National Academy of Management 1993 - present.
- 2005 – present. Member of editorial board of Organization Studies.
- 2004 – present. Member of editorial board of Journal of Applied Behavioral Science.
- 1993 - present. Member of editorial board of Journal of Management Inquiry.
- 2002 – present. Member of advisory board of Action Research Journal.

Michael W. Boudreau
Senior Lecturer
December 1995

Academic Degrees:

- MBA, Santa Clara University, December 1966, finance.
- Bachelor of Mechanical Engineering, Santa Clara University, December 1964, thermo-fluid mechanics.

Primary Teaching Areas:

- Acquisition: program management, manufacturing, and quality management

Graduate Teaching Experience

- Naval Postgraduate School, December 1995 to present. Resident, Distance Learning, and International short courses.

Publications, Papers, Presentations:

- NPS International Defense Acquisition Resource Management (IDARM) Report: "Proposed Blueprint for Polish National Acquisition Strategy," 25 October 2000 (co-authored)
- Publication: *Army AL&T*: "Transitioning From Fielding to Steady-State Sustainment," Jan-Feb 2001
- Research paper: entitled "Reduction of Total Ownership Cost," NPS-AM-03-04, published in the Acquisition Research Sponsored Report Series, September 2003 (co-authored)
- Paper Presentation: "Total Ownership Cost: An Exercise in Discipline," at *The Acquisition Research Inaugural Symposium, Charting a Course for Change: Acquisition Theory and Practice for a Transforming Defense*, Panel, *Total Ownership Costs: The Future*, May 2004. (co-presented)
- Journal Publication: "Total Ownership Cost (TOC) Considerations In Key Performance Parameters And Beyond," published in the *Acquisition Review Journal*, February-March 2005, Volume 12, Number 1 (co-authored)
- Paper Presentation: "Cost As an Independent Variable (CAIV): Front-End Approaches to Achieve Reduction in Total Ownership Cost," presented at the NPS *Second Annual Acquisition Research Symposium: Acquisition Research: The Foundation for Innovation*, Monterey, CA, May 2005
- Research Paper: "A Decision Support Model for Valuing Proposed Improvements in Component Reliability," NPS-GSBPP-05-006, 30 June 2005 (co-authored)
- Research paper: "Cost As an Independent Variable (CAIV): Front-End Approaches to Achieve Reduction in Total Ownership Cost**,"** published in the *Acquisition Research Working Paper Series*, June 2005
- Workshop Presentation: "Setting Up Acquisition for Total Life Cycle Supportability Performance," presented at the Institute for Defense and Government Advancement Conference: *Total Life Cycle Systems Management*, Arlington VA, July 2005 (co-presented)

- Research Paper: Using Cost as an Independent Variable (CAIV) to Reduce Total Ownership Cost, NPS-GSBPP-06-004, January 2006
- Paper Presentation: "Acoustic Rapid COTS Insertion – Case Study," Panel on Implementing an Open Systems Approach in Weapon System Acquisitions, presented at the NPS *Third Annual Acquisition Research Symposium:* Acquisition Research: Creating Synergy for Informed Change, May 2006
- Research Paper: "Acoustic Rapid COTS insertion: A Case Study in Spiral Development," NPS-PM-06-041, October 2006
- Paper Presentation: "Acoustic Rapid COTS Insertion (A-RCI): A Case Study in Modular Open Systems Approach for Spiral Development," presented at the IEEE ICSoSE, San Antonio, TX, April 2007

Research Projects:

- Research into Total Ownership Cost. Sponsor was U.S. Naval Sea Systems Command. 2003. Resulted in research paper, journal article, and two conference presentations (2004 NPS & 2005 IDGA); see above.
- Research into Cost as an Independent Variable (CAIV). Unfunded. 2005. Resulted in research paper and conference presentation (2005 NPS); see above.
- Acoustic Rapid COTS Insertion (A-RCI) Case Study. Sponsor is Program Executive Office IWS, U.S. Naval Sea Systems Command. 2006 Resulted in conference presentations (NPS 2006 and IEEE 2007 – see above) with research paper published October 2006.

Significant Practitioner Experience:

- Retired Army Colonel with specialties in defense acquisition and field logistics.
- Project Manager, Family of Medium Tactical Vehicles 1992-1995.
- Commander, U.S. Army Materiel Support Center, Korea, 1989-1991.
- Commander, Detroit Arsenal Tank Plant, 1982-1984.

Academic and Professional Associations:

- None.

Public Service Activities:

- None.

Consulting Activities:

None.

Douglas E. Brinkley
Senior Lecturer and Director of GSBPP Instructional Technology
July 1998

Academic Degrees:

- Doctor of Education, Nova Southeastern University, 2003, Instructional Technology and Distance Education. Dissertation: "*The Effect of Computer-Mediated Communications on Graduate Student Interactions*"
- Master of Science, Naval Postgraduate School, 1990, Information Systems
- Bachelor of Science, University of the State of New York, 1980, Economics

Primary Teaching Areas:

- Information Technology, Computer Systems Management, Network Security and Administration

Graduate Teaching Experience

- July 1998-Present; Senior Lecturer, Graduate School of Business and Public Policy, NPS, Monterey, CA. Lecturer of Information Systems and Computer Networks. Responsible for course and program development, management and administration, teaching and thesis advising. Below are significant positions held during this timeframe.

Publications, Papers, Presentations:

- NPS-GSBPP Instructional Report: Brinkley, D.E., "A Multinational Assessment of Thin Client Technology," NPS-GSBPP-07-004IR, June, 2007.

- Conference paper and presentation: Brinkley, D.E., "Thin-Clients in the Classroom; Software Compatibility and a Survey of Systems," Proceedings of the 2006 Conference on Global Leadership, Learning and Research, Honolulu, HI, 13-17 October, 2006.

- Conference paper and presentation: Brinkley, D.E., "The Effect of Computer-Mediated Communications on Graduate Student Interactions," Proceedings of the 2004 Conference on Global Leadership, Learning and Research, Orlando, FL, 25-30 July, 2004.

Research Projects:

- Thin-Client Computer Usability Study, 2005 – 2006

    - Objective: To analyze the interoperability of thin client terminals configured in a client/server architecture with instructional software used at the Naval Postgraduate School (NPS). The study also evaluates the responsiveness and usability of the thin client systems in comparison to the existing stand-alone PC environment.

- Funded by: Sun Microsystems and the Naval Postgraduate School Foundation

- Research product: Conference paper and presentation accepted for the 2006 Conference on Global Leadership, Learning and Research, Honolulu, HI, 13-17 October, 2006

Significant Practitioner Experience:

- January 1993 - June 1995; Officer in Charge, Defense Information Processing Center (DIPC), Guam - Responsible for all aspects of the activity's operational and administrative mission to provide data processing and information technology support to fleet and shore commands throughout the western pacific.

- October 1990 - January 1993; Chief Information Officer, Commander Naval Air Forces, U.S. Atlantic Fleet - Responsible for information systems guidance and technical support to 8 aircraft carriers, 11 naval air stations and 144 staffs/squadrons. Also served as Senior Information Systems Inspector and ADP Security Officer.

Academic and Professional Associations:

- Microsoft Certified Systems Engineer
- Microsoft Certified Trainer
- Oracle Certified Database Administrator
- Novel Certified Netware Engineer

Public Service Activities:

- None

Consulting Activities:

- None

Douglas A. Brook
Professor
Director, Center for Defense Management Reform
February 2002

Academic Degrees:

- Ph.D. George Mason University, 2001. Public Policy. Dissertation: "Business Style Financial Statements Under the CFO Act: An Examination of Audit Opinions."
- MPA. University of Michigan, 1967. Public Administration.
- BA. University of Michigan, 1965.

Primary Teaching Areas:

- GB 3013: Problem Analysis and Ethical Dilemmas
- GB 4053: Defense Budget and Financial Management Policy

Graduate Teaching Experience

- Naval Postgraduate School, 2006-Present.

Publications, Papers, Presentations:

PUBLICATIONS:

- Douglas A. Brook and Cynthia L. King, "Legislating Innovation in Human Capital Management: Lessons From The Department of Homeland Security," in Hannah Sistare and Terry Buss, eds., *Innovations in Human Capital Management* (New York: M.E. Sharpe, 2007): forthcoming.
- Douglas A. Brook and Philip J. Candreva, "Business Management Reform in the Department of Defense in Anticipation of Declining Budgets," *Public Budgeting & Finance*, vol. 27. no Fall 2007, forthcoming.
- Douglas A. Brook and Cynthia L. King, "Civil Service Reform as National Security," *Public Administration Review*, May-June 2007: 397-405.
- Douglas A. Brook, Dumping and Subsidy Cases at the ITC: Voting Discretion and Commissioner Attributes," The International Trade Journal, vol .29 no.4, (Winter 2005): 209-236.

- Douglas A. Brook, "Meta-Strategic Lobbying: The 1998 Steel Imports Case." Business and Politics, vol. 7, no. 1 (2005): 1094-1119.
- Douglas A. Brook, "Trade Policy Strategies and Enforcement Choices: An Examination of the 1992 Steel Antidumping Cases," The International Trade Journal, vol. XVII, no. 1 (Spring, 2003): 81-100.
- Douglas A. Brook, "Administrative Reform in the Federal Government: Understanding the Search for Private Sector Management Models - An Annotated Bibliography," Public Administration and Management: An Interactive Journal, vol. 7, no. 2 (2002): 117-165.
- Douglas A. Brook, Audited Financial Statements: Getting and Sustaining "Clean" Opinions, monograph, (Washington: The PricewaterhouseCoopers Endowment for the Business of Government, July, 2001).

- James P. Pfiffner and Douglas A. Brook, eds., *The Future of Merit: Twenty Years After the Civil Service Reform Act*, (Washington: Woodrow Wilson Center Press, 2000).
- Douglas A. Brook, "Merit and The Civil Service Reform Act," in James P. Pfiffner and Douglas A. Brook, eds., *The Future of Merit: Twenty Years After the Civil Service Reform Act*, (Washington: Woodrow Wilson Center Press, 2000), 1-11.
- Douglas A. Brook, "Steel: Trade Policy in a Changed Environment," in Alan V. Deardorff and Robert M. Stern, eds., *Constituent Interests and U.S. Trade Policies*, (Ann Arbor: The University of Michigan Press, 1998), 133-144.

Research Projects:

- "Civil Service Reform: The Homeland Security Act of 2002." An analytical history of enactment of the Homeland Security Act with emphasis on the personnel management provisions of the legislation. Sponsor: U.S. Office of Personnel Management.
- "Benchmarking for Organizational Transformation." Public and private sector transformation benchmarking models applicable to Navy's Sea Enterprise Initiative. Sponsor: Deputy Chief of Naval Operations (Material Readiness and Logistics).

Significant Practitioner Experience:

- Dean, Graduate School of Business and Public Policy, Naval Postgraduate School, 2002-2005
- Vice President, Government Affairs, LTV Corporation 1993-2002
- Acting Director, U. S. Office of Personnel Management 1992-1993
- Assistant Secretary of the Army (Financial Management) 1990-1992

Academic and Professional Associations:

- American Society of Military Comptrollers
- American Society for Public Administration
- Fellow – National Academy of Public Administration

Public Service Activities:

- Monterey Symphony Chorus
- Member, Visiting Committee, Gerald R. Ford School of Public Policy, The University of Michigan, 1993-2002
- Trustee, U.S. Naval Academy Foundation, 1993-2004
- Member, M.P.A. Advisory Committee, George Mason University, 2000-2002
- Business Advisory Board, Sodexho USA 2004-present

Consulting Activities:

- Research Paper Reviewer – Rand Corporation 2006
- Business Advisory Board – Sodexho USA, 2004 – present

Philip J. Candreva
Senior Lecturer of Budgeting
August 2002

Academic Degrees:

- M.S., Management (with distinction), Naval Postgraduate School, 1996
  - Thesis: "The Use of Financial Scoring Models for the Prediction of Business Failure: Implications for Department of Defense Financial Analysis" (Advisors: Doug Moses, Shu Liao)
- B.S., Mineral Economics, Pennsylvania State University, 1984

Primary Teaching Areas:

- Public budgeting and financial management with an emphasis on the U.S. Department of Defense.

Graduate Teaching Experience

- Military Lecturer, Naval Postgraduate School, August 2002-August 2006
- Senior Lecturer of Budgeting, Naval Postgraduate School, September 2006-present.
- Center for Executive Education, Naval Postgraduate School, 2006.

Publications, Papers, Presentations:

Peer Reviewed Publications

- "Business Management Reform in the Department of Defense in Anticipation of Declining Budgets," with Douglas A. Brook, *Public Budgeting & Finance*, in press.
- "Controlling Internal Controls," *Public Administration Review*, Vol. 66, no. 3, 2006, pp. 463-465.
- "Congressional Delegation of Spending Power to the Defense Department in the Post 9-11 Period," with L.R. Jones, *Public Budgeting & Finance*, Vol. 25, no. 4, 2005, pp. 1-19.
- "Congressional Control over Defense and Delegation of Authority in the Case of the Defense Emergency Response Fund," with L.R. Jones, *Armed Forces & Society*, Vol. 32, no. 1, 2005, pp. 105-122.
- "Analysis of the Field of Public Management: A Response to Kelman, Thompson, Jones and Schedler," *International Public Management Review*, Vol. 5, no. 1, 2004, pp. 58-68.

Other Publications

- "Changes in Navy Regional Maintenance Activities and their Funding Models," NPS-GSBPP-07-002IR, Naval Postgraduate School, Monterey, CA, February 2007.

- "Business Reform in the Department of Defense with a Declining Budget Top Line" with Douglas A. Brook, Center for Defense Management Reform Working Paper Series, NPS-CMDR-GM-06-008, 26 October 2006.
- "Depreciation of Capital Assets: Management Alternatives and Implications," report prepared for the Deputy Chief Financial Officer, U.S. Department of Defense, November 2005.
- "National Service Trust: A Case Study," NPS-GSBPP-05-010IR, Naval Postgraduate School, Monterey, CA, July 2005.
- "Case Studies in Basic Fiscal Law (A)," NPS-GSBPP-05-011IR, Naval Postgraduate School, Monterey, CA, July 2005.
- "Case Studies in Basic Fiscal Law (B)," NPS-GSBPP-05-012IR, Naval Postgraduate School, Monterey, CA, July 2005.
- Editor, *Practical Financial Management: A Handbook for the Defense Department Financial Manager*, 5th ed., Naval Postgraduate School, Monterey, CA, March 2003. Updated in January 2005 (6th ed.).
- "Accounting for Transformation," *Armed Forces Comptroller*, Vol. 49, no. 4, Fall 2004, pp. 7-13.
- "Global War on Resource Management," *Armed Forces Comptroller*, Vol. 49, no. 2, Spring 2004.

Conference Presentations/Panels

- "Budget Uncertainty and Business Management Reform in the Department of Defense: Some Considerations for Acquisition Management," Fourth Annual Acquisition Research Symposium, Monterey, May 2007.
- "Accounting for Transformation," American Society of Military Comptrollers annual Professional Development Institute, San Diego, June 2006.
- "Tell Me How I'm Measured, I'll Tell You How I'll Perform," American Society of Military Comptrollers annual Professional Development Institute, San Diego, June 2006.
- Sole discussant for panel, *Issues in International Public Budgeting and Financial Management*, Association for Budgeting and Financial Management conference, Washington DC, November 2005.
- "The Sword and the Purse: The Why and How of Congressional Delegation of Budget Authority to DoD," American Society of Military Comptrollers annual Professional Development Institute, Salt Lake City, June 2005. Reviewed in *Armed Forces Comptroller*, Vol. 50, no. 3, Summer 2005, 41-44.

- "Paying for the War on Terrorism," (with L. R. Jones) a paper presented in the panel discussion *Current Issues in Federal Budgeting*, Association for Budgeting and Financial Management Conference, Chicago, October 2004.

Research Projects:

- Public sector management reform agendas – issues related to leadership transition, implications for resource allocation, and change management, unfunded, ongoing.
- Issues of performance evaluation and goal ambiguity with respect to military housing privatization, unfunded, 2004-present. Paper in draft.
- Researching Policy Network Management: Cybernetics in Navy Programming Decisions, unfunded, 2004-2005. Paper accepted for 2005 Networking and Electronic Commerce Research Conference (NAEC 2005), Riva Del Garda, Italy, October 2005, but I was unable to attend.

Significant Practitioner Experience:

- Director, Navy Supply Information Systems Activity, Mechanicsburg, PA (1999-2002)
- Deputy for Financial Management, Research and Engineering, Naval Air Systems Command, Patuxent River, MD (1996-1999)
- Supply Officer, USS JOHN RODGERS (DD-983), ported in Charleston, SC (1991-1994)
- Faculty and Assistant Planning Officer, Navy Supply Corps School, Athens, GA (1989-1991)
- Supply Support Officer, USS PUGET SOUND (AD-38), ported in Norfolk, VA (1985-1989)

Academic and Professional Associations:

- Senior Associate, Center for Defense Management Reform (2006-)
- American Society of Public Administration (2003-)
- ASPA Section on Public Performance and Management (2006-)
- Association for Budgeting and Financial Management (2003-)
- International Public Management Network (2003-)
- American Society of Military Comptrollers (2003-)

Public Service Activities:

- Vice-President and President, Monterey Chapter, American Society of Military Comptrollers, 2004-2006.
- Ad hoc peer reviewer for *Public Administration Review*, 2005-2006
- Ad hoc peer reviewer for *International Public Management Journal*, 2005-2006
- Ad hoc peer reviewer for Hawaii International Conference on System Sciences (HICSS), 2004-2005
- MBA/MS Student Thesis Advisor, 33 students, 2002-2007.

- Naval Postgraduate School Awards Board (2002-2006)
- Navy-Marine Corps Relief Fund Drive (Monterey peninsula 2004 campaign chairman)
- U.S. Navy Supply Corps Association, Monterey CA (faculty advisor, 2002-2004)

Consulting Activities:

- "Depreciation of Capital Assets: Management Alternatives and Implications," prepared for the Deputy Chief Financial Officer, U.S. Department of Defense, November 2005.

- Dozens of relatively minor consulting engagements with former students and colleagues throughout the Defense Department.

Peter J. Coughlan
Associate Professor
June 2004

Academic Degrees:

- Doctor of Philosophy, California Institute of Technology, June 1999, Social Sciences (Economics & Political Economy), dissertation title: Essays on the Economics of Institutions.
- Master of Science, California Institute of Technology, June 1995, Social Sciences (Economics & Political Economy).
- Bachelor of Arts with Distinction, University of Virginia, May 1992, Economics and Mathematics.

Primary Teaching Areas:

- Strategic Management
- Economics

Graduate Teaching Experience

- *Strategic Management* (M.B.A. & M.S.), School of Business & Public Policy, Naval Postgraduate School, 2005–2006.
- *Economics and the Global Defense Environment* (M.B.A. & M.S.), School of Business & Public Policy, Naval Postgraduate School, 2005–2006.
- *Management and Markets: Organizational Economics and Strategy* (Ph.D.), Harvard Business School, 2004.
- *Competitive Dynamics: The Rise and Fall of Competitive Advantage* (M.B.A.), Harvard Business School, 2003–2004.
- *Economics of Markets* (M.B.A.), Harvard Business School, 2001–2003.
- *Strategy* (previously *Competition & Strategy*) (M.B.A.), Harvard Business School, 1999–2002.

Publications, Papers, Presentations:

Refereed Journal Publications

- American Rule vs. English Rule: A Theoretical and Experimental Analysis of Alternative Legal Fee Institutions (with Charles R. Plott, California Institute of Technology), *Journal of Economic Behavior and Organization*, Revise & Resubmit.
- In Defense of Unanimous Jury Verdicts: Communication, Mistrials, & Strategic Voting, *American Political Science Review*, Vol. 94, No. 2, June 2000.
- A Social Choice Function Implementable via Backward Induction with Values in the Ultimate Uncovered Set (with Michel Le Breton, CORE, Belgium), *Review of Economic Design*, Vol. 4, No. 2, June 1999.

Research Papers

- Adoption, Non-Adoption, & De-Adoption of New Technologies in the Presence of Network Effects (with William R. Gates and Nicholas Dew, Naval Postgraduate School), Work in Progress.
- Auctions as a Force-Shaping Tool for the U.S. Navy (with William R. Gates, Naval Postgraduate School), Work in Progress.
- The Manpower Assignment Problem: Applying Auction Theory, Matching Markets, & Experimental Simulation (with William R. Gates, Naval Postgraduate School), Work in Progress.
- Optimal Re-Enlistment Bonuses: Applications of Signaling & Auction Theory (with William R. Gates, Naval Postgraduate School), Work in Progress.
- Friend or Foe: Competition vs. Cooperation in High-Stakes Prisoner Dilemmas (with William R. Gates and Elda Pema, Naval Postgraduate School), Work in Progress.
- An Efficient Mechanism for Allocation of an Excludable Public Good with Consumption Externalities, Harvard Business School Working Paper, 2004.
- Connecting Backward and Competing Forward: Incentives for Backward Compatibility and the Sustainability of Competitive Advantage, Harvard Business School Working Paper, 2004.
- Strategic Deterrence and Simultaneous vs. Sequential Decision-Making: An Experimental Investigation (with Richard D. McKelvey and Thomas R. Palfrey, California Institute of Technology), California Institute of Technology Working Paper, 2000.

Published Case Studies and Course Notes

- The Leader's (Dis)Advantage, Harvard Business School Course Note #701-084 (2001).
- Competitor Analysis: Anticipating Competitive Actions, Harvard Business School Course Note #701-120 (2001).
- Pricing for Profit: Multi-Part Pricing in the U.K. Credit Card Industry, Harvard Business School Case #706-407 (2005).
- The Ready-to-Eat Breakfast Cereal Industry: Coupon Competition and Price Discrimination, Harvard Business School Case #706-409 (2005).
- The Ready-to-Eat Breakfast Cereal Industry: Product Proliferation and Preemption, Harvard Business School Case #706-408 (2005).
- The Golden Age of Home Video Games: From the Reign of Atari to the Rise of Nintendo, Harvard Business School Case #704-487 (2004).
- Blockbuster Inc. & Technological Substitution (A) – (D), Harvard Business School Case #704-404, 704-407, 704-462, & 704-463 (2003), Coauthored with Jennifer Illes (Research Associate).
- Lamoiyan Corporation of the Philippines: Challenging Multinational Giants, Harvard Business School Case #703-467 (2003), Coauthored with Jennifer Illes (Research Associate).
- The Disposable Diaper Industry in 2003, Harvard Business School Case #703-474 (2003), Coauthored with Jennifer Illes (Research Associate).

- WebMD (A) &(B), Harvard Business School Cases #701-007 (2000) and #701-133 (2001), (A) case coauthored with Michael Rukstad & Carl Johnston (Research Associate), (B) case coauthored with Debbie Freier (Research Associate).
- DaimlerChrysler Post-Merger Integration, Harvard Business School Case #703-417 (2002), Coauthored with Richard Meyer; Michael G. Rukstad, & Stephan A. Jansen (Research Associate).
- DaimlerChrysler Knowledge Management Strategy, Harvard Business School Case #702-412 (2001), Coauthored with Michael G. Rukstad and Carl Johnston (Research Associate).
- Note on Home Video Game Technology and Industry Structure, Harvard Business School Case #700-107 (2000).
- Competitive Dynamics in Home Video Games (A) – (K), Harvard Business School Cases #701-091 through #701-101 (2001).

Research Projects:

- None other than research papers and publications documented above.

Significant Practitioner Experience:

- *Incentive Markets, Inc.,* Co-Founder and Chief Economic Advisor, 2001-2004.
  - Start-up company that designs "prediction markets" to assist business clients in forecasting performance of products, research projects, and other initiatives.
  - Initial emphasis in pharmaceutical industry, with Eli Lilly as the flagship client.
- *ASE, Inc.,* Independent Management Consultant, 1997-1998.
  - Participated in various management studies while completing doctoral research.
  - Analyzed product pricing, systems safety, and customer sampling methodologies.
- *Booz•Allen & Hamilton, Inc.,* Senior Management Consultant, 1995-1997.
  - Conducted organizational evaluations, process redesign, cost reduction studies and other management studies for private and public sector clients worldwide.
  - Developed several analytical computer tools including an elasticity-based pricing model and a probabilistic queuing model

Academic and Professional Associations:

Academy of Management
Strategic Management Society
The Econometric Society
Institute for Operations Research and Management Science
American Law and Economics Association
Public Choice Society
American Political Science Association

Public Service Activities:

(I have interpreted this to include professional service activities)

- Faculty Instruction Committee, Graduate School of Business & Public Policy, NPS
- Dean Search Committee, Graduate School of Business & Public Policy, NPS
- Conference on Management Strategy and the Business Environment
  - Annual conference series rotating among HBS, Wharton, and Stanford GSB
  - Co-founder and co-organizer
- Harvard Business School Strategy Unit Field Studies Coordinator
- Harvard Business School Academic Performance Committee
- Journal Referee:
  - Journal of Economics and Management Strategy
  - Games and Economic Behavior
  - Economic Inquiry
  - American Political Science Review
  - Journal of Theoretical Politics
  - Interfaces

Consulting Activities:

- None in past three years.

Alice M. Crawford
Senior Lecturer
June 1988

Academic Degrees
- MA San Diego State University, Experimental Psychology
- BA San Diego State University, Experimental Psychology

Primary Teaching Areas
- Foundations of Learning: Military Training and Education
- Educational Theory
- Organizational Behavior
- Leadership
- Motivation
- Conflict
- Teams
- Capstone Project Research Methods and Processes

Graduate Teaching Experience

All teaching experience has been at the graduate level in the following programs at NPS since 1988:
- NPS Leadership Education and Development Program (on-site delivery for MS program at United States Naval Academy)
- Resident courses for the MBA program and, before that, the MS program
- Executive MBA program (on-site delivery for an accelerated course in Teams)
- Product Development 21 (distance learning by VTE)
- Various short courses for the Naval Bureau of Medicine and Surgery, the National Reconnaissance Office, and the NPS Center for Executive Education
- Thesis advising: approximately 6-12 per year

Publications, Papers, Presentations 2003-2007:

Technical Reports

Crawford, A.M., Thomas, G.F., Mehay, S.L., and Bowman, W.R. *Successful Women in the US Navy Surface Warfare Community: Is the Navy Losing the War for Talent?* Naval Postgraduate School, December 2006.

Crawford, A.M., Malina, M., and Kocher, K. *Truancy Abatement and Prevention in the School Attendance Enhancement Program.* Naval Postgraduate School, March 2003.

Crawford, A.M., Thomas, G.F., and Estrada, A.X. *Best Practices at Junior Reserve Officers Training Corps Units.* Naval Postgraduate School Technical Report 04-005, August 2004.

Conference Presentation

Crawford, A.M., Thomas, G.F., Mehay, S.L., and Bowman , W.R. *Successful Women in the US Navy Surface Warfare Community: Is the Navy Losing the War for*

Talent? Presentation at the Seventh Annual Navy Workforce Research and Analysis Conference, Washington, DC, 1-2 May 2007.

Crawford, A.M., and Miller, S. *Navy Retention and the Battle for Talent.* Presentation at the Executive Life/Work Integration Summit, Monterey, CA 31 May – 1 June 2007.

Pendergast, G., and Crawford, A.M. *Applications of E-Learning in the Military and Defence Services.* Invited presentation at the Fernausbildungskongress der Bundeswehr, Helmut Schmidt Universitat, Hamburg, Germany, 20-22 September 2005

Research Projects 2003 - 2007

● Study of Retention of Surface Warfare Officer Women, funded by Chief of Naval Personnel (N14), October 2005 to present
● JROTC Comprehensive Review project, funded by Office of the Secretary of Defense, January 2002 – March 2003
● Safe Schools / Healthy Students project, funded by US Departments of Health and Human Services, and Justice, September 2002 to March 2003

Significant Practitioner Experience 2003--2007
● Delivered 360-degree feedback to PXO/PCO and NCBC students

Academic and Professional Associations
● None 2003 – 2007

Public Service Activities
●Member Hamming Teaching Award Committee, September 2007
● Member, NPS CHSD Director Search Committee May 2006—May 2007
● GSBPP-CEE Liaison June 2006--present
● Associate Dean for Distance Learning, GSBPP, June 2004 – June 2006
● Academic Associate for the LEAD Program, November 2005 – June 2006
● Academic Associate for International Student Curricula April 2006 – present
● Academic Associate for the LEAD Program, June 1997 – June 2004
● Member, GSBPP Dean Search Committee, January – September 2006
● Member, NPS Provost Search Committee, May 2005 – May 2006
● Member, Human Systems Integration Curriculum Committee for the OR Department, April 2004 to 2006
● Member, Faculty Instruction Committee, June 2005 – present
● Chair, Business Education Continuum Development Committee, Fall 2005
● Member Hamming Teaching Award Committee, September 2005
● Member Hamming Teaching Award Committee, September 2004
● Chair, Lecturer/Senior Lecturer Task Force, January 2003 – March 2003
● Member, Core Curriculum Review Task Force, April 2004
● Chair, MBA Operations Committee, January 2002 - January 2004

- Member, MBA Policy Committee, January 2002 – January 2004
- Member, MBA Ad Hoc Review Committee
- Member, Institutional Review Board 2002 – 2004
- Member, Organization Structure Task Force, September – December 2004

Consulting Activities
None 2003 - 2007

Jeffrey R. Cuskey
Lecturer
July 1997

Academic Degrees:

- Master of Science in Management, Naval Postgraduate School, Monterey, CA, March 1997 (Acquisition and Contract Management)

- Bachelor of Arts and Sciences, University of Delaware, June 1978 (Political Science)

Primary Teaching Areas:

- Since 1997, employed by the Naval Postgraduate School (NPS), Monterey, California as a Graduate School of Business & Public Policy Faculty Member and Course Coordinator for various advanced acquisition and business financial management courses.

Graduate Teaching Experience

- Naval Postgraduate School: July 1997 to Present

Publications, Papers, Presentations:

- "Privatization of the Naval Air Warfare Center Aircraft Division, Indianapolis" Case Study by William Lucyshyn, Jeffrey R. Cuskey, and Jonathan Roberts, University of Maryland Center for Public Policy and Private Enterprise, School of Public Policy, July 2004

Significant Practitioner Experience:

- Business Financial Manager for the U.S. Navy's F/A-18 Strike Fighter Program.
- Deputy Contracting Officer for the U.S. Navy's F/A-18E/F Strike Fighter Program.
- Contract Specialist, Defense Contract Administration Services Management Area, Philadelphia, PA.
- United States Naval Officer. In July 2000 completed 20 years of active duty military service as a Navy Supply Corps Officer.
    - In addition to significant acquisition and business management experience, held various operational, administrative, staff and management positions,
    - Fleet Plans Officer and Assistant Strike Warfare Officer for Commander Sixth Fleet
    - Assistant Supply Officer of a Combat Stores Ship during Operations Desert Storm and Desert Shield.

Academic and Professional Associations:

- Designated an Acquisition Career Professional by the Assistant Secretary of the Navy for Research, Development and Acquisition.

- Awarded “Level III” Defense Acquisition Workforce Improvement Act (DAWIA) in Contracting, Level III Certification signifies an acquisition professional has attained the requisite training, education and experience to fill critical acquisition leadership positions.

Public Service Activities:

- 2004 – Board Member, Del Monte Forrest Property Owners’ Association

Consulting Activities:

- 20 – 31 August 2005: Provided Program, Contract and Business Management services to a medium sized defense technical and engineering services company on the East Coast. Supported the company’s development of a detailed response to a $19.1 billion Proposal Request for Strategic Program Management Support Services.

2002 – Present: Board Member and Business Management consultant to a high tech Semi-Conductor Packaging Company in Silicon Valley.

Nicholas Dew
Assistant Professor
August 2003

Academic Degrees:

- *Ph.D. in Management, August 2003.* **Darden Graduate School of Business Administration, University of Virginia, Charlottesville, U.S.A, 1999-03**
  Dissertation: "Lipsticks and Razorblades: How the Auto ID Center used pre-commitments to build the Internet of Things"
  Coursework: entrepreneurship, strategy and business ethics.

- *Masters in Business Administration, May 1999.* Darden Graduate School of Business Administration, University of Virginia, Charlottesville, U.S.A., 1997-99
  Recipient of faculty award for academic excellence (top 10% of class).
  Recipient of General Motors scholarship award for international students.

- *Bachelor of Arts (Honors) in History, July 1989.* **University of York, York, U.K., 1986-89**
  Graduated with First Class Honours (top 5% of class).

Primary Teaching Areas:

- Strategic management GB4014

Graduate Teaching Experience

- None.

Publications 2003-2006

Journal articles

Sarasvathy, S.D. and Dew, N., "Effectuation and over-trust: debating Goel and Karri." Conditionally accepted at *Entrepreneurship Theory and Practice.*

Dew, N. and Read, S. "The more we get together: Coordinating network externality product introduction in the RFID industry." Forthcoming in *Technovation.*

Dew, N., 2006. "Cookies for the Real World: Assessing the Potential of RFID for Contractor Monitoring." Forthcoming in the *Journal of Public Procurement*.

Dew, N. and Sarasvathy, S.D. "Innovations, stakeholders & entrepreneurship." *Journal of Business Ethics.*

Wiltbank, R., Dew N., Sarasvathy, S.D. and Read, S. "What to do next? The Case for Non-Predictive Strategies." Forthcoming in *Strategic Management Journal.*

Dew, N., 2006. "Incommensurate Technological Paradigms? Quarrelling in the RFID Industry." *Industrial and Corporate Change*, 15(5): 785-810.

Dew, N. 2006. "Institutional Entrepreneurship: a Coasian Perspective." *International Journal of Entrepreneurship and Innovation* 7(1):13-22

Sarasvathy S. D. and Dew, N. 2005. "New Market Creation through Transformation." *Journal of Evolutionary Economics* 15:533-565.

Sarasvathy S. D. and Dew, N., 2005. "Toward a technology of foolishness: alternative logics embodied in entrepreneurial action." *Scandanavian Journal of Management 21(4):385-406.*

Dew N., Velamuri S. R. and Venkataraman, S., 2004. "Dispersed Knowledge and an Entrepreneurial Theory of the Firm". *Journal of Business Venturing* Vol. 19, Iss. 5:659-679.

Dew N., Sarasvathy S. D. and Ventakaraman, S., 2004, "The Economic Implications of Exaptation". *Journal of Evolutionary Economics*, 14:69-84.

Other publications

Dew, N., "Abduction: a Pre-Condition for the Intelligent Design of Strategy." *Journal of Business Strategy*, forthcoming.

Dew, N., 2006. "Preadaptation, exaptation and technology speciation: a comment on Cattani (2006)". *Industrial and Corporate Change* 16(1):1-6.

Dew, N., Goldfarb, B. and Sarasvathy, S.D., 2006. "Optimal Inertia: When Organizations Should Fail." In J.A.C. Baum, S.D. Dobrev, and A. van Witteloostuijn, Strategy and Ecology: Advances in Strategic Management, 23. Oxford UK: JAI/Elsevier. Forthcoming.

Wiltbank, R., Read, S., Dew, N. and Sarasvathy, S.D., 2006. "Prediction & Control: Angel Investing at the Individual Level". Frontiers of Entrepreneurship Research, 2005. Forthcoming.

Dew, N., Read, S. and Wiltbank, R., 2006. "Work in Progress". In Sarasvathy, S.D. *Effectuation: The Logic of Entrepreneurial Expertise.* Cheltenham: Routledge. Forthcoming.

Dew, N., "None of Our Business? A Stakeholder Perspective." *Harvard Business Review*, December 2004.

Sarasvathy, S.D., Dew, N., Velamuri, S. R. and Venkataraman, S., 2003. "Three Views of Entrepreneurial Opportunity." In the Handbook of Entrepreneurship, Acs Z.J. and Audretsch, D.B. (eds): 141-160. Berlin: Springer.

Research Projects:

- FY2004 funded under RIP
    - Produced various working papers currently under peer journal review or published.
- FY2005 funded under RIP.
    - Produced various working papers currently under peer journal review or published.
- FY2006 funded under Acquisition Research: "Acquisition of RFID Technology by DOD". Produced 3 research papers currently under peer journal review
    - Dew, N., 2006. "Cookies for the Real World: Assessing the Potential of RFID for Contractor Monitoring." (April 2006).
    - Apte, U., Dew, N. and Ferrer, G. "What is the right RFID for you?" (January 2006).
    - Apte, U., Dew, N. and Ferrer, G. "When is RFID right for your service?" (April 2006).

Significant Practitioner Experience:

- Various positions held at British Petroleum 1989-1997.

Academic and Professional Associations:

- None to mention.

Public Service Activities:

- None to mention.

Consulting Activities:
None to mention.

John T. Dillard
Senior Lecturer
November 2000

Academic Degrees:

- **MS** - University of Southern California LA, 1985
- **BA** - University of Tennessee Chattanooga, 1974

Primary Teaching Areas:

- Defense Systems Acquisition Management
- Project Management
- Test and Evaluation
- Strategic Leadership for Senior Leaders
- Joint Systems and Processes (Acquisition, Force Management, Security Assistance)

Graduate Teaching Experience

- 11/2000 to present as member of the Acquisition Faculty of GSBPP
- 07/1994 to 07/1996 as Senior Army Faculty Member

Publications, Papers, Presentations:

- *Centralized Control of Acquisition Programs*. NPS Technical Report, Sep 2003.
- *Organizational Excellence in the Public Sector*. Presentation to 53rd Annual Quality Congress, Annaheim, CA. 26 May 1999.
- *Army TACMS Initial Operational Test and Evaluation – From the PM's Perspective*. Redstone Arsenal, AL. 1991. (Revised for use by DAU as instructional text material in TST 202)
- *The Acquisition of Strategic Airlift.* US Army War College, Carlisle, PA. 1996 – 1997.
- Presentation to Naval Postgraduate School *Acquisition Research Symposium*, Monterey, CA. 19 May 2004. From Market to Clan: How Organizational Control Affects Trust in Defense Acquisition"
- Presentation to Naval Postgraduate School *Acquisition Research Symposium*, Monterey, CA. 19 May 2004. "Determining the Best Loci of Knowledge, Responsibilities and Decision Rights in Major Acquisition Organizations,"
- "Computational Modeling of Project Organizations Under Stress" Project Management Journal, March 2007.
- "Spiral Development Considerations," Center for Strategic and International Studies, Washington, D.C., Spiral Development, Real Options, and Other Development Methodologies. 5 June 2006. http://www.csis.org/component/option,com_csis_events/task,view/id,985/

- Presented to Monterey Chapter Project Management Institute "*Progressive Elaboration*" 11 January 2006, and the Silicon Valley Chapter "*Strategies for Evolutionary Product Development*" 16 Oct 2006.

Research Projects:

- Dillard, J.T. - Toward Centralized Control of Defense Acquisition Programs: A Comparative Review of the Framework from 1987 – 2003. Acquisition Review Journal – December issue 2005.
- Dillard, J.T. and Nissen, M.E., "Determining the Best Loci of Knowledge, Responsibilities and Decision Rights in Major Acquisition Organizations," Proceedings Second Acquisition Research Symposium, Monterey, CA (May 2005), pp. 80-111.
- Zolin, R and Dillard, J.T., "From Market to Clan: How Organizational Control Affects Trust in Defense Acquisition" Proceedings Second Acquisition Research Symposium, Monterey, CA (May 2005), pp. .
- Nissen, M.E and Dillard, J.T.., "Computational Design Of Public Organizations," International Public Management Review. Volume 6, Number 2. 2005.
- Dillard, J.T. and Nissen, M.E., "Computational Modeling of Project Organizations Under Stress" submitted to PMJ July 2005
- Dillard, J.T. and Frank, R. and Melese, F. "A Transactions Cost Economics Approach to Defense Acquisition Management" Technical Report - Proceedings Naval Postgraduate School *Acquisition Research Symposium*, Monterey, CA. 18 May 2006.
- "When to Terminate Your Own Program - Bad Business: The JASORS Debacle" Working Paper - Proceedings Naval Postgraduate School *Acquisition Research Symposium*, Monterey, CA. 18 May 2006.
-

Significant Practitioner Experience:

- 1998 – 2000 Commander, Defense Contract Management Command - Long Island, NY, Garden City, NY
- 1993-1994 Product Manager (PM), Joint Advanced Special Operations Radio System US Army Communications and Electronics Command, Fort Monmouth, NJ
- 1991-1993 Assistant Project Manager (APM), Javelin Missile System Program Executive Office - Tactical Missiles, Redstone Arsenal, AL
- 1989-1991 Assistant Project Manager (APM), Army Tactical Missile System (ATACMS) Program Executive Office - Tactical Missiles, Redstone Arsenal, AL
- 1985-1987 Manager, Light Close Combat Systems Advanced Systems Concepts Office, Armament Research Center, Picatinny Arsenal, NJ

Academic and Professional Associations:

- Project Management Institute – Scheduled speaker at the Silicon Valley Chapter, November 16, 2006.

Public Service Activities:

- Past Chairman, NPS Faculty Retirement and Special Functions Committee

Consulting Activities:
As adjunct faculty member at the University of California, Santa Cruz: consults and trains Silicon Valley public and private organizations on project management and organizational excellence, including Santa Clara Valley Water District, Iowa State University, Rockwell-Collins Electronics, 3Com, and others.

Kenneth H. Doerr
Associate Professor
July 2001

Academic Degrees:

- Ph.D., University of Washington, Seattle, December 1994. Major: Operations Management. Minors: Mathematics, Research Methods.
- B.S., Indiana University, Bloomington, December 1984. Major: Quantitative Business Analysis.

Primary Teaching Areas:

- Operations Management

Graduate Teaching Experience

- Associate Professor, Naval Postgraduate School, 2001-Present
- Assistant Professor, University of Miami, 1997-2001

Publications, Papers, Presentations:

Publications

- Freed, Doerr & Chang (In Press), "In-house development of scheduling decision support systems: case study for scheduling semiconductor device test operations." International Journal of Production Research.
- Doerr, Gates & Mutty (2006), "A hybrid approach to the valuation of RFID/MEMS technology applied to ordnance inventory." International Journal of Production Economics, V. 103, No. 2, pp. 726-741.
- Stebbins, Freed, Shani, & Doerr (2005), "Reflection in Organizational and Work Redesign: Learning from a Redesign Process at a USA Defense Company." In Productive Reflection and Learning at Work, Docherty, P. (Ed.), Routledge Publishing Company.
- Doerr, Lewis & Eaton (2005) "Measurement issues in Performance Based Logistics," Journal of Public Procurement., V. 5, No. 2, pp. 164-186.
- Doerr, Freed, Mitchell, Schriesheim & Zhou (2004), "Within and Between Worker Variability on Flow Lines." Journal of Applied Psychology. V. 89, No. 5, pp. 911–921.
- Doerr, Mitchell, Schriesheim, Freed & Zhou (2002), "Heterogeneity and Variability in the Context of Flow Lines." Academy of Management Review, V. 27, no. 4, pp. 594-607
- Doerr & Arreola-Risa (2000), "A Worker-Based Approach for Modeling Variability in Task Completion Times," IIE Transactions, V. 32, no. 7, pp. 625-636.
- Doerr, Klastorin & Magazine (2000), "Synchronous Unpaced Flow Lines with Worker. Differences and Overtime Cost," Management Science, V. 46, no. 3, pp. 421-435.

Conference Proceedings and Presentations

- Kang, Sanchez & Doerr (2006), "A design-of-experiments approach to readiness risk analysis," Presentation to the National Winter Simulation conference, Monterey.
- Doerr (2006), "On the Effect of Non-Diagnostic Information and Variability on Vendor Performance Evaluation," Invited presentation to the Behavioral Research in Operations and Supply Chain Management Conference, Smeal College of Business, Penn State University.
- Doerr & Gue (2005), "Analysis of a goal-motivated performance metric at a distribution center," Presentation to the National Production and Operations Management Society Conference, Chicago.
- Doerr, Eaton & Lewis (2004), "Characteristics of Good Performance Metrics for Performance Based Logistics," Proceedings of the Acquisition Research Symposium, "Charting a Course for Change: Acquisition Theory and Practice for a Transforming Defense," Monterey.
- Doerr, Gates & Mutty (2004), "A combined Monte Carlo Simulation and MCDM approach to valuation of RFID." Presented to the International Technology and Strategy Forum's 2nd European – US workshop on Information Technology in Logistics, Berkeley CA.
- Doerr, Eaton & Lewis (2004), "Performance Based Logistics," Presented to the International Defense Acquisition Resource Management Conference, Capellen, Luxembourg.
- Doerr & Gue (2003), "A Tune-Able Performance Metric And Goal-Setting Procedure For A Warehouse." Presented to the International Technology and Strategy Forum's workshop on Information Technology in Logistics, Berkeley CA. Also presented to the Decision & Information Technology research seminar at the Robert H. Smith School of Business, University of Maryland.
- Doerr, Gates & Mutty (2003), "An Integrated Multi-criteria and Simulation Approach to Cost Benefit Analysis of Inventory Tracking," Invited Presentation to the National INFORMS conference, Atlanta.

Research Projects:

- Metrics for Performance Based Logistics Naval Postgraduate School (2004-2005). Two grants ($70,000 and $91,600) from the Naval Sea Systems Command to develop and evaluate metrics for outsourced weapon-systems logistics.
- Capacity and Contingency Planning for the Voluntary-Intermodal Sealift Agreement (VISA) Naval Postgraduate School (2004). $45,000 grant from the Military Sealift Command to develop a simulation-based analysis of capabilities related to the VISA program.
- Cost Benefit Analysis of Advanced Technology Ordnance and Surveillance, Naval Postgraduate School (2003). $50,000 grant from the ATOS program office to perform cost-benefit analysis for RFID-related technology.

Significant Practitioner Experience:

- Senior Optimization Engineer, Peoplesoft, 1996-1997

- Systems Analyst, Shell Oil, 1984-1989

Academic and Professional Associations:

- Member of the editorial review board of Production and Operations Management.
- Colloquium Chair for INFORMS Teaching Effectiveness Colloquium, Miami (2001).
- Session Chair for two invited sessions at the POMS conference in Chicago (2005), and sponsored sessions at the INFORMS Conference in Washington, D.C. (1996), the INFORMS Conference in Montreal (1998), and the INFORMS Conference in Salt Lake City (2000). Discussant and session chair at the National Decision Science Institute Conference in Orlando (2000).
- Journal Referee: Academy of Management Review (2004, 2006, 2007) Decision Sciences (2003, 2007), European Journal of Operational Research (1995, 1996), IIE Transactions (1995, 2007), International Journal of Flexible Manufacturing Systems (1998), International Journal of Production Economics (2006), Journal of the Operational Research Society (1994), Journal of Operations Management (2000), Management Science (2004), Manufacturing & Service Operations Management (1998, 1999, 2003, 2004), Naval Research Logistics (1995, 1999, 2006), Operations Research (1998), Production and Operations Management (2003).
- Referee for M&SOM doctoral student paper competition (1997).
- Referee for conferences: national Decision Sciences Institute Conferences in Honolulu (1994) and New Orleans (1999); national Academy of Management Conferences in Chicago (1999), Toronto (2000), Washington, D.C. (2001), Denver (2002), Seattle (2003), and Hawaii (2005); and the 36^{th} & 37^{th} annual Hawaii International Conference on Systems Science (2002, 2003).

Public Service Activities:

- None

Consulting Activities:

- None

Richard B. Doyle
Associate Professor of Public Budgeting
January 1990

Academic Degrees:

- PhD, Political Science, University of Washington, 1984. Dissertation Title: Administrative Law and the Legal Order
- M.A., Political Science, University of Washington, 1976.
- B.S., International Affairs, United States Air Force Academy, 1969.

Primary Teaching Areas

Public Budgeting

Graduate Teaching Experience

Naval Postgraduate School, 1990-present

Publications, Papers, Presentations

- Doyle, Richard. 2007. National Security Strategy: Policy, Process, Problems. *Public Administration Review*, July/Aug.
- Doyle, Richard. 1996. Congress, the Deficit and Budget Reconciliation. *Public Budgeting and Finance*, Winter: 59-81.
- Doyle, R, and J. McCaffery. 1993. The Budget Enforcement Act in 1992: Necessary but not Sufficient. *Public Budgeting and Finance*, Summer: 20-37.
- Jones, L. and R. Doyle. 1992. Public Policy and Management Issues in Budgeting for Defense. *Defense Analysis*, Vol 8, no 1: 29-43.
- Doyle, R. and J. McCaffery. 1992. The Budget Enforcement Act in 1991: Isometric Budgeting. *Public Budgeting and Finance*, Spring: 3-15.
- Doyle, R. 1991. The High-Tech Military: Means and Ends. *Global Affairs*, Spring: 160-68.
- Doyle, R. and J. McCaffery. 1991. The Budget Enforcement Act of 1990: The Path to No Fault Budgeting. *Public Budgeting and Finance*, Spring: 25-40.
- Doyle, R. 1986. A Private Pool Approach to State Administrative Law Adjudication. *Judicature*, Dec-Jan: 224-27. (Reprinted as State Administrative Law Adjudication: Idaho's Private Pool Approach, in *The Advocate*, Vol 29, no 4, 1986, pp. 23-26).
- Doyle, R. 1986. Partisanship and Legislative Afterthought: A Study of Oversight by Legislative Review of Agency Rules in Idaho, 1970-1982. *Legislative Studies Quarterly*, Feb: 109-18.
- Doyle, R. 1992. Reconciliation and the Budget Process. *Policy Studies Journal*, Vol 20, no 3: 489-98.
- Doyle, R. 1997. "Entitlements," In Jay Shafritz, editor, *The International Encyclopedia of Public Policy and Administration* (Boulder, CO: Westview Press, Inc.).
- Doyle, R. 1997. "Markup." In Jay Shafritz, editor, *The International Encyclopedia of Public Policy and Administration* (Boulder, CO: Westview Press, Inc.).

- Doyle, R. 1997. "Reconciliation." In Jay Shafritz, editor, *The International Encyclopedia of Public Policy and Administration* (Boulder, CO: Westview Press, Inc.).

Research Projects

- Development and deployment of online module on the US National Security Strategy for NATO's Partnership for Peace Information Management System (PIMS) (http://www.nps.navy.mil/dl/dlrc/PFP/), 2006. Funded by NPS Office of Continuous Learning
- Development of online module on NATO's Security Strategy for NATO's Partnership for Peace Information Management System (PIMS), 2007. Funded by NPS Office of Continuous Learning.
- Development of budget simulation for GB 4053 (see above) to be used within asynchronous online course, 2004. Funded by NPS Office of Continuous Learning. Simulation has been each time the course is taught, i.e., several times per year.

Significant Practitioner Experience

- 1987-1989: Senior Analyst for Defense, Committee on the Budget, United States Senate, Washington, D.C.
- 1986-1987: Legislative Assistant, Defense and Foreign Policy, U.S. Senator Slade Gorton, Washington, D.C.

Mark Jan Eitelberg
Professor of Public Policy
October 1982

Academic Degrees:

- Ph.D., New York University, 1979, Public Administration (Public Policy and National Security). Dissertation: *Military Representation: The Theoretical and Practical Implications of Population Representation in the American Armed Forces*.
- M.P.A., Wagner School of Public Service, New York University, 1973, Public Administration (Theory and Practice).
- A.B., Franklin and Marshall College, 1970, Government and Religious Studies (Dual Major).

Primary Teaching Areas:

- Military Manpower Policy
- Research Methods
- Public Policy Analysis

Graduate Teaching Experience

- Naval Postgraduate School, 1982-Present

Publications, Papers, Presentations:

- **Books**

Eitelberg, Mark J., ed. *Americans in Arms: Diversity and the Modern Military*. Three-book set. Westport, CT: Praeger, Forthcoming (2008).

Committee on the Youth Population and Military Recruitment, National Research Council *Assessing Fitness for Military Enlistment*: *Physical, Medical, and Mental Health Standards*. Washington, DC: National Research Council of the American Academies, 2006

Committee on Techniques for the Enhancement of Human Performance, National Research Council, *The Changing Nature of Work: Implications for Occupational Analysis*. Washington, DC: National Academy Press, 1999.

Eitelberg, Mark J. and Mehay, Stephen L., eds. *Marching Toward the 21st Century: Military Manpower and Recruiting.* Westport, CT: Greenwood Press, 1994.

Eitelberg, Mark J. *Manpower for Military Occupations*. Washington, DC: Office of the Assistant Secretary of Defense (Force Management and Personnel), April 1988. (Monograph Series)

Eitelberg, Mark J., Laurence, Janice H., and Waters, Brian K. (with Perelman, Linda S.). *Screening for Service*. Washington, DC: Office of the Assistant Secretary of Defense (Manpower, Installations, and Logistics), September 1984. (Monograph Series)

Binkin, Martin and Eitelberg, Mark J. *Blacks and the Military*. Washington, DC: The Brookings Institution, 1982.

- ***Chapters in Books***

Eitelberg, Mark J. "Women and Minorities in the Military: Charting a Course for Research," in *Managing Diversity in the Military*. Edited by Mickey R. Dansby, James B. Stewart, and Schuyler C. Webb. New Brunswick, NJ: Transaction Publishers, 2001.

Eitelberg, Mark J. “The All-Volunteer Force After Twenty Years,” in *Professionals on the Front Line: Two Decades of the All-Volunteer Force.* Edited by J. Eric Fredland, Curtis L. Gilroy, Roger D. Little, and W.S. Sellman. Washington, DC.: Brassey’s, 1996.

Eitelberg, Mark J. and Little, Roger D. “Influential Elites and the American Military After the Cold War,” in *US Civil-Military Relations: In Crisis or Transition?* Edited by Don M. Snider and Miranda A. Carlton-Carew. Washington, DC: The Center for Strategic and International Studies, 1995).

Eitelberg, Mark J. and Mehay, Stephen L. “The Shape of Things to Come,” in *Marching Toward the 21st Century: Military Manpower and Recruiting.* Edited by Mark J. Eitelberg and Stephen L. Mehay. Westport, Connecticut: Greenwood Press, 1994.

Eitelberg, Mark J. and Mehay, Stephen L. “Demographics and the American Military at the End of the Twentieth Century,” in *U.S. Domestic and National Security Agendas: Into the 21st Century*. Edited by Sam C. Sarkesian and John Flanagin. Westport, Connecticut: Greenwood Press, 1994.

Eitelberg, Mark J. “Military Manpower and the Future Force,” in *American Defense Annual, 1993*. Edited by Joseph Kruzel. New York: Lexington Books, 1993.

Eitelberg, Mark J., Laurence, Janice H. and Brown, Dianne C. “Becoming Brass: Issues in the Testing, Recruiting, and Selection of American Military Officers” in *Testing Policy in Defense: Lessons from the Military for Education, Training and Employment*. Edited by Bernard Gifford and Linda Wing. Boston, MA: Kluwer Academic Publishers, 1991, pp. 1–141.

Binkin, Martin and Eitelberg, Mark J. “Women and Minorities in the All-Volunteer Force,” in *The All-Volunteer Force After a Decade*. Edited by William Bowman, Roger Little, and G. Thomas Sicilia. Elmsford, New York: Pergamon-Brassey’s, 1986.

Eitelberg, Mark J. and Binkin, Martin. “Military Service in American Society,” in *Toward a Consensus on Military Service*. Edited by Andrew J. Goodpaster, Lloyd H. Elliott, and J. Allen Hovey, Jr. Elmsford, New York: Pergamon Press, 1982.

- **Conference Papers and Presentations (1998-Present)**

Eitelberg, Mark J. and Armor, David J. "Research Update: First-Term Attrition of Recruits Who Received an Enlistment Waiver." Paper presented to the Committee on the Youth Population and Military Recruitment," National Academies, Washington, DC, April 2005.

Eitelberg, Mark J. "First-Term Attrition of Women and Minorities Who Enlisted in the Military During the 1990s." Paper presented to the Committee on the Youth Population and Military Recruitment," National Academies, Washington, DC, April 2004.

Eitelberg, Mark J. and Armor, David J. "First-Term Attrition of Recruits Who Received an Enlistment Waiver." Paper presented to the Committee on the Youth Population and Military Recruitment," National Academies, Woods Hole, MA, August 2004.
Eitelberg, Mark J. “Confessions of a Cranky Journal Editor,” Panel on Tips for Academic Writers, Biennial Conference of the Inter-University Seminar on Armed Forces & Society, Chicago, IL, October 2003.

Eitelberg, Mark J. "Spacemen, Scholars, and Sailors: Another Look at the Military's Treatment of Gays." Paper presented at Annual Conference of the American Psychological Association, Toronto, Canada, August 2003.

Eitelberg, Mark J. "America's All-Volunteer Force: Who Serves and Why Should We Care?" Invited paper presented at "Notestein Seminar," Office of Population Research, Woodrow Wilson School of Public and International Affairs, Princeton University, December 2001.

Eitelberg, Mark J. "Bridging the Gap Between Defense and Public Administration."

Remarks presented at the Annual Meeting of the American Society for Public

Administration, Newark, NJ, March 2001.

Eitelberg, Mark J. "Military Recruiting for the 21st Century: Where Do We Go From Here?" Paper presented at *Symposium on Strategic Approaches to Military Recruiting: An International Perspective*, 41st Annual Conference of the International Military Testing Association, Monterey, CA, November 1999.
Eitelberg, Mark J. "The Demography of Diversity." Paper presented at "Managing Diversity Workshop" for newly-selected Admirals (US Navy) and Generals (US Marine Corps), Washington, DC, January 1999.

Eitelberg, Mark J. "The All-Volunteer Force and Society." Paper presented at *Seminar on Transition to an All-Volunteer Force*, sponsored jointly by the Council on Foreign and Defense Policy (Russia), the *Independent Military Review* (Russia), and the Center for Civil-Military Relations (Naval Postgraduate School), Moscow, Russia, January 1998.

Eitelberg, Mark J. "Women and Minorities in the Military: Research Trends and Future Directions." Invited paper presented at the Equal Opportunity Research Symposium, Defense Equal Opportunity Management Institute (DEOMI), Cocoa Beach, FL, December 1997. In DEOMI, *1997 EO/EEO Research Symposium Proceedings*, Patrick AFB: DEOMI, April 1998.

- **Government Reports**

Department of Defense. *Career Progression of Minority and Women Officers.* Washington, DC: Office of the Under Secretary of Defense for Personnel and Readiness, August 1999. (Contributing Author.)

Department of Defense, "Defense Advisory Committee on Women in the Services: Utilization of Women Indicator Report." Monterey, CA: Defense Manpower Data Center/Naval Postgraduate School, September 1996. (Contributing Author and Editor.)

Department of Defense. "Evolution of Policy and Programs," Chapter 2 in *Family Status and Initial Term of Service, Volume II - Trends and Indicators.* Washington, DC: Office of the Assistant Secretary of Defense (Personnel and Readiness), December 1993. (Sole Author.)

Department of Defense, *Human Resource Development in the Department of Defense: Issues and Initiatives for Military Selection.* Washington, DC: Office of the Assistant

Secretary of Defense (Force Management and Personnel), September 1991. (Contributing Author and Editor.)

Department of Defense. "A Preliminary Assessment of Population Representation in Operations Desert Shield and Desert Storm," Appendix D in *Population Representation in the Military Services, Fiscal 1990*. Washington, DC: Office of the Assistant Secretary (Force Management and Personnel), August 1991. (Sole Author.)

Department of Defense. *Human Resource Development in the Department of Defense: Issues and Initiatives for Military Selection and Classification.* Washington, DC: Office of the Assistant Secretary of Defense (Force Management and Personnel), *July 1990*. (Contributing Author and Editor.)

Department of Defense. *A Comparison of Current Army and Marine Corps Recruit Quality Requirements*. Washington, DC: Office of the Assistant Secretary of Defense (Force Management and Personnel), May 1986. (Sole Author.)

Department of Defense. *Population Representation in the Active Duty Military Services.* Washington, DC: Office of the Assistant Secretary of Defense (Manpower, Installations, and Logistics), *June 1985*, *June 1986*, and *August 1987* editions. (Contributing Author and Editor.)

Department of Defense. "ASVAB Testing in Languages Other Than English." Information Paper. Washington, DC: Office of the Assistant Secretary of Defense (Manpower, Installations, and Logistics), 1985. (Sole Author.)

Department of Defense. *Profile of American Youth: 1980 Nationwide Administration of the Armed Services Vocational Aptitude Battery*. Washington, DC: Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics), March 1982. (Principal Author and Editor.)

Research Projects:

- No funded research projects through the Naval Postgraduate School during the self-study period. However, since 1976, directed approximately 35 research projects for the Office of the Secretary of Defense and U.S. Defense agencies. Funding for projects has totaled several million dollars.

Significant Practitioner Experience:

- 1975-1982, Senior Scientist, Human Resources Research Organization. Research project director and principal investigator; author of numerous technical reports, papers, and government documents.
- 1975, Personnel Analyst, State of New Jersey.
- 1970-1976, Staff Sergeant, US Army Reserve and US Army National Guard

Academic and Professional Associations:

- Editor, *Armed Forces & Society*, official journal of the Inter-University Seminar on Armed Forces & Society (1998-2001)
- Board of Editors, *Military Psychology* (2001-2005) and *Armed Forces & Society* (2001-Present)
- Elected Member (Fifth Term) of Governing Council and Fellow, Inter-University Seminar on Armed Forces and Society, Chicago, Illinois. Founder and Chair of the Pacific Coast Chapter (1988-Present)

- American Psychological Association, Division 19 (Military Psychology), Washington, DC. Recipient of "Robert M. Yerkes Award" for career achievement and notable contributions to military psychology by a non-psychologist, August 2000.

Public Service Activities:

- U.S. Department of Defense representative on The Technical Cooperation Program (TTCP), an international, cooperative program in the defense sciences and technologies. Member of HUM-TP3 (formerly UTP-3), panel on "Military Human Resource Issues." (1990-2001)
- Board of Directors, Toro Little League and Board of Directors, Toro Pony League (Toro Park, Corral de Tierra, and Salinas, California). (1997-2001)
- Commissioner, University of California Blue Ribbon Commission on Estimating the Costs of Excluding Homosexuals from the US Military. (2005-2006)

Consulting Activities:

- Visiting Research Collaborator, Office of Population Research, Woodrow Wilson School of Public and International Affairs, Princeton University. (2001-2002)
- Member and Contributing Author, Committee on the Youth Population and Military Recruitment: Physical, Medical, and Mental Health Standards, National Research Council of the National Academies. (2004-2005)
- Member and Contributing Author, Committee on Techniques for the Enhancement of Human Performance, National Research Council of the National Academy of Sciences. (1997-2000)
- Consultant, RAND Corporation. (1998-2000)
- Consultant, Campbell-Ewald (US Navy's ad agency), Warren, Michigan. (2000-Present)
- Consultant and Author, National Commission on Testing and Public Policy, University of California, Berkeley. (1988-1989)
- Consultant and Author, Global Demographic Trends Group, President's Commission on Integrated Long-Term Strategy, National Defense University, Washington, DC. (1987-1988)
- Consultant, Human Resources Research Organization (HumRRO). (1983-1986; 2005-Present)
- Associated Staff, Foreign Policy Studies Program, The Brookings Institution, Washington, DC. (1980-1982)
- Member and Contributing Author, Military Service Working Group, The Atlantic Council of the United States, Washington, DC. (1980-1981)

Kenneth J. Euske
Professor
August 1978

Academic Degrees:

- Ph.D, Arizona State University, 1978, Accounting.
- MBA, Amos Tuck School of Business Administration at Dartmouth College, 1969, Finance and Organizational Theory.
- AB, Gonzaga University, 1969, Economics.

Primary Teaching Areas:

- Managerial accounting and control
- Financial accounting

Graduate Teaching Experience

- Naval Postgraduate School, Monterey, California. Graduate School of Business and Public Policy, August 1978 – Present
- School of Accounting, University of Southern California, Los Angeles, California. Visiting Professor of Accounting, January 1996 - May 1996.
- Darden Graduate School of Business Administration, University of Virginia, Charlottesville, Virginia. Visiting Associate Professor of Accounting, September 1989 - May 1990.
- University of California, Berkeley, California. Visiting Assistant Professor of Accounting, August 1983 - July 1984.

Publications, Papers, Presentations:

ARTICLES:

- The Role of Management Control Systems in Planned Organizational Change: An Analysis of Two Organizations. With R. H. Chenhall. *Accounting, Organizations and Society*, In press.
- Enhancing the ABC Cross. With A. Vercio. *Management Accounting Quarterly*, In press.
- The Pyramid of Organizational Development as a Performance Measurement Model. With M. Malina. *Advances in Management Accounting*, 2005, *14*, 167-175.
- Public, Private, Not-for-Profit: Everybody Is Unique? *Managing Business Excellence*, 2003, *7* (4), 5-11.

RESEARCH MONOGRAPH AND BOOK CHAPTERS:

- History of Performance Measurement. With L. Zander. In *The Encyclopedia of Social Measurement.* Academic Press, 2005.

BOOKS:

- *Activity-Based Cost Management Design Framework: Getting It Right the First Time*. With R. Bleeker. (Ed.) CAM-I, 2004.
- *Service Process Measurement: Breaking the Code.* With N. Frause, T. Peck, B. Rosenstiel, and S. Schreck. CAM-I, 1998.

- *Management Control: Planning, Control, Measurement and Evaluation.* Addison-Wesley, 1984.

REFEREED PROCEEDINGS AND PAPERS PRESENTED:

- The Role of Management Control Systems in Planned Organizational Change: An Analysis of Two Organizations. With R. H. Chenhall. *3rd Conference on Performance*
- *Measurement and Management Control, September 21-23, Nice, France. An earlier version was presented at the AIMA World Conference on Management Accounting Research, Monterey, California, May 12-13, 2005.*
- Public, Private, Not-for-Profit: Everybody is Unique? *Performance Measurement Symposium 2003, INSEAD, July 27-29, 2003.*

Research Projects:

- Summer 2007. Support to the Fleet Resources Center Southwest.
- Fall 2004, Winter 2006. Performance Metrics Project for the Project Executive Office (Integrated Warfare Systems). Sponsor: Project Executive Office (Integrated Warfare, Systems).
- Fall 2005. Performance Metrics Project for the Project Executive Office (Littoral and Mine Warfare). Sponsor: Project Executive Office (Littoral and Mine Warfare).
- Summer 2005. Performance Metrics Project for the Naval Warfare Center – Port Hueneme. Sponsor: Naval Warfare Center - Port Hueneme .
- Fall 2004, Spring 2005. Performance Metrics Project. Sponsor: Assistant Secretary of the Navy (Research, Development, and Acquisition).
- Summer 2002 - Fall 2003. Improving Performance Measurement. Sponsor: Safe Schools/Healthy Students. Salinas, California.

Significant Practitioner Experience:

- August 2006 - Present. President-Elect of the Management Accounting Section of the American Accounting Association.
- January 2007 – Present. Member of the editorial board of *Management Accounting Research*.
- August 2005 – August 2006. President-Elect of the Management Accounting Section of the American Accounting Association.
- August 2004 – August 2005. Chair of the Outstanding Dissertation Award Committee of the Management Accounting Section of the American Accounting Association.
- July 2000 - Present. Member of the Advisory Board of the Performance Measurement Association.
- September 1971 - August 1972. Heler Associates Incorporated, Flagstaff, Arizona. Vice President.

Academic and Professional Associations:

- Member of the American Accounting Association

- Member of the European Accounting Association
- Member of the Institute of Management Accountants
- Member of the Society for Business Ethics
- Member of the Institute for Operations Research and the Management Sciences
- Member of the Academy of Management
- Member of Beta Gamma Sigma

Public Service Activities:

- January 1998 - July 2001. Member of the Board of Directors. Evan-Moor Publishing Company, Inc.
- March 1991 - November 1992. Member of the Committee to Save Rocky Shores, Pacific Grove, California.

Geraldo Ferrer
Associate Professor
October 2004

Academic Degrees:

- Ph.D. in Management, INSEAD (European Institute of Business Administration), 1997, Technology Management, and "Managing the Recovery of Value from Durable Products".
- MBA, Dartmouth College, 1992, General Management.
- BS Engineering, IME (Military Institute of Engineering), 1981, Mechanical and Automobile Engineering.
- BA Management, UFRJ (Federal University of Rio de Janeiro), 1980.

Primary Teaching Areas:

- Operations Management
- Supply Chain Management

Graduate Teaching Experience

- Supply Chain Management (NPS, since 2005)
- Operations Management (NPS, since 2005)
- Sustainable Operations (UNC – Chapel Hill, 1997-2005)
- Project Management (UNC – Chapel Hill, 2002-2004)
- Special Issues in Operations Management (doctoral seminar) (UNC – Chapel Hill, 1997-2000)

Publications, Papers, Presentations:

- Ferrer, Geraldo, Iuri Gavronski and Ely L. Paiva, "ISO 14001 Certification in Brazil: Motives and Benefits." Approx. 30 pages. Journal of Clean Production. Forthcoming.
- Ferrer, Geraldo and Jay Swaminathan. 2006. "Managing New and Remanufactured Products". Management Science. Vol. 52:1, pages 15–26
- Heese, H. Sebastian, Kyle Cattani, Geraldo Ferrer, Wendell Gilland and Aleda Roth. 2005. "Competitive advantages through take-back of used products". European Journal of Operational Research. Vol. 164:1 pages 143-157.
- Ferrer, Geraldo and Michael Ketzenberg 2004. "Value of Information in Remanufacturing Complex Products." IIE Transactions. Vol. 36:3 pages 265-277.
- Cattani, Kyle, Geraldo Ferrer, and Wendell Gilland. 2003. "Simultaneous Production of Market–Specific and Global Products for Worldwide Demand." Naval Research Logistics. Vol 50:5 pages 438-461.
- Ferrer, Geraldo. 2003. "Yield Information and Supplier Lead Time in Remanufacturing Operations". European Journal of Operational Research. Vol 149:3 pages 540-556.

- Ferrer, Geraldo and D. Clay Whybark. 2001. "Material Planning for a Remanufacturing Facility". Production and Operations Management. Vol 10:2 pages 112-124.
- Ferrer, Geraldo. 2001. "On the Widget Remanufacturing Operation". In European Journal of Operational Research. Vol 135:2 pages 373-393.
- Baganha, Manuel, Geraldo Ferrer and David Pyke. 1999. "The Residual Life of the Renewal Process: A Simple Algorithm." In Naval Research Logistics 46-4 pages 435-443.

- Speaker and session organizer in INFORMS conferences: Seattle 2007, San Francisco 2005, Honolulu 2005, Atlanta 2003, San Jose 2002, Miami 2001, San Antonio 2000, Cincinnati 1999, Atlanta 1996, New Orleans 1995, Singapore 1995.
- Speaker at the Acquisitions Research Conference: Monterey 2006, 2007.
- Speaker and session organizer in POMS conferences: Rio de Janeiro 2007, Savannah 2003, San Francisco 2002, Orlando 2001, Seville 2000.
- Invited speaker of the research group Closed-Loop Supply Chains, sponsored by Carnegie Bosch Institute: Penn State University 2003, INSEAD 2002 and Carnegie Mellon University 2001.
- Invited Speaker at the Frank Batten Young Scholars Forum, College of William & Mary, June 2001.
- Co-Organizer of the Teaching Workshop on Global Supply Chain Management, Charlottesville (2001) and Chapel Hill (1999).

Research Projects:

- "The Economic Impact of Open Architecture in the Life-Cycle of Reusable Assets." Competitive research grant of the Acquisitions Research Program in the Naval Postgraduate School. Period: FY2007
- "RFID Implementation Process in the Department of Defense." Competitive research grant of the Acquisitions Research Program in the Naval Postgraduate School. Period: FY2007
- "Managing the Remanufacturing Process of Defense Assets." Competitive research grant of the Acquisitions Research Program in the Naval Postgraduate School. Period: FY2007
- "What Is the Right RFID for Your Process." Competitive research grant of the Acquisitions Research Program in the Naval Postgraduate School. Period: FY2006
- "Managing the Service Supply Chain in the Department of Defense: Opportunities and Challenges." Competitive research grant of the Acquisitions Research Program in the Naval Postgraduate School. Period: FY2006
- Research Initiation Program. Competitive research grant at the Naval Postgraduate School. Period: FY2005 and 2006
- DEVISO – Global Development and ISO 14000 Research Project. Principal Investigator. Grantor: Kenan Institute of Private Enterprise, Chapel Hill, NC. Period: 11/2002-11/2003. Amount: $20,000.

Significant Practitioner Experience:

- Founder and Director of Superserv Ltd, Rio de Janeiro, Brazil (1982-1990).

Academic and Professional Associations:

- *National Science Foundation*: ad-hoc member of the review panel for Unsolicited Proposals received by the Service Enterprise Engineering (SEE) Program.
- *Social Sciences and Humanities Council* (Canada): grant reviewer.

- *INFORMS*: Institute for Operations Research and Management Science
- *POMS*: Production and Operations Management Society.
- *MSOM*: Manufacturing and Service Operations Management Society.
- *DSI*: Decision Science Institute (member of the Strategic Planning for International Affairs Committee)

Raymond E. Franck
Senior Lecturer
October 2000

Academic Degrees:

- PhD, Harvard University, Graduate School of Arts and Sciences (GSAS), 1983, Economics, "The Option of War and Arms Race Behavior"
- AM, Harvard University, GSAS, 1969, Economics.
- BS, US Air Force Academy, 1967, International Relations

Primary Teaching Areas:

- Economics: basic MBA course, cost-benefit analysis
- Modeling
- Military Leadership
- Engineering Economics, Cost Estimation
- Systems Analysis

Graduate Teaching Experience

- Joint Military Intelligence College
    - Intelligence and National Security Strategy
    - Intelligence and National Military Strategy
    - Special Topics in Strategy
- Naval Postgraduate School: see subjects above.

Publications, Papers, Presentations:

Articles, books, monographs, manuals, reports or other published material published 2003-2006.

- with Francois Melese, "A Game Theory View of Military Conflict in the Taiwan Strait," *Defense & Security Analysis*, Vol. 19, no. 4, (December 2003), 327-348.
- with Francois Melese: "Exploring The Structure Of Terrorists' WMD Decisions: a Game Theory Approach," *Defense & Security Analysis*, Vol 20, no 4 (December 2004), 355-372.
- "Innovation and the Technology of Conflict During the Napoleonic Revolution in Military Affairs," *Conflict Management and Peace Science*, Vol. 21, no. 1 (2004), 69-84.
- *Business Case Analysis and Contractor vs. Organic Support: a First-Principles View*, NPS-AM-04-013, Acquisition Research Sponsored Report Series, Naval Postgraduate School, September 2004.
- with Terry Pierce, "Disruptive Military Innovation and the War on Terror," *Defense & Security Analysis*, Vol. 22, no. 2 (June 2006), 123-140.

Significant publications from earlier years.

- "Expanding the Framework for Analyzing National Missile Defenses: A Proposal for Discussion," *Defense & Security Analysis*, Vol. 18, no. 3 (Fall 2002), 221-226;

- with Francois Melese, "The Access Deterrence Scenario: A New Approach to Assessing National Missile Defenses," *Defense & Security Analysis*, Vol. 18, no. 3 (Fall 2002), 227-238;
- "A Bayesian Perspective of Dominant Battlefield Awareness," *63rd MORSS Conference Proceedings* (1996)
- "Competitive Aspects of the Military-Technical Revolution …," *Defense Analysis*, Aug 1996, with Hildebrandt
- "Alternatives for Defense in the Post-Soviet World …," *Defence and Peace Economics*, Vol. 5, no 1 (Jan 1994)
- "Cost-Performance Choices in Post-Cold War Weapon Systems," CADRE Papers Special Series, *The Future of the Air Force*, AU-ARI-CPSS-91-11 (Maxwell AFB, AU Press, Feb 1992).

<u>Conference presentations and other significant presentations, 2003-2006.</u>

- Analyzing Conflict: Insights from the Natural and Social Sciences," UCLA, 24-26 April 2003. Presented paper, "Innovation and Military Conflict: Leaders and Followers in RMAs,"
- WEAI Annual Conference, Denver, 11-15 July 2003. Chaired one session, discussed one paper and presented one paper.
- WEAI Annual Conference, Vancouver, BC, 29 June – 3 July 2004. Organized two sessions, chaired one session, presented one paper, discussant for three papers.
- NPS Annual Acquisition Research Symposium, Monterey, CA, 17-18 May 2005.
  - Chaired panel on "Competitive Sourcing."
  - Papers: "A Transactions Cost Economics View of DoD Outsourcing," and "Business Case Analyses and Contractor vs. Organic Support."
- WEAI Annual Conference, San Francisco, CA, 4 – 8 July 2005.
  - Organized two sessions, title "Economic Analysis and National Security" (I & II), with Sonmez Atesoglu (Clarkson Univ.); chaired one of those sessions;
  - Also chaired session on "Defense Strategy and Alliances."
  - Three papers presented: "Analytical Foundations of Business Case Analyses," "Military Innovation and the Macrotechnology of Conflict," and (with Francois Melese) "One Size Does Not Fit All: Transactions Costs in Government Contracting."
  - Discussant for two papers: Toshihiro Ihori (Univ. of Tokyo) and Martin McGuire (UC, Irvine), "Collective Risk Management," and Thomas Hamilton (RAND), "Cost-Effectiveness of Airport Security"
- NPS Annual Acquisition Research Symposium, 16-17 May 2006. Presented paper titled "A Transaction Cost Economics Approach to Defense Acquisition Management." Paper published in Symposium *Proceedings*.
- WEAI Annual Conference, San Diego, CA, 29 June – 3 July 2006.
  - Organized two sessions, titled "Economic Analysis and National Security" (I&II), with Sonmez Atesoglu (Clarkson Univ); chairing one session
  - Presented one paper, "A Transactions Cost Economics Approach to Optimal Contracts"

    - Discussant for two papers: Martin McGuire (UC, Irvine), "Two Concepts of Security from Conquest;" Francois Melese (NPS), "Six Ways to Structure a Cost-Effectiveness Analysis of Alternatives."
- NPS Annual Acquisition Research Symposium, 16-17 May 2007, "Applying Insights from Transaction Cost Economics (TCE) to Improve DoD Cost Estimation." Paper published in Symposium *Proceedings*.
- WEAI Annual Conference, Seattle, WA, 29 June – 3 July 2007.
    - Organizing one session, "Economic Analysis and National Security," with Sonmez Atesoglu (Clarkson Univ); chairing two sessions
    - Presenting three papers: "US and EU Defense Industrial Base Issues," "Transaction Cost Economics: Insights on Cost Estimation," "Coercively Deficient WMD Powers: Characteristics and Countermeasures"
    - Discussing two papers.

Research Projects undertaken 2003-2006.

- "Transactions Cost Economics and Optimal Contract Type," with John Dillard and Francois Melese, sponsored by GSBPP Acquisition Chair, 2005-06.
- "Business Case Analysis for Production Support", sponsored by GSBPP Acquisition Chair, 2003-04.
- Autumn Project (or Solarium II): Served on NPS team led by Dr. Patrick Parker. Fairly extensive activities in the Fall and Winter of AY 2003. NPS plus three other groups produced recommendations for national security strategy for the war on terror. Results were briefed to the Director of Net Assessment and Deputy Secretary of Defense in January 2003. Coauthored chapter on energy policy in NPS team's written report of March 2003.

Significant Practitioner Experience:

- Thirty-three years of commissioned service in US Air Force. Retired 2000 in grade of Brigadier General. Assignments with significant public policy involvement included the following:
    - April 1985 - February 1989. Deputy Chief, Programs Analysis Division; CINCSAC Special Assistant, Headquarters SAC, Offutt AFB, NE.
    - July 1980 - November 1982. Staff Analyst, Strategic Offensive Forces Division, Office of the Director, Program Analysis and Evaluation (PA&E), Office of the Secretary of Defense; The Pentagon, Washington, DC.
- Educational Administration
    - Professor and Head, Department of Economics and Geography, United States Air Force Academy, 1989-2000
    - Associate Dean, School of Intelligence Studies, Joint Military Intelligence College, 1995-96. (Sabbatical from USAF Academy.)
    - Interim Chair, Department of Systems Engineering, Graduate School of Engineering and Applied Sciences, NPS, 2002-2004.

Academic and Professional Associations:

- American Economic Association

- Western Economic Association International

Public Service Activities:

- Congregation President, Faith Lutheran Church, Seaside, CA.

Consulting Activities:

- 2001 to present. Occasional consultant with RAND Corporation: Activity includes supporting analysis for study of costs of mobility for the US Army, and reviews of two draft RAND reports.
- Consulting in support of Quadrennial Defense Review (QDR). Sponsor was Office of the Secretary of Defense (Program Analysis & Evaluation). With Dr. Hildebrandt, the principal member. Major focus was possible peer (or near-peer)competitors. Activities included trips to Washington, DC, several analyses and memos, a briefing to the National Intelligence Officers (NIOs) for General Purpose Forces and Economics (Apr 97), and presentation at OSD-Intelligence Community Conference on in Revolutions in Military Affairs (RMAs), " Costing the Reconnaissance-Strike Complex: Capital as an Indicator in the Contemporary RMA" (Sep 97).

William R. Gates
Associate Professor
Associate Dean of Research
June 1988

Academic Degrees:

- Ph.D. in Economics, Yale University, May 1984.
  Areas of Specialization: Industrial Organization and Public Finance.
  Dissertation: "Federal Participation in Commercial Technology Development: The Case of Solar Thermal Technologies
- B.A. in Economics (Highest Honors), University of California at San Diego, June 1975.

Primary Teaching Areas:

GB4071 Economic Analysis and Defense Resource Allocation
GB4043 Business Modeling and Analysis
MN2039 Basic Quantitative Methods in Management
GE3070 Economics for Defense Managers
MN3140 Microeconomic Theory
MN4145 Policy Analysis

Theses/Projects Completed – Spring AY07

Principal Advisor	103 Thesis students	28 Project Students
Co-Advisor	77 Thesis students	10 Project Students
Associate Advisor	115 Thesis students	25 Project Students
Total	295 Thesis students	63 Project Students

Graduate Teaching Experience:

- Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA – MS in Management and MBA: April 1988-Present
- Golden Gate University, Monterey, CA campus – MBA, 1991 – 2001.
  Managerial Economics
- Monterey Institute of International Studies, Monterey, CA – MBA, 1990 – 1996.
  Microeconomics, International Economics

Publications and Presentations 2004 – 2007

Book Chapters

- William R. Gates and Mark E. Nissen, "An Overview of Agent-and Web-Based Employment Marketspaces in the U.S. Department of Defense," in M. Khosrow-Pour (Ed.), Encyclopedia of Information Science and Technology, Hershey, PA: Idea Group Publishing, 2005. (Refereed)

Refereed Journal Papers

- Kenneth H. Doerr, William R. Gates and John E. Mutty, "A Hybrid Approach to the Valuation of RFID/MEMS Technology Applied to Ordnance Inventory," *International Journal of Production Economics*, 103, 2006, pp. 726-41.

- William R. Gates and Mitchell J. McCarthy, "United States Marine Corps Aerial Refueling Requirements: Queuing Theory and Simulation Analysis," *Defense and Security Analysis*, 20 (3), September 2004, pp. 273-287.
- William R Gates and Mark E. Nissen, "Experimental Analysis of e-Employment Market Design," *Journal of Organizational Computing and Electronic Commerce*, 14(3), 2004, pp. 195-222.

Technical Reports

- K.H. Doerr, W.R. Gates and J.E. Mutty, *A Hybrid Approach to the Valuation of RFID/MEMS Technology Applied to Ordnance Inventory*, NPS Technical Report, NPS-GSBPP-05-013, Nov. 1, 2005.
- M.A. Malina, K.H. Doerr and W.R. Gates, *Promotion Expenditure Categories, Time Lag Structure, and the Demand for Almonds*, NPS Technical Report, NPS-GSBPP-05-007, June 6, 2005.

Presentations

- Coughlan, Peter J., Nick Dew, William R. Gates and Suzanne Schang, Crossing the Technology Transfer Chasm: Network Externalities, Coordination Games and Lessons Learned from ACTDs, Western Economics Association International Meetings, Seattle, WA, June 30-July 3, 2007.
- Coughlan, Peter J., William R. Gates and Bock, Paul, Analysis of an Alternative Reenlistment Bonus Program, Western Economics Association International Meetings, Seattle, WA, June 30-July 3, 2007.
- Coughlan, Peter J., William R. Gates and Pei-Yin Tan, Simulating the Effectiveness of an Alternative Assignment Incentive Pay Auction Mechanism, Western Economics Association International Meetings, Seattle, WA, June 30-July 3, 2007.
- Coughlan, Peter J., Nick Dew, William R. Gates and Suzanne Schang, Crossing the Technology Transfer Chasm: Network Externalities, Coordination Games and Lessons Learned from ACTDs, 4th Annual Acquisition Research Symposium, Monterey, CA, May 16 - 17, 2007.
- Coughlan, Peter J., William R. Gates and William N. Filip, Assessing the Effectiveness of an Alternative Retention Bonus Scheme Using a Sequential Auction Mechanism, Navy Workforce Research and Analysis Conference, Center for Naval Analysis, Falls Church, VA, May 1 - 2, 2007.
- Coughlan, Peter J., William R. Gates and Pei-Yin Tan, Simulating the Effectiveness of an Alternative Assignment Incentive Pay Auction Mechanism, Navy Workforce Research and Analysis Conference, Center for Naval Analysis, Falls Church, VA, May 1 - 2, 2007.
- Coughlan, Peter J., William R. Gates and William N. Filip, Developments in Selective Re-enlistment Bonuses, Western Economics Association International Meetings, San Diego, CA, June 30-July 3, 2006.
- Coughlan, Peter J., William R. Gates and Henning H. Homb, Innovations in Service Member Assignment Processes, Western Economics Association International Meetings, San Diego, CA, June 30-July 3, 2006.
- Pema, Elda, Peter J. Coughlan and William R. Gates, The Prisoner's Dilemma in National Security: Lessons Learned from Friend or Foe, Western Economics Association International Meetings, San Diego, CA, June 30-July 3, 2006.

- Coughlan, Peter J., William R. Gates and Henning H. Homb, Innovations in Service Member Assignment Processes, Navy Workforce Research and Analysis Conference, Center for Naval Analysis, Falls Church, VA, April 25-26, 2006.
- William R. Gates, Peter J. Coughlan and Reggie Dizon, Analysis of Separation Pay, Western Economics Association International Meetings, San Francisco, CA, July 5-8, 2005.
- William R. Gates, Peter J. Coughlan and Reggie Dizon, Analysis of Separation Pay, Navy Workforce Research and Analysis Conference, Center for Naval Analysis, Arlington, VA, April 18-19, 2005.
- William R Gates, "Analysis of Separation Pay Options in the Navy," Western Economics Association International Meetings, Vancouver, BC, July 2, 2004.
- Karsten P. Logemann, William R. Gates and CDR William Hatch "Simulating Assignment Incentive Pay for Enlisted U.S. Sailors", Navy Manpower Research and Analysis Conference, Center for Naval Analysis, Alexandria, VA, March 30-April 1, 2004.

Research Projects

- **Analysis of Separation Pay Options** (AY2004)
  Chief of Naval Operations 6.6 Studies and Analysis Program ($35K)
  Theses/Projects Advised
  - Viltz, Damian K., *Analysis of Separation Pay Options*, June 2004.
  - Reppert, Joseph L, *Analysis of Early Separation Incentive Options to Shape the Naval Force of the Future*, December 2004
- **Efficiency of Alternative Assignment Auction Formats** (AY2005)
  Naval Personnel Research, Studies and Technology/PERS-12 ($35)K
  Theses/Projects Advised
  - Mainor, Walter, Moreno, Jesus S., Pinkston, Antonio, *Alternative Assignment Incentive Pay Formats*, June 2005.
- **Analysis of Separation Pay Options** (AY2005)
  Chief of Naval Operations 6.6 Studies and Analysis Program ($38.1K)
  Theses/Projects Advised
  - Dizon, Reginald E., *The Use of Auctions as a Force-Shaping Tool for Downsizing the Navy*, Forthcoming.
  - Hudson, Daniel P., *Utilizing Auctions as a Force Shaping Tool to Provide Voluntary Separation Incentives to Naval Personnel*, March 2006.
- **Efficiency of Alternative Assignment Auction Formats** (AY2006 – unfunded)
  Theses/Projects Advised
  - Homb, Henning H., *Salary Auctions and Matching As Incentives for Recruiting to Positions That Are Hard to Fill in the Norwegian Armed Forces*, March, 2006.
  - Tan, Pei Yin, *Simulating the Effectiveness of an Alternative Salary Auction Mechanism*, December, 2006.
- **Analysis of Retention Bonus Auctions** (AY2006 – unfunded)
  Theses/Projects Advised

- Filip, William N., *Improving the Navy's Officer Bonus Program Effectiveness*, June, 2006.

- **Crossing the Technology Valley of Death (Diffusion Chasm): Network Externalities, Coordination Games and Lessons Learned from ACTDs** (AY2006)
  NPS Acquisition Research Program and NPS Dean of Research ($80K)
  Deputy Under Sec. of Defense (Advanced Systems & Concepts) ($90K)
  Theses/Projects Advised
  - Schang, Suzanne L., *Exploration of Factors Affecting the Success of New Technology Adoption and Its Budget Implications*, June 2007.
- **Innovations in Defense Acquisition Auctions: Lessons earned and Alternative Mechanism Designs** (AY2007/2008)
  Chief Of Naval Personnel, N1 ($88.6K)
- **Efficiency of Alternative Assignment Incentive Pay Processes** (AY2007/2008)
  Office of the Chief of Naval Personnel, N130/132 ($61.1K)

Significant Practitioner Experience

- **Economist, Systems Analysis Section, Jet Propulsion Laboratory**, Pasadena, CA 91109: October 1979-June 1988, Summer 1977, Summer 1976

Academic and Professional Associations

- Member American Economics Association
- Member Western Economics Association; attend annual conference serving as presenter, discussant and session chair.
- Member Navy Workforce Research and Analysis Group; attend annual conference serving as presenter, discussant and session chair.

Public Service Activities

- Volunteer coach, Stevenson High School JV Softball, 2002 – present
- Volunteer, Monterey County Alzheimer's Association 2003-2004
- Volunteer, Walk for Juvenile Diabetes, 1998-2004
- Judge, Monterey County History Day, 1996-2004
- Course Director, Run in the Forest 5K and 10K (Stevenson School), 1999-2003
- Volunteer, RL Stevenson School Football Snack Bar (cook) 1997-2003
- Co-Director, Run, Pacific Grove Triathlon, 1996-2003
- Guide, Monterey Bay Aquarium, 1990-2002

Consulting Activities

- **Almond Board of California** (2004 – 2005): helped prepare a return on investment analysis (ROI) of the promotional and research expenditures made by the Almond Board of California (ABC) to promote the California almond industry

Deborah E. Gibbons
Associate Professor
July 2007

Academic Degrees:

- Ph.D. Carnegie Mellon University, December 1996, Organizational Behavior and Theory with a minor in Statistics,
    - Dissertation Title: Headlines, Grapevines, and Masterminds: Understanding the Transmission Capacity and Propensity of Social Relations in Organizations
- M.S. Carnegie Mellon University, June 1994, Organizational Behavior and Theory
- B.A. University of Washington, August 1992, Psychology

Primary Teaching Areas:

- Organizational behavior and theory, power and politics, organizational learning and design, management of groups and teams, social relations and networks

Graduate Teaching Experience

- Managing for Effectiveness
    - Organizational behavior and theory course with a public administration and defense orientation (graduate students, Naval Postgraduate School 2004-2007)
- Organization Theory
    - Lecture-based course in organization theory (MBA students, Georgia State University 1997-2001)
- Organizational Behavior
    - Introductory organizational behavior course (MBA students, Georgia State University 1997-2004)
- Organizational Design
    - Project-based course applying organization theory to organizations and events (MBA students, Georgia State University 2001-2004)
- Power in Organizations
    - Readings and discussion-based course covering historical and current views and applications of power (Master's and doctoral students, Georgia State University 2001-2004)
- Organization Theory
    - Special Topics course for doctoral students (Georgia State University, as needed)

Publications, Papers, Presentations:

<u>Scholarly Publications</u>

- Gibbons, Deborah E. (2007). Maximizing the Impact of Disaster Response by Nonprofit Organizations and Volunteers. In D. E. Gibbons (Ed.) <u>Communicable Crises: Prevention, Management and Resolution in the Global Arena</u>. Charlotte, NC: Information Age Publishing, 203-240.

- Gibbons, Deborah E. (2007). Synthesizing Perspectives on Management of Communicable Crises. In D. E. Gibbons (Ed.) Communicable Crises: Prevention, Management and Resolution in the Global Arena. Charlotte, NC: Information Age Publishing, 353-374.
- Gibbons, Deborah. E. (2007). Interorganizational network structures and diffusion of information through a health system, American Journal of Public Health.
- Gibbons, Deborah. E. and Grover, S. L. (2006). Network Factors in Leader-Member Relationships. In G. Graen (Ed.) LMX Leadership: The Series, Sharing Network Leadership, Volume 4. Greenwich, CT: Information Age Publishing Inc.
- Gibbons, Deborah E. (2004). Friendship and Advice Networks in the Context of Changing Professional Values. Administrative Science Quarterly, 49(2), 238-262.
- Gibbons, Deborah E. (2004). Network structure and innovation ambiguity effects on diffusion in dynamic organizational fields. Academy of Management Journal, 47(6), 938-951.
- Gibbons, Deborah E. and Olk, Paul M. (2003). Individual and structural origins of friendship and social position among professionals. Journal of Personality and Social Psychology, 84, 340-351.

Reports

- A Framework for Quantitative Assessment of Public Health Systems. (with Sergey Sotnikov and Subhashish Samaddar) Issues and guidelines for assessment of inter-organizational networks that support public health. Project report submitted to Georgia State University and the U. S. Centers for Disease Control, October 2005, in fulfillment of a research-funding agreement.
- Satisfaction, Attitudes, and Intended Turnover among Employees of the City of Atlanta. (with Murray Bradfield, Human Resources Director for City of Atlanta and Norman Bryan, GSU Professor) Examination of social and personal factors related to job satisfaction, attitudes, and intentions among city employees. Project report submitted to the Atlanta Mayor's office and cabinet, 2003.

Conference Presentations

- *Individual and Network Influences on Team Composition for Business Strategy, Negotiation, and Crisis Intervention Teams*, presented at the Intra-Organizational Networks Conference, Lexington, KY, March, 2007. (with Georgios Baltos and Zoi Mitsopolou)
- *Monotheistic Faiths, Freedom, and Society*, presented at the International Public Management Network Biennial Conference, St. Gallen, Switzerland, June, 2006.
- *Networks Analysis*, presented at University of Otago Doctoral Retreat, Clyde, New Zealand, November 2005.
- *Preventing a Pandemic* and *Assessing Public Health Networks*, presented at University of Otago, Dunedin, New Zealand, November 2005.

- *Preventing a Pandemic: Internal and External Professional Network Effects on Citizenship Behaviors by Health Workers*, presented at the Intra-organizational Networks Conference, Emory University, Atlanta, GA, October, 2005.
- *Social Networks Analysis Methods to Define and Quantify Dimensions of Public Health Systems*, Presented to the Centers for Disease Control and Georgia State University, Atlanta, GA, October 2005. (with Sub Samaddar and Sergey Sotnikov).
- *Dynamics of Friendship Imbalance among Professional Adults*, presented at the Western Academy of Management Conference, Las Vegas, NV, April, 2005 (with Paul Olk).
- *Social Networks Analysis Methods to Define and Quantify Dimensions of Public Health Systems*, Presented at the AcademyHealth Annual Research Meeting, San Diego, CA, June, 2004 (with Sergey Sotnikov).
- *Interorganizational Public Health Networks: Structural Effects on Information Diffusion*, Presented at the Public Health Systems Research Meeting of the AcademyHealth Annual Research Meeting, San Diego, CA, June, 2004 (with Sergey Sotnikov).

Research Projects:

- STRUCTURAL CONSTRAINT ON PUBLIC HEALTH INFORMATION DIFFUSION
    - Agent-based models were used to simulate local information sharing processes and observe system level diffusion outcomes. Graphs of diffusion curves demonstrated differences among inter-group structures, and regression models tested effects of parameterized and emergent network variables on diffusion. Differing tie patterns among subgroups produced observable differences in diffusion curves at all levels of density and partnering tendencies. Fully connected subgroups diffused information faster than more constrained networks, but hierarchical inter-group structures outperformed decentralized group-to-group chains. Although variance in centralities did not significantly affect the process, the effective size of the diffusing organization's network influenced information diffusion, particularly near the beginning of the process.
    - By identifying which network structures facilitate natural dissemination of information through the health system, the results provide guidelines for strategic development of partnerships.
    - This work was funded by the U.S. Centers for Disease Control. It has yielded project reports, conference presentations, an article in the American Journal of Public Health, and ongoing work to develop public health network interventions.
- HOW DO SOCIAL RELATIONS AND NETWORK STRUCTURES INFLUENCE COWORKER COOPERATION AND SYSTEM-LEVEL OUTCOMES?
    - Deborah E. Gibbons and Ajay Mehra
    - Existing research has built foundations for understanding interaction among personal tendencies to help others, social structures, and

professional cooperation, but standard research methods are unable to systematically test effects of varying social conditions on coworker cooperation and organizational outcomes. Computational modeling enables us to test effects of personal and social variables on outcomes of interest, based on behaviors that are likely to occur at the individual or partner level. By modeling pairwise interactions throughout a simulated system, it is possible to predict the accumulated results of varying social conditions.

- USING METHODS OF SOCIAL NETWORKS ANALYSIS TO DEFINE AND QUANTIFY DIMENSIONS OF PUBLIC HEALTH SYSTEMS
  - Sergey Sotnikov, Deborah E Gibbons, and Subhashish Samaddar
  - This study uses social network analysis to create a framework for quantitative evaluation of health partnerships of community health systems. The authors used a combination of case study and social network measurement methods to assess attributes and effects of five public health networks within the same community. They graphed and calculated quantitative measures of network structures, relating them to respondents' perceptions of public health system performance. The five networks operated almost independently, with connections primarily through joint partnerships with insurance providers. The networks varied in form, and their structural attributes were related to perceived public health outcomes. The project also developed a web-based network surveying system to support quantitative evaluation of inter-organizational relationships within public health systems
  - This work was funded by the U.S. Centers for Disease Control and Prevention/Georgia State University Seed Grant Awards in Social and Behavioral Sciences. It has yielded a project report and conference presentations.

Significant Practitioner Experience:

- Partnerships with colleagues at the U.S. Centers for Disease Control and Prevention, developing methods to assess and support public health networks

Academic and Professional Associations:

- Academy of Management

Public Service Activities:

- Various public schools, 1995-1997, to help them identify networking patterns and outcomes.
- City of Atlanta Government, 2002-2003, to help them conduct a survey of employee satisfaction and morale.
- Centers for Disease Control, various public health agencies, 2003-present, to help them map their participant networks and identify better partnering approaches.

Consulting Activities:

- none

Susan K. Heath
Assistant Professor of Logistics and Operations Management
September 2006

Academic Degrees:

- Doctor of Philosophy in Management Science and Information Systems, The University of Texas at Austin, August 2006, Operations Management, "Scheduling Multiple Product Families on Identical Parallel Assembly Lines With Space Constraints in a Lean Production Environment".
- Master of Engineering, Cornell University, May 1997, Operations Research and Industrial Engineering.
- Bachelor of Arts, Cornell University, January 1995, Psychology.

Primary Teaching Areas:

- Simulation, Optimization.

Graduate Teaching Experience

- Naval Postgraduate School, Winter 2007 and Summer 2007.

Publications, Papers, Presentations:

Refereed Journal Articles:

- Loveland, Jennifer, Susan K. Monkman, and Douglas J. Morrice. "Dell Uses New Production Scheduling Heuristics to Accommodate Increased Product Variety." 2007. Interfaces, v37, n3, pp. 209-219.
- Monkman, Susan K., Douglas J. Morrice and Jonathan F. Bard. "A Production Scheduling Heuristic for an Electronics Manufacturer with Sequence Dependent Setup Costs." 2006. European Journal of Operational Research, In Press.

Refereed Conference Proceedings:

- Monkman, Susan K., Douglas J. Morrice and Jonathan F. Bard. "Scheduling Product Families in a High Volume, Flexible, Assemble-to-Order Factory." 2005. Proceedings of The 2nd Multidisciplinary International Conference on Scheduling: Theory & Applications. Graham Kendall, Lei Lei, Michael Pinedo, eds. pp 394-395.
- Heath, Susan K. and Douglas J. Morrice. "A Comparison of Scheduling Approaches Make-to-Order Electronics Manufacturer." 2007. Forthcoming in Proceedings of the 2007 Winter Simulation Conference, S. G. Henderson, B. Biller, M.-H. Hsieh, J. Shortle, J. D. Tew, and R. R. Barton, eds.
- Davenport, Jon, Charles Neu, William Smith, and Susan Heath. "Using Discrete Event Simulation to Examine Marine Training at The Marine Corps Communication-Electronics School." 2007. Forthcoming in Proceedings of the 2007 Winter Simulation Conference, S. G. Henderson, B. Biller, M.-H. Hsieh, J. Shortle, J. D. Tew, and R. R. Barton, eds.

Conference Presentations:

- "Integrating Assignment and Sequencing of Product Families on Multiple Lines to Minimize Set-up Costs", joint work with Douglas Morrice and Jonathan Bard, presented at the Naval Postgraduate School in Monterey, CA, January 24, 2006

- ”Integrating Assignment and Sequencing of Product Families on Multiple Lines to Minimize Set-up Costs”, joint work with Douglas Morrice and Jonathan Bard, presented at the INFORMS Annual Meeting in San Francisco, November 13, 2005
- “Scheduling Product Families in a High Volume, Flexible, Assemble-to-Order Factory”, joint work with Douglas Morrice and Jonathan Bard, presented at the 2nd Multidisciplinary International Conference on Scheduling: Theory & Applications at the Stern School of Business in New York City, July 19, 2005
- “Scheduling Multiple Product Families on Identical Parallel Assembly Lines With Space Constraints”, joint work with Douglas Morrice and Jonathan Bard, presented at The University of Texas at Austin, October 8, 2004
- “Problems in Mass-Customization: Production Scheduling in an Assemble-to-Order System Where the Part Variety Exceeds the Space Available on the Assembly Lines”, presented at the 2nd World Conference on POM in Cancun, Mexico on May 1, 2004

Research Projects:

- Scheduling Product Families on Multiple, Identical, Parallel Assembly Lines in a Make-To-Order Electronics Manufacturer
    - Sponsor: Naval Postgraduate School RIP Program
    - Products:
        - Heath, Susan K. and Douglas J. Morrice. “A Comparison of Scheduling Approaches Make-to-Order Electronics Manufacturer.” 2007. Forthcoming in Proceedings of the 2007 Winter Simulation Conference, S. G. Henderson, B. Biller, M.-H. Hsieh, J. Shortle, J. D. Tew, and R. R. Barton, eds.
        - Monkman, Susan K., Douglas J. Morrice and Jonathan F. Bard. “A Production Scheduling Heuristic for an Electronics Manufacturer with Sequence Dependent Setup Costs.” 2006. European Journal of Operational Research, In Press.
        - Upcoming presentation at 2007 INFORMS Annual Meeting
- A Review of Applications of the Traveling Salesman Subtour Problem
    - Sponsor: Naval Postgraduate School RIP Program
    - Product: Upcoming presentation at 2007 INFORMS Annual Meeting

Significant Practitioner Experience:

- Senior Business Analyst, Kraft Foods, Inc., 1997 to 2000
    - Supported information systems in a large manufacturing facility
    - Co-lead cross functional team to evaluate and improve all systems support services within Kraft Foods North America; worked with corporate support teams, site support teams and call management center
    - Served as site systems project manager for $1MM product weight control system implementation on the shop floor
    - Performed contractor management on several projects
    - Developed a core support reduction plan, implemented plan, and significantly reduced site support issues and support time spent in factory

Academic and Professional Associations:

- INFORMS member, 2002 to present
- POMS member, 2004 to 2006

Public Service Activities:

- Refereed papers for Interfaces and Naval Research Logistics
- Attended Community Emergency Response Team training, Summer 2007

Consulting Activities:

- None

David R. Henderson
Associate Professor
July 1984

Academic Degrees:

- Ph.D, Economics, University of California, Los Angeles, 1976. Dissertation Title: The Economics of Safety Legislation in Underground Coal Mines
- M.A., Economics, University of California, Los Angeles, 1974.
- B.Sc., Mathematics, University of Winnipeg, 1970.

Primary Teaching Areas

Microeconomics, Cost-Benefit Analysis

Graduate Teaching Experience

University of Rochester, Graduate School of Management, 1975-1979.
Naval Postgraduate School, 1984-present

Publications

Books

- David R. Henderson and Charles Hooper, **Making Great Decisions in Business and Life**, Chicago Park Press, 2006.
- David R. Henderson, **The Joy of Freedom: An Economist's Odyssey**, Financial Times Prentice Hall, 2002.
- David R. Henderson, ed., **The Fortune Encyclopedia of Economics**, Warner Books, 1993.

Articles in Refereed Journals

- David R. Henderson, "The Role of Economists in Ending the Draft," **Economic Journal Watch**, Vol. 2, No. 2, August 2005, pp. 1-21.
- David R. Henderson, "The Hidden Inequality in Socialism," **Independent Review**, Vol. IX, Number 3, Winter 2005, pp. 389-412. (co-authored with Robert McNab and Tamas Rozsas.)

Chapters in Books

- David R. Henderson, "The U.S. Drug War on Latin America," in book (title not known) to be published by Hoover Press, 2007.
- David R. Henderson, "Myths About U.S. Health Care," in David Gratzer, ed., **Better Medicine: Reforming Canadian Health Care**, March 2002.

Conference Papers

- David R. Henderson, "The Economics of Defense, War, and Foreign Policy: Expanding the Scope." Paper presented at Annual Meetings of the Western Economic Association International, San Francisco, July 7, 2005.
- David R. Henderson, "Is Freedom Contagious?", paper given at the Mont Pelerin Society Regional Meeting, Chattanooga, Tennessee, September 19, 2003.

- David R. Henderson, "How Three Economists Switched from Socialist to Pro-Free Market: An Exploration in Oral History," American Economics Association annual meetings, January 3, 1999, New York, NY.

Research Projects

- Study of the role of economists in ending the draft, 2005.
- Study of the hidden inequality in socialism, 2003-2006.

Significant Practitioner Experience

- 1982-1984: Senior economist for health policy and energy policy, Council of Economic Advisers, White House.
- 1979-1980: Senior Policy Analyst, Cato Institute, San Francisco, California.

Academic and Professional Associations:

Member of American Economic Association (1982 to present) and Mont Pelerin Society (1980 to present.)

Public Service Activities:

- Active in various ad hoc groups to control or limit spending and taxation at local level.
- Regular columnist for www.antiwar.com

Consulting Activities:

Microsoft antitrust case, 2002 to 2003.

Nayantara Hensel
Assistant Professor
September 2004

Academic Degrees:

- Ph.D., Harvard University Graduate School of Arts and Sciences, Applied Economics (Business Economics), June, 2001
- M.A., Harvard University Graduate School of Arts and Sciences, Applied Economics (Business Economics), November, 1999
- B.A., Harvard College, Phi Beta Kappa, Magna cum Laude, Economics, June,1997

Primary Teaching Areas:

- Corporate Finance, Financial Institutions, International Economics, Industrial Organization, International Business Management

Graduate Teaching Experience:

- US Naval Postgraduate School, Graduate School of Business and Public Policy, 2004-present
- Stern School of Business, New York University, 2003-2004

Publications, Papers, Presentations:

Refereed Journal Articles:

- Hensel, N. and M. Deichert. "An Empirical Analysis of the Factors Impacting Discount Rates: Evidence from the US Marine Corps," Review of Financial Economics**,** p. 1-17 (forthcoming in print later in 2007; article already available online through Elsevier ScienceDirect)
- Hensel, N. "Cost Efficiencies, Profitability, and Strategic Behavior: Evidence from Japanese Commercial Banks." International Journal of Managerial Finance February, 2006, p. 49-76.
- Hensel, N. "Efficiency in IPO Issuance Processes? A Case Study of Google's IPO," Business Economics, October, 2005, p. 31-42.
- Hensel, N. "An Empirical Analysis of Recent IPO Pricing Patterns in the US," Journal of Financial Transformation, Vol. 14 (Market Imperfections) September, 2005, p. 62-67.
- Hensel, N. "Are Dutch Auctions Right for Your IPO?." Harvard Business School Working Knowledge, April, 2005.
- Hensel, N. "Efficiency in IPO Pricing?: Online Auctions vs. Traditional Processes," Economists Ink , March, 2005.
- Hensel, N. "What Can Law Firms Learn from Their Corporate Clients?," Law Firm, Inc. (American Lawyer Media), February, 2004.
- Hensel, N. "Strategic Management of Cost Efficiencies in Networks: Cross-Country Evidence on European Branch Banking," European Financial Management Journal, September, 2003, Vol. 9, No. 3, p. 333-360.
- Hensel, N. "The Implications of Strategic Network Management for Firm Behavior." Journal of Financial Transformation. Vol. 4. April, 2002, p. 29-35.

Chapters in books:

- Hensel, N. "Banking Regulation and Reform: Implications for the New Millennium." In The New Millennium: Challenges and Strategies for a Globalizing World. Aldershot: Ashgate Press, 2000, p. 197-212.

Monographs:

- Hensel, N. A Manual on Options Trading. Weil Brothers Cotton, 1995

Conference Proceedings

- Hensel. N. "An Empirical Analysis of the Patterns in Defense Industry Consolidation and their Subsequent Impact:" Naval Postgraduate School Acquisition Program Symposium Proceedings, April, 2007

Conference Presentations: (2003-2007)

- Panel Chair, "Economic Growth and Financial Development in the Asian Countries," 48th Annual ISA Convention, Chicago, IL, March, 2007
- "Recent Trends in Asian Banking," 48th Annual ISA Convention, Chicago, IL, March, 2007
- "An Empirical Analysis of the Pricing Behavior of Traditional IPO Issuance Processes and the IPO Online Auction Process." Presented at the Economics Seminar at DePaul University, Chicago, November, 2006.
- Invited Guest, Air Force Association Annual Meeting, Washington DC, September, 2006
- Invited participant, NBER National Security Working Group Meeting, Boston, MA, July, 2006
- "An Empirical Analysis of the Factors Impacting Discount Rates: Evidence from the US Marine Corps," (joint with Martin Deichert). Presented at the Western Economics Association, San Diego, July, 2006
- **"**"An Empirical Analysis of the Pricing Behavior of Traditional IPO Issuance Processes and the IPO Online Auction Process,"
    - Presented at the Midwest Economics Association Conference, Chicago, March, 2006.
    - Presented at the Western Economics Association, San Diego, July, 206
- Invited participant, NBER National Security Working Group Meeting, Boston, MA, February, 2006
- **"**Cost Efficiencies, Profitability, and Strategic Behavior: Evidence from Japanese Commercial Banks." Presented at the European Financial Management Association Conference, Milan, Italy, June, 2005.
    - Panel Chair, Agency Theory I
    - Discussant, "The Stock Return Predictability of the European Banking Sector"
- Discussant, "Missions, Market Quality, Recruiter Effort, and Enlistments," Western Economics Association, July, 2005.
- "Sovereignty and Efficiency: The Transformation of Global Banking" Presented at the 5th International CISS Millennium Conference, Salzburg, Austria, June, 2004.
    - Panel chair for "Emerging Trends and the New Economy"

- Panel Chair and Discussant, European Financial Management Association Conference, Basle, Switzerland, June, 2004:
    - Session Chair, Market Microstructure III
    - Discussant, "Modeling Price Pressure in Financial Markets" (Market Microstructure III)
    - Discussant, "Divergence of Opinion and Equity Returns" (Behavioral Finance II)
    - Discussant, "Integrated Volatility and UHF-GARCH Models: A Comparison Using High Frequency Financial Data" (Methodological Issues I)
- "The Impact of Corporate Governance Reform on M&A Activity." Presented at the International Studies Association Conference, Budapest, Hungary, June, 2003. Also served as panel chair.
- "Strategic Management of Networks: Empirical Evidence from European Branch Banking."
    - Presented at the London Business School Strategy Seminar, February, 2002
    - Presented at the University of Tennessee and the Naval Postgraduate School Graduate School of Business in February, 2003.

Research Projects:

- "Economics of Network-Based Industries," Sponsor; US Naval Postgraduate School's Office of Research. September, 2004-September, 2006.
- "An Empirical Analysis of the Patterns in Defense Industry Consolidation and their Subsequent Impact:,"Sponsor: US Naval Postgraduate School Acquisitions Research Program Grant , September 2006- September 2007.

Significant Practitioner Experience:

Senior Manager / Senior Economist, Ernst & Young LLP, New York City (March, 2003-August, 2004)

- Played a leadership role in developing both the bankruptcy litigation practice and the economics litigation advisory practice.
- Served as the primary economist for the 300+ person Investigative and Dispute Resolution Services Group at Ernst & Young, LLP.
- Brought in over $7.2 million dollars in sales during 2003-2004 with various litigation projects involving economics, bankruptcy, and accounting restatement work.
- Worked with Ernst & Young Corporate Finance, LLC in performing valuation work.
- Developed a new methodology for measuring enterprise value of companies with opaque financial statement data through using event studies to reprice stock, repricing debt, and moving the results to earlier periods (for fraudulent conveyance analysis purposes).

Managing Economist, LECG, New York City (2002-2003)

- Played leadership role in the development and growth of the New York City office of this West Coast-based firm. Developed the practice of the New York City office through marketing and client presentations.

- Helped to grow the utilization of this office from one of the least utilized in the 13 office system to one of the most utilized offices.
- Directed research, wrote expert reports, and conducted economic analyses in a variety of projects.

Consulting Economist, National Economic Research Associates (NERA) / Marsh & McLennan, Securities and Finance Practice, New York City (2001-2002)

- Extensive experience in directing research and writing expert reports in breach of contract cases, market efficiency cases, securities valuation cases, 10b-5 securities class actions, mass torts claims valuation cases and bankruptcy cases.

Academic and Professional Associations:

- Program Committee, National Association of Business Economists Conference, San Francisco, CA, September, 2007
- Policy Content Reviewer, NBER
- Reviewer, International Journal of Industrial Organization, Review of Financial Economics, European Financial Management Journal
- Program Committee, European Financial Management Association Annual Meeting, 2004 and 2006.
- Current Member, European Financial Management Association, National Association of Business Economists, Western Economics Association, Academy of Management, and Midwest Economics Association
- Current member, Harvard Faculty Club, Harvard Business School Club of New York, Harvard Club of Boston, Harvard Club of New York City
- Program Committee, Harvard Business School Club of New York, 2002-2003
- Chair, Younger Members Committee, Harvard Club of Boston, 2000-2003

Consulting Activities:

- See under practitioner experience

Susan Page Hocevar
Associate Professor
September 1990

EDUCATION

- Ph.D., Business Administration. University of Southern California, 1989.
- M.A., Educational Psychology and Measurement. Cornell University, 1975.
- B.A., Psychology. University of Rochester, 1970.

PRIMARY TEACHING AREAS

- Organizational Behavior
- Organizational Power, Politics and Conflict Management
- Negotiation and Consensus Building

GRADUATE TEACHING EXPERIENCE

- Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA Associate Professor (7/01-present); Assistant Professor, Department of Systems Management, (7/95 – 7/01). Visiting Assistant (Adjunct) Professor 9/90 - 6/95.
- Center for Executive Education, Naval Postgraduate School, Monterey, CA. Modules on organization design; and negotiation and collaboration for both the Navy Corporate Business Course (NCBC), Navy Intelligence Business Executive Course (NIBEC), and the Executive Business Course (EBC). 2002; 2006-present
- Adjunct Faculty for University of San Francisco's MPA in Managing Nonprofit Organizations teaching statistics and advising thesis research. (11/85-9/90)

Publications, Papers, Presentations (2004-2007):

REFEREED ARTICLES for JOURNALS or BOOKS

- Hocevar, S.P., Thomas, G.F., Jansen, E. (2006). Building collaborative capacity: An Innovative strategy for homeland security preparedness. In Beyerlein, Beyerlein & Kennedy (Eds) Advances in Interdisciplinary Studies of Work Teams: Innovation Through Collaboration, Volume 12 (263-283). New York: Elsevier JAI Press.

REFEREED in PROCEEDINGS

- Hocevar, S.P, Jansen, E., and Thomas, G.F. (2007) Developing Collaborative Capacity: A Diagnostic Model. In Proceedings of the 4th Annual Acquisition Research Symposium. Monterey, CA.
- Hutchins, S.G., Weil, S., Kleinman, D.L., Hocevar, S.P., Kemple, W.G., Pfeiffer, K., Kennedy, D., Oonk, H., Averett, G, Entin, E. (2007). Design of an Experiment to Investigate ISR Coordination and Information Presentation Strategies in an Expeditionary Strike Group. In Proceedings of the 12th International Command and Control Research and Technology Symposium. June 19-21, 2007. Newport, RI.
- Kemple, W.G., Kleinman, D.L., Weil, S., Grier, R., Hutchins, S., Hocevar, S.P. Serfaty, D.(2006). "Field Observations of an Expeditionary Strike Group: A

Prerequisite to Model-driven Experimentation of Adaptive C2 Processes." Proceedings of the 11th International Command and Control Research and Technology Symposium: Coalition Command and Control in the Networked Area, September 2006, Cambridge, England.

- Thomas, G.F., Jansen, E., and Hocevar, S.P. (2006). Building Collaborative Capacity in the Interagency Context. Presentation at 3rd Annual Acquisition Research Symposium. May 2006. Monterey, CA.
- Weil, S., Kemple, W.G., Grier, R., Hutchins, S., Kleinman, D, Hocevar, S.P., Serfaty, D. (2006). Empirically-Driven Analysis for Model-Driven Experimentation: From Lab to Sea and Back Again. In Proceedings of the 11th International Command and Control Research and Technology Symposium. June 20-22, 2006. San Diego, CA.
- Hutchins, S.G., Kemple, W.G., Kleinman, D.L., Hocevar, S.P. (2005). Expeditionary Strike Group: Command Structure Design Support. In Proceedings of the 10th International Command and Control Research and Technology Symposium. June 13-16, 2005. McLean, Virginia.
- Entin, E.E., Weil, S. A. Kleinman, D.L., Hutchins, S.G., Hocevar, S.P., Kemple, W.G., Daniel Serfaty, (2004). Inducing Adaptation in Organizations: Concept and Experiment Design. In Proceedings of the 2004 Command and Control Research and Technology Symposium, Loews Coronado, CA, June 2004.

CONFERENCE PRESENTATIONS: PAPERS NOT in PROCEEDINGS

- Hutchins, S. G., Kemple, W. G., Kleinman, D. L., and Hocevar, S. P. (2005). Expeditionary Strike Group: Command Structure Design Support. Presentation to the Military Operations Research Society Symposium. West Point, NY. 21-24 June 2005.
- Hocevar, D. & Hocevar, S. (2004). What is Good for Science may not be Good for Policy: Scales, Schools and Accountability. Presentation at the International Meeting of the Psychometrika Society, Monterey, CA.
- Hutchins, S.G., Entin, E.E., Weil, S. A. Kleinman, D.L., Hocevar, S.P., Kemple, W.G., Daniel Serfaty, (2004). Inducing Adaptation in Organizations: Concept and Experiment Design. Presentation to the 72nd Military Operations Research Society Symposium, NPS, Monterey, CA, June 2004.

TECHNICAL REPORTS

- Thomas, G.F., Hocevar, S.P., Jansen, E. (2006). A Diagnostic Approach to Building Collaborative Capacity in an Interagency Context. NPS Technical Report (NPS-PM-06-026). Naval Postgraduate School. Monterey, CA.
- Hocevar, S.P., Jansen, E.; Thomas, G.F. (2004). Building Collaborative Capacity for Homeland Security. NPS Technical Report (NPS-GSBPP-04-008). Naval Postgraduate School. Monterey, CA.

RESEARCH PROJECTS (2004-2007)

- 1998-PRESENT: Investigator research effort entitled Adaptive Architectures for Command and Control (A2C2). Funded by Office of Naval Research (ONR).

NPS Principal Investigator is Professor William Kemple, GSOIS (Graduate School of Operations and Information Sciences). This research program involves a team of researchers from U. of Connecticut, Michigan State U., Carnegie Mellon U., George Mason U. as well as government and industry members. The focus of this research is on identifying structural design characteristics and processes that facilitate organizational adaptability. Our research team has advised the Chief of Naval Operations's Strategic Studies Groups in their activities related design and adaptation. Published products are presented annually at the Command and Control Research and Technology Symposium. Received funding of approximately $200,000 per year 2004-present.

- 2003-2004: Investigator for project entitled "Interagency Coordination for Homeland Security: Building Flexible, Collaborative Networks." Funded by Department of Justice funded program (through NPS Department of Homeland and Security and Defense) (approx $95,000) Principal Investigator was Professor Gail Thomas, GSBPP. The purpose of this project was to derive a model for collaborative capacity focusing on data gathered from homeland security professionals. The primary product of this effort is the Technical Report published 2004 (cited above).

- FY06 & FY07: Investigator for two research projects related to inter-organizational "Collaborative Capacity." Funded by Acquisition Research Program, Naval Postgraduate School. Principal Investigator is Professor Gail Thomas, GSBPP. The purpose of this project is to develop a conceptual model and instrumentation to assess the collaborative capacity of agencies to work together. To date, we have gathered data from the context of homeland security and defense acquisition. This work is on-going. Funding approximately $90,000 per year.

OTHER SCHOLARLY CONTRIBUTIONS TO DOD (2004-2007)

- 2004 -- I was invited to be a participant at a 3-day workshop on Network-Centric Operations (NCO) conducted at NPS, hosted by the Cebrowski Institute and Center for Executive Education. This event combined formal presentations and workshops in which the participants engaged in ways to advance our understanding of NCO.

- 2005 -- I was invited to be a "peer reviewer" for a three-day workshop for the NATO Code of Best Practice for C2 (Command and Control) Assessment. The purpose of the workshop was for a panel of peer reviewers to examine and critique new C2 concepts developed by the SAS-050 Research Group that was established by NATO in 2003. The product of this work will be published as a revised edition of NATO Code of Best Practice for C2 Assessment in 2006.
- 2006 – I was requested, along with Professor Nancy Roberts to design and conduct a workshop sponsored by the NPS Center for Stability and Reconstruction Studies. Participants in this 5-day workshop included forty

representatives from Non-Government organizations (e.g., International Rescue Committee, Save the Children), Inter-national Organizations (e.g., UN Office for the Coordination of Humanitarian Assistance (UNOCHA), International Organization for Migration), U.S. and international military officers and members of the U.S. Department of State Humanitarian Information unit. The focus of this workshop was to make advances in the challenging domain of inter-organizational information sharing in complex humanitarian emergencies. Conducted 21-25 May, 2006. Technical report in preparation.

- 2007 – I was invited to assist in the design, delivery and facilitation of a "Strategic Communication Summit" convened by VADM Stufflebeem and VADM Ulrich for key members of COMNAVEUR and C6F. In addition to my design and facilitation contributions, I made a presentation on inter-agency collaboration as it relates to strategic communication planning.

PROFESSIONAL ASSOCIATIONS AND ACTIVITIES (2004-present)
Memberships:

- Fellow in the Inter-University Seminar on Armed Forces and Society, 1993-present.
- Member of the National Academy of Management, 1982-present.

Reviewing:

- Journal reviewer for Homeland Security Affairs 2005-present.
- Member of editorial review board for Military Psychology, 2002 to present.

PUBLIC SERVICE ACTIVITIES

CONSULTING ACTIVITIES

Lt Col Bryan J. Hudgens, USAF
Military Lecturer
Air Force Acquisition Representative
Academic Associate, Master of Executive Management Degree
March 2005

Academic Degrees:

- ABD, University of Oklahoma, 2003 (Marketing and Supply Chain Management)
- Air Command and Staff College (Non-residence), Maxwell AFB AL, 2003 (Professional Military Course)
- Intermediate Developmental Education (Residence), University of Oklahoma (Professional Military Education Course, 2000-2003
- Master of Science, Air Force Institute of Technology, 1997 (Contract Management),
- Squadron Officer School (Residence), Maxwell AFB AL, 1995 (Professional Military Education Course)
- Bachelor of Arts, University of Pennsylvania, 1989 (Mathematics)

Primary Teaching Areas:

- Strategic purchasing
- Research methods
- Corporate entrepreneurship
- Operations management
- Acquisition
- Supply chain management

Graduate Teaching Experience

- Lecturer and Director, Graduate Strategic Purchasing Program, Air Force Institute of Technology, 2003-2005

- Military Lecturer; Air Force Acquisition Representative; Academic Associate, Master of Executive Management Program; 2005-Present

Publications, Papers, Presentations:

Peer-Reviewed Journal Articles:

- Daugherty, P.J., Richey, R.G., Hudgens, B.J., & Autry, C.W. (2003). Reverse Logistics in the Automobile Aftermarket Industry. *International Journal of Logistics Management*, *14*(1), 49-62.

Technical Reports:

- Brook, D., Hudgens, B., Nguyen, N., and Walsh, K., "Benchmarking Best Practices in Transformation for Sea Enterprise," Naval Postgraduate School Technical Report, NPS-CDMR-GM-06-000, September 2006.

Conference Proceedings (Published):

- Searle, D., Reed, T., Bowman, D. & Hudgens, B. (2006). DoD is Not IBM. *Proceedings of Third Annual Acquisition Research Symposium,* 25-46.

- Pigeon, N., Hudgens, B., England, E. & Mable, L. (2006). The Use of Alternative Dispute Resolution Techniques in United States Air Force Environmental Conflicts. *Proceedings of Third Annual Acquisition Research Symposium,* 139-157.

- Petit, C., Hudgens, B., Jordan, R. & Mable, L. (2006). Development of Measures of Success for Corporate Level Air Force Acquisition. *Proceedings of Third Annual Acquisition Research Symposium,* 282-304.

Conference Presentations (Unpublished):

- Pope, D., Tenney, C., Hudgens, B. & King, D. (2006). *Performance Based Service Acquisition: A Quantitative Evaluation of Implementation Goals and Performance in the United States Air Force*. Paper presented at the Third Annual Acquisition Research Symposium, Monterey, California, May 17-18.

- Novak, R., Reed, T., Hudgens, B., & Greiner, M. (2006). *Going to War with Defense Contractors: A Case Study of Battlefield Acquisition*. Paper presented at the Third Annual Acquisition Research Symposium, Monterey, California, May 17 - 18.

- Wood, C. C., Holt, D. T., Reed, T. S., Hudgens, B. J., & Coombes, S. M. T. (2005). Entrepreneurial mindset in Air Force organizations: Antecedents and outcomes. Paper presented at the annual meeting of the Western Academy of Management, Las Vegas, NV, March 30 - April 2.

Book Reviews (Published):

- Hudgens, B.J. (2004). [Review of the book *The Art of the Strategist*]. *The Journal of Applied Management and Entrepreneurship.*

- Hudgens, B.J. (2004). [Review of the book *Operation Excellence: Succeeding in Business and Life the U.S. Military Way*]. *The Journal of Applied Management and Entrepreneurship.*

Research Projects:

Center for Defense Management Reform (Current):
Customer: Office of the Deputy Chief of Naval Operations (Material Readiness and Logistics)
Topic: Benchmarking Best Practices in Transformation.
Anticipated deliverable: Technical report due in Fall 2006.

Significant Practitioner Experience:

- Sep 1989 – Feb 1992, Contract Management Officer, 2d Contracting Squadron, Barksdale AFB LA
- Feb 1992 – Mar 1993, Chief, Construction Flight, 2d Contracting Squadron, Barksdale AFB LA
- Sep 1992 – Feb 1993, Chief of Contracting, Riyadh Air Base, and Contracting Officer, HQ Joint Task Force Southwest Asia (JTF-SWA/J4-C)
- Apr 1993 – Apr 1996, Contract Administrator and Administrative Contracting Officer, DCMA San Antonio, Austin Residency, Defense Contract Management Command, Defense Logistics Agency, Austin TX
- May 1996 – Sep 1997, Student, Graduate Contract Management Program, Air Force Institute of Technology, Wright-Patterson AFB OH
- Sep 1997 – Jul 2000, Contract Negotiator, Procuring Contracting Officer, and Chief, Management Operations Division, F-16 System Program Office, Wright-Patterson AFB OH
- Jul 2000 – Aug 2003, Student, Marketing and Supply Chain Management, University of Oklahoma, Norman OK
- Aug 2003 – Mar 2005, Director, Graduate Strategic Purchasing Program, Air Force Institute of Technology, Wright-Patterson AFB OH
- Present, Military Lecturer; AF Acquisition Representative; Director, Master of Executive Management Program, Naval Postgraduate School, Monterey, CA
- Military awards include:
    - Meritorious Service Medal
    - Joint Service Commendation Medal
    - Air Force Commendation Medal x 2

Academic and Professional Associations:

- Level III Certification in Contracting, Department of Defense Acquisition Professional Development Program
- Senior Air Force Acquisition Badge
- Member, Institute for Supply Management
- Lifetime Member, Air Force Association

Public Service Activities:

- Reviewer, Journal of Business Logistics (2001-2003)
- Reviewer, Southern Management Association (2002)
- Invited Presentation. Hudgens, B.J. (2004). Trends in Global Purchasing and Supply Management. *Presentation to the Institute for Supply Management*, Dayton, OH, February 2004.

Consulting Activities:

- Center for Defense Management Reform (see "Research Projects" above)

Thomas J. Hughes, VADM, USN (ret.)
Distinguished Visiting Professor
Conrad Chair for Financial Management
July 2007

Academic Degrees:

- MS in Operations Analysis, NPS Monterey, 31 May 1962
- BS in Applied Sciences, Harvard University, 5 June 1946

Primary Teaching Areas:

- MBA, Financial Management

Graduate Teaching Experience:

- GSBPP, NPS, 8 Sept 2002 to present.
- Acting Dean, GSBPP NPS, 1 July 2005 to 4 October 2005

Publications, Papers, Presentations:

- None

Research Projects:

- None

Significant Practitioner Experience:

- 43+ years active duty in U.S. Navy (1 March 1944 to 1 August 1987)
- At rank VADM, USN 4 years
- President/CEO Navy Federal Credit Union (2 August 1987 to 19 April 1996)

Academic and Professional Associations:

- MORS, ASMC, ASNE, Credit Union Trade Associations NFCU, and CUNA; AASCB Conference

Public Service Activities:

- Episcopal Church "sideman" and collector

Consulting Activities:

- None

Recent Awards at NPS:

- NPS Distinguished Alumni Award
- Navy Meritorious Civilian Service Award

Becky D'Addea Jones
Lecturer
June 2007

Academic Degrees:

- MBA - Marketing, Golden Gate University (1998)
- MA Chapman University (1990)
- BS Arizona State University (1978)

GRADUATE TEACHING EXPERIENCE

- Naval Postgraduate School, Marketing Lecturer (2002 – present)
- Golden Gate University, Business & Marketing Lecturer (1998 - 2003)

Significant Practitioner Experience:

- Whirlpool Corporation/Integrated Home Solutions (2001 – 2002)
  National Field Marketing Manager - Internet enabled appliances (e-homes)
- Cisco Systems - 2000 to 2001
- Channel Development Manager
  Develop a channel with homebuilders and land developers for the Cisco vision of the Internet lifestyle. Working with homebuilders and land developers, create a program whereby Cisco leverages their strong ecosystem of partners towards new "internet home" developments.
- ReplayTV - Feb. 2000 to July 2000 Director of Marketing Communications
  Direct the creation of strategic marketing plans, collateral materials & associated marketing schedules and budgets. Determine messaging and marketing requirements for the consumer markets.
- SONY Electronic Publishing Services - Feb. 1996 to May 24, 1999
  - Director of Marketing (Electronic Publishing Services for CD-ROM-DVD-ROM, Audio & Video)
  - Established and enhanced customer relationships across market segments. Increased company's presence from startup position in the software services industry to becoming the premier provider for electronic publishing services through extensive use of Internet services. Initiated company's web presence & established company's market position through tradeshows, direct & relationship marketing/selling, and advertising activities. Identified target audience and prospected for new customers while maintaining and enhancing services to existing client base. Continually increased project volume and annual revenues over a 3-year period.
- The McGraw-Hill Companies - April 1992 to Feb. 1996
  Business Unit Manager/Vice President, Product Development,
- McGraw-Hill School Systems (9-93 – 2-96)
  Managed and directed the activities of the Monterey business unit which included educational software development, usability/human factors engineering, technical support, technical documentation, quality assurance, product marketing, training and network administration, budget and personnel administration. Business Unit

contributions included the two fastest growing market opportunities; classroom products and library automation, representing 40% of the company's overall revenue. Additional product offerings included student-assessment and instructional-management software for Windows and Macintosh platforms.

- CTB/McGraw-Hill (Columbia Software) (4-92 – 9-93)
  Directed and managed the activities and staff for major accounts, marketing, product management, technical support, training, and remote operations for educational administrative software. Created & managed P&L of 6 product lines, 11 cost center budgets and $18M annual revenue. Established and maintained standards for product management and customer satisfaction. Developed proposals/bids for state and school district software contracts. Promoted to V.P. Product Development.

Lawrence R. Jones
Wagner Professor of Public Management
September 1987

Academic Degrees:

- Ph.D University of California, Berkeley, Doctor of Philosophy. 1977
  Field: Budgeting and Finance in Higher Education, Dissertation
  Topic: Critical Mass Planning and Budgeting
- M.A. University of California, Berkeley, Master of Arts in Public Affairs, 1971
- B.A. Stanford University, Bachelor of Arts in Political Science, American Government and International Relations, 1967

Primary Teaching Areas:

- Public Budgeting and Financial Management;
- Budgeting and Financial Management for National Defense

Graduate Teaching Experience:

- Naval Postgraduate School, 1987 to present
- University of New Mexico, 1985-1987
- University of Oregon, 1979-1985

Publications, Papers, Presentations:

Books:

- From Bureaucracy to Hyperarchy in Netcentric and Quick Learning Organizations, (Charlotte, NC: Information Age Publishing, 2007), with F. Thompson.
- International Public Financial Management Reform, (Greenwich, CT: Information Age Publishing, 2005), co-edited with J. Guthrie et. al.
- Strategy for Public Management Reform, (London: Elsevier-Oxford Press, 2004), co-edited with K. Schedler and R. Mussari.
- Budgeting and Financial Management for National Defense, (Greenwich, CT: Information Age Press, 2004), with Jerry L. McCaffery.

Articles in Refereed Journals, Chapters in Edited Books and Other Publications:

- "Capital Budgeting in the Federal Government and Department of Defense: What Can Be Learned from the Private Sector?" in A. Kahn, ed., Capital Budgeting for the Federal Government, New York, NY: Marcel-Dekker, 2007, with J. L. McCaffery.
- "Improving the Performance of Management in Asia," International Public Management Review, 8/1 2007, with C. Wescott.
- "The Consummate Comparative Public Administrationist: Ferrel Heady," Public Administration Review, 67/2 (March/April), 2007, with Donald Klingner.

- "Leadership: Ten Plus One Key Attributes of Effective Leaders," LEAP Forum, 1/1, Manila, Asian Development Bank, 2007.
- "The Future of U. S. National Defense Strategic Planning and the Impact of New Technology: Searching for Better Organizational Designs, Processes and Methods to Cope with Global and Fiscal Exigency," book review essay, Public Administration Review, 66/6 (November/December) 2006.
- "Assessing Public Management Reform in an International Context," in N. Lind, ed., Essential Readings in Comparative Public Administration. Oxford: Elsevier, 2006, with Donald F. Kettl.
- "Recent PPBES Transformation in the Defense Department," in U. S. Military Program Management: Lessons Learned and Best Practices. R. Rendon and G. A Garrett, eds., New York: Management Concepts, Inc., 2006, with J. McCaffery.
- "Learning from the Philippine Occupation: Nation-Building and Institutional Development in Iraq and Other High Security Risk Nations," Public Administration and Development, 25 2005, with Donald J. Klingner
- "Defense Acquisition and Budgeting: Investigating the Adequacy of Linkage Between Systems," International Public Management Review, 6/2 2005, with Jerry L. McCaffery.
- "Reform of Program Budgeting in the Department of Defense," International Public Management Review, 6/2 2005, with Jerry L. McCaffery
- "Congressional Control over Defense and Delegation of Authority in the Case of the Defense Emergency Response Fund," Armed Forces and Society, 2005, with Philip J. Candreva.
- "Reform of PPBS and Management Control in the U. S. Department of Defense: Insights from Budget Theory," Public Budgeting and Finance, 25/3 2005, with Jerry L. McCaffery.
- "Contemporary Financial Management Reform in the U.S. Federal Government," in J. Guthrie et. al., eds., International Public Financial Management Reform, Greenwich, CT: Information Age Publishing, 2005, with J. McCaffery.
- "Public Management Reform Strategy in an International Context," in L. R. Jones et al, eds., Strategies for Public Management Reform, (London: Oxford-Elsevier Press, 2004), with Donald F. Kettl
- "Integrating Theory and Practice: Financial Management Reform in the U.S. Federal Government," in A. Kahn, ed., Theory of Financial Management, (New York: State University of New York Press, 2004), with J. McCaffery.
- "Smart Practice Development Administration in Iraq and Other High Security Risk Nations: Lessons from Colonial Experience," International Public Management Review, 5/1, 2004 with Donald Klingner.

Research Projects:

- Budgeting for National Defense Acquisition (2005-2007)
- Capital Budgeting for the Federal Government and National Defense (2005-2007)
- Management, Budgeting and Control of the Navy Flight Hour Program (2003-2008)

Significant Practitioner Experience:

1977 Director of Research, California Student Aid Commission
State of California, Sacramento, California
1975-1977 Budget and Academic Planning Director
California Postsecondary Education Commission
State of California, Sacramento, California
1973-1975 Budget and Planning Officer, Office of the Chancellor
University of California, Berkeley
1971-1973 Budget Analyst and Management Auditor, Department of Finance, Budget Division, State of California, Sacramento, California
1967-1968 Sales and Marketing Manager, Kaiser Steel Corporation, Los Angeles, California
1963-1964 & 1967 Production Line Engineer, Kilo Engineering, Inc., La Verne, California

Academic and Professional Associations:

- Recipient of the Aaron Wildavsky Award for Lifetime Achievement in the Field of Public Budgeting and Finance from the American Association for Budgeting and Financial Management, Washington, DC, November, 2005.
- Member, American Society for Military Comptrollers (1990-2006)
- President, International Public Management Network (1995-2007) (1150 members from more than 90 nations)
- National Chairman, Section on International and Comparative Administration, American Society for Public Administration (2005-2007)
- Chairman, International Policy Issues Steering Committee, Association for Budgeting and Financial Management, American Society for Public Administration (900 members) (2006-2007)

Public Service Activities:

Invited addresses, lectures and visiting scholar residencies: Visiting Research Scholar at: Asia Pacific Governance Institute (2006), All Souls' College, Oxford University (2002), the London School of Economics (2002), JFK School of Government, Harvard University (2001), National Defense University, Taipei, Taiwan (2002), Department of Public Administration, Government of Italy, Rome (2001 and 2000) Thammasat University, Bangkok, Thailand (2001), Asian Development Bank, the Philippines (2001), ENAP, Government of Brazil, Brasilia (2001), Government of Chile, Santiago (2001), Peoples' Friendship University, Moscow, Russia (2000), University of St. Petersburg, Russia (2000), University of Siena, Italy (2000), University Ca'Forcari, Venice (2000), University of Southern Denmark (2000), The Berlin Science Center (2000), Macquarie University Graduate School of Business, Sydney, Australia (2000), University of St. Gallen, Switzerland (1999), University of Geneva, (1996), Fudan University, Shanghai, PRC (1980).

Consulting Activities:

- President, Management and Policy Associates, Inc. Monterey, California and Portland, Oregon, Research and consulting for public private sector organizations

- 2005-2006 Research Consultant, Economic Development and Regional Cooperation, Asian Development Bank
- Evaluation Consultant, The Ford Foundation, International Division, Asia and the Pacific, New York City, New York, Evaluation of Foundation funded programs

Keebom Kang
Associate Professor
July 1988

Academic Degrees:

- Ph.D. (1984): Industrial Engineering, Purdue University
  Ph.D. Dissertation: Confidence Interval Estimation via Batch Means and Time Series Modeling
- M.S. (1979): Operations Research, University of Texas at Austin
- B.S. (1976): Industrial Engineering, Seoul National University

.

Primary Teaching Areas:

- Logistics Engineering, Modeling and Simulation of Military Systems

Graduate Teaching Experience

Naval Postgraduate School (1988-present)

- Taught graduate-level courses: Simulation Modeling and Analysis, Logistics Engineering, Business Logistics, Operations Research, Probability, Statistics
- Distance Learning (VTC) courses in Simulation Modeling & Analysis
- Thesis Supervision: (more than 100 theses as an advisor or associate advisor)

University of Miami (1983-1988)

- Taught graduate-level Operations Research courses, and Executive MBA Management Science courses.

Publications, Papers, Presentations:

Books

- Joines, J. A., R. R. Barton, K. Kang and P. A. Fishwick, Editors (2000). *Proceedings of the 2000 Winter Simulation Conference*, Volumes 1 and 2, The Institute of Electrical and Electronic Engineers (IEEE), Piscataway, NJ.
- Alexopoulos, C., K. Kang, W. R. Lilegdon, and D. Goldsman, Editors. (1995), *Proceedings of the 1995 Winter Simulation Conference*, The Institute of Electrical and Electronics Engineers (IEEE), Piscataway, NJ.

Refereed Journal Articles

- Goldsman, D., Kang, K., Kim, S., Seila, A., and Tokol, (2007) "Combining Standardized Time Series Area and Cremèr-von Mises Variance Estimators," *Naval Research Logistics*, Vol. 54, No. 3, pp.384-396.
- Goldsman, D., K. Kang and A. F. Seila (1999), "Cramer-von Mises Variance Estimators for Simulations," *Operations Research*, Vol. 47, No. 2, pp. 299-309.
- Park, J. and K. Kang (1993), "Delay Analysis for Multidimensional Queueing Process in CSMA/CD Area Network," *Telecommunication Management*, Vol. 1, No. 3, pp. 217-242.
- Kang, K., M. P. Bailey and J. H. Eu (1992), "Statistical Properties of Out-of-frame Detection Schemes for Digital Transmission Systems," *IEEE*

Transactions on Communications. Vol. 40, No. 5, pp. 980-987.

- Gitlow, H. S., K. Kang and S. Kellogg (1992), "Process Tapering: An Analysis of On/Off Deadband Process Controlling," *Quality Engineering*, Vol. 5, No. 2, pp. 293-310.
- Sargent, R. G., K. Kang and D. Goldsman (1992), "An Investigation of Small Sample Size Behavior of Confidence Interval Estimation Procedures," *Operations Research*, Vol. 40, No. 5, pp. 898-913.
- Bailey, M. P., M. Bartroli, K. Kang and A. Callahan (1992), "Reliability Goal Determination for Major-Caliber Ammunition," *Naval Research Logistics*, Vol. 39, pp. 877-892.
- Kang, K. and D. Goldsman (1990), "The Correlation between Mean and Variance Estimators in Computer Simulation," *IIE Transactions*, Vol. 22, No. 1, pp. 15-23.
- Kang, K. and B. W. Schmeiser (1990), "Graphical Evaluation and Comparison of Confidence-Interval Procedures," *Operations Research*, Vol. 38, No. 3, pp. 546-553.

Conference Proceedings:

- Apte, U., and Kang, K., "Lean Six Sigma for Reduced Life Cycle Costs and Improved Readiness," *Proceeding of the Second Defense Acquisition Research*, Monterey, CA, May 2007 (An earlier version was published as Naval Postgraduate School Technical Report, NPS-LM-06-033, Sep 2006.)
- Kang, K., Sanchez, S., and Doerr, K., "A Decision Design of Experiments Approach to Readiness Risk Analysis," *Proceeding of the 2006 Winter Simulation Conference*, pp.1332-1339, Monterey, CA, December 2006.
- Kang, K., Sanchez, S., and Doerr, K., "A Decision Design of Experiments Approach to Readiness Risk Analysis for Performance-Based Logistics, Naval Postgraduate School Technical Report, NPS-LM-06-037, Sep 2006.
- Kang, K., Doerr, K., Apte, U. and Boudreau, M., "A Decision Support Model for Valuing Proposed Improvements in Component Reliability," *Proceeding of the Second Defense Acquisition Research*, Monterey, CA, May 2005
  (Also appeared as Naval Postgraduate School Technical Report, NPS-LM-05-008, June 2005.)

Chapters in Books

- Kang, K. and R. J. Roland (1999), Military Simulation, *Handbook of Simulation* (ed. J. Banks), Chapter 19, John Wiley.

Presentations:

- "On Budget Allocation to Increase Operational Availability and Reduce Readiness Risk through Improvements in Weapon Systems," Third Defense Acquisition Research Conference, Monterey, CA May 2006
- "Metrics and Performance Evaluation in Performance Based Logistics," Workshop at the Future Naval Plans & Requirements West Conference, San Diego, CA October 2005.
- "A Decision Support Model for Valuing Proposed Improvements in Component Reliability," *Second Defense Acquisition Research*, Monterey, CA, May 2005

Research Projects:

- Co Principal Investigator, On Budget Allocation to Increase Operational Availability and Reduce Readiness Risk Through Improvements in Weapon Systems Logistics, PEO SHIPS and PEO IWS via NPS Acquisition Research, Funding Level: $80,000, (2005-2006).
- Co Principal Investigator, A Decision Support Model for Valuing Proposed Improvements in Component Reliability, PEO SHIPS and PEO IWS via NPS Acquisition Research, Funding Level: $80,000, (2004-2005).
- Principal Investigator, Military transportation network analysis, sponsored by the U.S. Transportation Command (USTRANSCOM), Funding Level: $30,000, (2003).

Significant Practitioner Experience:

- None.

Academic and Professional Associations:

- Member of INFORMS (Institute for Operations Research and Management Science) and IIE (Institute of Industrial Engineering)
- Associate Editor for *Naval Research Logistics* (2006 – present)
- Associate Editor of *IMA Journal of Mathematics for Management Science* (2001-2003)
- Editorial Board member, *IIE Transactions* (1996-2003)
- Program Chair for the Winter Simulation Conference 2000
- Co-Editor of the *Proceedings of the 1995 Winter Simulation Conference*
- Transportation and Logistics Track Coordinator for the Winter Simulation Conference, 2005
- Referee for
  Operations Research, IIE Transactions, Management Science, Simulation,

  Operations Research Letters, European Journal of Operational Research,

  Naval Logistics Research, International Journal of Computer Simulation,

  Computers and Industrial Engineering, Communications of ACM,

  ACM Transactions of Modelling and Computer Simulation

Public Service Activities:

- None

Consulting Activities:

Driscoll's, Inc.: Developed a simulation model and helped them improve the logistics processes (November 05 – February 06)

Cynthia L. King, Ph.D.
Assistant Professor
August 2007

Academic Degrees:

- Ph.D., Communication, University of Washington, 2005, Rhetorical Communication
    - Dissertation: "Examining proper communicative conduct in the discursive construction of racialized others: An analysis of perspectives in the case of Saul Bellow and Brent Staples."
- M.S., Technical Communication, University of Washington, 1995, Management
- B.A., English, University of Washington, 1992, Expository Writing

Primary Teaching Areas:

- Management Communication
- Public speaking
- Rhetorical criticism
- Communication Theory
- Technical Communication
- Interviewing
- Interpersonal Communication

Graduate Teaching Experience

- Communication for Managers, Naval Postgraduate School, 2004-present
- Theoretical Dimensions of Technical Communication, University of Washington 2001-2003

Publications, Papers, Presentations:

Refereed Journal Articles

- Brook, D., & King, C. (2007). "Civil service reform as national security: The Homeland Security Act of 2002." *Public Administration Review 67*(3). 399-407.
- Thomas, G., King, C. (2006). "Reconceptualizing email overload." *Journal of Business and Technical Communication.*

Book Chapters

- Brook, D., & King, C. (forthcoming, 2007). "The Department of Homeland Security: A case study in legislating innovation in Human Capital Management." *Innovations in Human Capital Management* (Hanna Sistare & Terry F. Buss, Eds.) New York: M.E. Sharpe.

Invited Presentations

- Thomas, G. & King, C. (2007). "Reconceptualizing email overload." Invited speakers for the annual meeting of INFORMS Computing Society, Seattle, WA.

- Brook, D., & King, C. (2006). "Legislating civil service reform: The Homeland Security Act of 2002." Keynote speakers for the *Standing Panel on Public Service* Meeting, presented at the Fall Meeting of the National Academy of Public Administration, Washington DC.

Conference Presentations

- Salem, A., King, C. (2007). "Beyond ROI: UCD as a catalyst for organizational change—Results from the workshop." Paper presented at BayCHI Usability Engineering Birds-of-a-feather meeting, Mountain View, CA.
- Salem, A., King, C., Boyd, S., Kleimann, S., Simonds, K., Rose, E. (2007). "Beyond ROI: UCD as a catalyst for organizational change." Workshop presented at the annual conference of the Usability Professionals Association, Austin, TX.
- King, C. (2006). "Reconceptualizing communication strategy: A rhetorical perspective." Paper presented at the annual conference of the Association for Business Communication, San Antonio, TX.
- Pope-Ruark, R., King, C., Williams, L. (2006). "Rhetoric is not a dirty word: A history of rhetorical scholarship in the Journal of Business Communication and Business Communication Quarterly. Paper presented at the annual conference of the Association for Business Communication, San Antonio, TX.
- Thomas, G., King, C. (2006). "Reconceptualizing e-mail overload." Paper presented at the annual conference of the Association for Business Communication, San Antonio, TX.
- King, C., Dubinsky, J., Kryder, L., Vielhaber, M., Martin, J. (2005). "Exploring the significance of rhetorical theory for business communication research and teaching." Paper presented at the annual conference of the *Association for Business Communication*, Irvine, CA.
- King, C. (2005). "Subduing the Chaos of Disorganized Documents: Teaching "Reverse Outlining" as a Method for Editing." Paper presented at the annual conference of the *Association for Business Communication*, Irvine, CA.
- May, G., King, C., & Vielhaber, M. (2005). "Consulting demystified: Preliminary results of research." Paper presented at the annual conference of the *Association for Business Communication*, Irvine, CA.
- King, C. (2004). "Discursively constructing racialized others: An analysis of Saul Bellow's communicative conduct regarding black characters in Humboldt's Gift and Mr. Sammler's Planet." Paper presented at annual conference of the *National Communication Association convention*, Chicago, IL.
- King, C., & Salem, A. (2003). "Dialogic probing: Collaborating versus information retrieval in interviews." Paper presented at the President's Panel at the annual conference of the *Northwest Communication Association*, Ceour d'Alene, ID.
- King, C. (2003). "The importance of method in phronetic social science: An analysis and response to a critique of Philipsen's empirical approach in case study research." Paper presented at annual conference of the *Western States Communication Association*, Salt Lake City, UT.

Research Projects:

- Project: *History of Enactment of the National Security Personnel System*. Sponsored by the Under Secretary of Defense (Personnel & Readiness). Funded April 2007-December 2007.
    - Technical Report forthcoming
- Project: *Effective Communication Practices During Organizational Transformation: A Benchmarking Study of the U.S. Automobile Industry and U.S. Naval Aviation Enterprise.* Sponsored by the U.S. Navy, Readiness and Logistics, Sea Enterprise. Funded October 2006-July 2007.
    - Technical Report, NPS-CDMR-GM-07-001. "Effective Communication Practices During Organizational Transformation: A Benchmarking Study of the U.S. Automobile Industry and U.S. Naval Aviation Enterprise."
- Project: *Legislating Civil Service Reform: The Homeland Security Act of 2002.* Jointly sponsored by the Office of Personnel Management, Washington D.C. and the Center for Defense Management Reform, Naval Postgraduate School. Funded. July 2005 – June 2006.
    - Technical Report, NPS-CDMR-HR-06-006. "Legislating Civil Service Reform: The Homeland Security Act of 2002.
- Project: *Violence Involving Sailors: Approaches for reducing the rates of violence*. Sponsored by Commander, Third Fleet. Unfunded. May 2005-May 2006.
    - Technical Report, NPS-GSBPP-06-008. "Violence Involving Sailors: Approaches for reducing the rates of violence."

Significant Practitioner Experience:

- Consultant, SalemSystems, Inc., Seattle, WA (1999-2005)
    - Executive coaching, communication training, marketing communication, user-centered design, and product research and testing for various information technology clients.
- Director of Business Development, Chase Bobko, Inc., Seattle, WA (1997-1999)
    - Responsible for revenue generation, sales management, and marketing and branding consultation for software development firm.
- Director of Information Design, Chase Bobko, Inc., Seattle, WA (1996-1997)
    - Responsible for research and development of design and architecture strategies of information systems, and managed team of designers for software development firm.
- Director of Training, Sakson & Taylor, Inc., Seattle, WA (1995-1996)
    - Responsible for training and development of over 1000 contract technical communication professionals.
- Technical Writer/Editor, CKM Services, Seattle, WA (1993-1996)
    - Technical writing, editing, and marketing for consulting civil and structural engineering firms
- Czech and Slovak Cryptologic Linguist, U.S. Air Force (1983-1988)

Academic and Professional Associations:

- Founder/Coordinator, Rhetoric Special Interest Group, Association for Business Communication (2006/2007)

- Board member, Association for Professional Communication Consultants (2003-2007)
- Web Manager, Association for Professional Communication Consultants (2005-2006)
- Editorial board member, Kaleidoscope: A Graduate Journal of Qualitative Research, (2003/2004)
- Online forum coordinator, Association for Professional Communication Consultants (2003)

Public Service Activities:

- Editorial review board member, Journal of Business Communication (2005-2007)
- Editorial reviewer, Organization Science, (2006-2007)

Consulting Activities:

- Bellevue Public Utilities, Bellevue, WA: Consulted and delivered training on "Writing for the Web: Designing for Use, Accessibility, and Information Retrieval," 2004
- State of Washington, Labor & Industries, Olympia, WA: Consulted and delivered training on "The *Active Interview* as an Interviewing Technique in Product Design Interviews," 2003

Alan Laverson
Assistant Professor of Economics and Public Policy
September 2006

Academic Degrees:

- Ph.D., Policy Analysis, RAND Graduate School, September 1999, Policy Analysis, *A Study of Overhead Rate Behavior at a U.S. Air Force Base in the Context of A-76 Competition*
- M.S., RAND Graduate School, September 1999, Policy Analysis
- M.B.A., Oklahoma City University, May 1989, Business Administration
- M.S., University of Maryland, May 1985, Computer Science
- B.A., University of Maryland, December 1981, Economics

Primary Teaching Areas:

- Finance

Graduate Teaching Experience:

- Naval Postgraduate School, September 2006 - Present

Publications, Papers, Presentations:

- *A Study of Overhead Rate Behavior at a U.S. Air Force Base in the Context of A-76 Competitions*, RAND, 2000.
- *An Evaluation of Jump-Ahead Techniques in Menu Selection*, Behavior and Information Technology, Vol. 6, No. 2, 1987.

Research Projects:

- An Empirical Analysis of Submarine Deployment Costs and Cost Drivers; sponsored and partially funded by the Comptroller - SUBPAC; research product expected to be a probabilistic budgeting model and a published article; Mar 2007 – Dec 2007.
- Review of Lead Systems Integrator (LSI) Roles in the Army's Future Combat System and the Coast Guard's Deep Water program; sponsored and funded by the PEO Ground Combat Systems; research product expected to be a technical report; Feb 2007 – Feb 2008.

Significant Practitioner Experience:

- **Senior Financial Economist,** Asst. Secretary of the Air Force for Financial Management (SAF/FM) (Pentagon), 1999-2002
  - Financial/economic advisor to SAF/FM, Asst. Secretary of the Air Force for Acquisition (SAF/AQ), and Asst. Secretary of the Air Force for Installations, Environment, and Logistics (AF/IL).
  - Developed/defended/critiqued financial analyses supporting Air Force acquisition programs for SAF/FM and SAF/AQ.
  - Led financial analysis division of negotiating team on $28 billion KC-767 aircraft acquisition and maintenance support program.

- Advised SAF/FM and AF/IL on privatization initiatives (e.g., military family housing, utilities, etc.), pilot and special projects.
- Worked with investment bankers to raise low-cost private funds for government lease and privatization programs.
- Ensured projects complied with all financial policies and regulatory requirements.
- Performed cost-benefit analyses for programs, including determining program trade-offs, to determine best alternative.
- Developed and used mathematical models to analyze program lifecycle costs.
- Conducted research/analysis on key topics such as aerospace company financial health, military health care costs, and special projects.

- **Research Fellow,** RAND (Santa Monica, CA), 1996-1999
  - Researched Air Force base overhead rate behavior as base operating support activities are outsourced.
  - Researched various military acquisition reform topics.
  - Researched viability of various reusable space launch systems.
  - Researched criteria to be used to allocate national park resources to maximize visitor utility.

- **Economist,** Economic Research Service, U.S. Dept. of Agriculture, (Washington, DC), 1980-1985
  - On development and maintenance team of one of the largest working econometric models in the world, the Grains-Oilseeds-Livestock (GOL) model, to forecast worldwide supply/demand of agricultural products.
  - Designed, developed and applied software to perform agricultural economic research.

Academic and Professional Associations:

- Western Economic Association International (WEAI)
- American Society of Military Comptrollers (ASMC)
- Institute of Electrical and Electronics Engineers (IEEE)
- Association for Computing Machinery (ACM)
- Armed Forces Communications and Electronics Association (AFCEA) International
- Air Force Association (AFA)

Public Service Activities:

- Volunteer, Carmel Bach Music Festival
- Volunteer, Special Olympics of Northern California

Consulting Activities:

- Develop a more accurate method of predicting and allocating the annual operating and repair budget for submarines; Comptroller - SUBPAC; Mar 2007 – Dec 2007.

- Evaluate alternative production and acquisition tools for Spin Out 1 of the Future Combat System and recommend most promising strategies; PEO Ground Combat Systems; Feb 2007 - Feb 2008.

Ira Lewis
Associate Professor of Logistics
September 1998

Academic Degrees:

- PhD in Business (Logistics and Operations Management), Arizona State University, 1992
- MBA, University of Ottawa, 1982
- BA (Geography), University of Ottawa, 1980

Primary Teaching Areas:

- Logistics, Transportation, Operations Management

Graduate Teaching Experience

- Naval Postgraduate School, MBA and EMBA programs, 1998 to present

Publications, Papers, Presentations:

Refereed Publications 2004—2007

Ira Lewis and Alex Talalayevsky, "Improving the Interorganizational Supply Chain through Optimization of Information Flows," *Journal of Enterprise Information Management*, 17(3), 2004, 229-237.

Ira Lewis, "Analysis of Alternative Institutional Arrangements for Reform of U.S. Air Traffic Control," *International Public Management Journal*, 7(3), 2004, 385-414.

Ira Lewis and Roxanne Zolin, "The Public to Private Continuum Measure and the Role of Stakeholder Boards as a Proxy for Markets in the Governance of Air Navigation Services," *International Public Management Review*, 5(2), 2005, 52-77.

Kenneth Doerr, Ira Lewis, and Donald R. Eaton, "Measurement Issues in Performance Based Logistics," *Journal of Public Procurement,* 5(2), 2005, 164-186.

Ira Lewis, "Public Management and Performance Based Logistics in the U.S. Department of Defense," *International Public Management Review*, 6(2), 2005, 116-127.

Proceedings and significant publications up to 2003

Ken Doerr, Don Eaton, and Ira Lewis, "Impact of Diffusion and Variability on Vendor Performance Evaluation," Proceedings o the Second Annual Acquisition Research Symposium, Monterey, CA, May 19, 2005, 226-231.

Ira Lewis and Alex Talalayevsky, “Logistics and information technology: A coordination perspective,” *Journal of Business Logistics*, 18(1), 1997, 141–157.

Ira Lewis and Jim Suchan, “Structuration Theory: Its Potential Impact on Logistics Research,” *International Journal of Physical Distribution and Logistics Management*, 33(4), 2003, 296-315.

Ira Lewis, “Analysis of Alternative Institutional Arrangements for Reform of U.S. Air Traffic Control,” *International Public Management Journal*, 7(3), 2004, 385-414.

Research Projects:

During 2005-2007, four research projects were funded by the NPS Acquisition Research Program: Performance Based Logistics, Logistics Impact of Evolutionary Acquisition, Gap Analysis in Acquisition, and US-EU Defense Industrial Relations.

Significant Practitioner Experience:

Internal Audit Officer, Program Evaluation Officer, Program Analyst, Department of National Defence, Ottawa, 1982-1998.

Academic and Professional Associations:

INFORMS, American Society for Transportation and Logistics

Public Service Activities:

Editorial Board Member of *Transportation Journal*, *Acquisition Review Journal* and *Journal of Public Procurement*.

Consulting Activities:

None

David F. Matthews
Senior Lecturer
June 1994

Academic Degrees:

- Master's Degree, Middle Tennessee State University, January 1974, Macro Sociology.
- Bachelor's Degree, Vanderbilt University, June 1966, History and Political Science.

Primary Teaching Areas:

- Program Management, Defense Systems Acquisition, and Acquisition Logistics.

Graduate Teaching Experience:

- Naval Postgraduate school, June 1994 to date.

Publications, Papers, Presentations:

- NPS-PM-04-017 "The New Joint Capabilities Integration Development System (JCIDS) and Its Potential Impacts upon Defense Program Managers," 30 December 2004.
- NPS-GSBPP-05-002 "The New Joint Capabilities Integration Development System (JCIDS) and Its Potential Impacts upon Defense Program Managers," 04 March 2005.
- Presentation to 2nd Annual NPS Acquisition Symposium May 2005. "The New Joint Capabilities Integration Development System (JCIDS) and Its Potential Impacts upon Defense Program Managers."

Research Projects: None

Jerry McCaffery
Professor of Public Budgeting
August 1984

Academic Degrees:

- Doctor of Philosophy in Political Science, University of Wisconsin, Madison, 1972, Public Administration. The Politics of Tax Exemption.
- Master of Arts in Political Science, University of Wisconsin, Madison, 1969.
- Bachelor of Science, University of Wisconsin, Madison. 1959. History and English.

Primary Teaching Areas:

- Public Budgeting

Graduate Teaching Experience

- Professor of Public and Environmental Affairs, Indiana University, Bloomington Indiana, April, 1982-Aug.1984.
- Visiting Associate Professor and holder of the Goudy Chair in Public Administration, Willamette University, January to May, 1981.
- Associate Professor, School of Public and Environmental Affairs, Indiana University, Bloomington, 1975-1982.
- Assistant Professor, Department of Political Science, University of Georgia. Sept. 1972 to August 1975.

Publications :

Books:

- Budget Decision Making for Defense with L. R. Jones. Greenwhich, CN: Information Age Publishing. 2004: 476 pages.
- Budgeting and Financial Management in the Federal Government. With L. R. Jones. Greenwhich, CN: Information Age Publishing. 2001. 472 pages.

Journal Articles

- L. R. Jones and Jerry L. McCaffery, "Defense Acquisition and Budgeting: Investigating the Adequacy of Linkage Between Systems." International Public Management Review, Vol. 6, Issue 2, 2005: 87-115. www.ipmr.net

- Jerry L. McCaffery and L. R. Jones, "Reform of Program Budgeting in the Department of Defense." International Public Management Review, Vol. 6, Issue 2, 2005: 141-176. www.ipmr.net

Stephen L. Mehay
Professor of Economics
Initial date of appointment at NPS: 1985

Academic Degrees:

- Ph.D., UCLA, Economics, 1973.
- M.A., University of Illinois, Economics,1967
- A.B., Indiana University, 1965, Economics.

Primary Teaching Areas:

- Labor Economics, Applied Manpower Analysis, Econometrics, Cost-Benefit Analysis

Graduate Teaching Experience

- Labor Economics, Applied Manpower Analysis, Econometrics, Cost-Benefit Analysis

Publications, Papers, Presentations:

Journal Articles

- "Workplace Drug Prevention Programs: Does Zero Tolerance Work?" *Applied Economics*, forthcoming 2006. (with N. Webb).
- "Marital Status and Productivity: Evidence from Personnel Data," *Southern Economic Journal*, vol. 72, no. 1, July 2005. (with W. Bowman)
- "Election Methods and Minority Policy Influence," *Economics and Politics*, November 2003 (with T. Sass)
- "Evaluating the Labor Market Performance of Veterans Using a Matched Comparison Group Design," *Journal of Human Resources*, vol. 38, no. 3 Summer 2003 (with B. Hirsch).
- "College Selectivity and On-the-Job Productivity." *Industrial and Labor Relations Review*, vol. 55, No. 4, July 2002, pp. 700-714 (with W. Bowman).

Technical Reports

- Carol Newman and Stephen Mehay. "Female Surface Warfare Officer Retention: Causal Factors and Policy Options," Technical Report to Chief of Naval Personnel, N-14, November 2005.
- Elda Pema and Stephen Mehay "Effect of High School JROTC on Academic Achievement and Post-Secondary Education," Technical Report to Chief of Naval Personnel, N14, December 2005.
- Christopher D. Bownds and Stephen Mehay. "Educational Credentials and the Success of First-Term Sailors." Technical Report to Commander, Navy Recruiting Command, May 2004.
- Stephen Mehay, et al., "An Analysis of the Navy Officer Lateral Transfer and Re-designation Process," Technical Report to Chief of Naval Personnel, N1, 2004.

Conference Presentations

- "Selection and Classification of Male and Female Applicants to the U.S. Naval Academy." Presentation to the annual Meetings of Western Economic Association International, San Francisco, July 2005.
- "Effect of High School JROTC Participation on Academic Achievement and Post-Secondary Educational Attainment," Presentation to the annual Meetings of Western Economic Association International, San Francisco, July 2005.
- "The Value of Graduate Education to the Military," Invited presentation to the International Symposium on Management and the Military, Management of Intellectual Capital, Turkish Military Academy, Ankara, Turkey, May 2005.
- "Selection and Classification of Applicants to the U.S. Naval Academy," presentation to the Annual Navy Workforce Conference," Alexandria, VA, April, 2005.
- "Validating Quantitative and Qualitative Admissions Criteria for Selective Colleges." Presentation to the annual Meetings of Western Economic Association, Vancouver, Canada, June 2004.
- "Civilian Labor Market Experiences of Veterans' Spouses." Presentation to the annual Meetings of Western Economic Association, Vancouver, Canada, June 2004.
- "Gender Differences in Career Advancement: Evidence from Personnel Data," presentation to the 83rd Conference of the Applied Econometrics Association at Mons, Belgium, October 7, 2004.
- "Selection Criteria for Officer Applicants: An Analysis of Admissions to the U.S. Naval Academy," presentation to the NATO Research Task Group on Recruiting and Retention of Military Personnel," Brussels, Belgium, October 28, 2004.
- "An Analysis of Educational Credentials and First-Term Attrition," presentation to the 46th Annual conference of the International Military Testing Association," Brussels, Belgium, October 27, 2004.
- "Career Advancement in a Hierarchical Organization,"Presentation to the International Business and Economics Research Conference. Edinburgh, Scotland, June 2004.
- Stephen Mehay and William Bowman, "Commissioning Source and the Performance of Marine Corps Officers." presentation to the Annual Navy Workforce Conference," Alexandria, VA, March, 2004.
- William Bowman and Stephen Mehay, "An Analysis of Technical Skills of the Navy's Officer Corps," Annual Navy Workforce Conference," Center for Naval Analyses, Alexandria, VA, March, 2003.
- Stephen Mehay, "Cost-Benefit Analysis of Drug Prevention Policies," presentation at Conference on Health Economics, Neuchatel, Switzerland, July 2003.
- Stephen Mehay, "Graduate Education and Job Performance: Evidence from U.S. Federal Employees," presented at the Global Conference on Business and Economics, Imperial College, London, UK, July 2003.

Research Projects:

- “Development of Civilian Workforce Planning Models,” Funded project for Navy Seal Logistics Command, 2006
- “Analysis of Return on Investment on Navy’s Early Graduate Education Programs,” Funded project for Chief of Naval Personnel, N-13, 2006.
- “Female Surface Warfare Officer Retention: Causal Factors and Policy Options,” Funded project for Chief of Naval Personnel, N-14, 2005.
- “Effect of High School JROTC on Academic Achievement and Post-Secondary Education,” Funded project for Chief of Naval Personnel, N14, 2005.
- “Educational Credentials and the Success of First-Term Sailors.” Funded project for Navy Recruiting, 2004.
- “Analysis of Selection Criteria for Officer Applicants: An Analysis of Admissions to the U.S. Naval Academy,” Funded project for Chief of Naval Personnel, N-13, 2004.
- "An Analysis of Technical Skills of the Navy’s Officer Corps,” Funded project for Chief of Naval Personnel, N-13, 2003.

Academic and Professional Associations:

- Member, American Economic Association
- Member, Southern Economic Association
- Member, Society of Labor Economics
- Member, WEA International

Member, International Applied Econometric Association

O. Douglas Moses
Senior Associate Dean, Associate Dean for Instruction
Associate Professor
Initial Appointment 1985

Academic Degrees

- Ph.D., University of California, Los Angeles, 1983, Accounting; Dissertation: "Accounting Change Behavior: The Relationship between Earnings Adjustments and Explanatory Factors."
- M.B.A., Accounting, San Diego State University, 1976, Accounting
- B.A., Cornell University, 1969, Economics

Primary Teaching Areas:

- Financial Accounting
- Financial Reporting and analysis
- Managerial Accounting

Teaching Experience

- Naval Postgraduate School 7/85 – Present
- San Jose State University 9/92 - 12/94
- University of California, Santa Cruz 9/89 - 12/89
- Stanford University 9/88 - 12/89
- Golden Gate University 9/86 - 5/89, 5/95 - 8/95
- University of California, Berkeley 8/84 - 6/85
- California State University, Hayward 1/85 - 6/85
- California State University, Los Angeles 6/78 - 9/84
- University of California, Los Angeles 9/76 - 12/78

Publications, Papers, Presentations

- 2004-2007: No significant publications

Selected earlier publications:

- *Cost Analysis*: "Error Patterns from Alternative Cost Progress Models", Journal of Parametrics, Fall 1996, pp. 59-94.
- *Management*: "Organizational Slack and Risk Taking Behavior: Tests of Product Pricing Strategy," Journal of Organizational Change Management, Vol. 5, No. 3, 1992, pp. 38-54.
- *Finance*: "Cash Flow Signals and Analysts' Earnings Forecast Revisions," Journal of Business Finance and Accounting, November 1991, pp. 807-832.
- *Marketing*: "Determinants of Contractor Pricing Strategy," Program Manager, July - August 1989, pp. 32-43.
- *Education*: "Factors Explaining Performance in Graduate Level Accounting," Issues in Accounting Education, Fall 1987, pp. 281-291.
- *Accounting*: "Income Smoothing and Incentives: Empirical Tests using Accounting Changes," The Accounting Review, April 1987, pp. 358-377.

- *Information Systems*: "Rationality, Ambiguity and Management Information Systems," Business Forum, Fall 1984, pp. 8-11.

Research Projects

- 2004-2007: None

Practitioner Experience

- Senior Associate Dean, GSBPP, 2004 – present: Responsibility for school operations, management of faculty, financial management.
- Associate Dean for Instruction, GSBPP, 2000 – present: Responsibility for coordination of school's instructional programs and curricula.
- Academic Associate for Financial Management, GSBPP, 1995 – 2001: Responsibility for oversight of the Financial Management students, faculty and curriculum.
- Price Waterhouse and Co., Research Intern, 1977: Responsibility for developing applications of new accounting standards to client practice.
- U.S. Navy, Lieutenant, 6/69 - 7/73: Served in various Surface Line Officer positions related to navigation, operations and engineering.

Academic and Professional Associations

American Accounting Association:

- Ad hoc Associate Editor: The Accounting Review
- Reviewer: Issues in Accounting Education, Behavioral Research in Accounting, The Accounting Review, Accounting Horizons, AAA national and regional meeting papers..
- Committee Service: AAA Membership Committee California Coordinator; Notable Contributions to Accounting Literature Screening Committee; Program Arrangements Committee, Western Regional meeting.

Decision Sciences Institute:

- Reviewer: Decision Sciences, Annual Meeting papers
- Discussant: Annual meetings

Society of Cost Estimating and Analysis:

- Reviewer: Journal of Cost Analysis, National Meeting papers. National

The Institute for Management Science:

- Reviewer: Management Science

Academic Ad Hoc Reviewer

- Journal of Accounting and Public Policy,
- Journal of Organizational Change Management
- Quarterly Journal of Business and Economics
- Asian Pacific Journal of Accounting

Public Service Activities

No significant

Consulting Activities

No significant

John E. Mutty
Senior Lecturer
July 1995

Academic Degrees

- Master of Science, The George Washington University, 1975, Finance
- Bachelor of Science, US Naval Academy, 1967, Mechanical Engineering

Primary Teaching Areas

- DoD Financial Management
- DoN Financial Management
- Public Policy

Graduate Teaching Experience

- Naval Postgraduate School, 1995 to Present

Publications, Papers, Presentations

Refereed Journal Article

- Doerr, K.H, Gates, W.R., and Mutty, J.E., A hybrid approach to the valuation of RFID/MEMS technology applied to ordnance inventory, International Journal of Production Economics.(Accepted for publication, March 06)

Book Chapter

- McCaffery, Jerry and Mutty, John E., The Hidden Process of Budget Execution, Journal of Public Budgeting, Accounting & Financial Management, Summer 1999

Technical Report

- Doerr, K.H, Gates, W.R., and Mutty, J.E., A Hybrid Approach to the Valuation of RFID/MEMS Technology Applied to Ordnance Inventory, Naval Postgraduate School, November 2005

Conference Presentation

- Mutty, John E. and Rendon, Rene: DoD Contract Termination Liability: An Analysis of Special Termination Cost Clause (STCC) at the 4th Annual Research Symposium, Monterey CA., May 2007

Research Projects

- Special Termination Cost Clauses, Funded, OUSD, Acquisition, Technology and Logistics, 2006 (With Rendon, Rene)
- Advanced Technology Ordnance Surveillance, Funded, Naval Surface Warfare Center, 2003 (With, Gates, William R, and Doerr, Kenneth H.)

Significant Practitioner Experience

- Comptroller, Naval Air Systems Command, 1990-1994, responsible for all aspects of financial management for a multibillion dollar budget

- Deputy Director, Investment and Development Division, Office of Budget, Assistant Secretary of the Navy, (Financial Management and Comptroller); 1992-1994, Responsible for all investment, military construction, and research and development appropriations for the Department of the Navy.

Academic and Professional Associations

- Member, American Society of Military Comptrollers

Public Service Activities

- Course Director, Big Sur International Marathon, 1997-Present
- Executive Board Member , Big Sur International Marathon, 2005-Present

Brad R. Naegle
Senior Lecturer
August 2000

Academic Degrees

- M.S., Naval Postgraduate School, 1994, Management (System Acquisition Management)
- B.S., Weber State University, 1977, Economics (Decision Theory)

Military Schools

- US Army Command and General Staff College, 1990
- US Army Combined Arms and Services Staff School, 1984

Primary Teaching Areas

- Acquisition, Contracting, Project Management and System Acquisition Logistics Teaching Experience, Naval Postgraduate School 1997- Present
- Defense Acquisition University 1997 – 1999
  Advisor for over 50 theses/MBA Projects 1997 – Present

Courses Taught

- MN 3221 Principles of Acquisition and Program Management – 1 (2-1)
- MN 3222 Principles of Acquisition and Program Management – 2 (3-2)
- MN 3331 Principles of Acquisition and Program Management (5-1)
- MN 4307 Program Management, Policy and Control (4-0)
- MN 2303 Seminar for Program Management (0-3)
- MN 4366 Program Leadership, Management, Policy and Control (4-0)
- MN 3309 Acquisition of Embedded Software Intensive Weapon Systems (4-1)
- MN 3361 Advanced Acquisition Program – Software Acquisition Management (2-0)
- MN 3363 Advanced Acquisition Program – Production & Quality Management (2-0)
- MN 4602 Test & Evaluation Management

Publications

- Boudreau, M. W. and Naegle, B. R., (2005). *Total Ownership Cost Considerations in Key Performance Parameters and Beyond.* Defense Acquisition Review Journal, Vol. 12, No. 1. (February/March 2005, Communities of Practice Supplemental Edition), pp.108-119.

- Naegle, Brad R., (2000). *Educating the Future Acquisition Workforce,* Army Acquisition Newsletter Editorial, Fall 2000 issue.

- Boudreau, M. W. and Naegle, B. R., (2003). *Reduction of Total Ownership Cost.* Naval Postgraduate School Report number NPS-GSBPP-03-004 (September 2003), Sponsored Research for Naval Sea Systems Command and Naval Postgraduate School.

- Naegle, B. R., (2005). *Developing System Software Requirements and Performance Specification Development Supporting Open Systems Architecture.* NPS-06-001 (15 November 2005) Sponsored Research Project for US Navy Program Executive Officer for Integrated Weapon Systems (PEO-IWS).

- Naegle, B. R., (2006). *Software Architecture: Managing Design for Achieving Warfighter Capability*. (17 April 2007) Sponsored Research Working Paper Series for US Navy Program Executive Officer for Integrated Weapon Systems (PEO-IWS).

Significant Practitioner Experience

- U.S. Army, Program Executive Office for Tactical Wheeled Vehicles, Product Manager for Tactical Wheeled Vehicle Remanufacture Programs, Deputy Project Manager for Light Tactical Vehicles, program management, human resources management, financial management, systems engineering management, technical management, contracting, test management, risk management, and system automation management, 1994 - 97.
- U.S. Army, 7th Infantry Division, Fort Ord, California, Division Materiel Management Officer, Chief of Division Materiel Management Center (DMMC), logistics management, human resources management, training management, materiel readiness, aviation maintenance, logistics automation management, financial management, and supply chain management, 1990 - 93.
- U.S. Army, 34th Support Group, Pusan Korea, Director of Operations, Plans & Security, Area VII, Korea, operations management, intelligence, training management, human resources management, Korean Military Forces liaison, Korean National Police Liaison, Non-combatant Evacuation Operations (NEO), port operations, and security operations, 1987 - 89.
- U.S. Army, Army Development and Deployment Agency (ADEA), Fort Lewis Washington, Test Program Manager, Operational Test Manager, Chief of Appraisals Branch, human resources management, operational test manager, test schedule manager, contracting officer's technical representative (COTR), live and simulated testing, combat warfare, 1984 - 87.
- Acquisition and Program Management Qualifications:
    - Program Management: Level III Certified
    - Contract Management: Level II Certified
    - Acquisition Logistics: Level III Certified
    - Test & Evaluation: Level II Certified
    - Systems Engineering: Level II Certified
    - Software Acquisition Management: Level II Certified

Professional Service

- Academic Associate for Program Management Curricula (816 Resident & 836 Distance Learning)
- Developer and Program Manager, NPS Advanced Acquisition Program (AAP)

- Course Coordinator for MN4366, MN3309, MN3361 and MN3331
- Served on Academic Awards Committee, 1997 – 2005
- Led the GSBPP Reimbursable Fund Management Redesign Committee, 2001 – 2002
- Served on the GSBPP Dean's Offsite Planning Committee, 2002
- 836 & 835 Curricula Evaluation Committee, 2001 – 2002
- Senior Army representative, 1998 – 2000

Public Service

City of Pacific Grove Youth Sports Program Volunteer; 97-present

Consulting: None

CDR Richard M. Nalwasky
Military Lecturer, GSBPP
June 2007

Academic Degrees:

- Name of doctoral degree - None.
- Name of master's degree – MBA, NPS, December 2003, 815 Acquisition and Contract Management.
- Name of bachelor's degree – MS, Penn State University, 1990, Metallurgical Engineering.

Primary Teaching Areas:

- Contracting, Program Management

Graduate Teaching Experience

- None prior to NPS.

Publications, Papers, Presentations:

- List all articles, books, monographs, manuals, reports or other published material published in the self-study year and the three preceding years (2004-2007) - None.
- Additionally include in the list significant publications from earlier years (2003 or earlier) - None.
- List Conference presentations and other significant presentations during the self-study year and the three preceding years (2004-2007) - None.

Research Projects:

- Research projects undertaken in the self-study year and three preceding years (2004-2007). Note sponsors, funded or unfunded, research products and dates.

Significant Practitioner Experience:

- Identify significant practitioner experience, with organizations, titles, dates and duties:
    - Contracting Officer, Naval Air Systems Command, Jan 2004 – Jun 2007.
    - Contingency Contracting Officer, Coalition Provisional Authority, Mar – Sep 2004.

Academic and Professional Associations:

- Defense Acquisition Corps.

Public Service Activities:

- None.

Consulting Activities:

- None.

Walter E. Owen
Senior Lecturer
November 1995

Academic Degrees:

- **DPA** - Golden Gate University, 2003, *Public Administration.*
- **MS** - Naval Postgraduate School, 1992, *Management (Financial Management).*
- **BS** - U.S. Naval Academy, 1979, *Naval Engineering (Management and Technology).*

Primary Teaching Areas:

- Financial Management, Project Management, Performance Assessment, Leadership.
- Systems Engineering, Systems Acquisition, Product Development, Test and Evaluation.
- Public Policy, Policy Analysis, Defense Resource Analysis, Policy Evaluation.

Graduate Teaching Experience

- 2006- Present Senior Lecturer, NPS, Graduate School of Business and Public Policy and Graduate School of Engineering and Applied Sciences, Department of Systems Engineering.
- 2002-2005, Senior Lecturer, NPS, Wayne E. Meyer Institute of Systems Engineering and Graduate School of Business and Public Policy.
- 2001- 2002, Senior Lecturer, NPS, Graduate School of Business and Public Policy.
- 1995-2001, Lecturer, NPS, Department of Systems Management.
- 1992-1995, Military Lecturer, NPS, Department of Systems Management.

Publications, Papers, Presentations:

- Owen, Walter E. (2003). *A Case Study of Distance Education at the Naval Postgraduate School: Assessing the Effectiveness of Video Tele-education (VTE) as a Distance Learning Method.* Ann Arbor, MI:UMI.
- Owen, Wally (2002, July). Navy's PD21 Program Update. *Naval Postgraduate School Journal.*
- Owen, W. E., (1996, November). Joint Prototype and Integrated Product Team Development System (JRAPIDS), A 'Walk the Talk' Success Story for DAU Implementing IPTs Within Acquisition Education and Training. *Acquisition Review Quarterly.*
- Smith, Mark (RIT), Mahoney, Denny (MIT), Owen, Walter (NPS), and Prasad, Hriday (UDM). (2002). *PD21:* An Education Consortium for Product Development Leadership. *Proceeding from the ASSE- Engineering Management Conference.*

- Hocevar, S. P. and Owen, W. E. (1998, December). Team-Based Redesign as a Large Scale Change: Applying Theory to the Implementation of Integrated Product Teams. *Acquisition Review Quarterly, Special Edition.*

Research Projects:

- 2007- Distance Learning Research- Co-Investigator on a new DL research project with another colleague assessing DL education and learning methods and their effects on leadership succession and promotion.
- 1998- Present; Distance Education Programs- Principal Investigator for numerous funded graduate courses and degree programs with over 20 Department of Defense and Defense Contractor sponsors.

Significant Practitioner Experience:

- 1979 – 1992; Acquisition/Military Experience: Naval Officer (F4/F14 flight and weapon systems operations, carrier aviation operations, test and evaluation, aircraft maintenance, facilities management, support equipment logistics management, financial management, human resources and program development, recruitment and leadership).

Academic and Professional Associations:

- Project Management Institute (PMI).
- International Council on Systems Engineering (INCOSE).
- American Society for Public Administration (ASPA).

Public Service Activities:

- Little League- Baseball Coach.
- Boy Scouts- Volunteer.
- Community Board Member.

Consulting Activities:

- None.

Elda Pema
Assistant Professor of Economics
August 2003

Academic Degrees:

- Ph.D., Economics, Michigan State University, East Lansing, Michigan. December 2003
  Fields: Applied Econometrics, Labor Economics, Public Economics.
  Dissertation: "Essays on Compensation Structures and Human Capital Migration."
- M.A., Economics, Michigan State University, East Lansing, Michigan. 2001.
- B.A., Applied Economics, B.A. Business Administration, American University in Bulgaria, Blagoevgrad, Bulgaria**.** 1998 (magna cum laude).

Primary Teaching Areas:

Graduate School of Business & Public Policy, Naval Postgraduate School

- GB3070 - Economics and the Global Defense Environment (Winter & Summer 2004, Summer 2005, Summer 2006)
- MN3760 – Manpower Economics I (Fall 2004, Fall 2005)
- MN4110 – Manpower Data Analysis I (Winter 2004, Summer 2004)
- MN4111 – Manpower Data Analysis II (Fall 2004, Fall 2005, Fall 2006)

Graduate Teaching Experience

Department of Economics, Michigan State University

- Taxes, Government Spending, and Public Policy (Summer 2001)
- Introductory Macroeconomics (Summer 2000, Summer 2003)

Publications, Papers, Presentations:

Publications

- "The Impact of JROTC on Post-High School Employment and Educational Attainment, Evidence from *High School and Beyond*," book chapter in "Americans in Arms: Diversity and the Modern Military," Praeger Publishers, *forthcoming*, with Steve Mehay.
- "Impact of High School JROTC on Student Academic Achievement, Post-Secondary Education, and Military Enlistment." Technical Report to the Navy Personnel Command (N-14).
- "Publications over the Academic Life-cycle: Evidence for Academic Economists," *Economics Bulletin*, Vol. 1 no. 1 pp. 1-8, 2004, with Onur Baser.
- "The Return to Publications for Economics Faculty in the Big Ten Universities," *Economics Bulletin*, Vol. 1 no. 1 pp. 1-13, 2003, with Onur Baser.

Papers under review/working papers

- Pema, E. and Mehay, S., "Impact of High School JROTC on Student Academic Achievement and Military Enlistment" under review at the *Economics of Education Review*.
- "Special Provisions of State and Federal Age Discrimination Laws for Postsecondary Faculty" under review at the *Atlantic Economic Journal.*

- "Internal Labor Markets Revisited: Tournaments in Academia," Submitted to *Economic Inquiry*.
- "The Impact of State Fiscal Policies on the Migration Decision: A Relative Comparison of Interstate Mobility across Education Groups" Submitted to *International Tax and Public Finance*.
- "Why Do Institutions of Higher Education Reward Faculty for Research While Selling Education?" with Dahlia Remler.
- "Gender Differences in Job Performance and Career Progression: Evidence from Civil Service Personnel," with Steve Mehay.
- "The Transition from School to Career: The Role of Vocationally-Oriented Education Programs," with Steve Mehay.
- "Do Immigrants Pay Their Own Way? Comparing Immigrant and Native Welfare Use Among Displaced Workers", with Linda Bailey.
- "Trends in the Albanian Labor Market: Who Are Albania's Unemployed?"

Research in progress

- "Long-Term Labor Market Effects of 'Tied Movers' – Evidence from Veteran Spouses", with Steve Mehay.
- "The Effect of Graduate Education on Job Performance and Career Progression: Evidence from Civil Service Personnel," with Steve Mehay.
- "The Prisoners Dilemma in National Security: Lessons Learned from Friend or Foe" With Bill Gates and Pete Coughlan.
- "The Effect of Seniority on Academic Salaries: New Evidence from Longitudinal Data."
- "Rising Wage Profiles: An Evaluation of Alternative Theories Based on Evidence from the Academic Labor Market."

Conference presentations

- "Impact of High School Junior ROTC Participation on Student Academic Performance," *invited presentation, Baruch University, School of Public Affairs (City University of New York).* May 2006.
- "Long-Term Labor Market Effects of 'Tied Movers': Evidence from Veterans' Spouses," *Society of Labor Economists meeting*, Cambridge, May 2006.
- "Impact of JROTC Participation on Student Performance and Military Enlistments," *80th Western Economic Association International*, San Francisco, July 2005.
- "The Impact of Local Taxes and Expenditures on the Migration of Human Capital," *Joint Meeting of the Society of Labor Economists (SOLE) and European Association of Labour Economists (EALE)*, San Francisco, June 2005.
- "Long-Term Labor Market Effects of 'Tied Movers': Evidence from Veterans' Spouses," *79th Western Economic Association International*, Vancouver, Canada, June 2004.
- "The Effect of Graduate Education on Job Performance and Career Progression: Evidence from Civil Service Personnel", *Applied Econometric Association*

Conference (on the Econometrics of Labour Demand), Mons, Belgium, October 2004 (presented by Steve Mehay).

- "Internal Labor Markets Revisited: Tournaments in Academia," *Midwest Economic Association Meeting*, St. Louis, March 2003.
- "Essays on Compensation Structures and Human Capital Migration," *Southern Economic Association Conference*, New Orleans, November 2002.
- "Academic Publications – Their Reward, Life-Cycle Profile, and Depreciation Over Time: Evidence for Academic Economists in Midwestern Universities," *Midwest Economic Association Meeting*, Chicago, March 2002.

Research Projects:

- Navy Sea Logistics Command (NSLC Pacific), 2005-2006.
- Research on retirement models and workforce planning models for DOD civilian employees, with Steve Mehay.
- Chief of Naval Personnel (N-14), 2004-2005.
- "Impact of High School Junior ROTC Participation on Student Academic Performance," with Steve Mehay.
- Research Initiation Program, Naval Postgraduate School, 2003-2005.
- "Gender Differences in Job Performance and Career Progression."
- "Long-Term Labor Market Effects of 'Tied Movers'"

Significant Practitioner Experience:

None

Academic and Professional Associations:

- Association for Public Policy Analysis and Management (APPAM)
- American Economic Association (AEA)
- Western Economic Association International (WEAI)
- Committee on the Status of Women in the Economics Profession (CSWEP)
- Society of Labor Economists (SOLE)

Public Service Activities:

- Course Coordinator for MN4110/MN4111
- Referee for the *Armed Forces and Society*
- MSA Curriculum hiring, January 2004, 2007

Consulting Activities:

None

Diana Petross
Lecturer
September 2006

Academic Degrees:

- MPA, University of Oklahoma, 1991, Public Policy & Law
- BS, University of Central OK, institution, 1983, Science & English

Primary Teaching Areas:

- Principles of Acquisition & Program Mgt, Logistics Strategy

Graduate Teaching Experience

- NPS, 2002, NPS 2006-Current

Publications, Papers, Presentations:

- None

Research Projects:

- Software Architecture: Managing Design for Achieving Warfighter Capability, 2007, Naval Open Architecture. Not funded.

Significant Practitioner Experience:

- 8/05 to 9/06 - Source Selection Evaluation Chairman, 327th TSG/SP, Tinker AFB OK Executive Officer for Source Selection for $4.5B Programmed Depot Maintenance (PDM) Re-Competition for the KC-135. Personally requested by the Air Logistics Center Commander to direct a twenty-five person source selection team responsible for developing and publishing a Performance Work Statement, reviewing defense contractor's proposals and awarding a contract. Reported directly to the Air Force Program Executive Office for Combat Mission Support.

  10/03-8/05: Division Chief, Special Airlift Mission Operations, 327th Contractor Logistics Support Group, Tinker AFB OK. Program Manager responsible for the total system performance of the Air Force commercial derivative aircraft for the Special Air Mission (SAM) fleet. Directs all aircraft program management, acquisition, sustainment, engineering, configuration control, and financial management for VC-25 (Air Force One), C-20 (Gulfstream III/IV), T-43 (B-737), Navy E-6 (B-737) and the Air Force Academy aircraft.

  8/02-10/03. Lecturer. Graduate School of Business and Public Policy, Naval Postgraduate School. Taught graduate level Business Administration (MBA) and Executive MBA courses in Principles of Acquisition and Program Management and Acquisition of Embedded Weapon System Software. Organized and conducted Defense Acquisition University (DAU) certification training for acquisition, software acquisition, and program management for the Army and Navy.

10/01 – 8/02. Supervisory Logistics Management Specialist - Chief, Resources and Program Management Branch, Tinker AFB OK. Responsible for the management and oversight responsibilities for the business infrastructure of the B-1 System Program Office, the management information systems, funds availability, expenditures, cost estimating/analysis, contract performance, financial integration, budgeting, and administrative support. Managed total life cycle support to the B-1B including a $5B multi-year budget for sustainment and acquisition programs and a $1B software upgrade program and executed $17M for automatic test/support equipment for both the depot and field level support delivering critically needed tester's that improved mission capable rates five (5) percent.

10/00-10/01. Supervisory Logistics Management Specialist, Chief, Program Control, Tinker AFB OK. Successfully executed approximately $15M for the upgrade of fourteen high frequency stations throughout the world in a joint Air Force / Navy venture which incorporated information technology solutions to communication problems.

6/99-10/00. Program Manager/Financial Analyst, USAF/ILM-T Air Force Pentagon, Washington, DC Served as staff advisor for Director of Maintenance for logistics programs and policies.

Academic and Professional Associations:

- Tinker Management Assoc 1985-2006
- Air Force Association 2001-2006

Public Service Activities:

- None

Consulting Activities:

- None

Lisa F. Potvin
CDR, Military Instructor
October 2006

Academic Degrees:

- MBA, University of Denver, August 1997, Finance
- BS, University of Main, May 1984, Marketing

Primary Teaching Areas:

- Budgeting
- Defense Financial Management

Graduate Teaching Experience

- Naval Postgraduate School, October 2006 to present

Publications, Papers, Presentations:

- Potvin, L., Bay, D., and Smith, A., "The Next Katrina: A New Process for Reimbursement," American Society of Military Comptrollers, Vol 51, no. 4, pp. 39-41, 2006.
- "Educational Opportunities in DoD," American Society of Military Comptrollers annual Professional Development Institute, Kansas City, May 2007.

Research Projects:

- N/A

Significant Practitioner Experience:

- North American Aerospace Defense Command – United States Northern Command (NORAD-USNORTHCOM), Budget Analyst, February 2003 – October 2006. Primary duties:

    - Established $.6M budget for newly transferred Security Assistance missions in Mexico and Canada. Budgeted and executed over $2M annually in International Military, Education, and Training (IMET) and military engagement. Provided oversight to the entire $15M USNORTHCOM counterdrug program. These funds are fences and require significant policy and program expertise as well as inter and intra-departmental and interagency knowledge and engagement.
    - Wrote budget and execution guidance and policy governing the execution of all Security Assistance, Counterdrug, and Traditional Commander Activity (TCA) funding. These funds have unique attributes that require specialized budgeting and execution process and procedures.
    - Lead Budget Analyst for FY05 and FY06 NORAD-USNORTHCOM (N-NC) Financial Plan. Designed and developed N-NC Financial Plan process. Briefed the FY05 and FY06 Financial Plans to the AF Operating

Budget Review Committee and recognized as the only command to link programming to budget, a DoD benchmark.

- Developed a Contingency Cost process. This cost process was in response to Combatant Commander's and SECDEF interest. Cost model used for quick response, complex issues that require precise answers in a timely fashion. Used mostly for O&M scenarios. Specific cost exercises include:
- Cost analysis project to determine the cost of post-911 Combat Air Patrols (CAPs) across the U.S. Analysis focused on ABC methodology with multiple layers of activity and multiple variables in each layer. A 6 month effort for 2.5 FTEs. Results were ultimately used by the Combatant Commander to brief SECDEF and POTUS.
- Cost analysis to identify and justify NORAD's Forward Operating Locations (FOL) in Canada. Analysis simplified long misunderstood cost sharing agreements between Canada and the U.S. Documented the FOLs value to the U.S.
- Conducted cost analysis on U.S. and Canadian support to Superbowl XXI, a National Special Security Event (NSSE) for NORAD-USNORTHCOM. This event involved the Canadian Defence Ministry, DoD, and other U.S. government agencies. Significant skill required to understand the task, to identify cost variables, both actual and simulated, and to decide which cost variables are relevant to the task. Results presented to the Commander as part of mission analysis.
- Developed a Financial Management Concept of Operations (CONOPS) for USNORTHCOM's Defense Support of Civil Authorities (DSCA) mission. DSCA FM Operations was brought to the forefront during Hurricanes Katrina and Rita in Sep 2005, a $.5B event in DoD. Led a team and assembled a community of DSCA participants, both DoD and interagency. Wrote a CONOPS to better support DSCA FM Operations. Coordinated the CONOPS with numerous DoD organizations. CONOPS was accepted by OSD and praised as work that will close the gap between government agencies.
- Lead Analyst for FY06 fiscal closeout for both NORAD and USNORTHCOM. Responsible for ensuring over $256M was obligated. Included coordination with over 35 Resource Advisors and 12 Budget Analysts. Complicated by a conversion to a new contract mechanism for both commands. Developed strategy to ensure optimal use of FY06 dollars while providing maximum flexibility in FY07.

- North American Aerospace Defense Command – United States Space Command (NORAD-USSPACEOM), Program Analyst, October 2001 – January 2003. Primary duties:

    - Assisted with the development of planning, programming, and budget guidance for senior leadership within NORAD and USSPACECOM. Interfaced with Office of the Secretary of Defense (OSD), Joint Staff,

Unified Command Staffs, and other DoD and non-DoD Agency personnel to address NORAD and USSPACECOM PPBES issues and requirements.

- Assisted in the development of the NORAD and the newly stood up Combatant Command USNORTHCOM FY04 Program Objective Memorandum (POM). Assisted in preparing the final POM submission, fully documenting USNORTHCOM and NORAD requirements.
- Interfaced with Financial Management Division to ensure coordination between execution year and future year budget issues. Established and maintained liaison with counterparts within OSD, Joint Staff, Air Staff, force providers organizations, component organizations, and other Federal agencies.
- Completed PPBES course in Washington, DC. Participated in Issue Cycle, resulting in successful adjustments of $82M funding for Command and Control (C2) programs. Participated in POM cycle, resulted in complete and succinct submission of $2.7B (includes $1.4B of advocacy). Personally recognized by the CDR NORAD-USSPACECOM for outstanding efforts in the POM submission.
- Coordinated with Combatant Commander's Congressional Liaison Officer for Congressional Plus-up on FY03 President's Budget. Critical effort in seeking over $40M for NORAD C2 programs.

- IBM Global Services, Finance and Planning, February 1998 – September 2001. Primary duties:

  - Lead Financial and Budget Analyst for Customer Service Center. Responsible for project accounting, cost analysis, budgeting, planning, and forecasting for 1000+ employee division with gross costs in excess of $150M. Presented detailed monthly financial reports to Senior Management. Responsible for cost reduction of $11.8M in 1999.
  - Managed Capital Program spending of $125M in cost. Achieved 2000 capital spending target in a dynamic and technical environment. Designed Capital Database to link capital planning and spending with expense planning and forecasting, closing a gap between expense and capital forecasting. Coordinated a team of 9 Capital Planners supporting over 5000 employees generating over $864M in total gross cost. Teamed with Procurement Department to maintain audit controls on capital items.
  - Created unique e-business capital process to meet extremely short delivery timelines while meeting all audit requirements. Negotiated unique process guidelines with Senior HQ staff who were unaware of operational challenges. The process was adopted and implemented across the Americas divisions.
  - Cost Analyst for IT Distributed Services division. Streamlined a cost infrastructure which resulted in the elimination of 4 cost pools (similar to DoD working capital funds). Defined cost pool theory, practice, and process. Reduced manual procedures for managing cost pools by 75% allowing for increased time on analysis and productivity improvements.

As a result, one service pool eliminated $1.1M in labor cost in a 9 month period. Educated service providers on interpreting financial data. Changed service provider's focus from 'meeting budget' to 'year-to-year cost reduction and savings.'

- Provided leadership to a team of new Financial Analysts in a multifaceted, technical environment. Educated new analysts on business acumen and cost pool theory. Created automated measurement tools to assist analysts in providing consistent, user friendly financial reports. Clearly defined a cost and recovery flow process within a large, complex billing system. Resulted in a solid, productive team that came quickly up a steep learning curve. The team has earned the respect of the most challenging Director who requested the team not be reassigned.

Academic and Professional Associations:

- Active member of the American Society of Military Comptrollers. Participated in two panels at the Professional Defense Institute in May 2007.
- Active member of the Naval Reserve Association. Acted as President of the Colorado Springs chapter, 2006.

Public Service Activities:

- *Military Service*. As a military faculty member, my duties include service as a role model and mentor for the students. Routinely conducted career counseling and academic sessions to ensure success of the junior officers. Participated in military functions on base.
- *NPS Service.* Participated in the evaluation of potential faculty members in a variety of disciplines by attending symposia, conducting interviews and evaluating vitas.
- *Professional Service*. Routinely provided brief consulting assistance to military commands with financial questions; often at the request of alumni.

Consulting Activities:

- N/A

Edward H. Powley
Assistant Professor of Management
October 2006

Academic Degrees:

- PhD Organizational Behavior, Case Western Reserve University, 2005, relationship connections in crisis; thesis title: Connective Capacity in Crisis: Mechanisms of Organizational Resilience.
- MA Organizational Management, The George Washington University, 2000.
- BA Anthropology, Brigham Young University, 1997.

Primary Teaching Areas:

- Organizational Behavior
- Management

Graduate Teaching Experience

- Managing for Effectiveness (core MBA course), Naval Postgraduate School, 2006-2007.
- Human Value in Organizations (core MBA course), Case Western Reserve University, 2004.

Publications, Papers, Presentations:

Refereed Articles and Book Chapters

- Powley, Edward H., & Kim S. Cameron. 2006. Organizational healing: Lived virtuousness amidst organizational crisis. *Journal of Management, Spirituality, & Religion, 3*(1): 13-33.
- Powley, Edward H., & Scott N. Taylor. 2006. Values and leadership in organizational crisis. In E. Hess & K. Cameron (Eds.), *Leading with Values: Values, Virtues & High Performance*. Cambridge: Cambridge University Press.
- Cheung-Judge, Mee-Yan, & Edward H. Powley. 2006. Engaging an entire organizational system: Innovations on the appreciative inquiry summit. In B. B. Bunker & B. T. Albion (Eds.), *The Handbook of Large Group Methods: Creating Systemic Change in Organizations and Communities.* San Francisco: Jossey-Bass.
- Powley, Edward H., Ronald E. Fry, Frank J. Barrett, & David S. Bright. 2004. Dialogic democracy meets command and control: Transformation through the appreciative inquiry summit. *Academy of Management Executive, 18* (3): 67–80.
- Powley, Edward H. 2004. Underlying ritual practices of the appreciative inquiry summit: Toward a theory of sustained appreciative change. In D. L. Cooperrider, & M. Avital (Eds.), *Constructive Discourse and Human Organization: Advances in Appreciative Inquiry, 1*: 241–261.
- Dent, Eric B., & Edward H. Powley. 2004. Worldview assumptions: Paradigm shift in progress? *Journal of Behavioral and Applied Management, 5*(3): 280–306.

Conference Presentations

- "Organizational healing." Edward H Powley. Presentation given at the Positive Organizational Scholarship Conference, Ann Arbor, MI, 7-9 December 2006.
- "Positive Organizational Change: Prudential Retirement." Edward H Powley. Presentation given at the Positive Organizational Scholarship Conference, Ann Arbor, MI, 7-9 December 2006.
- "Compassion in organizational trauma." Edward H. Powley. Paper presentation at the Academy of Management 2006, Atlanta.
- "The engagement continuum: Exploring the impact of appreciative inquiry on high quality connections in interpersonal relationships." David S. Bright, Edward H. Powley, & Ronald E. Fry. Paper presentation at the Academy of Management 2006, Atlanta.
- "Organizational resilience: A social mechanisms perspective." Michelle Barton, Marlys Christianson, Jody Hoffer Gittell, Carlos Martin-Rios, Edward H. Powley, & Kathleen Sutcliffe. Symposium presentation at the Academy of Management 2006, Atlanta.
- "The Appreciative Inquiry Summit methodology: New visions for leading large-scale change." James D. Ludema, Larissa Marczak, Frank J. Barrett, Edward H. Powley, Ronald E. Fry, David S. Bright, & David L. Cooperrider. Professional Development Workshop presented at the Academy of Management 2005, Honolulu.
- "Uncovering New Variables, Methods, & Mechanisms from Positive Organizational Scholarship (POS)." Kim S. Cameron, Jody Hoffer Gittell, Fiona Lee, Gretchen M. Spreitzer, Robert E. Quinn, Amy Wrzesniewski, Michele Williams, Ryan Quinn, Wayne E. Baker, & Edward H. Powley. Professional Development Workshop presented at the Academy of Management 2005, Honolulu.

Research Projects:

- Center for Positive Organizational Scholarship, Ross School of Business, University of Michigan. Prepared case study on the implementation of a POS culture at Prudential Retirement. Funded and sponsored through the University of Michigan, 2006.
- Center for Business as an Agent of World Benefit, Institute for Advances in Appreciative Inquiry. Conducted research on large system change at the U.S. Environmental Protection Agency, Office of Research and Development. Funded and sponsored through Case Western Reserve University, 2005
- Center for Positive Change at the Naval Postgraduate School. Conducted research on large system change initiatives in the U.S. Navy; projects included work with the Navy Personnel, Naval Reserves, and Navy Information Professional communities. Funded and sponsored by several Navy communities, 2002-2004.
- Society for Organizational Learning. Interviewed members of the Society for Organizational Learning's Sustainability Consortium about its effectiveness, produced report used to facilitate discussions at semi-annual meetings; supported by a grant from the National Science Foundation, 2001-2004.

Academic and Professional Associations:

- Academy of Management
    - Organizational Management and Theory division (OMT), conference paper reviewer
    - Organizational Development and Change (ODC), conference paper reviewer
- Naval Postgraduate School Toastmasters International Club

Public Service Activities:

- Work with youth in local church group

Rene G. Rendon
Senior Lecturer

Academic Degrees:

- D.B.A. Argosy University, Orange County California Campus, 2003
  Dissertation: *A Systematic Approach to Assessing Organizational Contract Management Maturity*
- M.B.A. University of North Dakota, 1985 (sponsored by the Air Force Institute of Technology)
  Thesis: *Computer Simulation of Credit Union Teller Operations*
- B.B.A. Angelo State University (San Angelo, Texas), 1981

Professional Certifications:

- PMP Project Management Professional
  Certificate #27068
  Project Management Institute, 2000

- C.P.M. Certified Purchasing Manager
  Certificate #27940
  Institute for Supply Management 1997

- CPCM Certified Professional Contracts Manager
  National Contract Management Association 1988
  Certificate #3684

- CACM Certified Associate Contracts Manager
  National Contract Management Association 1987
  Certificate #64

Primary Teaching Areas:

Acquisition, Contract Management, Program/Project Management

Graduate Teaching Experience

Jan 2001 - Jul 2004: Senior Faculty, Keller Graduate School of Management
Los Angeles, CA (Project Management, Contract Management)

Publications, Papers, Presentations:

Books

Rendon, R. G. (2007). *Government Contracting Basics.* Federal Acquisition ActionPack. Management Concepts, Vienna, Virginia.
ISBN 978-1-56726-195-0.

Rendon, R. G., Garrett, G. A. (2007). *U.S. Military Program Management: Lessons Learned and Best Practices.* Management Concepts, Vienna, Virginia.

ISBN 1-56726-184-1.

Rendon, R. G., Garrett, G. A. (2005). *Contract Management: Organizational Assessment Tools.* McLean, Virginia: National Contract Management Association, ISBN 0-9700879-0-8

Articles

- Rendon, R. G., Rendon, J.M. (2006). Federal Tax Compliance: Implications for Contractor Responsibility Determinations. *Journal of Contract Management*, 4(1), 7-15.
- Rendon, R. G. (2005). Commodity Sourcing Strategies: Processes, Best Practices, and Defense Initiatives. *Journal of Contract Management*, 3(1), 7-20.
- Rendon R. G. & Garrett, G. A. (2005). Managing Contracts in Turbulent Times. *Contract Management*, September, 48-57.
- Rendon R. G. & Stevens, B. S. (2005). Graduate Education and Research: Key to Procurement Transformation. *Contract Management*, June, 38-44.
- Rendon, R. G. (2003). Book review of *Federal Acquisition and Contract Management*. *Contract Management*, June, 68-70.
- Rendon, R. G. (2002). Book review of *World Class Contracting: How Winning Companies Build Successful Partnerships in the e-Business Age*. *Project Management Journal*, 33(3), 66-67.
- Rendon, R. G. (2001). Outsourcing Base Operations Support Functions. *Program Manager*, January-February, 16-20.
- Rendon, R. G., Floyd, M.R., & Wellman, G. L. (1999). Emergency Contracting: Responding to Natural Disaster. *Contract Management*, February, 8-11.
- Rendon, R. G. (1998). The Changing Face of Operational Contracting. *Contract Management*, February, 18-21.
- Rendon, R. G., Heberling, M. E., & Wagner, C. F. (1993). The F-22 Advanced Tactical Fighter: The Air Force Model Acquisition Program. *PM Network*, September, 7(9), 12-19.
- Rendon, R. G. & Templin, C. R. (1992). Corporate Procurement Strategy: An Analysis of Supply Line Management. *Contract Management*, July, 18-25.
- Rendon, R. G. (1991). The Pre-award Survey. *Contract Management*, February, 23-25.

Professional Presentations/Proceedings

- 2007 4th Annual NPS Acquisition Research Symposium, 16-17 May 2007, Monterey, California.
  1. *Analysis of MOSA Implementation in Navy Acquisition Programs*
  2. *Managing the Service Supply Chain in the Department of Defense: Implications for a Program Management Infrastructure*
  3. *DoD Contract Termination Liability: An Analysis of the Special Contract Termination Cost Clause*
- 92nd Annual International Supply Management Conference, 6-9 May, 2007, Las Vegas, Nevada.
  1. *Project Management for the Supply Professional*

2. *Best Practices in Contract Management*

- 2007 NCMA World Congress, 22-25 April, 2007.
  1. *Risk Management for the Contracts Professional*
  2. *Filling the Knowing-Doing Gap: Implications for the Contracting Workforce*
- IEEE International Conference on Systems of Systems Engineering, 16-18 April, 2007, San Antonio, Texas.
  Using a Modular Open Systems Approach in defense Acquisitions
- 2007 National Association of Purchasing Management (NAPM) Western Washington Educational Conference, 12 January 2007, Seattle, Washington.
  Risk Management for the Supply Professional
- 2006 Project Management Institute (PMI) Global Congress-North America, 22-24 October, 2006, Seattle, Washington.
  Department of Defense Open Systems Based Projects: Implications for the Contracting Process
- 2006 60th National Association of Purchasing Management (NAPM) Southwest Purchasing Educational Conference, 4-5 October 2006, Albuquerque, New Mexico.
  Project Management for the Supply Professional
- 2006 Federal Acquisition and Subcontract Management Group (FASMG) Teleconference Seminar, 7 September, 2006.
  Current Issues in Federal Acquisition and Subcontract Management
- 2006 National Contract Management Association (NCMA) Aerospace and Defense Contract Management Conference, 27-28 July 2006, Santa Ana, California.
  Department of Defense Open Systems Based Projects: Implications for the Contracting Process
- 2006 Production and Operations Management Society - College of Service Operations, 2-3 June 2006 *Services Acquisition in the Department of Defense: Current Trends and Issues. Managing the Service Supply Chain in the Department of Defense: Opportunities and Challenges.*
- 2006 Silicon Valley Chapter, National Contract Management Association, 23 May 2006 National Education Seminar: *Best Contracting Practices for Business*
- 2006 3rd Annual NPS Acquisition Research Symposium, 17-18 May 2006
  Using a Modular Open Systems Approach in Defense Acquisition: Implications for the Contracting Process Managing the Service Supply Chain in the Department of Defense: Opportunities and Challenges
- 2006 National Contract Management Association Audio Seminar, 16 April 2006
  The Contract Management Maturity Model (CMMM) and Assessment Tools
- 2006 91st Annual International Supply Management Conference, 7-10 May 2006
  Project Management for Supply Managers (Presented twice)
  Measuring Contract Management Process Maturity: A Tool for Enhancing the Value Chain
- 2006 NCMA World Congress, 9-12 April 2006
  Managing Business Risk in Complex Projects (Panel Chair)
  Project Management for the Contracts Professional

- 2006 National Association of Purchasing Management (NAPM) Western Washington Educational Conference, 14 March 2006
  Project Management for Purchasing/Supply Managers
- 2005 National Association of Purchasing Management (NAPM) New Mexico Annual Educational Conference, 20 October 2005,
  Project Management for the Supply Professional
- 2005 NCMA 5th Annual Commercial Contract Management Conference, 18 October 2005,
  Contract Management Maturity Model and Assessment Tools
- National Association of Purchasing Management (NAPM)-Twin Cities Regional Education Conference, 17 October 2005,
  Project Management for the Supply Professional
- 2005 NCMA Rio Grande Contracts Symposium, 12 October 2005,
  Measuring Contract Management Maturity
- 2005 2nd Annual Acquisition Research Symposium, Naval Postgraduate School, 19 May 2005, *Commodity Sourcing Strategies: Supply Management in Action*
- 2005 90th Annual International Supply Management Conference, 9 May 2005,
  Project Management for Supply Managers
- 2005 NCMA World Congress 2005, 26 April 2005,
  An Approach to Assessing Contract Management Maturity
- 2004 23rd Annual NCMA Government Contract Management Conference, 7 Dec 2004, *Organizational Contract Management Tools*
- 2004 International Public Procurement Conference, Florida Atlantic University, 23 October 2004, Chair, *Contract Bundling* Discussion Panel.
- 2004 NCMA National Education Seminar, Tucson, Arizona, 30 March 2004,
  Contracting Best Practices
- 2003 NCMA National Education Seminar, Los Angeles, California, 20 November 2003, *Back to Basics: The Procurement Process*
- 2003 NCMA Southwest Regional Conference, Port Hueneme, California, 2 September 2003, *Procurement Transformation*
- 2002 NAPM 56th Southwest Purchasing Conference, Dallas, Texas, 11 October 2002, *Current Trends in Government Contracting*
- 2002 NCMA National Education Seminar, Los Angeles, California, 21 May 2002,
  Financial Analysis: Contract Management Applications
- 2001 NAPM Federal Acquisition and Subcontract Management Conference, Dallas, Texas, 17 February 2001, *Necessary Tools for Purchasing and Contracting Success*

Research Projects:

- Rendon, R. G., Mutty, J.E. (2006). *DoD Contract Termination Liability: An Analysis of the Special Termination Cost Clause.* (NPS-GSBPP-06-042) Naval Postgraduate School. (Sponsor: OUSD (AT&L))
- Rendon, R. G. (2006). *Using a Modular Open Systems Approach in Defense Acquisition: Implications for the Contracting Process.* Acquisition Research

Sponsored Report, Graduate School of Business and Public Policy, Naval Postgraduate School. (Sponsor: Navy PEO/IWS)

- Rendon, R. G. (2005). *Commodity Sourcing Strategies: Supply Management in Action*. Acquisition Research Sponsored Report, Graduate School of Business and Public Policy, Naval Postgraduate School. (Sponsor: NPS Acquisition Research)
- Rendon, R. G., Lucyshyn, W., & Novello, S. (2005). *Improving Readiness with a Public-Private Partnership: NAVAIR's Auxiliary Power Unit Total Logistics Support Program.* Center for Public Policy and Private Enterprise, School of Public Affairs, University of Maryland.

Significant Practitioner Experience:

- 2003-2004: Director of Contracts, Evolved Expendable Launch Vehicle (EELV) Program Office, Air Force Space and Missile Systems Center, Los Angeles AFB, California
- 2000-2003: Director of Contracts, Space Based Infrared Systems Program Office, Air Force Space and Missile Systems Center, Los Angeles AFB, California
- 1997-2000: Squadron Commander, 47th Contracting Squadron, 47th Flying Training Wing, Laughlin AFB, Texas
- 1995-1997: Flight Commander, Mission Support Contracting Flight, Air Education and Training Command Contracting Squadron, Randolph AFB, Texas
- 1994: Supply Chain Manager, NCR Inc., Dayton, Ohio
- 1989-1994: Contracting Officer (Maverick Missile, C-20, F-22), Aeronautical Systems Center Wright-Patterson AFB, Ohio
- 1987-1989: Contracting Officer (Peacekeeper ICBM, Minuteman ICBM),Air Force Contract Management Division, Warren AFB, Wyoming
- 1986-1987: Detachment Commander, Detachment 7, Air Force Institute of Technology (AFIT), Warren AFB, Wyoming
- 1982-1986: Missile Combat Crew Commander; Combat Crew Instructor, 91st Strategic Missile Wing, Minot AFB, North Dakota

Academic and Professional Associations:

- **National Contract Management Association (NCMA)** Member since 1985. Member of NCMA Corporate Board of Advisors. Previously on Board of Directors for Wyoming, Dayton, Alamo, and Los Angeles Chapters. Currently, Associate Editor for *Journal of Contract Management* and member of NCMA Education Outreach Committee.
- **Project Management Institute (PMI)** Member since 2000. Currently active in the Project Management Institute (PMI) and a member of the Monterey Bay PMI chapter.
- **Institute for Supply Management (ISM)** Member since 1997. Currently, Editorial Reviewer for *Inside Supply Management.* Currently serving as Chair for ISM's Certification Committee. Spearheading the development of a new professional qualification reflecting the transformation from purchasing to supply management. Developing the body of knowledge and Knowledge, Skills, and

Abilities (KSAs) for new certification exam. Also active in ISM's Certification Exam item writing committee. Represent all Federal Government procurement sector in ISM's certification programs. Currently serving as Chair for the ISM Federal Acquisition and Subcontract Management Group (FASMG).

Public Service Activities: None

Consulting Activities: Providing training and education for the Institute for Supply Management and the National Association for Purchasing Management.

Benjamin J. Roberts
Senior Lecturer
May 1984

Academic Degrees:

- Ph.D., The Pennsylvania State University, 11/77, Social and Industrial Psychology, "Reference Groups and Orientations of Black Students in a Predominantly White University."
- MS, Louisiana State University, 6/72, Social and Clinical Psychology
- BS, Louisiana State University, 6/70, Psychology

Primary Teaching Areas:

- Human Resource Management
- Organizational Behavior
- Management of Change
- Groups and Teams
- Strategic Management

Graduate Teaching Experience:

- University of Florida, 1977-1982
- U.S. Army Organizational Effectiveness Center and School, 1982-1984 (Organization Theory and Design)

Significant Practitioner Experience:

- Director, Distributed Learning Programs, Meyer Institute of Systems Engineering, 2002-2006
- Program Manager for Instruction, Product Development for the 21st Century (PD-21), 2000-Present
- Program Manager for Instruction, Master of Science in Systems Engineering, 2000-Present
- Director and Co-director, Executive Management Education, Navy Medicine, 1990-1999.

Academic and Professional Associations:

- American Psychological Association
- American Society for Training and Development

Public Service Activities:

Member of advisory board, Command College, Peace Officer Standards and Training (POST), State of California

Joseph G. San Miguel
Professor
Academic Associate for Financial Management
August 1982

Academic Degrees:

- Ph.D. Accounting and Information Systems; Secondary Fields: Operations Research and Experimental and Social Psychology, The University of Texas at Austin, 1972. Dissertation: "Goals, Information, and Psychological Variables in Decision Making: An Empirical Study."
- M.B.A. Major: Accounting; Minor: Economics, University of North Texas, 1968.
- B.B.A. Major: Accounting; Minor: Mathematics, The University of Texas at Austin, 1967.

Professional Certification:

- Certified Public Accountant, Texas State Board of Public Accountancy, 1969 to Present.

Primary Teaching Areas:

- Financial & Managerial Accounting, Corporate Financial Reporting, Strategic Resource Management

Graduate Teaching Experience

- Professor of Accounting, Graduate School of Business & Public Policy, Naval Postgraduate School, 1982–Present.
- The David T. McLaughlin Visiting Professor of Business Administration, Dartmouth College Amos Tuck Graduate School of Business, 1997 & 1998.
- Visiting Professor, Stanford University Graduate School of Business, 1990 & 1996.
- Visiting Professor, Dartmouth College Amos Tuck Graduate School of Business, 1994 & 1995.
- Visiting Professor, University of California at Davis Graduate School of Management, 1987 & 1999.
- Visiting Professor, Claremont Graduate School–Peter Drucker Graduate School of Management, 1992.
- Associate Professor of Business Administration, Harvard University Graduate School of Business Administration, 1977–1982.
- Associate Professor, Department of Economics, Harvard University College of Arts and Sciences, 1979–1982.
- Assistant Professor of Business Administration, Harvard University Graduate School of Business Administration, 1974–1977.
- Assistant Professor of Accounting, New York University Graduate School of Business, 1972–1974.

Publications, Papers, Presentations:

- "Leasing As A Government Strategic Financing Option: The Navy's Maritime Prepositioned Ships Experience" with John K. Shank and Donald E. Summers, *Journal Of Public Procurement*, forthcoming in Issue 1, Volume 8 (2008).
- "Grand Jean Company," in R.N Anthony and V.G. Govindarajan, *Management Control Systems*, McGraw-Hill/Irwin, 12th Edition, 2007.
- "Abrams Company," in R.N Anthony and V.G. Govindarajan, *Management Control Systems*, McGraw-Hill/Irwin, 12th Edition, 2007.
- "Emerson Electric Co.," in R.N Anthony and V.G. Govindarajan, *Management Control Systems*, McGraw-Hill/Irwin, 12th Edition, 2007.
- "Public-Private Partnerships for Government Financing, Controlling Risk, and Value-for- Money: The UK Experience," with Donald E. Summers. Technical Report NPS-FM-06-036, September 1, 2006.
- "Using Public-Private Partnerships and Energy Savings Contracts to Fund DoD Mobile Assets," with Donald E. Summers. Technical Report NPS-FM-06-034, September 3, 2006.
- "ERP as a Strategic Management Tool: Six Evolutionary Stages," with J. Shank, *Handbook of Cost Management*, Warren, Gorham, Lamont, 2002; and in *The CFO Project*, October 1, 2002; and *AccountingSoftware411.com*, April 2, 2003.
- "Morrow Company," in E.J. Blocher, et al., *Cost Management: A Strategic Emphasis*, McGraw Hill-Irwin, 2004.
- "Emerson Electric Company," in E.J. Blocher, et al., *Cost Management: Cases and Readings*, McGraw Hill-Irwin, 2004; also reproduced by the *Beyond Budgeting Round Table*, Plano, Texas, 2005.
- *Value Chain Analysis for Assessing Competitive Advantage*, Management Accounting Guideline No. 41, Society of Management Accountants of Canada, Ontario, 1996.
- *Introduction to Financial Accounting*, with K. Wilcox, Harper & Row, 1980, Second Edition, 1984.
- *Assessing the Strategic Impact of Enterprise Resource Planning (ERP) Systems*, with J.K. Shank, Sponsored by the Financial Executives International Research Foundation 1999–2001.
- "Navy Acquisition Via Leasing: Policy, Politics, and Polemics with the Maritime Prepositioned Ships," with J.K. Shank & D.E. Summers, Acquisition Research Conference, Naval Postgraduate School, June 2005.

Research Projects:

- Classified Research Projects for the Defense Personnel Security Research Center, 2003-Present.
- "Alternative Methods for Financing Defense Acquisition," Acquisition Research Program, Naval Postgraduate School, 2005-2006.
- "Evaluation of the Maritime Prepositioned Ships Leasing Program," Acquisition Research Program, Naval Postgraduate School, 2004-2005.

Significant Practitioner Experience:

- Management Consulting, Goldman Sachs, 2003-2005.
- Member Advisory Board, Jenzabar, Inc.2006-Present.

Academic and Professional Associations:

- American Accounting Association: Accounting, Behavior and Organizations Section; Auditing Section; Management Accounting Section
- American Institute of Certified Public Accountants
- American Institute of Certified Public Accountants, Accounting Education Executive Committee, 1995–2000.
- American Institute of Certified Public Accountants, Business and Industry Executive Committee, 1996–1999.
- American Institute of Certified Public Accountants, Management Accounting Executive Committee, 1993–1996.
- American Accounting Association's Committee New Developments in Accounting Education, 1995–1996.

Consulting Activities:

Management Consulting and Executive Education at numerous U.S. companies

Susan M. Sanchez
Professor
Director, SEED Center for Data Farming
August, 2000

Academic Degrees:

- Ph.D. in Operations Research, Cornell University, August 1986.
- Dissertation: *Contributions to the Bernoulli Selection Problem*
- M.S. in Operations Research, Cornell University, May 1984.
- B.S.E. (summa cum laude) in Industrial and Operations Engineering, University of Michigan, May 1981.

Primary Teaching Areas: Statistics, Simulation

Graduate Teaching Experience

- ***Naval Postgraduate School***: August 2000-present
  Statistics; Advanced Simulation; Statistics for Technical Management; Introduction to Management Science; Statistics and Experimental Design for MOVES and HSI; Data Analysis for MOVES and HSI; Analytic Tools for Management Decisions
- ***University of Missouri – St. Louis***: Jan 1993 – Jun 2001
  Statistical Decision-Making; Business Forecasting; Management Science Elective (Manufacturing Strategy)
- ***University of Arizona***: Aug 1985 – Dec 1992
  Multivariate Stat I: Linear Regression; Multivariate Stat II: Experimental Design

Publications, Papers, Presentations:

Refereed journal articles, 2003-2006

- Sanchez, S. M., F. Moeeni, and P. J. Sanchez, (2006) "So many factors, so little time...simulation experiments in the frequency domain," *International J. Production Economics*, forthcoming.
- Sanchez, S. M. and P. J. Sanchez (2005). "Very large fractional factorial and central composite designs." *ACM Transactions on Modeling and Computer Simulation* 15(4): 362-377.
- Kleijnen, J. P. C., S. M. Sanchez, T. W. Lucas, and T. M. Cioppa (2005). "A user's guide to the brave new world of designing simulation experiments, *INFORMS J. Computing*, 71(3): 263-289. (with 5 page online supplement).
- Smith, L. D. and S. M. Sanchez (2003). "Assessment of business potential at retail sites: Empirical findings from a U.S. supermarket chain," *The International Review of Retail, Distribution and Consumer Research,* 13(1): 37-58.

Invited papers in refereed proceedings, 2003-2006

- Kang, K., K. Doerr, and S. M. Sanchez (2006). "A design of experiments approach to readiness risk analysis." *Proc. 2006 Winter Simulation Conference*, ed. L. F. Perrone, F. P. Wieland, J. Liu, B. G. Lawson, D. M. Nichol, and R. M. Fujimoto. IEEE: Piscataway, NJ, forthcoming.
- Sanchez, S. M. (2006). "Work smarter, not harder: Guidelines for designing simulation experiments," *Proc. 2006 Winter Simulation Conference*, ed. L. F. Perrone, F. P. Wieland, J. Liu, B. G. Lawson, D. M. Nichol, and R. M. Fujimoto. IEEE: Piscataway, NJ, forthcoming. (An earlier version appeared in *Proc. 2005 Winter Simulation Conference*, ed. M. E. Kuhl, N. M. Steiger, F. B. Armstrong, and J. A. Joines. IEEE: Piscataway, NJ, 69-82.)
- Sanchez, S. M. and R. K. Wood. 2006. " The BEST algorithm for solving stochastic mixed integer programs." *Proc. 2006 Winter Simulation Conference*, ed. L. F. Perrone, F. P. Wieland, J. Liu, B. G. Lawson, D. M. Nichol, and R. M. Fujimoto. IEEE: Piscataway, NJ, forthcoming.
- Sanchez, S. M., H. Wan, and T.W. Lucas (2005). "A two-phase screening procedure for simulation experiments." *Proceedings of the 2005 Winter Simulation Conference*, ed. M. E. Kuhl, N. M. Steiger, F. B. Armstrong, and J. A. Joines. IEEE: Piscataway, NJ, 223-230.
- Cioppa, T. M., T. W. Lucas, and S. M. Sanchez (2004). "Military applications of agent-based simulations," *Proc. 2004 Winter Simulation Conference*, eds. R. G. Ingalls, M. D. Rossetti, J. S. Smith, and B. A. Peters, IEEE: Piscataway, NJ, 2004, 171-180.
- Allen, T. E., A. H. Buss and S. M. Sanchez (2004). "Assessing obstacle location accuracy in the REMUS unmanned underwater vehicle," *Proc.2004 Winter Simulation Conference*, eds. R. G. Ingalls, M. D. Rossetti, J. S. Smith, and B. A. Peters, IEEE: Piscataway, NJ, 2004, 940-948.
- Sanchez, S. M. and H.-F. Wu (2003). "Frequency-based designs for terminating simulation experiments: A peace-enforcement example," *Proc. 2003 Winter Simulation Conference*, eds. D. Ferrin, D. J. Morrice, P. J. Sanchez, and S. Chick, IEEE: Piscataway, 952-959.

Book chapters, 2003-2006

- Lucas, T. W., S. M. Sanchez, T. M. Cioppa, and A. I. Ipekci, "Generating hypotheses on fighting the global war on terrorism," *Maneuver Warfare Science 2003*, Marine Corps Combat Development Command, 2003, 117-137.

Other proceedings articles, 2003-2006

- Lucas, T. W. and S. M. Sanchez. "Design of experiments for analyzing systems of systems." *Proc. Defense Analysis Seminar XIII*, conference in Seoul, Korea, 24-27 April 2006, 20 pages.
- Forsyth, A. J., S. M. Sanchez, H. Wan, K. M. Chang, and P. J. Sanchez. "Exploring edge organizations for network centric operations." To appear in *Proc.2006 CCRTS Conference*, conference to be held in San Diego, CA, June 20-22 2006, 15 pages.

Significant publications from 2002 or earlier

- Sanchez, S. M. and P. Konana. "Efficient data allocation for frequency domain experiments," *Operations Research Letters*, Vol. 26, No. 2, 2000, pp. 81-89.
- Smith, L. D., S. M. Sanchez and E. Lawrence, "A comprehensive model for managing credit risk and forecasting losses on home mortgage portfolios," *Decision Sciences*, Vol. 27, No. 2, 1996, pp. 291-317. **Winner**: Best Application Paper Award at the 1994 Decision Sciences Meeting.
- Kannan, P. K. and S. M. Sanchez, "Competitive market structures: A subset selection analysis," *Management Science*, Vol. 40, No. 11, 1994, pp. 1484-1499.
- Wholey, D. R., J. B. Christianson, and S. M. Sanchez, "Organizational size and failure among health maintenance organizations." *American Sociological Review*, Vol. 57, 1992, pp. 1-14.
- Christianson, J. B., D. R. Wholey and S. M. Sanchez, "State responses to HMO failures," *Health Affairs*, special issue on managed care, Vol. 10, No. 4, 1991, pp. 78-92.

Conference presentations and other significant presentations during 2003-2006

Note: presentations were also given for all proceedings papers listed above

- Lucas, T. W., S. M. Sanchez, and P. J. Sanchez. 2006. "The brave new world of designing simulation experiments for defense and homeland security applications." Joint Statistical Meetings, August 2006.
- Lucas, T. W., S. M. Sanchez, and F. Martinez Tiburcio. 2005. "Using simulation to study the protection of critical maritime assets." International Maritime Protection Symposium, Honolulu, HI, 13 December 2005.
- Forsyth, A., S. M. Sanchez, and H. Wan. 2005. "Exploring edge models for network-centric operations." Edge Project Workshop, Naval Postgraduate School, 9 December 2005.
- Sanchez, S. M., T. W. Lucas, and P. J. Sanchez. "Experimental designs for large-scale military simulation studies." Army Conference on Applied Statistics, Naval Postgraduate School, Monterey, CA, 20-22 October 2005.
- Sanchez, S. M., G. Schwarz, S. K. Gun, and H. H. Ang. "Peace support for elections: insights into voter participation and escalation." MORS Symposium on *Agent-based models and other analytic tools in support of stability operations*, SAIC, MacLean,, VA, 25-27 October 2005.
- Sanchez, S. M. and T. W. Lucas. "Experiments at NPS," Project Albert International Workshop 10, Pre-conference Technical Session Briefing, Stockholm, Sweden, 16-22 May 2005. A shorter version was briefed to Critical Infrastructure Protection (CIP) Roundtable participants, Project Albert International Workshop 9.5, Referentia Systems, Inc., Honolulu, HI, 15-25 February 2005.
- Cioppa, T. M., T. W. Lucas, and S. M. Sanchez. "Advances in large-scale simulation experiments." Full day tutorial, MORS Mini-Symposium on *New*

Analysis Techniques: Understanding and Applications. Johns Hopkins University Applied Physics Lab, 25-27 January 2005. (CD-ROM distributed)

- Wood, K. and S. M. Sanchez, "The BEST method for stochastic integer programming," 39th Annual Conference of the Operational Research Society of New Zealand, University of Auckland, Auckland, New Zealand, November 28-29, 2004.
- Sanchez, S.M., and T.W. Lucas, "Experimental Design and Analysis in the Data Farming Environment," Project Albert 9th International Workshop, Wellington, New Zealand, Nov. 2004. An earlier version was given at the Project Albert 8th Intl. Workshop, Singapore, April 2004.
- Sanchez, S.M., T.W. Lucas, B. Widdowson. "Data Farming: Accidental VV&A," INFORMS Annual Meeting, Denver, Colorado, October 2004.
- Sanchez, S.M. and G. Schwarz. "Modeling Peace Support Operations," INFORMS Annual Meeting, Denver, Colorado, October 2004.
- Steele, M.J., S.M. Sanchez, R. Gottfried, "Agent-Based Simulation of Unmanned Surface Vehicles: A Force in the Fleet," MORS Symposium, Naval Postgraduate School, Monterey, California, June 22-24, 2004.
- Sanchez, S. M. and E. S. Wolf. "Using agent-based models for expeditionary logistics." INFORMS Annual Meeting, Atlanta, GA, October 19-23, 2003.
- Sanchez, S. M. "Through the looking glass: reflections on an unexpected career in simulation." Ph.D. Colloquium Keynote, Winter Simulation Conference, December 6-9, 2003.

Research Projects: 2003-2006 (most recent first)

- Office of Naval Research: "Emerging and Advanced Technologies for Capable Manpower," $987,463 for 10/1/06-9/30/09. Pending.
- National Science Foundation: "Collaborative Research: Efficient Hybrid Factor Screening Procedures for Stochastic Simulation" (with Purdue University). $235,920 for 10/1/06-9/30/09. Unfunded.
- U.S. Army Training & Doctrine Command Analysis Center: "Modeling Individual Soldiers in Close Combat." $20,000 for 6/1/06-9/30/06. Funded.
- U.S. Army Training & Doctrine Command Analysis Center: "Enhancing Computational Capabilities in Support of Analysis for the Future Force Warrior." $10,000 for 6/1/06-9/30/06. Funded.
- U.S. Marine Corps Warfighting Laboratory: "Applying Simulation Experiments and Efficient Design to Analyze Complex Transformational Issues." $451,843 for 10/1/05-9/30/06. Funded.
- U.S. Army Training & Doctrine Command Analysis Center: Assessing Distributed Capabilities and Tactics, Techniques, and Procedures for Future Army Systems." $29,527 for 12/1/06-9/30/06. Funded.
- OASD: "Exploring Edge Organization Models for Network-Centric Operations." $25,905 for 12/05-9/06. Funded.

- U.S. Marine Corps Warfighting Laboratory: "Exploring Command and Control Issues in Networked Forces." Approx. $405,000 for 10/1/04-9/30/05. Funded.
- U.S. Marine Corps Warfighting Laboratory: "NPS Exploration of Agent-based Simulations." Approx. $350,000 for 5/03-9/04. Funded.
- U.S. Marine Corps Combat Development Command: "Adaptive Exploration of Agent-based Command and Control Simulations." Approx. $250,000 for 1/02-4/03. Funded.

Significant Practitioner Experience: N/A

Academic and Professional Associations:

- Simulation Area Editor, *INFORMS Journal on Computing*, Jan 2001-present
- Board of Directors, Winter Simulation Conference: American Statistical Association Representative (2004-present); Secretary (2006)
- INFORMS Subdivision Council member (2003-2005)
- INFORMS Simulation Society Council member (2004-2006)
- INFORMS College on Simulation President (2002-2004)
- INFORMS Forum on Women in OR/MS President (2003)
- National Science Foundation review panel
- Organizing committee, Project Albert International Workshop 6, March 2003

Public Service Activities:

- Pacific Grove Middle School Music Boosters
- Pacific Grove Middle School drama program
- Pacific Grove High School Music Boosters
- Big Sur Marathon volunteer

Consulting Activities: N/A

Yu-Chu Shen
Assistant Professor
September 2004

EDUCATION

- Ph.D. in Health Policy (field: Health Economics), Harvard University. 2001
  Dissertation: The Effects of Market Reforms and Ownership Choice on Hospital Quality
- A.B. with magna cum laude in Applied Mathematics (field: Decision and Control), Harvard University. 1996

RESEARCH INTEREST

- Primary Fields: Health Policy and Health Economics
- Current Research Topics and Interests:
  - Organizational changes in health care markets and their effects on quality of care
    - Racial disparity in health and health care
    - Access to care and health insurance coverage for the vulnerable population
    - Provider payment systems

PROFESSIONAL EXPERIENCES

- Assistant Professor of Economics, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA. 2004—present
- Faculty Research Fellow, National Bureau of Economic Research, Stanford, CA. 2004—present
- Research Associate, Health Policy Center, the Urban Institute, Washington, DC. 2001—2004
- Research Assistant, National Bureau of Economics Research, Cambridge, MA. 1997—2001
- Webmaster, Ph.D. Program in Health Policy, Harvard University, Cambridge, MA. 1997—2001
- Teaching Fellows, Kennedy School of Government, Harvard University. 1998—1999
- Research Assistant, Harvard School of Public Health, Boston, MA. 1996—1999
- Junior Partner, Murray Research Center for the Study of Lives, Cambridge, MA. 1994—1997

PUBLICATIONS

- Shen, Y. and Melnick, G.A. 2007. Is managed care still an effective cost containment device? *Forum for Health Economics & Policy: Vol. 9: Iss. 1 (Frontiers in Health Policy Research), Article 3.* http://www.bepress.com/fhep/9/1/3.
- Shen, Y., Eggleston, K., Schmid, C. and Lau, J. 2007. Hospital Ownership and

Financial Performance: What Explains the Different Empirical Literature Findings? *Inquiry, 44 (1): 41-68.*

- Shen, Y. and Long, S. 2006. What's driving the downward trend in employer sponsored health insurance? *Forthcoming in Health Services Research.*
- Eggleston, K. and Shen, Y. 2006. Ownership and performance of health service organizations: Evidence from hospitals. *Global Forum Update on Research for Health, 3rd annual volume.* Available at http://www.globalforumhealth.org/filesupld/global_update3/5_Addressing%20global%20challenges.pdf
- Shen, Y. and McFeeters, J. 2006. Out-of-pocket health spending between low- and high-income populations: Who is at risk of having high expenses and financial burdens? *Medical Care* 44(3): 200-209.
- Coughlin, T., Long, S., Shen, Y. 2005. How does Medicaid compare to private insurance: A look at the access gap for the nation and in 13 states. *Health Affairs* 24 (4): 1073-1083.
- Shen, Y. and Zuckerman, S. 2005. The effect of Medicaid payment generosity on access and use among Medicaid beneficiaries. *Health Services Research* 40(3): 723-744.
- Shen, Y. and Melnick, G.A. 2004. The effects of HMO ownership on hospital costs and revenues: Is there a difference between for-profit and not-for-profit plan? *Inquiry* 41(3): 255-267.
- Long, S. and Shen, Y. 2004. Low-income workers with employer-sponsored insurance: Who's at risk when employers drop coverage? *Medical Care Research and Review* 61(4): 474-494.
- Zuckerman, S. and Shen, Y. 2004. Characteristics of occasional and frequent emergency department users: Do insurance coverage and access to care matter? *Medical Care* 42(2): 176-182.
- Shen, Y. 2003. Changes in hospital performance after ownership conversions. *Inquiry* 40 (3): 217-234.
- Holahan, J. Nichols, L.M., Blumberg, L.J., and Shen, Y. 2003. A new approach to risk spreading via coverage expansion subsidies. *American Economic Review* 93 (2): 277-282.
- Shen, Y. 2003. The effect of financial pressure on the quality of care in hospitals. *Journal of Health Economics* 22 (2): 243-269.
- Shen, Y. and Zuckerman, S. 2003. Why is there state variations in employer-sponsored insurance? *Health Affairs* 22 (1): 241-251.
- Shen, Y. 2002. The effect of ownership choice on patient outcomes after treatment for acute myocardial infarction. *Journal of Health Economics* 21 (5): 901-922.

REPORTS AND PAPERS

- Shen, Y. 2007. Do HMO and its for-profit expansion jeopardize the survival of hospital safety net services? *Manuscript.*
- Shen, Y. and Eggleston, K. 2007. Effects of Soft Budget Constraints on Continuity of Hospital Safety Net Services. *Manuscript.*

- Shen, Y., Waidmann, T and Zuckerman, S. 2007. What Explains Racial And Ethnic Disparities In Insurance Coverage and Access to Care? *Manuscript.*

- Shen, Y. 2006. The effects of HMO and its for-profit expansion on the survival of specialized hospital services. *NBER working Paper #12374.*
- Shen, Y., Eggleston, K., Schmid, C. and Lau, J. 2005. Hospital ownership and financial performance: A quantitative research review. *NBER Working Paper # 11662.*
- Shen, Y. and McFeeters, J. 2005. Out-of-Pocket Health Spending Between Low- and High-Income Populations: Who is at Risk of Having High Financial Burdens? *NBER Working Paper # 11179.*
- Zuckerman, S. and Shen, Y. 2004. Did recent payment rate increases improve access and use among Medi-Cal beneficiaries? *Policy Report* to the California HealthCare Foundation.
- Blumberg, L.J. and Shen, Y. 2003. The effects of introducing federally licensed association health plans in California: a quantitative analysis. *Policy Report* to the California HealthCare Foundation. Available at http://www.chcf.org/documents/insurance/AHPBlumberg.pdf
- Shen, Y. Liu, K., Kramer, A., Maxwell, S. Garrett, AB., Wissoker, D. 2003. What explains therapy cost in skilled nursing facilities? The feasibility of using clinical characteristics in a payment system. *Interim Analysis Report* to the Centers of Medicare & Medicaid Services (CMS).
- Blumberg, L.J. and Shen, Y. 2003. Using the Urban Institute's Health Insurance Reform Simulation Model (HIRSM) to produce state-specific results. *Report* to Robert Wood Johnson Foundation.
- Blumberg, L.J., Shen, Y., Nichols, L.M., Buettgens, M., Dubay, L.C., and McMorrow, S. 2003. The Health Insurance Reform Simulation Model (HIRSM): Methodological detail and prototypical simulation results. *Final Report* to the US Department of Labor, PWBA, July 2003. Available at http://www.urban.org/url.cfm?ID=410867

PRESENTATIONS

- "Managed care and cost containment," presented at the National Yang Ming University, Taipei Taiwan, May 17 2007.
- "Financial pressure and the continuity of safety net services," presented at the National Yang Ming University, Taipei Taiwan, October 27 2006.
- "Applications of the propensity score methods in health policy studies," guest lecture at the National Yang Ming University, Taipei, Taiwan, October 19 2006.
- "The effects of managed care and its for-profit expansion on the survival of specialized hospital services." presented at the Stanford Research-in-progress seminar, Stanford CA, October 11 2006.
- "Systematic review of hospital ownership and quality of care: what explains the different results in the literature?" presented at the Academy Health Annual Research Conference, Seattle, WA, June 25 2006.
- "Hospital ownership and performance: a quantitative review." presented at the

American Society of Health Economists 2006 Conference, Madison, WI, June 5 2006.

- "Is managed care still an effective cost containment device?" presented at the Ninth Annual Frontiers in Health Policy Research Meeting, Cambridge, MA, November 4 2005.
- "Is managed care still an effective cost containment device?" presented at the Research-in-Progress seminar, Stanford University. Stanford, CA. September 28 2005.
- "Hospital ownership and financial performance: an integrative research review," presented at the Academy Health Annual Research Conference, Boston, MA, June 28 2005.
- "Hospital ownership and performance: an integrative research review," presented at the Research-in- Progress Seminar, Stanford University. Stanford, CA. May 11 2005.
- "What explains racial and ethnic disparity in health insurance coverage and access to care?" presented at the American Public Health Association (APHA) Annual Meeting, Washington, DC, November 8, 2004.
- "The effects of financial incentives on health care access and quality." Invited talk at the Bureau of National Health Insurance, Taipei Taiwan, March 3 2004.
- "Welfare implications of hospital ownership conversions to for-profit status." Invited talk at the National Health Research Institute, Taipei Taiwan, March 8 2004.
- "Low-income workers with employer-sponsored insurance: Who is at risk when employers drop coverage?" presented at the Association for Public Policy Analysis and Management (APPAM) Annual Research Conference, Washington DC, November 8 2003.
- "Welfare implication of hospital ownership conversion to for-profit status," presented at the American Economics Association (AEA) 2003 Annual Meeting, Washington DC, January 4 2003.
- "Do insurance coverage and access to care influence emergency room use?" presented at the U.S. General Accounting Office seminar series, Washington DC, November 2002.
- "Changes in hospital performance after ownership conversions: an application of the propensity score method," presented at the Urban Institute Modeling Group seminar, April 2002.
- "The effect of financial pressure on the quality of care in hospitals: evidence from patient outcomes after treatment for acute myocardial infarction," presented at the poster session of NRSA Conference, Los Angeles CA, June 2000.

TEACHING EXPERIENCE

- Graduate School of Business and Public Policy, Naval Postgraduate School
  - Economics in the Global Defense Environment, instructor
  - Multivariate Data Analysis I, instructor

- Kennedy School of Government, Harvard University
  - Regulation and Management in the Health Care System, teaching fellow
  - Quantitative Analysis and Empirical Methods, teaching fellow

GRANTS

- Naval Postgraduate School Research Initiative Program. Effects of Organizational and Market Changes on Hospital Behavior. $65,587. 10/1/2004–9/30/2006.

- Robert Wood Johnson Foundation, #56110. The Effect of Health Plan Concentration on Hospital Prices, Costs, Capacity, Charity Care and Outcomes. Co-principal investigator (with Glenn Melnick). 2/2006-1/2008.

- Robert Wood Johnson Foundation, #050953. Hospital Ownership and Performances: An Integrative Research Review. Co-principal investigator (with Karen Eggleston). 6/2004-11/2005.

- University of Southern California, #07398-000-00. Analysis of Hospital Data. Principal investigator. 1/2002-8/2004.

PROFESSIONAL ACTIVITIES

- Referee for the Journal of Health Economics, Inquiry, Health Services Research, Journal of American Medical Association, Health Affairs, Health Policy, Contemporary Economic Policy, Journal of Health Care for the Poor and Underserved
- Member of American Economics Association
- Member of Academy for Health Services Research and Health Policy
- Member of International Health Economics Association
- Invited Conference: *NSF Symposium on Quasi-Experimental Methods*, University of California, Berkeley, August 1999.

PERSONAL

Female; Fluent in English and Mandarin; Taiwan citizen and US permanent resident.

Dr. Cary Alan Simon
Lecturer
October 1999

Academic Degrees:

- **DBA** Doctorate Business Administration
  U.S. International University, 1997
  Dissertation Title: *Organizational Performance in the Public Sector: A Comparison of 77 Federal Bureaus Receiving or Not Receiving the President's Quality Award 1992-1997*
- **MS** Management, Naval Postgraduate School, 1996
- **MBA** Brenau University, 1991
- **BS** Chemistry, Houston Baptist University, 1974

Primary Teaching Areas:

- Strategic Management
- Organizational Behavior (including International)
- Managing Change

Graduate Teaching Experience:

- Lecturer, Naval Postgraduate School 1999 – present
- Adjunct Professor, Monterey Institute of International Studies 2004 - present
- Adjunct Professor, Golden Gate University 2000 - 2004
- Adjunct Professor, Georgia Military College 1990-1991
- Military Instructor: Royal Australian Navy 1987-1988
- Military Instructor: U.S. Navy, Kings Bay, GA 1989-1991

Publications, Papers, Presentations:

- Sekerka, L., Zolin, R. & Simon, Cary (2005). "Change Now Because I Say So! Specialized Management Identy and Coercive Rapid Transformation." *Naval Postgraduate School Technical Report* #NPS-GSBPP-05-003, Monterey CA..
- Sekerka, L., Zolin, R. & Simon, Cary (2005). *Change Now Because I Say So! – Specialized Management Identity and Coercive Rapid Transformation,* Academy of Management Conference, August 2005.
- Sekerka, L., Zolin, R. & Simon, Cary (February 27, 2005). *Change Now Because I Say So! –Specialized Management Identity and Coercive Rapid Transformation,* Australian Defense Force Academy, Canberra, Australia, Research Seminar presented by R. Zolin.
- Presentation: *Systems Thinking and Acting* for 12 Army Directors, Two-star General and senior staff at the Aviation and Missile Research, Development, and Engineering Center in Huntsville, Alabama, March 2005. Facilitated a Strategic Planning Session for the same group/same location.

Significant Practitioner Experience

Consulting Activities:

- California Commission on Police Officer Standards and Training:
  Executive Education seminars for CA. Police Officers 2000 - present
- Strategic Planning Facilitation for California Cities:
  Marina 2001-2002
  Porterville 2002-2003
  Vacaville 2006
- Monterey County, Public Authority In-Home Support Services:
  Executive Board planning seminars 2000 - 2003
- Moss Landing Harbor District Board of Commissioners:
  Executive Board planning seminars 2001 - 2002
- U.S. Air Force, Civil Air Patrol Regional Strategy Workshop 2002
- Sierra Army Depot, Leadership Council Strategic Planning 2002 - 2003
- California Governor's Regional Summit 2002
  Large Group Intervention and Strategy Presentation
- California Soccer Association North:
  Executive Board, Strategic Planning Workshops 2003
- U.S. Army Ground Systems Industrial Enterprise, Strategic Planning 2003
- U.S. Army Tank-automotive & Armaments Command Strategic Planning 2003
- Shelter Outreach Plus, Executive Board Strategic Planning 2003
- Commander, Naval Forces Europe Strategic Planning 2005

Academic / Professional Associations:

Certified Professional: Society for Human Resource Management (SHRM) 2006
Certified Executive Coach, 360 degree Feedback 2007

Keith F. Snider
Associate Professor
Area Chair, Acquisition Group
August 1996

Academic Degrees:

- Ph.D., Virginia Polytechnic Institute and State University, 1997, Public Administration and Public Affairs.
- M.S., Naval Postgraduate School, 1982, Operations Research
- B.S., United States Military Academy, 1976 (no major).

Primary Teaching Areas:

- Defense acquisition policy
- Defense project management
- Public organizations

Graduate Teaching Experience

- Naval Postgraduate School – 1993-present

Publications, Papers, Presentations:

Refereed Papers:

- Snider, K.F. (2006). Pragmatism and public administration. *Encyclopedia of Public Administration and Public Policy, 1* (1), 1-4.
- Snider, K. F. (2006). Procurement leadership: from means to ends. *Journal of Public Procurement, 6* (3), 274-294.
- Snider, K.F. & Nissen, M.E. (2003). Beyond the body of knowledge: a knowledge-flow approach to project management. *Project Management Journal, 34* (2), 4-12.
- Snider, K.F, Barrett, F.J. & Tenkasi, R. (2002). Considerations in acquisition lessons learned system design. *Acquisition Review Quarterly, 9* (1), 67-80.
- Snider, K.F. & Walkner, M.F. (2001). Best practices and protests: toward effective use of past performance as a criterion in source selections. *Journal of Public Procurement, 1* (1&2), 96-122.
- Snider, K.F. (2000). Rethinking public administration's roots in pragmatism: the case of Charles A. Beard. *The American Review of Public Administration, 30* (2), 123-145.
- Snider, K.F. (2000). Expertise or experimenting? Pragmatism and American public administration: 1920-1950. *Administration & Society, 32* (3), 329-354.

Refereed Journal Notes:

- Snider, K.F. (2005). Rortyan pragmatism: 'Where's the beef' for public administration? *Administration & Society, 37* (2), 243-247.
- Snider, K.F. (2000). Response to Stever and Garrison. *Administration & Society, 32* (4), 487-489.

Technical Reports:

- Lucyshyn, W., Snider, K, & Maly, R. (2004). The Army seeks a world class logistics modernization program. *Acquisition Research Case Series*, NPS-PM-04-010, Naval Postgraduate School, Monterey, CA.
- Barrett, F.J. & Snider, K.F. (2001). Dynamics of knowledge transfer in organizations: implications for design of lessons learned systems. Naval Postgraduate School Technical Report NPS-GSBPP-01-002, 12 April, Monterey, CA.

Book Chapters:

- Nissen, M. and Snider, K. (2005). Defense project management knowledge flow through lessons learned systems. *The Story of Managing Projects: A Global, Cross Disciplinary Collection of Perspectives*, pp. 118-133. Westport, CT: Praeger, 2005.
- Nissen, M.E., Snider, K.F., & Lewis, I. (2002). U.S. defense acquisition research program: a new look. *The Frontiers of Project Management Research*, pp. 115-134. Newtown Square, PA: Project Management Institute Press.

Other Publications:

- Snider, K.F. & Greene, J.B. (2007). Preface and acknowledgements. Proceedings of the 4rd Annual Acquisition Research Symposium. 16-17 May, Monterey, CA: Naval Postgraduate School.
- Snider, K.F. & Greene, J.B. (2006). Preface and acknowledgements. Proceedings of the 3rd Annual Acquisition Research Symposium. 17-18 May, Monterey, CA: Naval Postgraduate School.
- Snider, K.F. & Greene, J.B. (2005). Preface and acknowledgements. Proceedings of the 2nd Annual Acquisition Research Symposium. 18-19 May, Monterey, CA: Naval Postgraduate School.
- Snider, K.F. & Greene, J.B. (2004). Preface and acknowledgements. Proceedings of the 1st Annual Acquisition Research Symposium. 13 May, Monterey, CA: Naval Postgraduate School.

Conference Presentations:

"Acquiring Public Goods and Services: Connecting Research to Administrative Practice and Teaching," 2005 Annual Meeting of the National Association of Schools for Public Affairs and Administration, Washington, DC, 13-15 October 2005.

Research Projects: Principal investigator and administrator for Naval Postgraduate School's Acquisition Research Program from December 2003 to present. Numerous Department of Defense/Navy sponsors have provided annual funding in amounts ranging from $50,000 to $1,000,000, resulting in several dozen technical reports, journal articles, and conference papers by faculty both from NPS and from other universities. The principal product of this program is the Acquisition Research Symposium, held in annually since 2004, and scheduled again for May 2008.

Practitioner Experience:

- U.S. Army, 1976-1996. Retired from active duty in August, 1996 with the rank of Lieutenant Colonel

- 1976-1980; 1986-1989: Command and staff positions in U.S. Army field artillery organizations in the U.S., Korea, and Germany.
- 1982-1985: Operations research analyst, Army Training and Doctrine Command Analysis Center at the Naval Postgraduate School.
- 1989-1993: Staff analyst, Strategic Defense Command, Washington, DC.

Academic and Professional Associations:

- Project Management Institute
- American Society for Public Administration
- Inter-University Seminar on Armed Forces and Society
- International Defense Acquisition Resource Management program (2001-present). Lecturer on acquisition-related topics to international students and delegations at the Naval Postgraduate School. Also conducted seminars for acquisition professionals in the ministries of defense in Egypt, Chile, Bulgaria, Slovenia, and the Slovak Republic.

Public Service Activities:

- Editorial Board, *Acquisition Review Quarterly*, 1996-present
- Manuscript reviewer, *American Review of Public Administration*
- Board of Directors, Sanctuary Bible Church, Carmel, CA, 2002-present. Chairman, 2004-present.

Consulting Activities: none

Jim Suchan
Professor
January 1986

Academic Degrees

- Ph.D. University of Illinois, 1980, English Literature, "The Ambivalent Attitude Toward the Orphan in the Early-Victorian Novel
- M.A. State University of New York at Buffalo, 1973, Humanities
- B.A. State University of New York at Buffalo, 1971, English Literature and Film Studies

Primary Teaching Areas

- Managerial Communication
- Crisis Communication and Media Relations
- Organizational Behavior

Graduate Teaching Experience

- The Naval Postgraduate School, 1986-present
- The University of Alabama, 1981-1985
- The University of Arizona, 1976-1980

Publications, Papers, Presentations:
Journal Articles

- Suchan, J. (2007). Drinking parties and learning: A tale from Japan. *Business Communication Quarterly*, vol. 70, No. 2, 194-99.
- Suchan, J & Charles, M. (2006). Business communication research: Past, present, and future. *Journal of Business Communication*, vol.43, No. 4, pp. 389-98.
- Suchan, J. (2006). Changing organizational communication practices and norms: A framework. *Journal of Business and Technical Communication, 20, 1, pp. 1-43.*
- Suchan, J. (2004). Writing, authenticity, and knowledge creation. *Journal of Business Communication*, vol.41, No. 3, pp. 302-15.
- Lewis, I & Suchan, J. (2003). Structuration theory: Its potential impact on logistics research. *International Journal of Physical Distribution and Logistics Management*, Vol. 34, No. 4, pp. 296-315.
- Suchan, J. & Hayzak, G. (2001). The communication characteristics of virtual teams: A case study. *IEEE Transactions on Professional Communication*, 44, 3, pp.174-187.
- Suchan, J. (2001). The effect of interpretive schemes on videoteleducation's conception, implementation, and use. *The Journal of Business and Technical Communication*, 15, 2, pp. 133-163. (Awarded the 2002 NCTE Award for Best Article on Methods of Teaching in Scientific and Technical Communication)
- Suchan, J. (1998). The effect of high-impact writing on decision making within a public sector bureaucracy. *The Journal of Business Communication*, Vol. 35, No.

3, pp. 299-327. (Awarded the 1999 Outstanding Article of the Year Award in Business Communication**).**

- Suchan, J. & Dulek R. (1998). From text to context: An open systems approach to research in written business communication. *The Journal of Business Communication,* Vol. 35, No. 1, pp. 87-110.
- Suchan, J. (1995). The influence of organizational metaphors on writers' communication roles and stylistic choices. *The Journal of Business Communication*, Vol. 32, No. 1, pp. 7-29.

Conference Presentation: 2003-2006

- Suchan, J. Understanding US and Japanese Negotiation Processes and Strategies: Preliminary Results. The Association for Business Communication Annual Meeting, Oct. 26-28, 2006, San Antonio, TX
- Suchan, J. The effect of organizational metaphors on changing written communication practice: Three cases. The Association for Business Communication Annual Meeting, Oct. 20-22, 2005, Irvine, CA.
- Suchan, J., Changing Organizational Communication Practice and Norms: A Framework, Association for Business Communication Annual Convention, Cambridge, MA, 28-30 October, 2004.
- Suchan, J. Writing, authenticity, and knowledge creation, Association for Business Communication Annual Convention, Albuquerque, New Mexico Oct. 27-29, 2003 (Conference's keynote lecture).

Research Projects

- Office of Continuous Learning (17K), fall, 2005, High-Impact Written Communication Module
- BPP Internal Funding (workload release funding) winter and spring, 2005, Changing organizational communication practices and norms: A framework. Journal of Business and Technical Communication, *20, 1, pp. 1-43.*

Practitioner Experience

Associate Dean of Distance Learning, GSBPP (2001-2004). As a full time administrator, helped develop the EMBA program, increased input to 125 students per year, maintained relations with various stakeholders, helped determine technology design at NPS and remote sites, managed a 2.1 million budget, supervised distance learning support staff, and helped manage 3 additional DL programs.

Academic and Professional Associations

- Reviewer, Journal of Business Communications, Management Communication Quarterly, Journal of Business and Technical Communication, and IEEE Transactions in Professional Communication

- Conference Organizer, California Managerial Communications Colloquium, 1998; Association of Business Communication Western Regional Conference, 1993

- Association for Business Communication Committee Memberships: Publications Board (1992-1998; 2004-2007), Publications Board Chair (2005-2007) Research Board (1992-1995, 1999-2003), Graduate Studies Board (1996-1999), MBA Committee (1995-present)
- Director-at-Large, The Association for Business Communication, 1993-96

Public Service: None

Donald E. Summers, CMA, CFM
Lecturer
March 2001

Academic Degrees:

- Masters of Science in Management, Naval Postgraduate School, June 1985, Financial Management
- Bachelor of Science in Business, University of Southern Colorado, June 1973, Marketing and Economics

Primary Teaching Areas:

- Cost Management/Managerial Accounting
- Financial Accounting
- Financial Management in the Armed Forces

Graduate Teaching Experience:

- Graduate School of Business and Public Policy, Naval Postgraduate School, October 2000 to present
- Graduate School of Business, Monterey Institute of International Studies, 2004 – 2005
- Golden Gate University, 1991 – 2001 (evening classes)

Publications, Papers, Presentations:

Refereed Publications:

- San Miguel, Joseph, John K. Shank, and Donald E. Summers. "Leasing As A Government Strategic Financing Option: The Navy's Maritime Propositioned Ships Experience," *Journal of Public Procurement*, scheduled for publication in Issue 3, Volume 7 (2007) or Issue 1, Volume 8 (2008).

Conference Proceedings:

- "The Budget Scoring Alternatives Financing Methods for Defense Requirements," with L. Leos, P. Rouleau, M. Wadsworth, and J. San Miguel. *Proceedings of the Fourth Annual Acquisition Research Symposium*, Monterey, California, May 16 – 18, 2007.
- "Navy Acquisition Via Leasing: Policy, Politics, and Polemics with the Maritime Prepositioned Ships," with J. Shank and J. San Miguel, *Proceedings of the Second Annual Acquisition Research Symposium*, Monterey, California, May 18 – 19, 2005.

Technical Reports:

- NPS-AM-05-006 San Miguel, Joseph G., John K. Shank, and Donald E. Summers. "Navy Acquisition via Leasing: Policy, Politics, and Polemics with the Maritime Prepositioned Ships." April 2005.
- NPS-FM-06-034 San Miguel, Joseph G., and Donald E. Summers. "Using Public-Private Partnerships and Energy Savings Contracts to Fund DoD Mobile Assets." August 2006.

- NPS-FM-06-036 San Miguel, Joseph G., and Donald E. Summers. "Public-private Partnerships for Government Financial, Controlling Risk, and Value-for money: The UK Experience." August 2006.

Research Presentations:

- "Strategic Financing of DoD Resources and Budget Policies." Chaired panel and presented overview of research. Fourth Annual Acquisition Research Symposium, Monterey, California, 17 May 2007.
- Presented and discussed our "Budget Scoring" research project as the guest speaker at the Joint Meeting of the American Bar Association (ABA) and Competitive Sourcing Committee and the ABA Public Contract Financing and Transaction Committee, Washington D.C., 15 February, 2007.
- San Miguel, Joseph G. and Donald E. Summers. Presented research finding and coordinated a panel discussion on Public-private partnerships with representatives from Hannon-Armstrong and Argent Group titled: "Alternative Methods for Financing Defense Acquisitions," for the Third Annual Acquisition Research Symposium, Monterey, California, 18 May 2006
- "Leasing Combat Support Equipment: Lessons from the Maritime Prepositioned Ship (MPS) Experience," with J. Shank, Second Annual Acquisition Research Symposium, Monterey, California, 19 May 2005.

Research Projects:

- Alternative Forms of Financing the Acquisition Budget**,** funding from the NPS Acquisition Chair, 2004 – 2007, products listed in the above section (Publications, Papers, Presentations)

Significant Practitioner Experience:

- Institute for Defense Education and Analysis (IDEA), Naval Postgraduate School (1995 – 2001)
    - Director, International Defense Acquisition Resources Management (IDARM) Program (1999 – 2001)
    - Director, Distributed Learning Division (1999 – 2000)
    - Program Manager, International Health Resources Management (IHRM) Program (1997 – 1999)
    - Research Associate engaged in developing an executive education program for DoD health care financial managers in a managed care environment (1995 – 1997)

- Morrison Knudson Corporation, Office of the Chairman, Carmel, CA (1994 – 1995), Executive Assistant/Business Manager for the Chairman/CEO (Mr. Bill Agee)

- Household Credit Services, Inc., Salinas, CA (1993 – 1994), Senior Financial Analyst

- U.S. Marine Corps (1973 - 1993)

- Marine Corps Representative, Director of the Marine Corps Practical Comptrollership Course, and Financial Management Instructor (MN2155), Naval Postgraduate School (1989 – 1993)
- Program Budget Coordinator for the Fiscal Director of the Marine Corps, Headquarters, Marine Corps, Washington D.C. (1985 – 1989)
- Financial Management Graduate Student, NPS (1983 – 1985)
- Executive Officer/Deputy Camp Commander, Camp Fuji, Japan (1982 – 1983)
- Rifle Company Commander, 29 Palms, CA (1980 – 1982)
- Student, Amphibious Warfare School, Quantico, VA (1979 – 1980)
- Series Commander, Company Commander, and Aide-de-Camp to the Commanding General, U.S. Marine Corps Recruit Depot, San Diego, CA (1976 – 1979)

Academic and Professional Associations:

- Institute of Management Accountants (IMA), Certified Management Accountant (CMA) and Certified Financial Manager (CFM).
- American Society of Military Comptrollers (ASMC)

Public Service Activities:

- Member of the Superintendent of the Monterey Peninsula Unified School District's (MPUSD) Business Advisory Committee. (2001 – present)
- Board Member and Treasurer for the Monterey High School's nonprofit Friends of Monterey Academy of Oceanographic Science (MAOS). (2002 – 2005)
- Co-chair of the Monterey Peninsula Unified School District (MPUSD) Budget Advisory Committee. (2002)
- Member of the Monterey Peninsula Unified School District (MPUSD) Blue Ribbon Committee (2000 – 2001), a committee of community members appointed by the MPUSD School Board to investigate the MPUSD financial crisis and make recommendations for improvement. I served as the Chairman of the Business Process Improvement Subcommittee.

Consulting Activities:

- National Parking and Valet, activity-based costing study and business process improvement, 2003 – present.
- Monterey Unified School District, informal consulting as part of various committees to improve business processes and reduce costs, 2001 – present.

Nicole Thibodeau
Assistant Professor
July 2005

ACADEMIC DEGREES:

- Ph.D. in Accounting, 2003 – University of Pittsburgh

  Thesis: "Improving The Organizational Architecture of Public Enterprise: An Investigation of the Effect of the Federal Government's Latest Effort through the Veterans Health Administration", chaired by Professor John Harry Evans, III
- BBA, 1988 – Université Laval, Québec, (QC), Canada

PRIMARY TEACHING AREA

- Financial accounting

GRADUATE TEACHING EXPERIENCE

- Naval Postgraduate School, Graduate School of Business and Public Policy, MBA

  Financial Accounting and Analysis (2005 - 2006)
- Université Laval, School of Accountancy, Masters in Accounting, Quebec, QC (Canada)

  Performance measurement and incentives and governmental management issues (2003 - 2005) and Thesis director
- Lecturer in accounting, Université de Moncton, New Brunswick, Canada, Executive MBA

  Intermediate Financial Accounting (1991 -1992)

PUBLICATIONS, PAPERS, PRESENTATIONS

- "La comptabilité intermédiaire", collaborator, French Canadian adaptation of "Intermediate Accounting, 10th Edition", Kieso et al., Chlala and Louis Ménard Editors, les Éditions du Renouveau Pédagogique, Montréal (QC), 2004
- Report on "Specialized Health Care Services Abroad" submitted to the Health Care and Social Services Ministry, Government of Quebec, 2003
- N. Thibodeau, Evans, J. H., Nagarajan, N. and Whittle, J. 2007. "Value Creation in Public Enterprises: An Empirical Analysis of Coordinated Organizational Changes in the VA Hospital System", *The Accounting Review* 82 (2): 483-502.

Conference presentations:

- "New Public Sector Reforms at Work: Transforming the United States Veterans Health Administration".
  - Presented at the International Conference on Accounting, Auditing and Management in Public Sector Reforms in Oslo, Norway, October 2004.

- "Value Creation in Public Enterprises: An Empirical Analysis of Coordinated Organizational Changes in the VA Hospital System" with John Harry Evans, III and Nandu Nagarajan, University of Pittsburgh
    - Presented at the American Accounting Association, Managerial Accounting Mid-year Meeting, Scottsdale, Arizona, January 2005.
    - Presented at the Canadian Academic Accounting Association Annual Meeting, Quebec, Quebec, Canada, June 2005.
    - Presented at the American Accounting Association Annual Meeting, San Francisco, California, August 2005.
- "Revisiting the Value of Repeated Contacts on Mail Survey Response Rates in Management Accounting Research" with Jean-François Henri, Université Laval.
    - Presented at the American Accounting Association Managerial Accounting Mid-year Meeting, Tampa Bay, Florida, January 2006.

RESEARCH PROJECTS

- "Value Creation in Public Enterprises: An Empirical Analysis of Coordinated Organizational Changes in the VA Hospital System – Phase 2" with John Harry Evans and Nandu Nagarajan, University of Pittsburgh (Under second revision at the The Accounting Review, June 2006).
- "Revisiting the Value of Repeated Contacts on Mail Survey Response Rates in Management Accounting Research" with Jean-François Henri, Université Laval (Presented at the Management Accounting Section of the American Accounting Association's annual meeting in January 2006).
- "New Public Sector Reforms at Work - Transforming the United States Veterans Health Administration" (Presented at the International Conference on Accounting, Auditing and Management in Public Sector Reforms in Oslo, Norway, October 2004)
- "A Critical Review of the Development of Financial Accounting Research: The Case of LIFO/FIFO"

SIGNIFICANT PRACTITIONER EXPERIENCE

- Audit Manager, Leblanc Nadeau Bujold Chartered Accountants, Edmundston, NB (Canada)
    - Auditing, consultation, professional education (1990 – 1994)
- The Canadian Institute of Chartered Accountants' Final Exam Marking Center Toronto (ON). 1990 -1993
    - Team Leader (1993), Assistant Team Leader (1992), Marker (1990-1991)
- Auditor, Maheu Noiseux Chartered Accountants, Québec (QC)
    - Systems auditing, public sector and health care (1988 – 1990)

ACADEMIC AND PROFESSIONAL ASSOCIATIONS:

- CPE session coordinator for the Government and Non-profit Section of the American Accounting Association: 2007
- Committee for the Notable Contribution to Management Accounting Literature Award – American Accounting Association: 2007
- Chair of the Canadian Accounting Academic Association's Public Sector Exposure Draft response committee to the Canadian Institute of Chartered Accountants: 2005 - 2006
- International accounting representative for the Government and Nonprofit Section of the American Accounting Association: 2005 - 2006
- Financial Managers' Institute (public sector), Université Laval Representative, 2003 – 2004
- Business Faculty Scientific Committee, Faculty Representative, 2003 – 2004
- Business Faculty Undergraduate Curriculum Committee, Department Representative, 2001 – 2004
- Financial Accounting Undergraduate Curriculum Coordinator, 2000 - 2004

CONSULTING ACTIVITIES

Consultation mandate on "Specialized Health Care Services Abroad" for the Health Care and Social Services Ministry, Government of Quebec, 2003

Gail Fann Thomas
Associate Professor of Management Communication
July 1989

Academic Degrees:

- Ed.D., Arizona State University, 1986, Business and Education, *Women Entrepreneurs: Entering the Economic Mainstream*.
- M.Ed., Arizona State University, 1979, Business and Education.
- BS, Northern Arizona University, 1976, Business and Education.

Primary Teaching Areas:

- Managerial Communication, Strategic Communication, Management of Teams

Teaching Experience:

- *Executive Education - NPS*
  Strategic Communication 2005-present; Teams and Leadership 2006
- *Graduate Resident Programs – NPS*
  Managerial Communication 1989-present; Organization and Management 1990; Teams, Power and Politics 2001-2004
- *NPS Distance Learning Programs*
  EMBA – Management of Teams 2003-present; MSCM & MSPM – VTC 2004-2005
- *Homeland Security - NPS*
  Research Methods Module Development; Organization Change, Interagency Collaboration
- *NPS Graduate Leadership Development Program at US Naval Academy*
  Adult Development 1997-2006; Group Dynamics and Teambuilding 1999;LEAD Research Colloquium 1997-2006; LEAD Program orientation 1997-2006; Communication for Leaders 2003-2006
- *Executive Education for Bureau of Navy Medicine 1995-1999*
  Effective Briefings for Healthcare Executives; Leadership Assessment; Managing Effective Teams in a Healthcare Environment
- *Graduate and Undergraduate teaching, Arizona State University, College of Business*
  Business Communication (undergraduate) 1986-1989; Managerial Communication (graduate) 1987-1989; Entrepreneurship (undergraduate and graduate) 1987-1989

Publications, Papers and Presentations (2003-2006):

REFEREED JOURNAL ARTICLES

Thomas, G.F. and King, C.L., "Reconceptualizing Electronic Mail Overload," Journal of Business and Technical Communication, 20(3), 1-36, forthcoming July 2006.

Nissen, M.E., Jones, C., Jansen, E., and Thomas, G.F. Contextual Criticality of Knowledge-Flow Dynamics: Understanding a U.S. Tragedy of Friendly Fire, Defense & Security Analysis, 20(3), 209-228, 2005.

CHAPTERS IN BOOKS/BOOKLET

Hocevar, S.P., Thomas, G.F., and Jansen, E., "Building Collaborative Capacity: An Innovative Strategy for Homeland Security Preparedness," chapter for *Innovation Through Collaboration,* Advances in Interdisciplinary Studies of Work Teams, Elsevier Series, Volume 13, forthcoming 2006.

Thomas, K.W. and Thomas, G.F., *Introduction to Conflict and Teams*, Consulting Psychologist Press, 2004.

TECHNICAL/PROJECT REPORTS

Crawford, A.M., Thomas, G.F., Mehay, S.L., & Bowman, W.R. "Successful Women in the US Navy Surface Warfare Community: Is the Navy Losing in the War for Talent?" December 2006.

Thomas, G.F., Hocevar, S.P., & Jansen, E. "A Diagnostic Approach to Building Collaborative Capacity in an Interagency Context." Acquisition Research Sponsored Report Series. September 25, 2006.

Crawford, A., Thomas, G.F., and Estrada, A.X. "Best Practices at Junior Reserve Officers Training Corp Units," NPS-GSBPP-04-005, 2004.

Hocevar, S., Jansen, E., and Thomas, G.F. *Building Collaborative Capacity for Homeland Security*. NPS-GSBPP-04-008, 2004.

Nissen, M.E., Jones, C., Jansen, E., and Thomas, G.F. *Contextual Criticality of Knowledge-Flow Dynamics: The Tragedy of Friendly Fire*. NPS-GSBPP-03-002, September 2003.

CONFERENCE PROCEEDINGS

Thomas, G.F., Jansen, E., and Hocevar, S. "Building Collaborative Capacity in the Interagency Context." 3rd Annual Acquisition Research Symposium, Monterey, CA. May 2006.

REFEREED and INVITED PRESENTATIONS

Thomas, G.F. "The Process of Building Capacity of Interagency Collaboration." European Association for Work and Organizational Psychology, May 2007.

Thomas, G.F. & Kings, C. "Reconceptualizing E-Mail Overload." Association for Business Communication," 71st Annual Convention, October 2006.

Thomas, G.F. "Strategic Communication." 10th Annual Conference on Corporate Communication. Notre Dame, September 2006. (invitation only)

Thomas, G.F. "The Role of Communication in Implementing Strategic Plans." Management Communication Association, USC, Los Angeles, CA. May 2006.

Thomas, G.F., Jansen, E. & Hocevar, S.P. "Building Collaborative Capacity in the Interagency Context." Acquisition Research Conference, May 17, 2006.

Thomas, G.F. and Thomas, K.W. "Complex Elements of Effective Conflict Management in Teams: It's More Than Collaboration." Tokyo, Japan. March 2005.

Thomas, G.F. "A Study of E-mail Challenges Faced by Senior Level Executives." Copenhagen, Denmark. May 2005.

Thomas, G.F. "The Role of Communication in Inter-organizational Collaboration: A Case Study of a Successful Collaboration in the Transportation Industry. October 2005.

Thomas, G.F. and Thomas, K.W. "Not Everybody is Collaborative: Complex Elements of Effective Conflict Management in Teams." Boston, Massachusetts, 27-30 October, 2004.

Thomas, G.F. "The Effect of Communication Technology on Organizational Design and Its Implications for Managerial Communication," Management Communication Association Conference; Tucson, Arizona, 24-27 April 2003.

Thomas, G.F. "Managerial Communication in Networked Organizations," ABC European Convention, University of Lugano, Switzerland, 29-31 May, 2003.

Thomas, G.F. "Mapping Distinctive Communication Competencies to Seven Levels of Managerial Work," presented at the 68th Annual Convention for the Association of Business Communication; Albuquerque, California, 23-25 October, 2003.

Funded Research Projects:

2007 Principle Investigator, *Field Validation of Collaborative Capacity Audit as Applied to Inter-agency Work in Acquisition* sponsored by Acquisition Research Program, $74,352. Research team: Susan Hocevar, Erik Jansen, and Rene Rendon.

2006 Principle Investigator, *Measures of Effectiveness for Inter-organizational Collaboration.* sponsored by Acquisition Research Program, $99,523. Research team: Susan Hocevar and Erik Jansen.

2006 Research Associate, *Retention of Women in Surface Warfare Officer Community* sponsored by N14, $40,000. Researching strategies for retaining SWO women.

2004-5 Principle Investigator, *Assessment for Building Collaborative Capacity* sponsored by Acquisition Research Program, $57, 600. Research team: Susan Hocevar and Erik Jansen. Developing an assessment tool that will measure an organization's collaborative capacity.

2003-5 Principle Investigator, *Building Collaborative Capacity for Homeland Security* sponsored by Homeland Security, $93, 275. Research team: Susan Hocevar and Erik Jansen.

2001-4 Research Associate, *JROTC Comprehensive Review Project* sponsored by OSD. This two-year project employed a team of seven NPS researchers. The purpose of this project was to examine issues of concern for the JROTC program as identified by JROTC headquarters-level personnel.

Practitioner Experience:

1984 - 1986	Consultant, Ray Ryan and Associates; Phoenix, Arizona Designed training programs for manufacturing of TOW and Maverick missiles
1982 - 1984	President and joint owner, Info Center, Inc. Startup and management of a full-service computer organization; conducted systems analysis, training, and customer support for micro and super-mini computers

Academic and Professional Association:

- Guest Editor, Journal of Business Communication, Special Issue: Diversity in the Workplace; October 1996
- Board of Directors for Association for Business Communication, 1996-present
- Associate Editor, *Journal of Business Communication*, 1994-1997; 2001-2005
- Chair, Association for Business Communication, Research Committee, 1997-2004; Co-chair, 2000-2001 & 2004-2005.
- Co-organized and sponsored PhD colloquium for ABC European Convention. Colloquium ran over two days and included 8 faculty and 10 PhD students.
- ABC Executive Director Selection Committee, 2006

Public Service Activities:
None

Consulting Activities:
None

Marc J. Ventresca
Associate Professor of Management
September 2006

Academic Degrees:

- Ph.D., Stanford University. 1995. Sociology (economic & organizational).
- M.A., Stanford University. 1990. School of Education (administration & policy analysis).
- B.A., Stanford University. 1983. Political science (political theory & governance).

Primary Teaching Areas:

- Strategic management, organization theory, technology & innovation strategy, leadership, economic sociology, implementation policy

Graduate Teaching Experience

- NPS, MBA strategy, 2006-
- University of Oxford, Said Business School, 2004-2006, MBA technology & innovation strategy, MBA strategy implementation; EMBA entrepreneurial strategy & organization; MSc seminar in organization theory
- University of California, Irvine, 2002-2004, MBA organization theory, EMBA leadership
- Copenhagen Business School, 2002-2004, MBA organization change & leadership, EMBA organization change & leadership
- Northwestern University, Kellogg Graduate School of Management, 1994-2003, MBA organization behavior, MBA power & leadership; EMBA power & leadership; Ph.D. seminars in organization theory; innovation & implementation

Publications, Papers, Presentations:

Books

Ventresca, M.J., R. Meyer, P. Walgenbach, and K. Sahlin (eds.). *Ideology and Institutions.* A volume in Research in the Sociology of Organizations. Elsevier / JAI Press. Forthcoming, 2008.

Mutch, A., Delbridge, R., Ventresca, M.J., (Eds.) "Situating Institutionalism," a special issue of *Organization: The Journal of Culture, Organization & Society*. Vol. 13, No. 6, 2006.

Technical reports: None

Journal articles

Ventresca, M.J. and Ghaziani, A., "Keywords and Cultural Change: The Persistence of 'Business Model' Talk, 1975-2000," *Sociological Forum*, 2006.

Hallett, T.P. and Ventresca, M.J, "Inhabited Institutions: Social Interaction and Organizational Forms in Gouldner's Patterns of Industrial Bureaucracy," *Theory & Society*, Vol. 35, pp. 213-236, 2006.

Mutch, A., Delbridge, R. and Ventresca, M.J., "Situating Organizational Action: The Relational Sociology of Organizations," in *Organization*, Vol.13 No. 6, pp. 607-625, 2006.

Hallett, T.P. and Ventresca, M.J., "How Institutions Form: Loose Coupling as Mechanism in Gouldner's Patterns of Industrial Bureaucracy," *American Behavioral Scientist*, Vol. 49, No. 7, pp. 908-924, 2006.

Galvin, T.L., M.J. Ventresca, and B. Hudson. 2005. "Contested Industry Dynamics: New Directions for Research on Legitimacy." *International Studies in Management and Organization*, 2005.

Washington, M., P.J. Forman, R. Suddaby, and M.J. Ventresca. "Strategies and struggles: The governance of U.S. collegiate athletics." In Kim Elsbach (ed), *Qualitative Organizational Research*, pp. 113-137. Information Age Publishing: Greenwich CT, 2005.

Washington, M. and M.J. Ventresca. "How Organizations Change: Three Mechanisms Supporting the Incorporation of Emerging Strategies in U.S. Higher Education." *Organization Science*, 15(1), January-February, 82-97, 2004.

Book reviews

Lacey, R. and Ventresca, M.J., Book review of *Whole World on Fire*, in *International PublicManagement Journal*, Vol. 9, No. 1, pp.1-6, 2006.

Significant publications prior to 2003

Books:

Lounsbury, M. and M.J. Ventresca. (eds.), *Social Structure and Organization Revisited*. New York, NY: JAI Press, 2002.

Hoffman, A. and M.J. Ventresca. (eds.). *Organizations, Policy, and the Natural Environment: Institutional and Strategic Approaches*. Stanford, CA: Stanford University Press, 2002.

Journal Articles:

Lounsbury, M. and M.J. Ventresca. "The New Structuralism in Organization Theory." *Organization*, 10(3): 457-480, 2003.

Ventresca, M.J., D. Szyliowicz, and M.T. Dacin. "Innovations in Governance: Global Institutions and the Field of Exchange-Traded Financial Markets," in M.L. Djelic and S. Quack, eds., *Globalization and Institutions: Redefining the Economic Rules of the Game*. Edward Elgar Press, 2003.

Lounsbury, M., M.J. Ventresca, and P.M. Hirsch. "Social Movements, Field Frames, and Industry Emergence: A Cultural-Political Perspective." *Socio-Economic Review* 1(1): 70-104, 2003.

Ventresca, M.J. and J. Mohr. "Archival Research Methods in Organization Science," Pp. 805-828 in J.A.C.Baum, ed., *Companion to Organizations*. London: Blackwell Publishing, 2002.

Meeting abstract: None
Notes: None
Reviews: None
Reprints: None

Conference papers (published in proceedings):

Kraatz, M. and Ventresca, M.J., "Pragmatism and Institutional Theory: Contested Diffusion of Higher Education Management Reforms, 1975-2000, *Best Paper Proceedings, Academy of Management*, Atlanta, GA, August, 2006.

Conference presentations

Ventresca, M.J., Zhao, M. and Martí, I., "'Rationalized Myths' and the Spirit of Entrepreneurial Activity," Conference on Entrepreneurship Beyond the Enterprise, School of Management, University of Warwick, Warwick UK, September 2006.

Ventresca, M.J. and H. Sommerfeldt, "The evolution of the European Financial Services Market: Post-trade services and the dynamics of strategic opportunity." Academy of Management annual meetings, Philadelphia. August 2007; also presented at Entrepreneurship Conference, London Business School, May 2007.

Ventresca, M.J. and S. Rosenberg, 'Towards a social sciences of services: Evidence from services industry statistics," American Sociological Association annual meetings, New York, August 2007.

Ventresca, M.J. and M. Zhao, "Institutional innovation," European Group on Organization Studies, Vienna Austria. July 2007.

Conference presentations (refereed):
Academy of Management: 2006, 2005, 2004, 2003
European Group for Organization Studies: 2006, 2004
American Sociological Association: 2006, 2004, 2003

Invited seminars, colloquia:
2007 Melbourne Business School; University of Wisconsin, Madison; UC Davis
2006 Wharton, Warwick, Aston, LBS, Stockholm School of Economics (Skevik)
2005 IESE, Barcelona; Wolfson College.

Research Projects:

- Ongoing research, funded internally and without sponsors: Topics in institutions, industry, and innovation (see publications).

Significant Practitioner Experience:

- Executive education and other service engagements, 2006-2007: US 3rd Fleet senior staff; British Energy, Standard Chartered Bank, Zurich Insurance

Academic and Professional Associations:
Editorial Boards
Organization July 2006- present
Organization Studies July 2006-June 2007
European Management Review July 2005- June 2007
Organization Science. August 2002-July 2005
Ad hoc Reviewer
Aspen Institute, UC Berkeley Energy Forum, University of Chicago Press, National Academy of Sciences/NRC, Sage Publications, University of Oxford Press

Academy of Management
2007 Faculty Fellow, Organization&Management Theory Junior Faculty Consortium
2006-2007 Technology & Innovation Management (TIM), 'best dissertation' committee;
2006-2008 OMT Research Committee (selects 'best paper,' 'best symposium' prizes)
2004 Organization and Management Theory (OMT), Coordinator, Junior Faculty Consortium, with M. Schultz.
2002-2005 OMT Division, Executive Council Representative-At-Large.

Public Service Activities:

- None

Consulting Activities:

- None

Elliott Cory Yoder
Lecturer and Academic Associate
June 2000

Academic Degrees:

- • **MA** – Master of Arts in National Security and Strategic Studies, Naval War College, Newport, 1997
- • **MS** - Master of Science in Management, Naval Postgraduate School, Monterey, 1993
- • **BS** - Indiana University, Kelly School of Business, Marketing, Bloomington, 1983

Primary Teaching Areas:

• Acquisition and Contracting, MGT, Supply
• Advanced Contract Management
• Contingency Contracting (Operations and Strategy)
• Contracting for Field Operations and Shore Stations
• Acquisition Streamlining, Efficiencies and Effectiveness, Protocol Analysis
• Contract Cost and Price Analysis
• Contract Negotiations and Maximizing Value

Graduate Teaching Experience

• Naval Postgraduate School, Monterey, CA, from June 2000 through today's date.

Publications, Papers, Presentations:

Publications:

- "Engagement Versus Disengagement: How Structural & Commercially-Based Regulatory Changes Have Increased Government Risks in Federal Acquisitions", Journal of Public Procurement, Volume 7, Issue 2, (2007) pp 35-172.
- "The VT-136 Exercise and Case Study: Market Research and Purchasing in Multi-variant Marketplaces," NPS Acquisition Research Case Study Series, July 2007.
- "Award-Term Contracts: Good for Business?" E. Cory Yoder and Brett Stevens, Contract Management Magazine, National Contract Management Association, pp. 30-35, September 2005.
- "Training and Educating Contingency Contracting Officers for the Modular Army", E. Cory Yoder and Major Cliff Calhoun, Army AL&T Magazine, January-February 2005 Web Edition.
- "Getting the Most from Business: Effective Use of Award Fee Contracts", E. Cory Yoder and 1Lt Josh Parsons (USAF), Army AL&T Magazine, January-February 2005 Web Edition.
- "The Yoder Three-tier Model for Optimal Planning and Execution of Contingency Contracting", NPS Working Paper NPS-AM-05-002, 05 December 2004.

- "Engagement Versus Disengagement: How Structural & Commercially-Based Regulatory Changes Have Increased Government Risks in Federal Acquisitions", NPS Working Paper NPS-AM-05-001, 01 November 2004. Note: this working paper was posted in the Project for Government Oversight (POGO) web-site (pogo.org) at the request of the POGO director.
- "Contingency Contracting Operations- Achieving Better Results", Army AL&T Magazine, January – February 2004.
- "The Naval Postgraduate School's Defense-Focused Master's Programs in Acquisition and Contracting", Navy Supply Corps Newsletter, March- April 2004.
- "Lessons for Contingency Contracting, Humanitarian Operations in Uzbekistan", Army AL&T, September-Additionally include in the list significant publications from earlier years (2002 or earlier).

Presentations:

- Presentation and Plenary Panel Member, NPS Acquisition Symposium, May 2006. Presented research work on the Capitalization of Commercial Item Acquisition Legislation for Simplified Acquisition Procedures.
- Presentation and Plenary Panel Member, NPS Acquisition Symposium, May 2005. Presented research work on Engagement versus Disengagement: How Structural & Commercially-Based Regulatory Changes Have Increased Government Risks in Federal Acquisitions.

Research Projects:

- "Contracting Out Procurement Functions," NPS Acquisition Sponsored Research Report Series, sponsored by the Assistant Secretary of the Navy, Research, Development and Acquisition (ASN, RDA). Completion scheduled September 2007.
- "Getting the Most from Acquisition Reforms: FAR 13.5 Test Provisions for Simplified Acquisition Procedures, Commercial Item Acquisition," NPS Acquisition Sponsored Research Report Series NPS-AM-06-049, 30 December 2006.
- "The Yoder Three-tier Model for Optimal Planning and Execution of Contingency Contracting", NPS Working Paper NPS-AM-05-002, NPS 2004. This research was conducted at the initiative and personal contribution of the author.
- "Engagement Versus Disengagement: How Structural & Commercially-Based Regulatory Changes Have Increased Government Risks in Federal Acquisitions", NPS Working Paper NPS-AM-05-001, 01 November 2004. This research was conducted at the initiative and personal contribution of the author.

Significant Practitioner Experience:

- 2000- Present -- Lecturer and Academic Associate (Program Manager)- Naval Postgraduate School
- Director and Chief of Logistics, Headquarters, Allied Forces Southern Command (AFSOUTH), Naples, Italy

- Post Commander/Commandant and Support Group Commander, Kosovo Verification Coordination Center (KVCC), Kumanovo (Skopje), Macedonia
- Stock Control Officer, USS TARAWA (LHA-1)
- Aviation and Surface Stores Officer, USS TARAWA (LHA-1)
- Officer-in-Charge, Fleet and Industrial Supply Detachment, Long Beach, California
- Naval Acquisition and Contracting Officer (NACO) internship, Naval Regional Contracting Center (NRCC), Washington, D.C.
- Supply Officer, USS FANNING (FF-1076)

Academic and Professional Associations:

- DAWIA Contract Level III Certified (Defense Acquisition Workforce Improvement Act)
- Institute for Supply Management (ISM), Direct National Member.
- Beta Gamma Sigma International Honor Society for Graduate Degree Holders, lifetime membership.

Public Service Activities:

- Active member of a local church community.

Consulting Activities:

- Boeing, St. Louis, MO. Investigated contract incentive structures to enhance the Performance-Based Service Contract for the F/A-18 support contract. August-September 2004.
- OPALSOFT, Sunnyvale, CA. Co-Developed a market analysis and business plan to enhance OPALSOFT's ability to market to DOD entities. June-December 2003.
- Northrop-Grumman, Sunnyvale, CA. Reviewed business case elements and the effects of reduced business activity on current Government contracts. September 2005 through March 2006.

Roxanne Zolin
Assistant Professor
July 2002

Academic Degrees:

- Ph.D. in Construction Engineering Management, Stanford University, Stanford, CA, 2002. DISSERTATION: "Modeling Trust in Cross-Functional Global Teams*": A study that unites the major theories of trust in a model of trust development in cross-functional, globally distributed teams. The study refines and validates the model by conducting case studies of cross-functional globally distributed student teams engaged in construction projects in a learning environment.*
- MA degree in Sociology, Stanford University, Stanford, CA, 2001.
- MBA in Marketing, Monash University, Vic, Australia, 1991.
- Bachelor of Business in Management, Queensland University of Technology, QLD, Australia, 1980

Primary Teaching Areas:

- Collaborative problem solving
- Entrepreneurship
- Organization design
- Organizational behavior
- Management and organization theory
- Management of innovation, technology, R&D, and engineering
- Project management and project lifecycle

Graduate Teaching Experience

2002 - present **Naval Postgraduate School**, Monterey California

Publications, Papers, Presentations:

PUBLICATIONS

Zolin, Roxanne and Kropp, Fredric (Forthcoming). The birth of new enterprises: public or private by genetics or by design? *International Public Management Journal*.

Zolin, Roxanne and Kropp, Fredric (2007). Federal government entrepreneurship: New enterprise structures. *Journal of Small Business and Enterprise Development.*

Zolin, Roxanne and Fredric Kropp (2007). Assisting Business Survival: How Governments Can Help Businesses Weather a Cataclysmic Disaster. Deborah Gibbons (Ed.), in *Communicable Crises: Prevention,*

Management, and Resolution in the Global Arena, Charlotte, NC, Information Age Publishing.

Sekerka, L. E. and Zolin, R. (2007) Can rules be bent with prudential judgment? How compliance may be deriding values in the Department of Defense. *Public Integrity*. 9(3).

Hagan, Joel J., Slack, William G., Zolin, Roxanne, and Dillard, John (2007) Now that you've optimized your process, optimize your organization. *Defense AT& L (Defense Acquisition, Technology and Logistics)*. March 2007.

Zolin, Roxanne and Fredric Kropp (2007). How surviving businesses respond during and after a major disaster. *Journal of Business Continuity and Disaster Preparedness*. 1(2), 1-17.

Kropp, Fredric and Roxanne Zolin (2005). Technological Entrepreneurship and Small Business Innovation Research Programs. *Academy of Marketing Sciences Review*, volume 2005, no. 7. Available: http//www.amsreview.org/articles/kropp07=2005.pdf

Sekerka, Leslie E. and Zolin, Roxanne (2005) Professional courage in the military: regulation fit and establishing moral intent. *Business & Professional Ethics Journal*, 24(4).

Lewis, Ira and Zolin, Roxanne (2004) "The Public to Private Continuum Measure and the role of stakeholder boards as a proxy for markets in the governance of Air Navigation Services," *International Public Management Review*, 5(2) http://www.unisg.ch/org/idt/ipmr.nsf/

Zolin, Roxanne and Hinds, Pamela J., (2004) Trust in context: The development of interpersonal trust in geographically distributed work, In *Trust and Distrust in Organizations*, Eds. Roderick M. Kramer, and Karen Cook for Russell Sage Foundation: New York.

Zolin R, Hinds P. J., Fruchter R., and Levitt R. E. (2004), Interpersonal trust in cross-functional, geographically distributed work: A longitudinal study. *Information and Organization*, 14(1), 1-24.

Zolin Roxanne, Fruchter R and Levitt R. E. (2003). Realism and Control? Key characteristics of problem-based learning environments as a data source for work-related studies, *International Journal of Engineering Education*, 19(6) 788-798

PEER REVIEWED PRESENTATIONS

Kropp, Fredric, Zolin, Roxanne and Lindsay, Noel J., (2007). Opportunity recognition, and organizational performance in the military. *Babson Conference.* Madrid, Spain, June 2007.

Kropp, Fredric and Zolin, Roxanne (2007). Entrepreneurial orientation and organizational performance in the military. *Western Marketing Conference*.

Zolin, Roxanne and Kropp, Fredric (2007). The effect of government research programs on commercializing technologies. *United States Association of Small Business and Entrepreneurship Annual Conference*, Orlando, Florida..

Kropp, Fredric, Roxanne Zolin and Noel J. Lindsay (2007). Federal Government entrepreneurship: New enterprise structures, *United States Association of Small Business and Entrepreneurship Annual Conference*, Orlando, Florida.

Zolin, Roxanne and Kropp, Fredric (2006) The effect of government research programs on commercializing technologies. *International Council for Small Business World Conference*, Melbourne, 2006.

Sekerka, L. E. and Zolin, R. (2006) Can rules be bent with prudential judgment? How compliance may be deriding values in the Department of Defense. *Prudential Judgment, Public Policy, and the Catholic Social Tradition Conference.* Terrence J. Murphy Institute for Catholic Thought, Law, and Policy, University of St. Thomas, School of Law , Minneapolis, MN. April 6-8, 2006.

Zolin, Roxanne and Lewis, Ira (2006) The birth of new enterprises: public or private by genetics or by design? *U.S. Association for Small Business and Entrepreneurship (USASBE),* Presented by R. Zolin, Jan. 2006.

Zolin, Roxanne, (2005) Market, hierarchy and clan: Are trust and control compliments or supplements when crossing organizational boundaries? *EIASM Conference* October 2005, Amsterdam.

Zolin, Roxanne (2005) What new visions of trust can the Mayer, Davis and Schoorman model provide in the 21st century? Symposium organizer and facilitator, *Academy of Management*, August 2005.

Sekerka, L. E., Zolin, R., Simon, C, (2005) Change Now Because I Say So! --- Specialized Management Identity and Coercive Rapid Transformation, *Academy of Management Conference*, August 2005.

Zolin, Roxanne and Kropp, Fredric (2005) Technological entrepreneurship: the role Small Business Innovation Research (SBIR) Programs Play in Developing and Commercializing Technologies *International Conference on Small Business* 50th World Conference in Washington, June 2005.

Zolin, Roxanne, Dillard, John (2005), From Market to clan: how organizational control affects trust in defense acquisition. *Acquisition Research Symposium*, May 2005, Naval Postgraduate School, CA.

Lewis, Ira and Zolin, Roxanne (2004) The Public to Private Continuum Measure and the role of stakeholder boards as a proxy for markets in the governance of Air Navigation Services, *International Academy of Management and Business*, Las Vegas, NV.

Zolin, Roxanne (2003) Context is everything: Empirical research into the antecedents to trust in different contexts. *European Institute of Advanced Studies in*

Management (EIASM) Workshop on Trust Within and Between Organizations. Amsterdam, October 2003.

Zolin R, Hinds P. J., Fruchter R., Levitt R. E. (2001), Trust in cross-functional global teams. At *Organization Science Conference*, Milan, Italy

Zolin, Roxanne, Fruchter, R., and Levitt, R. E. (2000) Simulating the Process of Trust: Using simulation to test and explore a social process. *Computational Social and Organizational Science Conference*.

Zolin, Roxanne, Fruchter, Renate, and Levitt, Raymond E. (2000) Building, maintaining and repairing trust in global AEC teams. *International Conference on Computers in Civil and Building Engineering*.

Zolin, Roxanne (1998) A taxonomy of simulation: Can it help researchers identify logical simulation partners for docking and interlocking? *Computational and Mathematical Organization Theory, INFORMS*.

PRESENTATIONS

Zolin, Roxanne (2007) Trust in Networks, for the program "International Defense Transformation " offered by the *George C. Marshall Center* in cooperation with the *Supreme Headquarters, Allied Command Transformation* and the *Center for Civil-Military Relations*, Naval Postgraduate School. Garmish, Germany. 13 May, 2007.

Zolin, Roxanne (2006) Transforming Military Organizations, for the program "International Defense Transformation " offered by *Center for Civilian-Military Relations* in partnership with Headquarters Allied Command Transformation (HQ ACT) and the Commander, Joint Forces Command (JFCOM) Joint Experimentation Directorate. October 2006.

Zolin, Roxanne (2006) Strong Angel – Swift Trust. Preliminary results in the study of trust in disaster response. Presented at the *Cebrowski Institute*, September 7, 2006.

Zolin, Roxanne and Kropp, Fredric (2006) The effect of government research programs on commercializing technologies. *Adelaide University*, South Australia. Presented by Roxanne Zolin on June 14, 2006.

Zolin, Roxanne and Kropp, Fredric (2006) Assisting business survival: How governments can help businesses weather a cataclysmic disaster. *Australian Defence Force Academy*, Canberra, Australia, Research Seminar, Presented by Roxanne Zolin on May 26, 2006.

Zolin, Roxanne and Gibbons, Deborah (2006) Strong Angel – Swift Trust. Presentation of a preliminary research proposal for the study of trust in disaster response. Presented at the *Cebrowski Institute*, April 11, 2006.

Zolin, Roxanne (2005) *Trust in networks*, for the program "International Defense Transformation " offered by *Center for Civilian-Military Relations* in partnership with Headquarters Allied Command Transformation (HQ

ACT) and the Commander, Joint Forces Command (JFCOM) Joint Experimentation Directorate. December 2005.

Zolin, Roxanne and LCDR Creighton, Beth (2005) How do you measure the performance of a large complex system without shifting costs? A simulation solution. Presented to *NAVAIR Enterprise AIRSpeed Program Office*, Patuxent River, MD. November, 1002.

Zolin, Roxanne, (2005) Why do some virtual collaborations fail, while others succeed? *Defence Science and Technology Organisation*, Canberra, Australia.

Sekerka, L. E., Zolin, R., Simon, C, (February 27, 2005) Change Now Because I Say So! --- Specialized Management Identity and Coercive Rapid Transformation at a Military University. *Australian Defence Force Academy*, Canberra, Australia, Research Seminar, Presented by Roxanne Zolin.

Zolin, Roxanne, (2004) Outsourcing to China, a trust perspective. *Carmel Valley Rotary Club*, Carmel Valley, CA.

Zolin, Roxanne (2004) Studying the A in VV&A. *VV&A Technical Working Group Meeting*, NAVISMO, San Diego.

Zolin, R. (2004) Military Marketing: Above and beyond the call of duty. Presented to RADM Milliken, Deputy Assistant Secretary of the Navy, *Navy International Programs Office*, Washington D.C.

Zolin, R. (2004) Successful Innovation in Military Markets. Presented to *NAVAIR's SBIR*, Washington DC.

Zolin, R. (October 2003) Empirical research into the antecedents to trust in Military IPTs. Presentation given to *Defense Acquisition Career Management* (DACM), Pentagon.

Zolin, R. (October 2003) Context changes everything: Empirical research into the antecedents to trust in different contexts. *Stevens Institute of Technology*, Hoboken, NJ

Zolin, R. (July 2003) Context is everything: Empirical research into the antecedents to trust in different contexts. *Australian Defence Forces Academy*, Canberra, Australia (July 2003)

Zolin, R. (July 2003) Context is everything: Empirical research into the antecedents to trust in different contexts. *Defence Science and Technology Organisation*, Canberra, Australia (July 2003)

Zolin, R. (July 2003) Context is everything: Empirical research into the antecedents to trust in different contexts. *Defence Science and Technology Organisation*, Adelaide, South Australia, Australia (August 2003)

Zolin R., Fruchter, R. and Hinds P. J., (2002) Modeling and Monitoring Trust in Virtual A/E/C Teams. Presented at the *Center for Integrated Facilities Engineering*, Stanford University.

WORKING PAPERS AND TECHNICAL REORTS

Creighton, Beth and Zolin, Roxanne (2006) "How Goes It?" Phase One Final Report. Presented to *Enterprise AIRSpeed* November 2006.

Zolin, Roxanne and Denning, Dorothy (2006) Principles of Reachback: A systems engineering approach to organizational changes required to implement feasibility studies for the study of opportunities to minimize the forward footprint. Presented to *U.S. Joint Forces Command* (JFCOM, J-8).

Lewis, Ira and Zolin, Roxanne, (2006), The role of trust in organizational change. An international comparative case study of Air Traffic Control in the United States and Australia. Naval Postgraduate School Instructional Report. Teaching Case Study for *International Military Education and Training* (IMET).

Zolin, Roxanne and Dillard, John (2005), *From Market to Clan: How Control Mechanisms Affect Trust in Defense Acquisition.* Technical Report, Naval Postgraduate School, CA.

Sekerka, L. E., Zolin, R., Simon, C, (2005) *Specialized Management Identity and Coercive Rapid Transformation in a Defense University*, Naval Postgraduate School Technical Report**.**

Creighton, Beth and Zolin, Roxanne (2005) "How Goes It?" Phase One Final Report. Presented to *Enterprise AIRSpeed* July 2005.

Zolin R., Hinds P. J. and Fruchter R (2003), Communication, Trust and Performance: The Influence of Trust on Performance in A/E/C Cross-functional, Geographically Distributed Work, Stanford University, CA, *Center for Integrated Facility Engineering*. Working Paper No. 78.

Zolin, Roxanne, Modeling and Monitoring Trust in Virtual A/E/C Teams. (2000), Stanford University, CA, *Center for Integrated Facility Engineering*. Working Paper No. 62

Zolin R, Hinds P. J., Fruchter R., Levitt R. E. (2002), Trust In Cross-Functional Global Teams. Stanford University, CA, *Center for Integrated Facility Engineering.* Working Paper No. 66

Zolin Roxanne, Fruchter R and Levitt R. E. (2002), Realism and Control? Key Characteristics of Problem-based Learning Environments as a data source for work-related studies, Stanford University, CA, *Center for Integrated Facility Engineering.* Working Paper No. 67.

WORK IN PROGRESS

Thomas, Gail and Zolin, Roxanne, (Revise and resubmit). The effect of communication on trust, openness and participation. *Journal of Business Communication*.

Sekerka, Leslie E. and Zolin, Roxanne (Submitted) Organizational change: How inquiry strategy influences readiness mode. *Journal of Managerial Psychology*.

Zolin, Roxanne and Kropp, Fredric, (Submitted) The effect of government research programs on commercializing technologies. *Defense Acquisition Review Journal.*

Zolin, Roxanne (Submitted). Trust in virtual teamwork. *Information and Organization*.

Hagan, Joel J., Slack, William G., Zolin, Roxanne, and Dillard, John (Submitted). Beyond Lean and Six Sigma: How organizational modeling and simulation reduced F/A-18e/F F414 engine maintenance time at NAS Lemoore AIMD. *Defense Acquisition Review Journal.*

Zolin, Roxanne, (Draft). From market to clan: How control mechanisms affect trust in outsourced new product development.

Zolin, Roxanne and Gibbons, Deborah. (Draft) Organizational Location and Interpersonal Relation Effects on Performance Appraisal.

Research Projects:

2007 *Grassroots Business Redevelopment* funded by Center for Stabilization and Redevelopment Studies.

Numerous large scale natural disasters, civil conflicts and military actions have created the need for grassroots business redevelopment, but first responders, such as the military, government officials and non-government organizations do not typically have business expertise. The objective is to document and analyze grassroots business redevelopment success stories and lessons learned.

2007 *HARMONIEweb.org : Humanitarian Assistance: Response Monitoring and Operations Network Internet Enterprise*, funded by Office of Naval Research, U.S.A.

No single point of contact existed for information sharing and collaboration between DoD and other humanitarian disaster response organizations. But HARMONIEweb.org, developed for this purpose, found it difficult to attract NGOs to the site to share information. The goal of this project is to identify and test alternative organizational structures.

2007 *Interactive Learning Environment for Managing Multinational, Interagency, and Other Interactions in Stability, Security, Transition and Reconstruction Operation* , funded by US Army RDECOM Acquisition Center, Adelphi, MD, U.S.A.

Social, cultural and organizational differences between U.S. military and non-government organizations (NGOs) make interactions between members of these organizations engaged in stability, security, transition and reconstruction operations (SSTR) less effective. An opportunity existed to develop an interactive computer based simulation to educate and exercise USMs in the principles of effective interactions with MNFs, OGAs and NGOs.

2007 *Moss Landing Sustainable Fishing Feasibility Study*, funded by Coastal Conservancy, U.S.A.

Moss Landing Marine Laboratories (MLML) identified the opportunity to partner with the local fishing industry, to create a sustainable fishery that could save local jobs and promote a partnership that would benefit research, education and fishing interests. The goal of the project is to develop a plan for the new sustainable fishery facility and facilitate the Public-Private Partnership dialogue with the local fishing industry.

- *Principles of Reachback. How to reduce the forward footprint*, funded by United States Joint Forces Command, , Norfolk, Virginia, U.S.A., 2006
- *Study of issues affecting international students (continued),* funded by International Military Education and Training (IMET), 2006
- *Swift trust in hastily formed teams (continued),* funded by the Cebrowski Institute, Naval Postgraduate School, 2006
- *Swift trust in hastily formed teams*, funded by the Cebrowski Institute, Naval Postgraduate School, 2005
- *"How goes it?"* Enterprise AIR*Speed.* AIR*Speed* focuses on the total aviation solution within all levels of supply and maintenance to make cost-wise readiness operational across the Naval Aviation Enterprise, 2005
- *Study of issues affecting international students*, funded by International Military Education and Training (IMET), 2005
- *"Public good or private service?"* Homeland Security Digital Library, 2004
- *Diverse cultures, diverse needs. Identifying the Problems and Opportunities of International Business Students*, funded by IMET, 2004
- *Lessons Learned in Enterprise Development and Technology Transfer* funded by NAVAIR SBIR, 2004
- *International Marketing Case Study*, funded by International Military Education and Training (IMET), 2004
- *Simulating Trust in Military Acquisitions* Part 2, Funded by the Acquisition Chair, NPS, 2004
- *Simulating Trust in Military Acquisitions* Part 1, Funded by the Acquisition Chair, NPS, 2003
- *Alpha Contracting, collocation and trust, 2003*
- *Trust in International Armaments Cooperation*, funded by the International Defense Acquisition Research Management Program (IDARM), 2002 - 2003
- *Trust in Integrated Product Teams, 2002-2003*
  Naval Postgraduate School Research Initiation Program

Significant Practitioner Experience:

- Contract Programmer, 1997 to 2001
  - Persona Computing for Pacific Gas and Electricity Company
  - Advanced Technology Staffing for Corsair Communications
  - PC Personnel for Bain & Co.
- Educational Software Developer, Executive Information Services Pty. Ltd., Vic, Aust., 1992 to 1997

- Trainer and Consultant, Marketing Visions Co., Vic, Aust., 1988 to 1991
- Marketing Manager, Companies such as Suncorp Building Society, Myers Stores, Ltd., Fisher-Price Toys (Aust.), Northern Permanent Building Society and Duesbury's Chartered Accountants, 1980 to 1987

Academic and Professional Associations:

- Academy of Management,
- INFORMS The Institute for Operations Research and the Management Sciences.
- USASBE the U.S. Association for Small Business and Entrepreneurship.
- ICSB the International Council of Small Business.
- Research Network for a Secure Australia.

Public Service Activities:

- Commissioner**,** Economic Development Commission, Marina, CA, 2002-2006
- Teacher**,** Bible Study, Juvenile Hall, San Jose, 1999-2002
- Board of Directors, YWCA, Victoria, Australia, 1989-1991
- Board of Directors, Southern Cross Capital Exchange, Melbourne, Australia, 1985-1990

Consulting Activities:

- Contract Programmer, 1997 to 2001
    - Persona Computing for Pacific Gas and Electricity Company
    - Advanced Technology Staffing for Corsair Communications
    - PC Personnel for Bain & Co.
    - PC Personnel for Mercer Management

Course Abstracts

Common Curriculum Components:

MBA / MSM Core Courses

GB3010: Managing for Organizational Effectiveness (4-0)

Course Instructor(s):

Professor Deborah Gibbons (AY05 - AY07)
Professor Cary Simon (AY06)
Professor Leslie Sekerka (AY06)
Professor Edward Powley (AY07)

Prerequisites for the Course:

None

Course Objectives:

GB3010, Managing for Effectiveness, teaches students to analyze, understand, and influence the public and private organizations with which they work. To do this, the course introduces psychological, behavioral, and structural principles that can be applied in organizations. From a public management perspective, we identify ways to improve structures, systems, and performance. From the perspective of an organization member, we discuss how to work more effectively with individuals and groups.

The course combines theoretical and practical knowledge to prepare students for situations that commonly arise and give them the tools to deal with unexpected or unusual situations. First, we develop foundational understanding of how people and organizations work. Then we apply this understanding to a variety of public and private organizational environments and circumstances. Finally, we build skills to facilitate students' success in organizations.

Students who successfully complete this course will be able to:

(1) design motivational programs for themselves and coworkers
(2) assess and compare cultures and their effects within and among organizations
(3) evaluate appropriateness of an organization's structure for its environment and activities
(4) identify leadership behaviors and determine when they are most appropriate
(5) coordinate team decision making and problem solving
(6) bargain collaboratively with individuals and across groups
(7) map social and power structures
(8) analyze organizational problems and opportunities, apply relevant theory to the situation, and propose appropriate interventions
(9) clearly and concisely present a case analysis

Course Description:

Organizations, including defense organizations and other government agencies, are complex, purposive, open systems. As open systems, they face challenges of external adaptation and effectiveness and of internal coherence and efficiency. Our purpose is to understand the structures and processes that make up organizations in order to appreciate how they succeed and why they falter or fail. Our focus is on "organizational diagnosis", which requires us to apply relevant theories to evaluate organizational performance. To do this, we examine topics that include: organizational structure, motivation and reward systems, organizational culture, power and conflict, effective teams, and the leadership characteristics involved in effectively managing today's organizations. Although these topics are relevant to all organizations, we pay special attention to their application in the context of the Department of Defense and other government organizations.

Major Topics Covered:

- Stakeholders, Systems and Change
- Organizational Structures
- Motivation of Individuals and Groups
- Motivational Systems and Management
- Applied Performance Practices
- Decision Making and Creativity
- Groups and Teams
- Group Decision Making
- Team Leadership and Crisis Management
- Organizational Culture and Ethics
- Organizational Research and SWOT Analysis
- Managing in an International Environment
- Social Interactions and Structures
- Power and Influence
- Conflict Management and Negotiation
- Leadership for Growth and Change
- Managing Change, with Practical Applications

Typical textbooks and readings:

Organizational Behavior Essentials, by McShane & Von Glinow

Harvard case by Balbaky, "Strike in Space"

Harvard case by Hill, "A Note for Analyzing Work Groups"

Kim, *Levels of Understanding: Firefighting at Multiple Levels*

Kolb: *Learning Style Inventory*

Heylighen: *Basic Concepts of the Systems Approach*

Senge: *Fifth Discipline*

Daniel and Herbig, *Perception: Why Can't We See What Is There To Be Seen?*

and Deal, *Reframing Organizations* (2nd Ed.)

Janus, Irving. "Groupthink"

Kotter, *What Leaders Really Do*

Burns, *Transactional and Transforming Leadership*

Mintzberg, *Organizational Design: Fashion or Fit?*

Soeters: *Culture in Uniformed Organizations*

Garvin and Roberto, M. "What You Don't Know About Making Decisions"

Samantha Power. "A Problem from Hell"

Bryant, "The Psychology of Resistance to Change"

Kotter: *Eight-Stage Process*

Bodaracco: *The Discipline of Building Character*

Useem, "Eugene Kranz Returns Apollo 13 to Earth"

Kerr, "On the Folly of Rewarding A while Hoping for B"

Krackhardt & Hanson, *Informal Networks*

Jick, *Implementing Change*

GB3012: Communication for Managers (3-0)

Course Instructors: Professor Jim Suchan (AY 07, AY 08)

Professor Gail Thomas (AY 07, AY 08)
Professor Cindy King (AY 07, AY 08)
Professor Leslie Serkerka (AY 07)
Professor Lisa Lindsey (AY 08)

Prerequisites for the Course: GB 3010

Course Objectives:

This course provides officers with theory, strategies, and skills to perform effectively the writing, speaking, listening, and feedback tasks in their *future* staff and command positions. After completing this course, students will be able to

- Examine and become more aware of the language they use to define and describe communication, the origins or sources of that language, and the influence that language has on their communication thinking and practice.

- Assess the strengths and weaknesses of various communication media and choose the right medium or combination of media for the communication situation and the message.

- Organize messages efficiently so that their audience quickly understands the message's purpose.

- Employ stylistic and document design strategies that enable their audience to quickly and efficiently process and understand the message.

- Develop a concrete language about writing and speaking that will help them to provide useful feedback to subordinates and peers.

- Know what is persuasion and what are the primary persuasion theories, understand a process that will help students construct persuasive messages, and demonstrate the ability to effectively construct a persuasive message.

- Understand the processes and factors that are important to managing their bosses

- Understand what are framing and metaphorical crafting and their relationship to leadership and organizational sense making.

Defense-related cases and scenarios are used to challenge officers to analyze complex public-sector contexts and choose the appropriate communication strategies for those contexts.

Course Description:

This course provides DoD and international military officers and civilians with the communication theories, strategies, and skills to manage and lead in the complex DoD environment. Instruction focuses on writing informative and persuasive documents, giving, succinct, easy-to-understand briefings, developing associates' communication competencies through various feedback roles and strategies, and listening analytically and empathetically. DoD cases, scenarios, and readings are used to analyze complex communication situations unique to defense organizations.

Major Topics Covered:

- The Role of Language in Shaping Conceptualizations of Communication
    - The Role of Metaphor
    - Common Metaphorical Constructs of Communication
    - Root Organizational Metaphors
    - The Metaphors of Communication Models
        - Information Transfer
        - Transactional Process
        - Strategic Control
        - Symbolic Interaction and Dialogue
- Strategic Models for Government Communications
- Media Choice Strategies
    - Message Equivocality and Media Richness
    - Context Factors Shaping Media Choice
    - Symbolic Perceptions of Media Choice
- Constructing Readable Documents Within Public Sector Contexts
    - Bottom-Line Organization
    - Schema Theory
    - Discourse Communities
    - Short-term memory and Information Chunking
- Giving Effective Briefings Within DoD
    - Coping with Briefing Apprehension
    - Effective Briefing Process: Goals, Audience, Targeted
    - Information, and Support
    - Impromptu Speaking Strategies
- Persuading in the DoD Context
    - Interests Behind Positions
    - Power and Credibility
    - Logos, Pathos, and Ethos

    - Rebuttals, Warrants, and Claims
- Listening: Selective, Active, and Empathetic Feedback Roles
    - Organizational Constraints: Judging versus Developing
    - Coaching, Evaluating, Educating, and Confronting
- Language and Leadership
    - Framing and Metaphor Making
    - Rhetorical Crafting of Vision and Values

Textbooks and Readings:

Communication for Managers. University Readers. A collection of articles from professional journals, books, and the popular press that focus on managerial communication issues germane to military officers.

Fielden, J. and Dulek, R. (1994) Bottom-Line Business Writing, New Jersey: Prentice-Hall

Correspondence Manual, D.O.D. SECNAVINST 5216.5C, 1983 (class handout).

GB3013: Problem Analysis and Ethical Dilemmas (0-2)

Course Instructor: Douglas Brook, Professor (AY06)

Prerequisites for the Course: None

Course Objectives:

The seminar has three objectives:

1. To educate BPP students in theories and models of ethics, and to explore the application of this understanding of ethics to real problems of military leadership and Defense business management.

2. To examine some management decision-making models involving complex environments, ambiguous conditions, incomplete information and uncertain outcomes.

3. To introduce incoming BPP students to each other and to the teaching methods employed in the School, including lectures, case studies, problem solving, and discussion groups.

Course Description:

As military officers advance to higher levels of responsibility, the organizational environments in which they operate become more complex and the decisions that they must make become more clouded by uncertainty. Business leaders face similar challenges. Under these conditions, ethical problems and issues also emerge in complex and uncertain ways leading to questions that go beyond simply "following the rules." The purpose of this seminar is to gain familiarity with problem analysis and the moral and ethical issues arising in the normal pursuit of business practices. We accomplish this through the presentation, analysis, and discussion of a number of representative case studies treating the ethical issues of business in society, as well as the ethical issues that arise within business organizations. These cases illustrate the interdisciplinary character of moral dilemmas, and show how such dilemmas draw on insights from organizational and management theory, law, political science and social psychology, as well as from philosophical ethics.

Major Topics Covered:

- Seminar overview
- Introduction to Problem Analysis and Decision-Making Models
- The Ethics OF Business: "Playing Monopoly: The Microsoft Corporation
- Ethics In Business: "Gap's Labor Problems"

- Business and Society: “GlaxoSmithKline, BristolMyersSquibb, and AIDS in Africa”
- Team case study projects

Typical textbooks and readings:

- John Shank, “Gas Stations in the Sky”
- “Playing Monopoly: The Microsoft Corporation”
- “Gap’s Labor Problems”
- “GlaxoSmithKline, Bristol-Myers Squibb, and AIDS in Africa”
- “B.F. Goodrich and Aircraft Brakes”
- “The MV-22 Osprey”
- “Wal-Mart’s Women”

Mitsubishi Motors in Normal, Illinois”

GB3040: Managerial Statistics (4-0)

Course Instructors: George W. Thomas, Professor (AY07, AY08)
Kathryn Kocher, Labor Economist (AY07)
Jeremy Arkey, Assistant Professor (AY08)

Prerequisites for the Course: College Algebra and Excel experience.

Course Objectives:
The goals of GB3040 are threefold:

1. To develop fundamentals needed to conduct appropriate managerial statistics analysis.
2. To provide students with the basis for continuing their education in statistical analysis both in subsequent GSBPP coursework and project work.
3. To provide a foundation for self education in appropriate statistical techniques in post-GSBPP public sector endeavors.

Course Description:

GB3040 is an introduction to the science and art of converting data into information for the resolution of managerial problems. Statistical concepts covered in this course include measurement scales, descriptive statistics for quantitative and qualitative data, basic probability concepts and distributions, sampling theory and sample design, sampling distributions, point and interval estimation, hypothesis testing, contingency table tests, and correlation and regression analysis. Excel statistical tools will be utilized for data analysis and presentation. Follow-on courses in GSBPP will build on the statistical foundations in GB3040.

Major Topics Covered:
Upon successful completion of this course, students should be able to:

- understand the role and nature of business statistics
- apply descriptive statistics for qualitative and quantitative data using Microsoft Excel
- select and work with various measurement scales
- employ appropriate graphical techniques both for insight and for information presentation
- apply basic probability concepts
- discuss and employ selected discrete and continuous probability distributions
- understand the logic of sampling and be familiar with sample design considerations
- construct point and interval estimates of population means and proportions
- formulate and test hypotheses about population means and proportions
- understand basic applications, interpretations, and limitations of correlation and regression analysis.

Typical textbooks and readings: Keller, Statistics for Management and Economics, 7th Edition.

GB3050: Financial Accounting and Analysis (4-0)

Course Instructor(s):

Nicole Thibodeau, Assistant Professor
Carmelita Troy, Assistant Professor
Danny Matthews, Senior Lecturer

Prerequisites for the Course: None

Course Objectives:

- This course is designed for the graduate student with no prior exposure to accounting. Its main objective is to provide students with the basic tools and knowledge to understand and interpret the content of financial reports in the private sector with an introduction to public sector financial reporting. To do this, the course covers a variety of fundamental topics, starting from the use and role of financial information, on through the core concepts of financial accounting and reporting, and the understanding and interpreting of financial reports. The core of the course is built around the core concepts and issues of financial reporting in the private sector so that students acquire a good working knowledge of the financial reporting model as well as a good base of the accounting ethos in how to organize, analyze and record transactions. However, throughout the course, examples of government transactions and financial accounting systems are contrasted and discussed in relation to the students' experiences. Students are also introduced to public sector financial reports which are contrasted to private sector annual financial statements.

Course Description:

- This course covers theory, concepts, and practices underlying Financial Accounting and Financial Reporting. The course is organized around the basic activities of an economic organization: operating, investing and financing. Through the successful use of invested capital, for-profit organizations produce goods or services that are valued by its customers and thus allow it to operate and provide a return on investment to investors. Similarly, not-for-profit or publicly owned organizations use capital to produce the goods or services for its members or constituents, according to its organizational objectives. The course focuses on understanding these functions and the role of accounting in supporting them.
- The first part of the course introduces the fundamental concepts and tools that underlie the production financial statements. It thus revolves around the accounting equation and the core concepts and rules that govern the recording and the measurement of economic transactions. It then follows with the reporting of these events in financial statements through the statement of financial position (balance sheet), the statement of operations (income statement) and the statement of owners' equity. The second part of the course follows with particular emphasis on more advanced transactions as well as the measurement and classification of

specific asset, liability, and owners' equity accounts. Students learn how to record as well as find and interpret that information in publicly available financial statements. In the process students also learn the concept of time value of money and how to apply it in various economic transactions. The third part of the course covers the financial reporting regulation environment, the cash flow statement and follows an introduction to ratio analysis, all using current examples of public financial statements. As in any MBA program, the course covers these topics in the context of the economic environment that privately owned corporations. However, this setting is contrasted with alternative settings that students will face or have faced in their work environment. In the process, the objectives and information needs of government entities such as DoD organizations are revealed and contrasted to that of for profit entities. This leads to the contrast of private sector financial statements with that of government entities. Thus, every attempt is made to link the topics covered to the current economic context, business and environment as well as to students' various experiences in business and government and to particular applications in their program of study.

Major Topics Covered:

- Accounting and Organizations: Overview of business and other organizational objectives and process, financial accounting uses and users in the context of various organizational forms (private, public, not for profit)
- Business Activities & the Accounting Equation: The accounting equation and its basic elements, concepts and application.
- Measuring and Recording Revenues and Expenses: Understanding more advanced transactions and events as well as the rules that govern their recording and valuation in the accounting equation. Recording and interpreting the resulting ledger accounts.
- Reporting Earnings and Financial Position: Building financial statements from ledger accounts and interpreting the resulting amounts in terms of how they represent the economic events they are purported to represent.

- Operating Activities: More detailed view of the income statement, earnings per share and related balance sheet accounts, including inventory and account receivable valuation and more advanced revenue recognition issues and related expenses, including returns, warranties, cost of goods sold.
- Investing Activities: Particularities of long lived assets (i.e., fixed assets, goodwill and other intangible assets): definition, cost and periodic valuation (depreciation and impairment), recording transactions and interpreting financial statements.
- The Time Value of Money: Understanding the concept of time value for money and how to value economic transactions that involve future payments and receipts, including sales and purchase transactions as well bonds. Involves calculating the value of resulting assets or liabilities, streams of payments or receipts and the interest component, the recording of these components and the interpretation of amounts related to the resulting accounts and line items in publicly available financial statements.

- Financing Activities: The nature of liabilities, current and long term, including operating liabilities, long term debt, contingencies and bonds as well as a more detailed understanding of owners' equity share and retained earning type of accounts, in particular their interpretation in financial statements.
- Reporting Cash Flows: Understanding and preparing a basic cash flow statement, with operating, investing and financing sections and interpreting real time cash flow statements of current publicly available statements.
- Full and Fair Reporting: The environment of financial reporting, including governance mechanisms such as board, rules governing the preparation and disclosure of annual reports as well as regulating authorities, with a case example focusing on the broader reporting content, including the auditor's report; current state, history, implications.
- Introduction to Ratio Analysis: Builds on knowledge acquired throughout the quarter and introduces more formally the use of ratio analysis as well as other types of financial statement and market based indicators so that students can calculate and interpret them at a basic level.

Typical textbooks and readings:

Custom textbook based primarily on

Ingram, R. W., and T. L. Albright. 2007. *Financial Accounting: A Bridge to Decision Making – 6th Edition*. Thomson South-Western, Canada and on Stice and Stice, 2007

With added analysis chapter from

Stice, E. K.,and J. K. Stice. 2006. *Financial Accounting: Reporting and Analysis - 7th Edition.* Thomson South-Western, Mason, OH.

Additional readings and documents, as needed, including financial and business press current news, cases and publicly available financial statements.

GB3051: Cost Management (3-0)

Course Instructor(s):

- Don Summers, Lecturer (AY06, AY07)
- Mary Malina, Assistant Professor (AY06)
- Ken Euske, Professor (AY07)

Prerequisites for the Course:

- GB3050: Financial Reporting and Analysis

Course Objectives:

- The primary objective of this course is to provide the students an opportunity to learn and apply concepts and theory related to the effective use of costing and management accounting data as elements in decision making to determine the cost of products and services, plan and control operations, measure performance, motivate employees, manage external relationships and make other related business decisions. The course will emphasize the decision-making and control functions of a manager using managerial accounting information in the public sector.

- The use of financial data and analyses for decision-making and allocation of resources is equally applicable in public and private organizations. Special considerations and applications in the Federal government and the Department of Defense (DoD) are presented as appropriate. The desired working capability is achieved through working a series of problems that illustrate those analytical techniques in the context of specific circumstances and data.

Course Description:

- The course consists of three major sections, as follows: (1) the determination of the costs of goods and services produced by an organization, (2) financial data relevant to planning future operations and making specific decisions among alternative courses of action, and (3) evaluating the effectiveness and efficiency of actual operations and using that information to help control future operations. Cost determination depends on the purpose for which it is to be made. Different product costs are appropriate for different purposes. The financial data relevant to a decision depend on the specific features of that decision and may be quite different from those relevant to some other decision that may involve the same operations. Evaluating actual performance depends partly on comparing relevant actual financial data with some plan or standard for desired performance. However, it depends also on the actual circumstances of the situation in which costs were incurred.

Major Topics Covered:

- Cost determination:

- Cost classifications for manufacturing, for assigning costs to objects, and for predicting cost behavior
- The flow of product costs through merchandising, service, and manufacturing operations
- Job order cost accounting in service and manufacturing operations
- Measurement and allocation of overhead costs
- Activity-based costing

- Planning and decision making:
  - Cost behavior patterns
  - Analysis of mixed costs
  - Analysis of the relationships among revenue, costs, and volume
  - Break-even analysis
  - Cost concepts for decision-making
  - Determining impacts of specific decisions on relevant revenue and costs
    - Make or buy (outsourcing) decisions
    - Dropping a product line or segment
    - Special offers
    - Product profitability analysis under capacity constraints
    - Nonfinancial considerations in decision analysis

- Performance evaluation and control:
  - Standard costs
  - Standard costs and variances between them and actual costs
  - Flexible budgets and overhead analysis
  - Balanced scorecard
  - Financial performance measures of segments of an organization
    - Segment reporting and profitability analysis
    - Return on investment
    - Residual income and economic value added

Typical Textbooks and Readings:

- Garrison and Noreen, Managerial Accounting, 12th edition, Irwin/McGraw-Hill

Supplementary readings are provided on topics covered in the text to illustrate the relevance and applications of the concepts addressed in the course to the DoD. Examples include: the cost analysis requirements of OMB Circular A-76, the Indirect Cost Management Guide for the Department of Defense, and various articles from newspapers and periodicals that illustrate the applications of the concepts covered in the course to the public sector and the DoD.

GB3070 Economics and the Global Defense Marketplace (4-0)

Course Instructors: Yu-Chu Shen
Peter Coughlan
Raymond Franck
David Henderson
Elda Pema

Prerequisites for the Course: College Algebra

Course Objectives:

The main goal is to impart an understanding of economic principles that will be useful for managers in defense organizations. The course focuses on resources and defense: how much is available for defense (macroeconomics); how much is provided for defense (provision of public goods); and how well defense resources are used (microeconomics). A second goal is to provide principles necessary for follow-on courses in the resident MBA core sequence, especially GB 4071.

Course Description:

Develops the fundamental tools of microeconomics and macroeconomics, and applies them to defense management and resource allocation. Course centers on defense applications of economic theory. Topics covered include: defense and the macroeconomy; markets and their interactions with defense acquisition and contracting; national security implications of globalization; and efficiency in defense decision making. PREREQUISITE: MA2XXX College algebra or equivalent.

Major Topics Covered:

- Basic Economic Concepts (scarcity, role of incentives, economic systems, …)
- Defense and the Macroeconomy
    - Concepts (GDP, inflation, unemployment, …)
    - Equilibrium
    - Macroeconomic Policy
    - Economic Growth
- Provision of Defense as a Public Good
- The Defense Marketplace
    - Theory of Markets (supply, demand, equilibrium)
    - Theory of the Firm
        - Cost, Production, Profit-Maximizing Model
        - Effects of Market Structure

- Special Topics (as time permits)
    - Economics of Corporate Strategy (e.g., Five Forces, "Co-opetition")
    - Principal-Agent Model
    - Outsourcing (Transaction Cost Economics)
    - Defense Industry Cases

Typical Textbooks and Readings:

Heyne, Paul, et. al., *The Economic Way of Thinking*, 2005.
Lieberman, Marc and Robert E. Hall, *Introduction to Economics*, 2005
Mankiw, N. Gregory 1997, *Principles of Economics*, 2006

GB4014: Strategic Management (4-0)

Course Instructors: Nick Dew, Assistant Professor (Course coordinator)
Pete Coughlan, Assistant Professor
Marc Ventresca, Associate Professor
Cary Simon, Senior Lecturer

Prerequisites for the Course: All previous required courses for the curricula.

Course Description:

This course introduces strategic management with a focus on strategic analysis, formulation, innovation, and implementation, and develops key concepts and tools in both public sector and commercial context. The primary learning objective is for students to develop analytic skills in topics which are central to any understanding of strategic management. By the end of the course students should be able to provide concept- and tool-based responses to these questions: What is strategic management? How can we evaluate a strategy overall and also analyze specific strategic situations? How do we tell a good strategy from a bad one? How does implementation shape both the good/bad distinction and what are key features of effective strategy implementation? What determines whether an organization wins or loses in strategic interactions with other organizations? What are sources of innovation and what are typical obstacles to innovation? What factors distinguish effective implementation, transformation initiatives?

The objectives of the course are direct and practical. The course is devoted to building a working knowledge of commonly applied strategy concepts for the business world and public sector. By the end of the course, students should have an understanding of these frameworks, such that they are able to hold an intelligent conversation about strategy with peers, consultants, suppliers, etc., evaluate available and needed data to assess a strategy, and recognize potential opportunities and pitfalls.

A recent expert study proposes this definition of strategic management[1]:

> "The field of strategic management deals with a) the major intended and emergent initiatives b) taken by general managers on behalf of owners, c) involving utilization of resources d) to enhance the performance e) of firms f) in their external environments."

Given this definition, the GB4014 course alerts students to important differences between this course and other courses students take in an MBA program. First, most courses concentrate on a specific element of management—the management of people, structures, processes, and functions (so-called "silos"), i.e. accounting, finance, acquisition, logistics, etc. In strategic management the whole organization is our unit of analysis. We

[1] Rajiv Nag, Donald C. Hambrick and Ming-Jer Chen, 2007. What Is Strategic Management, Really? Empirical Induction of a Consensus Definition of the Field. Strategic Management Journal.

address strategic issues of managing the total system, not only the parts, and distinguish between strategy and operations.

This change in perspective is accompanied by a second shift: the course focuses *outwards*, towards the external environment, i.e. industry context, stakeholders, competitive organizations and the non-market environment. The internal functioning of organizations is seen in light of their external effectiveness, i.e. in coping with stakeholders, competition, regulators and funding agencies, etc.

We discuss applications in government, non-profit, and commercial organizations. The cases used in the course are often based on private sector organizations; however, the concepts developed in the course generally apply across many different kinds of settings, and the transferability of these concepts to the public sector occurs in many parts of the course. In many ways, public sector strategic managers face even greater challenges than their private-sector counterparts because they are limited in the amount of control they have over the organization's direction, personnel, budgets and resources. They also face scrutiny by the media and the public, and they are expected to share power with other agencies, branches, and levels of government when making decisions and executing policy. However, the general principles of strategic management apply to all organizations – public, private and not-for-profit.

Of course, strategy in principle without effective practice offers little in the way of practical impact. Therefore the course also addresses how managers confront the challenge of implementing strategies under dynamic market and non-market conditions. In too many cases, 'strategy' fails because of poor execution or a lack of understanding of institutional and organizational dynamics. Issues of strategy implementation are vivid in large established companies and in technology startups, in public agencies and in community initiatives and non-profit organizations. Effective implementation of strategy requires both the ability to 'see' organization and strategy as complex systems and also practical managerial intuitions and skills.

Students should also note what strategic management is *not* about. Certain issues won't be a major focus of our attention in class. Topics such as job satisfaction, group behavior and other human factors are the purview of other classes. Broader societal implications of organizational strategy are also not major topics: we do not spend much time worrying about the social impact of organizations because the economic performance of individual organizations is our foremost concern. This doesn't mean we neglect stakeholders: because stakeholders can have a major impact on an organization, we build them into our analyses. What we don't do is take the perspective of government policymakers – that's the purview of other classes.

Typical course materials (exact cases and readings differ by instructor):

The Cola Wars (Harvard case collection HBS #9-702-442)

The USA Today Decision (HBS #9-792-030)

Wal*Mart in 1994 (HBS #9-794-024)

Intel Corp. 1968-97 (HBS #9-797-137)

Sunk Cost: The Plan to Sink the Brent Spar (HBS #9-903-010)

Bitter Competition (A) (HBS #9-794-079)

The Walt Disney Company: The Entertainment King (HBS #9-701-035)

GE's Two-Decade Transformation: Jack Welch's Leadership (HBS #9-399-150)

NYPD New (HBS # 9-396-293)

Xerox PARC: From Closed to Open Innovation (Chesbrough 2005)

Military Innovation and the Defense Industry (Dombrowski & Gholz 2006)

Southwest Airlines (Darden case collection UVA-OM-0743)

Eurotel vs. Globtel (A): Launching GSM Mobile Services in Slovakia.

Nucor at a Crossroads (HBS #9-793-039)

Ben & Jerry's (HBS 9-796-109)

Lesser Antilles Lines (A) (Darden UVA-QA-0355)

Apple Computer 2006 (HBS 9-706-496)

Unbuilding the World Trade Center (UO course instructor case)

Kodak and the Digital Revolution (HBS #9-705-448)

The US Combat Aircraft Industry, 1900-1988 (RAND report, 2003)

The MBA Program at the Naval Postgraduate School: Competitively Unique or Out on a Limb? (Coughlan, 2007).

War Made New (Max Boot – chapter excerpts)

GB4043: Business Modeling and Analysis

Course instructor: Prof. Aruna Apte, Prof. Franck, Prof. Doerr

Prerequisites for the course: GB3040

Course objective:

This course is required for all the students. This course introduces modeling for a sound conceptual understanding of decision–making process. The course will familiarize students with applications, assumptions, and limitations of the quantitative methods in modeling.

Course description:

Forecasting is an essential aspect of managing any business. Experience, good judgment, intuition, and understanding of the economy may give a manager some insight into the forecast of what is to come and therefore what is needed. However, validating that feeling and converting 'the feeling' into a tangible decision is not easy. Some time-series models are presented as tools for this decision making.

A situation of allocating scarce resources amongst competing activities is commonplace in the real world. The tools of optimization help model this situation, find an optimal solution, and perform a 'what-if' analysis. A generic linear programming model can help find planning of various production levels in a manufacturing plant, advertising in marketing companies, blending in chemical plants and refineries. Transportation problems, assignment problems, scheduling problems form the backbone of logistic operations. Selection of projects within a given budget such as investments in financial companies and the decision whether to build a warehouse can be easily solved using integer programming models. These are some of the numerous situations where optimization techniques can prescribe a solution.

Simulation is one of the most widely used quantitative approaches to decision making. It is a method for learning about a real system by experimenting with a model that represents the system. Some of the instances where simulation has been successfully used are, new product development, inventory models, waiting lines.

Major topics covered

Some of the fundamental concepts covered will be in optimization, simulation, and forecasting.

GB4053: Defense Budget and Financial Management Policy (4-0)

Course Instructor(s):
Lawrence Jones (course coordinator), Douglas Brook**,** Richard Doyle, John Mutty

Prerequisites for the Course:
GB3010: Managing for Organizational Effectiveness, GB3070: Economics of Global Defense Environment.

Course Objectives:
The objectives of the course are to provide participants with an understanding of (i) budgets as instruments of economic policy, (ii) federal and defense budget process events, timing and the roles of major participants, (iii) the political dynamics of budgeting, (iv) budgeting in the Navy and DoD including PPBES, (v) budgetary competition within the Pentagon, (vi) strategies of advocacy in budget formulation and execution, (vii) budget execution dynamics, (viii) alternative budget processes, e.g., zero-base, results and performance budgeting, (ix) budget reform initiatives, (x) contemporary defense budget resource policy issues, (xi) budgeting under fiscal stress, (xii) reform in the public sector and its budgetary and financial implications. In addition, the course presents brief overviews of the application of net present value (NPV) and net benefit computation in budget analysis, and of fund accounting and how it relates to the annual budget in terms of cash flow management and the relationship between sources and uses of money accounted for under the federal government fund accounting system.

Course Description:
This course is designed to provide an understanding of the budget and, to an extent, financial management processes of the federal government, Navy and Department of Defense. Material presented in lecture and readings analyzes how the process operates and the roles played by major participants and decision makers. The course evaluates the manner in which public policy is translated into resource allocation decisions. Budgets are documents in which policy and planning are expressed quantitatively and qualitatively as resource commitments. The budget process is comprised of a series of decision points at which policy and program priorities are analyzed, debated, established and implemented. Budgeting is highly competitive. The budget process evidences vigorous competition between and within federal departments and agencies as well as cooperation, conflict, compromise and, at times, some degree of strategic misrepresentation. These factors are inevitable characteristics of resource decision making in democratic political systems. Budgets make policy priorities explicit. Elected and appointed officials and public managers debate at great length about policy priorities and objectives. However, to understand the true nature of commitments it is necessary to analyze how public money is appropriated, allocated and spent, what is purchased and consumed in labor, services, goods, and then what benefits result. Annual and multiple year budget authorizations and appropriations represent programmatic priorities and commitments to meet requirements. Agency budget requests and internal resource allocation decisions reflect the policy priorities, political power and leverage applied in

the political system. Budget formulation and execution are intended to implement prevailing political priorities in response to public demand and need for services.

Major Topics Covered:
Fiscal Policy Objectives of Government; Definition of Policy; Federal Government Budget Process Analysis; Budgeting for National Defense Planning, Programming, Budgeting, Execution System; Congress and the Defense Budget; Supplemental Appropriations for Defense; Defense Budget Execution; Budget Process Participants: The Pentagon; Budget Process Participants: The Claimants; Navy Working Capital Fund Basics; National Defense Financial Management; Budgeting and Management of Weapons Acquisition; Budgeting under Fiscal Stress; Defense and Federal Budgeting and Management Reform: History, Transformation and the Future

Typical textbooks and readings:
Jerry L. McCaffery and L. R. Jones, Budgeting and Financial Management for National Defense. Information Age Publishing, 2004.

GB4071: Economic Analysis and Defense Resource Allocation (4-0)

Course Instructors: Bill Gates (Fall AY2006, Fall AY2007)
Chip Franck (Fall AY2006, Fall AY2007)
David Henderson (Spring AY2006)

Prerequisites for the Course: GB3070

Course Objectives:

Upon successful completion of this course, student should be able to:

- Use analytical methods to solve public sector resource allocation problems problems, especially those with a resource allocation flavor.
- Discuss the implications of market and government imperfections and measure their efficiency implications using producer and consumer surplus.
- Demonstrate a sophisticated understanding of cost-benefit and cost effectiveness analyses of government policies, particularly those in the Department of Defense
- Describe marginalism and opportunity cost and how they relate to efficiency in constrained and unconstrained resource allocation problems.
- Discuss the relevance of imperfect information and asymmetric incentives on agent behavior in principal-agent relationships, and the relevance of this to cost-benefit and cost effectiveness analyses.

Course Description:

GB4071 uses the analytical tools of economics, including Cost-Benefit Analysis (CBA), to solve resource allocation problems in the public sector (primarily defense). Building on GB 3070, GB4071 expands the students' understanding of "efficiency" as a central concept for defense decision making. It covers problem-solving methods with the intention of improving the students' skills for (1) making poorly-structured situations into well-structured problems, and (2) solving those well-structured problems.

This course focuses on analysis of problems in public policy and defense resource allocation. It emphasizes developing the principles of cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA) and their application to specific investment projects, programs and policies in the federal government, especially in the Department of Defense.. The basic intent is not necessarily to make the students expert analysts, but to provide a sophisticated understanding of analytical processes.

Major Topics Covered (Case Studies TBD by Instructor):

- **Valuing Costs and Benefits** 8 hrs
  - Introduction to Economics and Problem Solving

- Cost-Benefit/Cost-Effectiveness Analysis
- Producer and Consumer Surplus)
- DoD or Other Government Case Study

- **Market and Government Failures** 8 hrs
  - Externalities
  - Public Goods
  - Government Failures
  - DoD or Other Government Case Study

- **Cost-Benefit and Cost-Effectiveness Analysis** 10 hrs
  - Inflation and Discounting
  - Decision Making under Risk and Uncertainty (e.g., Crystal Ball)
  - DoD or Other Government Case Study

- **Efficiency in Defense Resource Allocation** 10 hrs
  - Marginalism (Constrained and Unconstrained Optimization)
  - Multiple Inputs – Multiple Outputs
  - Multi-Attribute Decisions (e.g., Logical Decisions for Windows)
  - DoD or Other Government Case Study

- **Asymmetric Information and Incentives** 4 hrs
  - Information and Incentives
  - Introduction to Game Theory (Prisoner's Dilemma/Auctions)
  - DoD or Other Government Case Study

Typical Textbooks and Readings:

Typical Primary Textbooks

Public Finance by Rosen
Cost-Benefit Analysis: Concepts and Practice by Boardman, et al.
A Primer for Policy Analysis by Stokey and Zeckhauser
OMB Circular A-94: Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs

Typical Supplementary Textbooks

Introduction to Economics by Lieberman and Hall
Principles of Economics by Mankiw
Case study readings supplied by instructor as appropriate

Course Abstracts

Common Curriculum Components:

MBA Only Courses

GB3031 Principles of Acquisition Management (2-0)

Course Instructors: Dr. Rene G. Rendon, Senior Lecturer

Prerequisites for the Course: None

Course Description

This course introduces the fundamental principles of public and private sector acquisition management by examining current acquisition policy issues, strategies, contractual decisions, and program management concepts. The aspects of planning, organizing, staffing, directing and controlling efforts within a risk managed process will be examined. Acquisition functional areas addressed in this course include: logistics, test and evaluation, systems engineering, manufacturing management, quality assurance, funds management, budgeting, research and development, and contracting management.

Course Objectives

1. Understand the basic principles of acquisition management in the public and private sectors.
2. Understand the overarching political environment as it relates to industry and government partners in acquisition management.
3. Be able to identify, define, and explain the various disciplines that must be integrated into effective teams for managing major acquisition programs.
4. Be familiar with management policies, processes and organizations associated with acquisition management.
5. Understand the product life-cycle, and the systems management process across development and production and support phases.
6. Understand the linkage to other processes that advance customer needs and allocate resources to develop and procure goods and services.
7. Be familiar with the policies governing contracting, particularly within government acquisition.
8. Understand the fundamental concepts, techniques, and challenges of system acquisition and program management of major systems.
9. Possess a basic vocabulary of systems acquisition and contracting terminology.
10. Apply knowledge of acquisition to optimize decision-making within a broad field of assignments that will bring the student into contact with the DoD acquisition process.

Major Topics Covered:

- Acquisition Management and Project Management
- Project manager and Project Team
- Project Organizations
- Needs Identification
- Proposed Solutions
- Projects
- Project Planning
- Project Scheduling
- Schedule Control
- Resource Considerations
- Cost Planning and performance
- Project Communications and Documentation

Textbooks and Readings:

Required: *Successful Project Management*, Jack Gido and James P. Clements, 2006. ISBN: 0-324-22428-1

Optional: *Introduction to Defense Acquisition Management*, Defense Acquisition University Press, 2005. (Posted on Blackboard).

Additional reading assignments are listed on the course outline and may be accessed via the NPS On-Line Blackboard (http://nps.blackboard.com)

GAO Reports (topically specific)
Numerous topical handouts
Various readings from defense acquisition regulations, journals, and periodicals.

GB4052: Managerial Finance (3-0)

Course Instructors: Professor Nayantara Hensel
Professor Shu Liao
Professor Randall Howard

Prerequisites for the Course: None.

Course Objectives:

This course seeks to provide MBA students with a strong foundation in the principles of corporate finance. The course is a mixture of lectures, cases, interactive discussion and problem-solving. By the end of the course, students should be able to understand the different financial markets and the securities issuance process, use finance theory in project finance, understand how investment portfolios are constructed, value equity, debt, and companies, and understand the rationale and the process for mergers and alternative forms of financial architecture.

Course Description:

The course is divided into six modules: Module I provides an introduction to financial markets and exchanges, the trading process, the IPO issuance process, and market efficiency; Module II focuses on project finance and topics such as NPV and other types of capital allocation decision rules; Module III focuses on investment portfolio theory and why diversification reduces risk; Module IV provides students with an understanding of how to read a company's financial statements and how to understand ratio analysis, working capital management, and leases. Module V focuses on valuing stocks, bonds, and companies, with an emphasis on financial forecasting. Module VI focuses on financial architecture—why firms merge, the merger process, the historical merger waves, measuring merger efficiencies, evidence on gains from mergers, takeovers and LBO's, financial architecture as a solution to principal-agent problems, and an international comparison of corporate governance mechanisms.

Major Topics Covered:

- Overview of Corporate Financing
- Securities Issuance and Financial Markets
- Market Efficiency
- Introduction to NPV and the Opportunity Cost of Capital
- Calculating NPV's and Annuities
- Decision Rules based on NPV
- Alternative Project Decision Rules to NPV
- Portfolio Theory I and Diversification
- Portfolio Theory II
- Ratio Analysis and Reading Financial Statements

- Working Capital Management and Leasing
- Valuing Stocks I: The DDM Model
- Valuing Stocks II: The FCFF and FCFE Models
- Valuing Stocks III: Marsh & McLennan and the Insurance Industry
- Valuing Debt
- Mergers: History, Mechanics, and Effects
- Financial Architecture as a Solution to the Agency Problem
- Agency Theory and Compensation Structure
- LBO's, Carve-Outs, Conglomerates, and International Perspectives on Corporate Governance
- Case: Defense Industry Mergers
- Bankruptcy:
- Case: LTV's Bankruptcy
- Case: Delta Airlines and Financial Distress

Typical textbooks and readings:

The text is Principles of Corporate Finance, by Richard Brealey and Stewart Myers, McGraw Hill (8^{th} edition)

Course Abstracts

Common Curriculum Components:

MSM Only Courses

MN2039 Basic Quantitative Methods in Management (4-0)

Course Instructors: Bill Gates (Fall AY08)
Dave Roberts (Fall AY07)
Eva Regnier (Spring AY2006)

Prerequisites for the Course: ***College Algebra***

Course Objectives:

This course introduces the mathematical basis required for advanced management and cost-benefit analysis. Math topics include algebra, graphs, differential calculus, including both single and multiple variable functions, and indefinite and definite integrals. Management concepts include cost-benefit and cost-effectiveness analysis, marginal analysis, unconstrained and constrained optimization, and welfare analysis. Students in this course have diversified backgrounds. For some, many topics may be review. For others, they may be challenging new concepts.

Course Description:

This course is designed to introduce students to the mathematical basis required for advanced management and cost-benefit analysis. It begins with a detailed review of algebra and graphs. This forms the foundation for analyzing introductory management concepts including willingness to pay and opportunity cost, forming the basis for the welfare economics models required by OMB circular A-94 for cost-benefit analysis in the public sector. The class will then introduce differential calculus. In particular, students will learn techniques of differentiation for both single and multi-variable functions. Corresponding management concepts include resource allocation in constrained and unconstrained optimization involving one and multiple variables. Finally, students will learn techniques for solving indefinite and definite integrals. Economic applications for this material include consumer and producer surplus.

Major Topics Covered:

- Algebra 6 hrs
- Graphs 6 hrs
- Differentiation Techniques 6 hrs
- Differentiation Applications 8 hrs
- Functions of Two Variables 8 hrs
- Integration 6 hrs

Typical Textbooks and Readings:

Typical Primary Textbooks

Brief Calculus and Its Application by Goldstein, Schneider and Lay

Applied Calculus for Business, Economics and the Social and Life Sciences by Hoffmann, Bradley and Rosen

Calculus for Business, Economics, Life Sciences and Social Sciences, by Barnett, Ziegler and Byleen

MN4110: Multivariate Manpower Data Analysis I (4-1)

Course Instructors: Elda Pema, Assistant Professor
Yu-Chu Shen, Assistant Professor

Prerequisites for Course: A course in statistics (GB3040)

Course Objectives:

This course provides the fundamentals needed to conduct empirical manpower research. One of the main goals is to provide the tools and intuition required to correctly interpret empirical research and to understand the implications of empirical studies and their policy suggestions. This course also lays the foundation for developing research methods at the level where one can independently analyze data to further the scope of social and behavioral science and to generate policies as a manpower analyst.

Course Description:

An introduction to multivariate data analysis. This course provides an overview of general research methodology and the multivariate techniques most frequently used in empirical studies. Emphasis will be placed on model specification, application, and interpretation: understanding the various multivariate statistical techniques and assumptions upon which they are based, selection of appropriate techniques, properties of the estimates they produce, correcting for violation of the assumptions, interpretation of computer results, and the art of model testing and building.

The course uses multiple data sets on both civilians and military personnel from various sources to provide exposure to a multitude of topics, data, and empirical issues. Students gain substantial competence in Stata during lab sessions.

Major Topics Covered:

- Simple linear regression
- Multiple linear regression
- Ordinary Least Squares (OLS)
- Mechanics of OLS
- Properties of estimators (unbiased, efficient, and consistent estimators)
- Statistical properties of OLS
- Multicollinearity
- Omitted variable bias
- Fitted values and residuals
- Goodness of fit
- Confidence intervals
- The variance and sampling distributions of OLS estimators

- The Gauss-Markov theorem
- The Central Limit Theorem
- Testing hypotheses about a single linear combination of the parameters
- Testing multiple restrictions (F-test)
- Interaction terms
- Binary variables
- Chow test
- Linear probability model
- Model specification
- Introduction to Stata (reading data, OLS estimation, generating new variables)

Typical Textbooks and Readings:

Wooldridge, *Introductory Econometrics* (3rd edition)
Wooldridge, *Student Study Guide with Solutions*
Other readings distributed in class.

Course Abstracts

Additional Components:

MBA Core Elective Courses

GB3030: Marketing Management (3/0)

Course Instructor(s): Becky Jones, Lecturer (AY06, AY07)

Prerequisites for the Course: None

Course Objectives:
Successful students will be able to:

1. Define marketing and understand the major marketing concepts
2. Understand how marketing fits into DoD, our society and the economy
3. Articulate and defend a code of marketing ethics
4. Gain the ability to develop marketing strategies and marketing plans

Course Description:
This course focuses on the managerial skills, tools and concepts required to produce a mutually satisfying exchange between consumers/users/organizations and providers of goods, services and ideas. The emphasis is on understanding the marketplace, strategic formulation (orientation, target segmentation, positioning) and how to manage the marketing. Although many examples will be drawn from the defense industries, an overview of marketing management in consumer and industrial markets will be provided.

The course is designed to provide graduate students with a basic understanding of the concepts and tools used to guide marketing decisions.

Students are expected to apply general marketing theory to the DoD environment. Each quarter an organization is selected as the client and students take on the role of the marketing department. The course is designed to provide hands-on, practical experience, with the fundamentals of marketing – market research, marketing strategy, campaign design, advertising, public relations, and campaign assessment. Students are given the opportunity to directly apply what they learn with the client.

Major Topics Covered:

- Marketing strategy
- Competitive analysis
- Market research
- Targeted markets
- Market Segmentation
- Product Position
- Pricing strategy
- Distribution
- Product Promotion

- Public Relations
- Relationship marketing
- Business to Business Marketing
- Consumer Marketing
- Packaging
- Customer Service
- Marketing Communications
- Development of a Marketing Plan

Typical textbooks and readings:
Kotler, Philip, Keller, Kevin Lane (© *2006 Prentice Hall*), Marketing Management, 12th Edition. ISBN#0-13-145757-8

GB4021: Strategic Management of IT (3-0)

Course Instructor(s):

- Glenn R. Cook, Lecturer, Information Sciences Department (2006-2007)

Prerequisites for the Course:

- GB-3020 Fundamentals of Information Technology (4-0)

Course Objectives:

- Provide the student with an understanding of the key components and underlying concepts of related to the management of information technology.
- Provide a fundamental understanding of IT infrastructures and architectures and their impact on Department of Defense activities.
- Understand how e-business applications provide a mechanism for transformation.
- Explore the relationship between IT strategy and Department of Defense Transformation.
- Examine various strategies for managing an IT unit and study key issues such as out sourcing and integration.
- Expand upon the curriculum discussions of Information Technology as an enabler for specific functional applications (e.g. Accounting, Budgeting, Inventory Management etc.) to a broader discussion of the integration of enterprise functions.
- Demonstrate how technology and systems decisions expand the complexity and inter-relationships within and between organizations.

Course Description:

- The management of Information Technology (IT) within the Government and Corporate environments has become a function that is shifting from the traditional IT management structure to the General Manager. In today's environment it is imperative to understand the importance of and unique issues related to technology. Since the traditional functional approach to IT/IS decision making has proven to be sub-optimizing, this course focuses on an approach to the holistic view of the organization as the target for technology integration. Additionally, because Network Centric Warfare has been deemed mission critical to the success of the military now and in the future, this course will cover the manner in which the application of technology between organizations can overcome traditional stovepipes. . This course will cover the role of IT in an organization and the critical areas where the general manager plays an important role. Lectures, case analysis, classroom discussions and individual challenge questions, will be used to both understand and apply e-business business models and strategies.

Major Topics Covered:

- The value proposition of Technology in organizations
- E-Business/E-Government approaches to organizational integration
- Strategic Outsourcing: Approaches to determining how technology can be be implemented and managed.
- Enterprise Applications: Integration within the confines of the enterprise
- Business Enterprise Architecture: Integrating strategic architecture to Business strategy in order to achieve full technological potential.
- Value Chain Integration: Integration between enterprises
- Business Process Transformation with Technology: Internal transformation of processes to efficiency and effectiveness using technology
- Force Transformation with technology: The application of technology to solve business process issues between government enterprises and between private industry and government.

Typical textbooks and readings:

This course has no textbooks, all reading assignments are articles and other documents

- Department of the Navy IT Capital Planning Guide
- Department of the Navy IT Investment Portfolio Model
- "How to build a case for SMB IT Initiatives", Rossner, Bill, Gartner Group, 2001
- "Strategy and the Internet", Porter, Michael, Harvard Business School, 2001.
- "Ten Attributes of a successful e-business", Technology republic.
- "New Rules for the New Economy", Kelly, Kevin, Viking Books, 1998.
- "How to think strategically about outsourcing", Craumer, Martha, Harvard Management Update, 2002.
- "Manage IT as a business service", Gartner Insight, 2002.
- "Army Logistics Marches Ahead", Caterinicchia, Dan, 2002
- "Linking Outsourcing to Business Strategy", Insinga and Werle, 2004
- "The Essential ERP: Its Genesis and Future", Jakoveljevic, P.J., Technology Evaluation, 2000.
- "Nestle's ERP Odyssey", Worthen, Ben, CIO Magazine, 2002.
- "Easy ERP: A Challenge to conventional thinking", Holt, Emmitt, Technology Evaluation, 2005.
- "Thinking without the Box: New Approaches for New Results", Housel, Thomas and Arthur Bell, 2004.

"ForceNet: A functional concept for the 21st Century", Department of the Navy, 2004.

GB4044: Defense-Focused Managerial Inquiry (3-0)

Course Instructor(s):
- Mark J. Eitelberg, Professor (AY07, AY08)
- Bryan J. Hudgens, Lecturer (AY07, AY08)

Prerequisites for the Course:
- None

Course Objectives:
To better understand and appreciate the following:
- The nature and logic of research and its various types
- How to recognize different degrees of quality in research
- Relationships between managers and research, managers and researchers
- The value, for managers and students alike, of learning research process skills
- The distinctions between various approaches to problem-solving
- The terminology of research
- The value of a research proposal
- Ethical issues associated with research
- How to frame a research question
- How to formulate a solid research hypothesis
- How to design a study to test a hypothesis
- How to present and support a research argument
- How to collect data for various types of research
- How to select from among available approaches in data analysis
- How to avoid common errors in research
- How to tell the "research story"
- How to select, develop, and execute an MBA project or thesis
- How to create a (your) research proposal
- How to express creativity in problem-solving
- How to make research enjoyable

Course Description:
Fundamentally, this is a course in thinking critically and analytically. Research can be as complicated or as simple—as organized or as disorganized—as we make it or as a task demands. Each of us, in our own way, is engaged almost constantly in some form of information collection and processing, some form of inquiry. Whether it pertains to an issue at our job or in the many personal decisions of a typical day, we are problem-solving and seeking informed choice. The methods we employ as researchers, problem-solvers, and decision-makers, regardless of the time or place, are basically similar, and may differ only in degree.

Some describe research as “organized common sense,” since it “supports the idea that good research is within the grasp of many people.” In this way, we can “simplify the more technical aspects of research methods, and enhance understanding, by showing the logic behind them.” This course similarly seeks to examine the logic of research methods—recognizing that these methods may differ across disciplines and subspecialties—rather than focus on detailed models or procedures that may hold limited meaning for the military’s managers. It is not a course in rules or required steps; rather, it is a course in understanding the principles, concepts, and range of techniques that define the craft of research.

Major Topics Covered:

- Introduction to the Course
- Review of Course Outline, Projects, Assignments, Grading, Policies
- Course Organization: Status of Projects and Theses
- Familiarity with Search Tools
- Navigating Blackboard
- Research, Researchers, Readers, and Users: Overview
- Research in Defense and Business
- Performing Research
- Data, Information, and Knowledge Management
- Managing Research; Sponsoring Research
- Applying Scientific Thinking to Management Problems
- From Questions to Problems
- From Problems to Sources
- Problem Definition and the Research Proposal
- Research Design
- Asking Research Questions and Finding Answers
- Framing the Research Question: A Critical Step
- Research Claims
- Making Good Arguments
- Reasons and Evidence
- Acknowledgments and Responses
- Warrants: What, How, & Why
- Gaining Readers’ Trust: Recognizing Opposing Views
- Why Conduct Exploratory Research?
- Types of Exploratory Research
- Collecting Data
- Primary vs. Secondary Sources
- Advantages and Disadvantages of Secondary Data
- Secondary Data Research Designs
- Types of Secondary Data
- Selected Sources for General Business, Government, and Defense Research

- Exploratory Search Strategies
- Qualitative Approaches: Overview
- The Nature of Surveys
- Survey Research Methods
- Errors in Survey Research
- Methods of Communication
- Overview of Quantitative Approaches
- Four Requirements: Reliable; Objective; Applicable; Measurable
- Analyzing Data
- Observation Methods
- Scientific Observation
- Content Analysis
- Experimental Research
- Classification of Experimental Designs
- Common Errors in Research
- The Iterative Process
- Questioning Assumptions
- Pitfalls Introduced by Researcher
- Dealing With the Unknown
- Poor Data; Small Numbers; Chance Occurrence
- Telling the "Research Story"
- Thinking Like a Reader; Writing Like a Thinker
- Exploring, Displaying, and Examining Data
- Establishing Credibility
- Voice, Tense, and Trimming the Fat
- An Idiot's Guide to Readability, Readability, Readability
- Making it Memorable
- Resources for Writers of Research Papers, Reports, and Theses
- Cases Drawn From Subspecialties
- The Ethics of Research
- The Creative Process

Typical textbooks and readings:

- Paul D. Leedy and Jeanne Ellis Ormrod, *Practical Research: Planning and Design*, Eighth Edition (Upper Saddle River, NJ: Pearson/Merrill Prentice Hall, 2005).

- Wayne C. Booth, Gregory G. Colomb, and Joseph M. Williams, *The Craft of Research*, Second Edition (Chicago: The University of Chicago Press, 2003).

- Michael J. Polonsky and David S. Waller, *Designing and Managing a Research Project: A Business Student's Guide* (Thousand Oaks, CA: Sage, 2005).

Course Abstracts

Additional Components:

Acquisition

MN2302: Seminar for Acquisition and Contracting Students (0-3)

Course Instructors: Rene Rendon

Ron Tudor

Bryan Hudgens

Marshall Engelbeck

Dave Mirano

Prerequisites for the Course: None.

Course Objectives:

This seminar is designed to expose students to current acquisition and contracting issues and problems. Specific objectives include:

- Interact with acquisition and contracting managers from government and industry.
- Prepare for professional certification exams.
- Present and discuss research work and conclusions regarding acquisition and contracting issues.
- Visit government acquisition organizations and contractor plants to obtain an understanding of the various facets of defense acquisition and contracting.

Course Description:

This seminar is designed to expose students to current acquisition and contracting issues and problems. Guest speakers from government and industry, field trips, and student thesis research presentations are employed in achieving this objective.

Major Topics Covered:

Topics covered are dependent upon guest speakers, student research areas, and organizations visited on field trips. Recent examples include:

- Guest Speaker: Director, Defense Procurement. Topic: Acquisition Reform.
- Guest Speaker: Major Defense Contractor Vice President for Contract Policy. Topic: Consolidations in the Defense Industry.
- Guest Speaker: Author, Historian, and Law Firm Partner. Topic: A History of Government Contracting.

- Guest Speaker: Naval Officer, recently deployed to Bosnia. Topic: Contingency Contracting.
- Field Trip: Missile Plant, Tucson Arizona.
- Thesis Research Presentation Topic: Risk Management.

Typical Textbooks and Readings: None.

MN2303: Seminar for Program Management Students (0-3)

Course Instructors: Keith Snider

Thom Crouch

Todd Kros

Prerequisites for the Course: None.

Course Objectives:

This seminar is designed to expose students to current program management issues and problems. Specific objectives include:

- Interact with acquisition and program managers from government and industry.
- Prepare for professional certification exams.
- Present and discuss research work and conclusions regarding acquisition and contracting issues.
- Visit government acquisition organizations and contractor plants to obtain an understanding of the various facets of defense program management.

Course Description:

This seminar is designed to expose students to current program management issues and problems. Guest speakers from government and industry, field trips, and student thesis research presentations are employed in achieving this objective.

Major Topics Covered:

Topics covered are dependent upon guest speakers, student research areas, and organizations visited on field trips. Recent examples include:

- Program Management in Army Future Combat Systems Office
- Program Management in Air Force B-52 System Program Office
- Project Management Institute professional certification program
- Navy Operational Test & Evaluation
- Congressional affairs

Typical Textbooks and Readings: None.

MN3303: Principles of Acquisition and Contracting (4-0)

Course Instructors: CDR Jeffrey R. Cuskey, SC, USN (Ret)
Professor Rene Rendon

Prerequisites: None

Course Objectives:

- Develop a fundamental understanding of the principles, policies and practices of the acquisition and contracting processes.
- Develop a framework for management and control of these processes.
- Develop managerial competence to identify and deal with the key issues and concepts in acquisition and contracting.

Course Description:

This course is a study of the principles of acquisition and contracting including the fundamentals of the Federal Acquisition Regulation (FAR) and the DOD FAR Supplement (DFARS); the acquisition and contracting processes including requirements determination, acquisition environment, acquisition strategies, basic contract law, contract types and methodologies, source selection; and acquisition and contracting management, particularly ethics/standards of conduct and professionalism.

Major Topics Covered:

- Acquisition and Contracting
  - Environment/Policy
  - Processes/Functions
  - Acquisition Reform

- Contracting
  - Laws and Regulations
  - Organizations

- Methods of Contracting
- Contract Types
- Sourcing
- Negotiation Principles
- Pricing, Cost & Audit Principles
- Contract Administration
- Value Analysis
- Quality Assurance
- Specifications
- Automated Procurement

- Simplified Acquisition Procedures
- Ethics in Acquisition and Contracting
- Major Systems Acquisition
- International Procurement

Typical Textbooks and Readings:

World Class Supply Management, Dobler, Burt and Starling, 2003

Handouts:

(1) Statement of Guiding Principles, FAR 1.102
(2) ARQ "Acquisition Reform: It's Not As Easy As It Seems", Summer 1995
(3) DODIG Indicators of Fraud
(4) DODD 5500.7, Standards of Conduct, 30 Aug 1993 & Joint Ethics Regulation (JER), Sections 5 & 6.
(5) Selected Chapters, Government Procurement Management, Sherman 1999

MN3304: Contract Pricing and Negotiations (5-2)

Course Instructors: CDR (Ret) Cory Yoder
(others as required)

Prerequisites for the Course: MN3303 or MN3331 preferred, but not mandatory

Course Objectives:

- Develop a fundamental understanding of pricing theory and pricing strategies.
- Understand the fundamentals of cost principles, cost and price analysis, cost accounting standards, and profit issues.
- Develop and sharpen negotiation skills.

Course Description:

This course involves the study of pricing theory and strategies, costing methodologies, and contract negotiations.

Major Topics Covered:

- Pricing Theory
- Pricing Arrangements
- Price Analysis
- Cost Principles
- Price-Based Acquisition
- Parametric Cost Estimating
- Cost Analysis
    - Direct Costs
    - Indirect Costs
    - Facilities Capital Cost of Money
    - Profit
- Profit Theory
- Cost Accounting Standards
- Estimating Systems
- Cost Realism
- Post-Award Pricing
- Negotiations
    - Preparation
    - Conducting Negotiations
    - Strategy/Tactics
    - Ethics

- Improvement Curve Theory
- Business Clearances
- Defective Pricing
- Contract Audit

Typical Textbooks and Readings:

Contract Pricing Reference Guide, Vols I-V, current

Contract Negotiation Cases: Government and Industry, Lamm, 1993

Hydrostream I, II, III, IV Case, Learning Curve Application, Yoder, 2007.

Gillette Generator and the ELF Transmitter, Yoder, 2005.

Contracting with the Federal Government, Worthington & Goldsman, 4th Edition (or as updated).

Accounting Guide for Government Contracts Trueger, 10th Ed., 1991

DCAA Contract Audit Manual, as updated 2007 online.

Handouts:

Parametric Cost Estimating Handbook, 1995

MN3304 Course Slide Set, Yoder, 2005-2007.

MN3306: Strategic Purchasing (3-0)

Course Instructor(s):

Lt Col Bryan Hudgens, USAF (AY06, AY07)

Prerequisites for the Course:

None

Course Objectives:

By the end of this course, you should:

a) Understand and appreciate the evolution of purchasing from a functional activity to an element of organizational strategy;
b) Comprehend and apply the concept of purchasing's strategic role within the context of total supply chain management;
c) Comprehend and apply concepts regarding how companies use strategic sourcing as a method of achieving a competitive advantage;
d) Comprehend and apply the factors involved in making strategic decisions regarding outsourcing organizational functions;
e) Comprehend and apply concepts regarding the importance of supplier relationships within the larger activity of supply-base management;
f) Understand the future sourcing trends for the twenty-first century and appreciate their implications for industry and DoD;
g) Consider how commercial strategic purchasing practices would be useful to—and analyze how they could be implemented in—the DoD acquisition environment.

Course Description:

This course is a graduate-level seminar in strategic purchasing. The course will be taught through a combination of formal lecture, guided discussion, and case analysis. My primary goal of this course is for you to appreciate purchasing not as a functional activity but rather as a ***strategic component*** of total ***supply chain management***. In this course we'll explore the argument that ***companies with world-class purchasing practices derive a competitive advantage in their industries from their procurement and sourcing strategies***. We'll also assess whether (and if so, how) this notion of competitive advantage through strategic purchasing generalizes to the Department of Defense. Our emphasis on world-class purchasing practices means we'll spend a fair amount of time observing and analyzing commercial organizations and their purchasing practices. Your task will be to assess whether these commercial purchasing practices are in fact world-class, and whether (and again, if so, how) they should be implemented practically in the DoD acquisition and sustainment environments.

Major Topics Covered:

- **Module 1: Course Introduction**
  - Course Administration
  - The World We Live In
  - Transformation
  - Strategic Purchasing

- **Module 2: A Strategy Primer**
  - Industry Analysis, Scanning, Spanning, Market Analysis
  - Firm-Level Analysis
  - Capabilities and Competencies
  - Transaction Cost Analysis

- **Module 3: Strategic Alliances & Interorganizational Relationships**
  - Alliance Formation
  - Buyer/Seller Relationships
  - Relationship Management

- **Module 4: Supply Chains**
  - Functions
  - Integration
  - Demand Management
  - Customer Satisfaction

- **Module 5: Purchasing Basics**
  - Purchasing Process
  - Purchasing Policies
  - Purchasing Organization

- **Module 6: Sourcing Strategy**
  - Insourcing/Outsourcing
  - Product Classification

- **Module 7: Supplier Management**
  - Supplier Selection, Evaluation, and Management/Development

- **Module 8: Supplier Measurement**
  - & Quality
  - SPC
  - Performance Measurement

- **Module 9: Strategic Analysis**
  - Techniques
  - Total Cost Analysis

- Spend Analysis
- Value Analysis

- **Module 10: Issues & Trends**
  - Social Responsibility
  - Global PSCM
  - Purchasing Ethics
  - Course Wrap-up

Typical textbooks and readings:

Monczka, Robert, Robert Trent, and Robert Handfield (2005), *Purchasing and Supply Chain Management*, 3rd Ed. Cincinnati, OH: South-Western College Publishing.

OR…

Burt, David N., Donald W. Dobler, and Stephen L. Starling (2003), *World Class Supply Management*, 7th Ed. New York: McGraw-Hill.

Many journal articles will be assigned. These articles will provide additional background, elaborate on areas in the text, and give you additional examples of how the concepts play out in "real life".

The readings support each learning module as shown in this table. Readings reflect the use of the Monczka text (designated MTH); if the Burt text is used, similar readings would replace those from the MTH text.

MN3307: Entrepreneurship in Strategic Purchasing (3-0)

Course Instructor(s):

Lt Col Bryan Hudgens, USAF (AY06, AY07)

Prerequisites for the Course:

None

Course Objectives:

- At the end of this course, you will be familiar with the following entrepreneurial mindset concepts and processes:

h) Understand the characteristics of corporate entrepreneurship and the entrepreneurial mindset
i) Comprehend the characteristics of ideas capable of worthwhile contributions to the organization
j) Comprehend the role of opportunity recognition in corporate ventures
k) Apply opportunity recognition in the creation of new business models
l) Comprehend the role of the entrepreneurial landscape in recognizing breakthrough opportunities
m) Apply assessment tools to diagnose the progress of entrepreneurial projects
n) Comprehend the organization's portfolio of initiatives and the importance of strategic focus and trade-offs within the portfolio
o) Understand various implementation strategies
p) Apply discovery-driven planning
q) Understand the role and practice of entrepreneurial leadership and management

Course Description:

- This course is a graduate level seminar on corporate entrepreneurship. The course focuses on entrepreneurship within the corporate environment and especially on the development of what is called the entrepreneurial mindset. What is the entrepreneurial mindset? Briefly, it's a way of thinking about organizations that is designed to exploit opportunities in uncertain environments. My primary goal for the course is to familiarize you both with the entrepreneurial mindset and with specific methods for deploying it. We'll look at how the entrepreneurial mindset is applied in entrepreneurial ventures and we'll investigate how we can deploy the mindset within DoD including acquisition. The foundation of the course will be an analysis of the process by which the entrepreneurial mindset generates new ideas, researches the ideas' likelihood of success, and successfully implements the idea. The course will also investigate the critical role of entrepreneurial leadership and scanning the environment for opportunity. The course will be taught through a combination of informal lecture, guided discussion, case study, and student presentations.

Major Topics Covered:

- Course Introduction:
  - Corporate Entrepreneurship

- The Entrepreneurial Mindset:
  - The Entrepreneurial Mindset
  - Framing the Challenge

- Opportunity Recognition:
  - Opportunities
  - Organizational Learning
  - Entrepreneurial Innovation

- Creating Opportunities:
  - Breakthrough Competencies
  - Blockbuster Products/Services
  - Redifferentiation
  - Disrupting the Rules

- Opportunity Selection:
  - Selecting the “best” from among your options

- Planning and Managing:
  - Discovery-Driven Planning
  - Managing Projects with
  - Uncertain Outcomes

- Entrepreneurial Strategy:
  - Portfolio Strategies
  - Growth Strategies

- Policy Entrepreneurs:
  - Who they are; why and how they operate

- Entrepreneurial Management & Leadership:
  - Entrepreneurial Organization
  - Entrepreneurial Culture
  - Leadership

- Corporate Entrepreneurship & the Entrepreneurial Mind:
  Course hot-wash

Typical textbooks and readings:
McGrath Rita Gunther & Ian MacMillan (2000). *The Entrepreneurial Mindset*, Boston MA: Harvard Business School Press.

Burns, Paul (2005). *Corporate Entrepreneurship*, New York, NY: Palgrave MacMillan.

Luecke, Richard (1994). *Scuttle Your Ships Before Advancing, and Other Lessons from History on Leadership and Change for Today's Managers*. New York: Oxford University Press, Inc.

Journal articles will be assigned for many of the blocks of instruction.

The readings support each learning module or topic as shown in this table:

Topic	Reading Assignment
Course Introduction:	
Corporate Entrepreneurship	Burns Chp 1 Hall & Wecker Chp 107 & 110
The Entrepreneurial Mindset:	McGrath Chp 1 & 2
The Entrepreneurial Mindset	Covey (2001)
Framing the Challenge	
Opportunity Recognition:	
Opportunities	Burns Chps 3 & 4
Organizational Learning	Burns Chps 12 & 13
Entrepreneurial Innovation	Buchanan (2002) Hopkins (2001) Luecke Chp 7
Creating Opportunities:	
Breakthrough Competencies	McGrath Chps 3-6 Kuznetsov & McDonald
Blockbuster Products/Services	(2000)
Redifferentiation	Higdon (2000); Inc (2002) Wetlaufer (2000); Lewis
Disrupting the Rules	(2001) Luecke Chp 8
Opportunity Selection:	
Selecting the "best" from among your options	McGrath Chp 8 Luecke Chp 2 Review Burns Chp 3
Planning and Managing:	

Discovery-Driven Planning	McGrath Chps 10 & 11
Managing Projects with Uncertain Outcomes	Luecke Chp 5 Fishman (2002)
Entrepreneurial Strategy:	
Portfolio Strategies	Burns Chps 9-11
Growth Strategies	D'Aveni (1995) D'Aveni (1999) Eisenhardt & Brown (1998, 1999)
Policy Entrepreneurs:	
Who they are; why and how they operate	Mintrom (1997) Mintrom & Vergari (1996) Drumwright (1994)
Entrepreneurial Management & Leadership:	
Entrepreneurial Organization	Burns Chps 6 & 7
Entrepreneurial Culture	Whitley (1999)
Leadership	Hornsby & Kuratko (1999) McGrath Chp 12 Collins (2001)
Corporate Entrepreneurship & the Entrepreneurial Mind:	
Course hot-wash	

MN3309: Acquisition of Embedded Weapon System Software (4-1)

Course Instructors: Brad Naegle
Diana Petross

Prerequisites for the Course: MN3331 or, MN3302 or, MN3221 & MN3222 series or, DAU PM Level 2 Certification, or DAU SAM 101 course

Course Objectives:

Students will possess abilities to:

- Recognize the unique management challenges and DoD's critical role associated with the development of the software component of software-intensive systems.
- Identify the DoD acquisition environment, policies, guidance and directives that influence development of software-intensive systems.
- Analyze software life-cycle management models and select models that support the overall developmental approach for varying systems.
- Recognize basic software engineering concepts and terms.
- Analyze risk areas associated with software development including risk identification, assessment, mitigation, risk handling, and documentation requirements. Select and apply appropriate risk management tools.
- Apply evaluation methodologies to assess the software development maturity (including CMM) in potential software development contractors.
- Integrate effective software management concepts into the DoD Acquisition Model and recognize necessary software elements of technical reviews, audits and baselines.
- Assess the most appropriate software management, process, and quality metrics for effective control and monitoring of the software development process.
- Recognize and differentiate different software development tools across the spectrum of the developmental and Sustainment phases.
- Apply effective management tools in the development of software requirements, performance specifications, and architectural design.
- Recognize the increasing impact of the software component on supportability burden and Total Ownership Cost (TOC).
- Assess and apply estimating tools for Post Deployment Software Support (PDSS) planning and resourcing.

Course Description:

MN3309 is designed to introduce software development management challenges, development concepts, and methods and tools for effectively managing software-intensive programs within predictable cost and schedule thresholds. Students are introduced to the critical role DoD plays in the successful development of software-intensive systems. Effective management tools are introduced and applied to control the DoD functions, drive the critical software design effort, and monitor technical progress in the development and delivery of the

software component. Software supportability concepts are emphasized and effective estimation tools are applied for predicting and planning supportability functions and resources. Notional and actual military cases are used for examples and exercises. Student teams analyze notional JCIDS input documents, identify derived and implied software requirements, develop a Work Breakdown Structure (WBS), and draft performance based software specifications.

Major Topics Covered:

Topics include the DoD acquisition environment, software life-cycle management, software risk management, developer maturity evaluations, software engineering, software development within the DoD acquisition model, metrics, DoD tools for software development, software developer tools, and Post Deployment Software Support (PDSS) planning and resource estimation.

Typical textbooks and readings:

- Guidelines for Successful Software Acquisition Management (GSAM), Third Edition, 2002
- *Managing the Software Process*, Humphries, Watts S., August 1990
- Software Engineering Institute (SEI) products, readings, and website
- USAF Software Technical Support Center (STSC) products, readings, *Crosstalk* Magazine, and website

GAO reports and periodical articles on software acquisition management issues, notional and actual case studies

MN3312: Contract Law (4-0)

Course Instructor: Sandra Desbrow, JD
Ron Tudor, JD

Prerequisites: MN 3303

Objectives:

- Develop an understanding of federal contract law analysis and legal principles associated with the acquisition process.
- Acquire the skills and competence for researching, briefing, and analyzing judicial and regulatory opinions.
- Understand and analyze the basic legal rights and obligations of the parties to a Government contract.
- Understand the roles and jurisdiction of the various agencies and judicial bodies empowered to render decisions.
- Understand the contract law associated with military operations.

Description:

This course involves a study of United States Federal Government contract law and fiscal law, federal legislation, regulations and administrative agency actions. The course covers a wide variety of legal areas of study from methods of contracting, types of contracts, ethics, fraud, fiscal law, and intellectual property in government contracting. Extensive materials are used in the class to address a wide variety of legal subjects associated with contracting. These materials include current cases as decided by the Government Accountability Office on protest decisions, and the Boards of Contract Appeals and Federal Courts. These cases date from the Civil War era to last minute decisions issued moments before the class begins. These cases are analyzed to ascertain the legal principles associated with valid contract formation, funding actions, competitive actions under the Competition in Contracting Act, the Economy Act, problems arising during contract administration under the changes clause, and other significant legal concepts. Students are required to read all materials and participate in extensive class discussions. Students must show a mastery of the materials by answering evaluation questions posed to them during sessions in the classroom.

Major Topics Covered:

- Sealed Bidding
- Negotiations
- Bid Protests
- Contract Changes
- Contract Terminations for Convenience
- Contract Terminations for Default

- Contract Disputes
- Availability of Appropriations as to Purpose
- Availability of Appropriations as to Time
- Obligating Appropriated Funds
- Construction Contracting
- Anti-Deficiency Act
- Intragovernmental and Required Source Acquisitions
- Intellectual Property
- Types of Government Contracts
- Simplified Acquisition Procedures
- Ethics in Government Contracting
- Procurement Fraud
- Government Information Practices
- Non-Appropriated Fund Contracting
- Contracting for Military Operations

Typical Text Materials:

Materials as compiled by Ron Tudor, JD with permission of the US Army Judge Advocate General's School, Charlottesville, Virginia, and from various internet attorney sites.

MN3315: Acquisition Management and Contract Administration (4-0)

Course Instructors: CDR (Ret) Cory Yoder
CDR (Ret) Jeff Cuskey

Prerequisites for the Course: MN3303 or MN3331 preferred, but not mandatory

Course Objectives:

Effective management of government contracts requires advanced understanding of the life-cycle nature of the acquisition process. This course builds on the fundamental knowledge and skills the acquisition and contracting student has developed through intensive studies in the prerequisite courses. A common theme of the course is identifying, evaluating and managing risks in the acquisition process; in this context, the effective management of the acquisition planning function is emphasized throughout the course. Specific objectives of this course include:

- Develop a complete understanding of the requirements for planning and awarding a government contract under the competitive proposal methodology.
- Acquire and refine the skills necessary to perform acquisition planning, market research, source selection evaluation, discussions/negotiations, and contract award.
- Develop managerial competence to identify and deal with the key issues in pre-award contracting.
- Perform an evaluation of technical, cost and management proposals.
- Develop a fundamental understanding of the principles, policies and practices of contract administration.
- Develop a framework for management and control of contract administration.
- Develop managerial competence to identify and deal with the key issues in contract administration.
- Develop a fundamental understanding of the nature of risk in the procurement process, and the basic skills necessary to assess, control and monitor identified risks.

Course Description:

This course focuses on the management functions and decision-making techniques involved in the award and administration of best value competitively negotiated contracts. The course is presented in three phases to coincide with the phases of the acquisition process. The first phase of the course concentrates on procurement planning, the second phase emphasizes contract formation, and the third phase focuses on contract administration. Students are required

to participate in a series of group projects and case studies that emphasize the importance of integrated teamwork in the achievement of acquisition objectives.

Major Topics Covered:

- Risk Management and the Acquisition Process
- Procurement Planning Phase:
    - Determining Requirements
    - Market Research
    - Acquisition Planning
    - Source Selection Planning
- Contract Formation Phase:
    - Describing Requirements
    - Solicitation Development
    - Proposal Evaluation
    - Negotiations and Discussions
    - Source Selection
    - Contract Award
    - Offeror Debriefings
    - Protests
- Contract Administration Phase:
    - Organizing for Contract Administration
    - Initiating Contract Administration
    - Performance Management
    - Financial Management
    - Subcontract Management
    - Property Management
    - Change Management
    - Claims Management
    - Terminations Management
    - Closeout Management

Typical Textbooks and Readings:

Lamm, D.V. (1993). *Contract Negotiation Cases: Government and Industry.* Wordcrafters Publications.

Yoder, E. C., MN3315 Course Slides, 2005-2006.

MN3318: Contingency Contracting (3-0)

Course Instructors: CDR (Ret) Cory Yoder
CDR (Ret) Jeff Cuskey

Prerequisites for the Course: None.

Course Objectives:

Objectives (Overarching):

- The Naval Postgraduate School's MN3318 is structured, designed and delivered to achieve DAU CON 234 equivalency for graduate students attending the Naval Postgraduate School.
- Develop a fundamental understanding of contingency contracting principles, policies, processes and practices.
- Develop a framework for management and control of these processes.
- Develop managerial competence to identify and deal with key contingency contracting issues and concepts.

Objectives (Specific Terminal Learning Objectives (TLOs) and Enabling Learning Objectives (ELOs):

In addition to the above broad course objectives, the student will be expected to accomplish the following specific objectives:

- Types of Contingencies -- Identify the contracting laws, regulations, and procedures unique to various types of contingencies.
    - Define and explain contingency contracting.
    - Identify contingency contracting sources of guidance.
    - Compare and contrast various types of contingencies.
    - Explain the four phases of typical support.
    - Discuss Waivers and Deviations for contingency operations.
    - Discuss expedited contracting procedures.
    - Equivalent to DAU CON 234 Lesson #2.

- Cross-Cultural Awareness -- Recognize cross-cultural behavior patterns and anti-terrorism vulnerabilities and explain their impact on contingency contracting.
    - Introduce students of "cross-cultural" concepts.
    - Based on readings and discussion, understand how enculturation may lead to obstacles in communication.
    - Identify cross-cultural behaviors and discuss adaptation and assimilation.

- Compare and contrast U.S. values with other world views.
- Discuss awareness to culture as it affects behaviors, perspectives, and the ability to function and conduct business in a dissimilar culture.
- Equivalent to DAU CON 234 Lesson #3.

- Roles and Responsibilities -- Identify the key personnel and organization in a contingency, their roles and responsibilities and required coordination.
  - Describe the mission and capabilities of DoD contracting organizations which support contingency operations.
  - Describe the roles and missions on non-DoD and non-governmental organizations in contingency operations.
  - Describe and discuss joint contingency contracting to include: Command structure from the national level down to the JTF, role of the CINC Acquisition and Contracting Board, differences between the operational and contracting authority, key players in a JTF and the CCO's relationship with them.
  - State the most significant differences between US and multinational contingency contracting operations.
  - Explain the responsibilities of a CCO in a JTF.
  - Compare and contrast the roles, responsibilities, and contractual authority (including training requirements) of OOs, CORs, GCPC holders, and Disbursing Agents.
  - Identify and establish with potential customers and other key personnel and agencies on the contracting officer's area of responsibility.
  - Discuss the roles of the CCO, Army Corps of Engineers, Army Material Command, Air Force Civil Engineer Support Agency, Defense Contract Management Command, and supported commands in using civilian augmentation contracts (LOGCAP / CONCAP / AFCAP) to support a contingency.
  - Describe an effective program to train customers, OOs, COR / COTR / QAEs, GCPC holders, and Disbursing Agents for their respective roles in contingency contracting operations.
  - Develop an unobstructed avenue for customers to submit procurement requests to the contingency contracting office.
  - Equivalent to DAU CON 234 Lesson #4.

- Automated Tools -- Assess customer requirements and select, justify, and execute the appropriate procurement action. Apply automated procedures to assemble, prepare, and close-out documents, files and reports.
  - Identify and demonstrate familiarity with the automated resources required for optimization of the contingency contracting office.
  - Conduct automated tool familiarization.
  - Identify, select, and complete specific contract vehicles based on case scenarios.
  - Equivalent to DAU CON 234 Lesson #5.

- Deliberate and Crisis Action Planning -- Identify, summarize and discuss the key elements of Deliberate and Crisis Action planning as they relate to contingency contracting planning.
    - Describe the major elements of Joint Operational planning and discuss the importance of Joint Planning to the contracting function.
    - Describe the Joint Uniform Lessons Learned System (JULLS) and discuss how a CCO would use this system.
    - Describe and discuss the contents of a Contingency Contracting Support Plan.
    - Discuss Contingency Contracting Officer pre-deployment actions.
    - Equivalent to DAU CON 234 Lesson #7.

- Anti-Terrorism and Security -- Recognize anti-terrorism vulnerabilities and explain their impact on contingency contracting.
    - Identify and discuss effective anti-terrorism practices necessary for:
        - Personal security
        - Travel security
        - Vehicle security
        - Operational, information, personnel, and physical security
    - Equivalent to DAU CON 234 Lesson #6.

- Funding of Contingency Operations -- Identify and apply the contracting laws, regulations, and procedures for funding and operations unique to various types of contingencies.
    - Demonstrate familiarity with various types of funds used in contingencies.
    - Describe the various fiscal controls on appropriate funds.
    - State the approval level required for the amount and the type of funds being used for specific contracting actions.
    - Explain the circumstances in which augmentation may be authorized.
    - Describe the proper use of O&M funds for deployment and contingency operations (including Humanitarian and Civil Assistance).
    - Explain the difference between MILCON appropriations and their proper use.
    - Describe the proper use of funds from other U.S. appropriations.
    - Discuss the proper use of funds received from other countries and alliances.
    - Equivalent to DAU CON 234 Lesson #8.

- Administration, Termination, and Closeout of Contingency Contracts -- Apply automated and manual procedures to assemble, prepare, and close out contract documents, files, and reports.
    - Identify the duties and responsibilities of the personnel involved in contingency contract administration and describe the training each requires to adequately perform contract administration functions.
    - Compare and contrast the types of contract modifications which are used in contingency contracting and their effect on timely performance.
    - Explain the procedures for ratifying unauthorized commitments and definitizing unpriced actions.

- Explain the procedures used to transfer open contracts and orders to other contracting offices and agencies.
- Discuss the judgmental, ethical, and environmental factors considered when terminating and closing out contracts.
- Discuss the typical reasons for contractor submission of claims and list the documentation required for negotiation and settlement of modifications, claims and disputes.
- Describe the record keeping required in administering and closing out contingency contracts and discuss procedures for monitoring the performance of contracting personnel.
- Demonstrate proper conduct of administration and termination actions.
- Equivalent to DAU CON 234 Lesson #10.

- Case Studies and Integrating Concepts -- Prepare and brief the class on various case scenarios designed to enhance and capitalize on the major lessons (from the ELOs and TLOs).
  - Various cases may be, and are, utilized thoughout the course modules.
  - The LOGCAP case co-developed by NPS, GW University and contractors directly supporting the Balkans operations, is the recommended backbone for the final graded case work. However, other imbedded cases should be utilized in modules to achieve highest educational results.
  - Details of the LOGCAP Balkans case are provide
  - Equivalent to DAU CON 234 imbedded cases and Lesson #11.

- Ethical Business Conduct -- Exercise and apply ethical principles in performing the duties of a contingency contracting officer.
  - Assess ethical dilemmas facing the CCO.
  - Determine best approach and course of action in dealing with challenging scenarios.
  - Make sound recommendations and choices based on operational, ethical, and theater objectives.
  - These objectives should be in every module.
  - This has no direct DAU stated equivalent, although DAU certainly teaches these principles.

Course Description:

This course is a study of the principles of contingency contracting and the fundamental skills required to provide direct contracting support to joint tactical and operational forces participating in the full spectrum of armed conflict and military operations other than war, both domestic and overseas. Topics include: Types of Contingencies, Cross-Cultural Awareness, Contingency Contracting Officer Authority, Roles and Responsibilities, Anti-terrorism and Security, Planning, Contractual Methodologies and Instruments, Automated

Tools, Deliberate and Crisis Action Planning, Funding and Execution, and Contract Administration (including terminations and closeouts), and Ethics/Standards of Conduct.

The Naval Postgraduate School's MN3318 is structured, designed and delivered to achieve DAU CON 234 equivalency for graduate students attending the Naval Postgraduate School.

Major Topics Covered:

See objectives above.

Typical Textbooks and Readings:

Yoder, MN3318 Course Slides, 2005-2007 (as updated)

Handout sets, see current edition for recent updates.

MN3331: Principles of Systems Acquisition & Program Management (5-1)

Course Instructors: Brad Naegle
Keith Snider
Mike Boudreau
Jeff Cuskey
Rodney Tudor
Dave Matthews
Dave Mirano
Todd Kros
Rene Rendon
Marshall Engelbeck
Dan Motherway

Prerequisites for the Course: None

Course Objectives:

- Understand the basic principles of weapon systems program management in the Department of Defense.
- Understand the Washington D.C. political environment as it relates to weapon systems acquisition.
- Identify, define and explain the various disciplines that must be integrated into effective teams for managing major acquisition programs.
- Be familiar with the management systems and organizations associated with DoD weapon systems acquisition.
- Understand the DoD resource allocation process, with emphasis on the planning, programming, budgeting, and execution system (PPBE), with the life cycle management process.
- Be familiar with policies governing DoD systems acquisition.
- Attain a basic understanding of the concepts, techniques and challenges of systems acquisition and program management of a major weapon system.
- Possess a basic vocabulary of acquisition and contracting terminology.

Course Description:

This course provides the student with an understanding of the underlying concepts, fundamentals and philosophies of the defense systems acquisition process and the practical application of program management methods within this process. The course examines management characteristics and competencies, control policies and techniques, systems analysis methods, risk management, and functional area concerns. Techniques for interpersonal relationships are examined in team exercise settings. Topics include the evolution and current state of systems acquisition management; the systems acquisition life cycle; user-producer

acquisition management disciplines and activities; and program planning, organizing, staffing, directing and controlling. Case studies are used to analyze various acquisition issues.

This course is designed to meet the Defense Acquisition University (DAU) education equivalency requirements for Acquisition 101, Acquisition 201, and PMT 250 courses. These courses are mandatory for defense acquisition professionals as specified in the Defense Acquisition Workforce Improvement Act (DAWIA).

Major Topics Covered:

Project Management
Capabilities Integration Development
Acquisition Management
Systems Engineering
Contract Management
Defense Resource Allocation
Test and Evaluation
Software Management
Earned Value Management
Acquisition Logistics

Typical Textbooks and Readings:

Forsberg, K., H. Mooz, and H. Cotterman. 2005. *Visualizing Project Management*. New York: Wiley. ISBN: 0-471-64848-5
DoD Directive 5000 (series)
Various readings from defense acquisition regulations, journals, and periodicals.

MN3384: Acquisition Production and Quality Management (5-1)

Course Instructor: COL (Ret) Michael W. Boudreau, Senior Lecturer

Prerequisites for the Course: MN3331

Course Objectives:

The purpose of Defense systems acquisition is to obtain warfighting materiel. Implicit in this endeavor are the conceptualization, initiation, design, development, test, contracting, production, fielding, deployment, and logistic support, modification, and disposal of weapon and other systems, supplies, or services (including construction) to satisfy DoD needs.

In this course we examine acquisition processes from the perspective of production of quality materiel. We focus on Government contract administration in the manufacturing environment. We consider design from the perspective of producibility. We examine development and modification of system designs as they relate to manufacturing and quality through consideration of configuration management, correction of design deficiencies, and product performance feedback.

During class, lab exercises, and examinations, students are confronted with typical problems and must work out solutions. Not only do they gain insights into manufacturing and quality assurance, but they also make connections with the broader universe of systems acquisition.

Course Description:

Acquisition Production and Quality Management (MN 3384) emphasizes production, manufacturing, and quality management principles, policies, processes and practices used in the Department of Defense. Students follow a curriculum that exposes them to manufacturing and quality processes, scheduling and control techniques, surveillance activities, and systems level production and quality management planning. Students analyze processes and practices involved in monitoring production operations and quality functions. Course content includes systems engineering, initiatives and trends, Federal Acquisition Regulation, specification and standards, source selection, environmental management, material control, quality assurance, and analytical tools

Major Topics Covered:

- Acquisition Reform / Acquisition Excellence
    - Performance Specifications
    - Warranties and Incentives
    - Knowledge Point Management
- Federal Acquisition Regulation (FAR)
    - Production and Quality, FAR Parts 42 and 46
    - Source Selection

    - Technical Support
- Acquisition Management
    - Environmental Management
    - Risk Management
    - Industrial Capabilities
    - Production Readiness
    - Producibility
- Operations Management and Quality Management
    - Integrated Management Planning
    - ISO 9001-2000 Quality Management System
    - Six Sigma
    - Manufacturing Management Systems
    - Electronic Tools
    - Current Initiatives
    - Analytical Tools
- Lab Exercises
    - Performance Based Statement of Work Lab
    - Warranty Lab
    - EXCEL Solver Lab
    - Quality Management Lab
    - Bottleneck Analysis Lab
    - Design for Manufacturing and Assembly Lab
    - Process Mapping Lab
    - Manufacturing Risk Management Lab
    - Lean Thinking Lab
    - Statistical Process Control Lab

Textbooks and Readings:

Chase, Richard B.; Aquilano, Nicholas J and Jacobs, F. Robert (2006). ***Operations Management for Competitive Advantage***, 11th Edition. Burr Ridge: Irwin / McGraw-Hill.

Womack, James P. and Jones, Daniel T. (1996). ***Lean Thinking, Banish Waste and Create Wealth in Your Corporation.*** New York: Simon & Schuster.

Acquisition Knowledge Sharing System (AKSS) website. https://akss.dau.mil/default.aspx.

Multiple readings in policy, best practice, reports and articles.

References:

Wheeler, Donald J. and Chambers, David S.(1992). ***Understanding Statistical Process Control.*** Knoxville: SPC Press.

Harry, Mikel and Schroeder, Richard (2000). ***Six Sigma: The Brekthrough Management Strategy Revolutionizing the World's Top Corporations.*** New York: Currency.

MN4304: Defense Systems Contracting (2-0)

Course Instructors: Professor Jeffrey R. Cuskey
Professor Rene Rendon

Prerequisites for the Course: MN 3331, MN 3222, or MN 4473

Course Objectives:

- To develop an understanding of concepts, policies, techniques, and problems of contracting for major systems.
- To experience the decision making environment faced by the Defense Acquisition Executive (DAE), Program Executive Officers (PEOs), Program Managers (PMs) and Procuring Contracting Officers (PCOs).
- To develop an understanding of the various disciplines and functional areas which must be integrated to acquire a major defense system.
- To keep abreast of real-time acquisition related news and acquisition reform initiatives that may influence the future acquisition environment.

Course Description:

This course is the study of the Department of Defense's major systems contracting policies, processes, procedures, and practices. A review of major systems acquisition and program management is provided but the primary focus is on the contracting process used to acquire Defense systems for the Service's Systems and Material Commands.

Major Topics Covered:

- Acquisition Environment
- Major Defense Acquisition Program (MDAP) Policies
- Acquisition Strategies
- Strategic Acquisition Considerations and Issues
- Multi-Year Procurement Strategies
- Acquisition Cycle Time Reduction Initiatives
- Alpha Contracting
- Source Selection
- Incentive Contracting
- Award Fee Planning
- Program Life Cycle Cost and Affordability Initiatives
- Competition
- Industrial Base Issues
- A-12 Lessons Learned
- Warranties

- Contractor Support Service (CSS) Contracting
- Contractor Engineering and Technical Support (CETS) Contracting
- Post-Award Contract Administration
- Termination Issues
- Ethics

Typical Textbooks and Readings:

The Federal Acquisition Regulations
Department of Defense Directive 5000.1 dtd 12 May 2003
Department of Defense Instruction 5000.2 dtd 12 May 2003
Defense Acquisition Deskbook,
Office of Management and Budget Circular A-109
Numerous Government Accountability Office (GAO) Reports
Numerous Topical Handouts (provided separately)

MN4307: Advanced Acquisition: Program Management Policy and Control

Course Instructor(s):
Keith Snider, Associate Professor (AY05 – 07)
Mike Boudreau, Senior Lecturer (AY03 – 07)
John Dillard, Senior Lecturer (AY01 – 07)
Brad Naegle, Senior Lecturer (AY03 – 07)

Prerequisites for the Course:
Prerequisites: MN3331/or MN3302, MN3309, MN3371, MN4602 or equivalent, SE4011 and MN3384.

Course Objectives:

- Integrates all acquisition and contracting concepts using topical and real-life program management cases and exercises.
- Provides the student an understanding of the processes involved in policy formulation and execution in the defense acquisition environment and methods to influence these processes.
- Provides the student current examples of the problems and issues facing senior defense acquisition managers, particularly the program manager.
- Describes the business and operating concepts essential to effective contractor program management
- Provides a basis for the ethical considerations of acquisition management

Course Description:

This course is the *capstone* to the Program Management Curriculum and is intended to integrate the various functional areas essential to successful program management. The course provides the student with knowledge of management control processes and tools, and an application of control systems with emphasis on real world, practical systems for performance, cost, and schedule control. Topic areas include: acquisition reform; acquisition strategies; industrial base; ethics & procurement integrity; requirements determination; contract solicitation, proposals, negotiations, award and administration; test and evaluation management; Earned Value (EV), and other technical performance measurements; technical reviews and audits; configuration management; program documentation; program baselines; production and manufacturing; logistics support; deployment and fielding; total quality management; risk management; costing and budgeting; and international program management issues. Integrative case studies involving managerial problem-solving and decision-making in the program management environment are used.

Major Topics Covered:

- Acquisition Environment and Acquisition Reform
- Acquisition Requirements Generation

- DoD Planning, Programming & Budgeting System (PPBS)
- Financial Management
- DoD Acquisition Management
- Acquisition Analysis & Controls
- Risk Management
- Data Management
- Configuration Management
- Market Analysis & Surveys
- Technical Performance Measurement
- System Test & Evaluation
- Operational T&E
- Developmental T&E
- Live-fire T&E
- Contract Management
- Production Management & Fielding
- Total Ownership Cost

Typical Textbook and Readings:

Program Manager, selected articles,
Government Executive, selected articles,
General Accounting Office, selected reports,
Best Practices NAVSO P-6071, selected chapters,
National Defense, selected articles,
Selected Sections of the Following Guides/Handbooks (Handed out at commencement of 816 Curriculum):
Systems Engineering Management Guide, DSMC, 1990, (SEMG)
Risk Management Concepts and Guidance, DSMC, 1989, (RISK)
Mission Critical Computer Resources Management Guide, DSMC, 1990, (MCCR)
JLC Guide for Management of Joint Service Programs, DSMC, 1987, (JSP)
Guide for the Management of Multinational Programs, DSMC, 1987, (MMP)
Scheduling Guide for Program Managers, DSMC, 1990, (SKED)
Test and Evaluation Management Guide, DSMC, 1988, (T&E)
Cost Realism Handbook, DSMC, 1985, (CRH)
Subcontracting Management Handbook, DSMC, 1988, (SMH)
A Program Office Guide to Technology Transfer, DSMC, 1988, (TT)
Warranty Guidebook, DSMC, 1992, (WAR)
Proceedings of the "Managing The Industrial Modernization Process" Conference, DSMC, 1990, (MOD)
Commercial Practices for Defense Acquisition, DSMC, 1992, (CPFDA)
NDI Acquisition, DSMC, 1992, (NDI)

Handouts (Acquisition Deskbook CD ROM)
DoD Directive 5000.1
DoD 5000.2R

MN4371: Acquisition and Contracting Policy (4-0)

Course Instructors: CDR Jeffrey R. Cuskey, SC, USN (Ret)

Prerequisites: MN4301 or MN4304

Course Objectives:

1. Develop an understanding of important issues, concepts and problems related to acquisition/contracting policy and its implementation within the Federal Government.

2. Develop an ability to conceptualize implications of alternative policies and choose effectively among alternatives.

3. Develop an ability to manage effectively within the Federal acquisition/contracting environment, with due consideration for policy formulation, implementation and execution.

Upon successful completion of this course, students should have the requisite skills to assume mid-grade to senior acquisition policy and leadership positions within the Department of Defense. As such, they should be able to:

- Develop their acquisition leadership and management skills, enabling them to be an effective business advisor.
- Use ethics, problem solving, and critical thinking to make sound business decisions.
- Use innovative/creative thinking to develop viable alternatives.
- Effectively communicate internally and externally.
- Identify and fulfill customer expectations by managing for results.
- Manage the implementation of change and transformation.
- Manage the acquisition and contracting Body of Knowledge (BOK) for currency.
- Understand, participate and contribute in cross-functional collaborative environments to optimize solutions.
- Incorporate FAR Guiding Principles, senior leadership vision and private sector perspectives in the decision making process.

Course Description:

This seminar analyzes business and Government acquisition and contracting policies. Emphasis is on policy formulation and decision-making utilizing studies, the current literature and topical issues.

Major Topics:

- Acquisition Management
  - Acquisition Environment
  - Acquisition Reform
  - Ethics
  - Outsourcing
  - Privatization
  - Depot Maintenance
  - Specifications and Standards
- Contract Management
  - International Procurement
  - Field Contracting
  - Major Weapon Systems
  - Services Contracting
  - Contract Administration
  - Source Selection
  - Past Performance
  - Environmental Contracting
  - Cost and Price Analaysis
  - Other Transactions Authority
  - Alternative Dispute Resolution (ADR)
- Government Peformance Results Act (GPRA)
- Current Acquisition Issues and proposed acquisition policies

Examples of Typical Reading Assignments:

"Statement of Guiding Principles," FAR 1.102

“Ten Guiding Principles” 7/18/98

"Priorities and Business," USD (AT&L) Presentation, 17 Mar 2003

"The Unfinished Agenda" Steven Kelman, Government Executive, September 03, pp.72,74

“A Vision of the Government as a World-Class Buyer: Major Procurement Issues for the Coming Decade’” J.S. Gansler, January 2002

“Sourcing and Acquisition Challenges Facing the Department of Defense, “ GAO-03-574T, March 19, 2003

"Acquisition as Business", Corey M. Rinder, Contract Management, May 2001

"Government Contracting Pathologies", Robert E. Llyod, Acquisition Review Quarterly, Summer 2000

"The Federal Acquisition System Transitioning to the 21st Century," Procurement Roundtable 2000, December 1999

"Assessing Federal Procurement Reform: Has The Procurement Pendulum Stopped Swinging?", Joseph A. Pegnato, Journal of Public Management, Volume 3, Issue 2, 145-175, 2003

"Making Sacrifices for the Future", George Cahlink, Government Executive, August 2003

"Major Management Challenges and Program Risks", GAO-03-98, January 2003

"Best Practices – Setting Requirements Differently Could Reduce Weapon Systems' Total Ownership Costs", GAO-03-57, February 2003

"Tactical Aircraft – DOD Needs to Better Inform Congress about Implications of Continuing F/A-22 Cost Growth", GAO-03-280

"Defense Acquisitions – Assessments of Major Weapon Programs", GAO-03-476, May 2003

"Military Space Operations: Common Problems and Their Effects on Satellite and Related Acquisitions", GAO-03-825R, June 2, 2003

"Defense Acquisitions – Matching Resources with Requirements is Key to the Unmanned Combat Air Vehicle Program's Success", GAO=03-598, June 2003

"Contract Bundling – A Strategy for Increasing Federal Contracting Opportunities for Small Business", OFPP, October 2002

"A Meeting of Minds in Contract Development and Agreements", Robert D. Witte, Contract Management, July 2002

"Award-Term: The Newest Incentive", Vernon J. Edwards, Contract Management, February 2001

"Military Operations: Contractors Provide Vital Services to Deployed Forces but Are Not Adequately Addressed in DOD Plans", GAO-03-695, June 2003

"Commercial Keys to Performance-Based Acquisition", Bob Welch, Contract Management, September 2002

"Reverse Auctions Guidebook", NAVSUP Publication 729, July 2002

"Unexpressed Intent", Robert D. Witte, Contract Management, June 2001

"Contracting at the Core", Steven Kelman, July 30, 2001

"Thwarted Acquisition", Robert D. Witte, Contract Management, August 2003

"DOD Contracts Payments: Management Action Needed to Reduce Billions in Adjustments to Contract Payment Records", GAO-03-727

"International Offset Practices", Barry Marvel, Contract Management, May 2001

"Exchange Rate Mistakes", Robert D. Witte, Contract Management, July 2003

"Joint Strike Fighter Acquisition: Managing Competing Pressures Is Critical to Achieving Program Goals", GAO- 03-1012T, July 21, 2003

"Defense Trade: Contractors Engage in Varied International Alliances", GAO-00-213, September 2000

"Contractor Cost Sharing", USD (ATL), May 16, 2001

"The Cost or Pricing Dilemma", Darryl L. Walker, Contract Management, May 2003

"Exceptions and Waivers to the Truth In Negotiations Act", USD (ATL), February 11, 2003

"Equitable Price Adjustment", Robert D. Witte, Contract Management, March 2002

"Total Costs Claimed", Robert D. Witte, Contract Management, May 2003

"Contract Management: DOD Needs Better Guidance on Granting Waivers for Certified Cost or Pricing Data", GAO-02-502, April 2002

"Priced-Based Acquisition", USD(ATL), November 29, 2000

"Performance-Based Contracting", W. Gregor Macfarlan, Working Paper Series, September 2001

"Performance Metrics for Non-Mathematicians", Lisa Diernisse, Contract Management, June 2003

"Contract Management: Guidance Needed for Using Performance-Based Service Contracting", GAO-02-1049, September 2002

"Seeking Defense Efficiency", Col Ralph H. Graves, USA, Acquisition Review Quarterly, Winter 2001

"Performance Metrics for the Contract Management Discipline", Contract Management Institute, June 2001

"Contract Management: Commercial Use of Share in Savings Contracting", GAO-03-327, January 2003

"Adapting Best Commercial Practices to Defense", Frank Camm, Rand Corporation

"All Contractors are Not Alike", John E. Delane, Contract Management, September 2000

"Can a Government Contractor Take a Product to the Commercial Marketplace"? Contract Management, June 2003

"Commercial Item Acquisition: Considerations and Lessons Learned", OSD, June 26, 2000

"A Guide to Collection and Use of Past Performance Information (Version 2), USD(AR), May 2001

"Acquisition of Services", ASN (RDA), March 10, 2003

"Contract Management: Comments on Selected Provisions of the Services Acquisition Reform Act of 2003, H.R. 1837", GAO-03-716T, June 13, 2003

"Best Practices: Improved Knowledge of DOD Service Contracts Could Reveal Significant Savings", GAO-03-661, June 2003

"Contract Management: High-Level Attention Needed to Transform DOD Services Acquisition", GAO-03-935, September 2003

"Best Practices: Taking a Strategic Approach Could Improve DOD's Acquisition of Services", GAO-02-230, January 2002

"Guidebook for Performance-Based Services Acquisition", USD(ATL) December 2000

"Conflict and Ambiguity: Implementing Evolutionary Acquisition", Rickard K. Sylvester and Joseph A. Ferrara, Acquisition Review Quarterly, Winter 2003

"Understanding the Procurement Business Case", William S. Kaplan, Procurement Management, March-April 2000

"Duress and Unconscionability", Robert D. Witte, Contract Management, May 2001

"Military Aircraft: Observations on the Proposed Lease of Aerial Refueling Aircraft by the Air Force", GAO-03-923T, September 4, 2003

"Military Aircraft: Considerations in Reviewing the Air Force Proposal to Lease Refueling Aircraft", GAO-03-1048T, July 23, 2003

"Clarification Regarding Conditions on Use of "Other Transaction" Agreements for Prototype Projects", USD(ATL) August 27, 2002

"Other Transaction" Authority (OTA) for Prototype Projects", USD(ATL) 21 December 2000

"DOD Contracting in the Electronic Age", William Bishop, Contract Management, April 2003

"Toward a Total E-Acquisition Solution", Gene Zapel, Colin Mclaren, and Rajesh Sharma, Contract Management, April 2003

"Legal Aspects of Electronic Signatures", Charles P. Dupray, Contract Management, August 2003

"What is a Digital Contract?", Christoper Webster and Mark Nissen, Paper for the NCMA World Congress, July 2002

"Intellectual Property: Navigating Through Commercial Waters", USD(ATL) Version 1.1, October 15, 2001

"How to Build an E-Procurement Strategy", Larry R. Smeltzer & Joseph R. Carter, Supply Chain Management Review, March/April 2001 Volume 5, Number 2

"E-Government Strategy", OMB, February 27, 2002

"Understanding Risk Management in DOD", Mike Bolles, Acquisition Review Quarterly, Spring 2003

"The Management of Downsizing Risk", Charles Farrior, Contract Management, July 2003

"Knowledge Management in Acquisition and Program Management (Km in the AM and PM)", Neal Pollock, Acquisition Review Quarterly, Winter 2002

"The CIA's In-Q-Tel Model: Its Applicability", Wendy Molzahn, Acquisition Review Quarterly, Winter 2003

"And the Survey Says … the Effectiveness of DOD Outsourcing and Privatization Efforts", W.M. Anderson, J.J. McGuiness and J.S. Spicer, Acquisition Review Quarterly, Spring 2002

"Trade Secrets and Proprietary Data", Robert D. Witt, Contract Management, April 2001

"Competitive Sourcing: Implementation Will be Challenging for Federal Agencies", GAO-03-1022T, July 24, 2003

"The Federal Mentor-Protégé Program", Michael D. Shag, Contract Management, March 2003

"Outsourcing for Environmental Services", James I. Mangi, Contract Management, January 2003

"The Role of the Business Manager or Advisor in Federal Acquisition Management", W. Grgor Macfarlan & Dean A. Titcomb, Logistics Management Institute IR209R1/February 2003

"How the Acquisition Workforce Adds Value", M. Barzelay and F. Thompson, Acquisition Review Quarterly, Winter 2001

"Crisis in the Acquisition Workforce: Some Simple Solutions", James H. Gill, Acquisition Review Quarterly, Summer 2001

"Acquisition Workforce: Status of Agency Efforts to address Future Needs", GAO-03-55, December 2002

"Implementation of the Acquisition Workforce 2005 Task Force Recommendations", DOD, March 2002

"Acquisition and Contracting Policy MN4371 Policy Exercise" Guidelines

"Business Case Analysis Format"

"Definition of Business Case Analysis"

MN4374: Capstone Seminar in Acquisition Management
(Strategic Purchasing) (3-0)

Course Instructor(s):

- Lt Col Bryan Hudgens, USAF (AY06, AY07)

Prerequisites for the Course:

- None

Course Objectives:

- At the end of this course, you should be familiar with the major areas of interest to strategic purchasing and contracting professionals to include.

  r) Identify purchasing requirements, establish procurement plans, determine appropriate methods of procurement and perform cost benefit analysis.

  s) Understand the preparation of solicitations: development/review of specifications, location of potential sources of materials and services, solicitation of competitive bids, and management of recommended sources lists.

  t) Comprehend supplier analysis, evaluate competitive offerings, conduct supplier visits, and assess supplier-rating systems.

  u) Understand contract execution, implementation and administration, preparation of purchase orders, obtaining legal review as appropriate, resolving payment problems, and managing files.

  v) Prepare for negotiation: develop negotiation strategies and tactics, and conduct subsequent negotiations.

  w) Understand the role of information technology, develop a computerized purchasing system, maintain database specifications, and computerized inventory systems.

  x) Comprehend quality issues, resolve quality problems with suppliers, and develop measurements of supplier quality.

  y) Understand internal relationships, participate in cross-functional team management, and implement changes to purchasing procedures.

  z) Understand external relationships, manage effective relationships with suppliers, review product availability, respond to supplier inquires, and develop and implement small business programs.

  aa) Conduct sourcing analysis, make or buy decisions, and develop leveraging and financing strategies.

  bb) Comprehend supply and inventory management: organize, control and minimize the storage of materials, reconcile inventory discrepancies, and handle obsolete materials and scrap.

  cc) Understand value-enhancing methods, standardization programs, process improvement, cost reduction, cost avoidance and cost containment plans.

  m) Comprehend forecasting and supply plan strategies: plan sourcing based on projections, develop and maintain market awareness, provide data on current and future market conditions to management and other departments.

  n) Develop strategic plans, goals, and objectives, analyze and resolve purchasing issues, prepare and administer department budget.

o) Supervise and lead purchasing staff: hire and promote, evaluate performance of human resources, resolve performance problems, implement programs to prevent and respond to discrimination and harassment.

Course Description:

- This course is the capstone seminar for the strategic purchasing program. My primary purpose for the course is to provide you an opportunity to synthesize the course material from the strategic purchasing program. A second purpose is to investigate the specific topics that are projected to be of high interest to DoD acquisition in the future. An underlying focus of the course is to prepare the student for the Certified Purchasing Manager examination. This professional certification administered by the Institute of Supply Management (ISM) identifies the holder as one of a select number of purchasing professionals. The course will be taught through a combination of informal lecture, guided discussion, and (primarily) student expert presentations.

Major Topics Covered:
(These topics correspond directly to the course objectives. The course objectives correspond to the modules of the Certified Purchasing Manager exam, and form a useful organizing construct for a "capstone" review of the entire curriculum.)

- Course Introduction
- Identifying Requirements
- Preparation of Solicitations
- Supplier Analysis
- Contract Implementation, Etc
- Negotiation
- Information Technology
- Quality Issues
- Internal Relationships
- External Relationships
- Sourcing Analysis
- Supply & Inventory Mgmt
- Value Enhancing Methods
- Forecasting & Strategies
- Mgmt & Organization Pt 1
- Mgmt & Organization Pt 2
- Human Resources Mgmt
- Human Resources Mgmt

Typical textbooks and readings:
CPM Study Guide, 7th Ed. Available through the ISM website (www.ism.ws).

The Purchasing Handbook, 6th Ed, by Joseph Cavinato and Ralph Kauffman. (Beginning in approximately 2008 or 2009, this text will change to: The Supply Management Handbook, 7th Ed, by Joseph Cavinato.)

Journal articles as assigned by each student seminar leader.

Additional references (OPTIONAL): Essentially, anything you feel is helpful is fair game. I have many references available for you to borrow. The single constraint is that the CPM guide information—as a practical matter—should be the final arbiter of the "right" information.

MN4602: Test and Evaluation Management (2-2)

Course Instructors: Brad Naegle
Keith Snider
Wally Owen

Prerequisites for the Course: MN3331 or, MN3302 or, MN3221 & MN3222 series or, DAU PM Level 2 Certification

Course Objectives:

Students will possess abilities to:

- Describe T&E's role in the acquisition process
- Develop T&E inputs for a TEMP or other test plans.
- Select a T&E strategy for alternative acquisitions, such as Non-Developmental Items (NDI), Commercial Items & non-traditional acquisitions such as Advanced Concept Technology Demonstrations (ACTDs).
- Distinguish between suitability and effectiveness to plan for the testing issues in an acquisition program
- Analyze issues associated with collecting and managing T&E data
- Identify the strengths and weaknesses of modeling and simulation (M&S) in defense T&E, and identify appropriate uses of M&S to support T&E
- Identify appropriate tools, processes and procedures to conduct software T&E
- Incorporate lethality and survivability considerations in the T&E process for a weapons system

Course Description:

Designed to cover Developmental, Operational and Joint Test and Evaluation, including planning concepts and procedures frequently used in test and evaluation programs. Taught from the perspective of the Program Manager, Test Project Officer and Test Engineer. Notional and actual military cases are used for examples and exercises. Topics include the role of Test and Evaluation in Systems Engineering and Acquisition Management, DT and OT test planning, introduction to test design, conduct of tests, live fire testing, modeling and simulation, human systems integration (HSI), reporting of test results, range and resource issues, and use of statistical methods and tools. Student teams will produce and brief a detailed test plan.

Major Topics Covered:

Topics include the role of T&E in the Systems Engineering Process, T&E policy structure and oversight mechanism, Joint Capabilities Integration & Development System (JCIDS) in the T&E process, modeling and simulation, conduct of test, use of descriptive and inferential statistics, alternative acquisition program T&E, human systems integration and live fire T&E.

Typical textbooks and readings:

- TEST AND EVALUATION MANAGEMENT GUIDE, Fifth Edition, Jan 2005
- Guidelines for Successful Software Acquisition Management (GSAM), Third Edition, 2002
- GAO reports and periodical articles on T&E management issues, notional and actual case studies

Course Abstracts

Additional Components:

Financial Management

GB3510: Defense Financial Management Practice (3-0)

Course Instructors:	CDR Phil Candreva, (USN ret.), Senior Lecturer John Mutty, Senior Lecturer
Prerequisites for the Course:	None, although in the course sequence, it is presumed that students will have already taken GB4053

Course Objectives:

At the end of the course, the student should:

- Understand the legal and administrative foundations for defense financial management and how they enable or constrain other aspects of defense management.
- Understand the primary processes in defense financial management, including how resource allocation decisions are made, how resources are requested and provided, how they flow within DoD, and the constraints on using them once provided.
- Know how to solve common problems encountered as a participant in DoD financial management processes.
- Understand the parameters and constraints that determine how funds can be obligated and moved within DoD. Understand the origins and purposes of those limitations.
- Understand DoD accounting principles in conjunction with principles of corporate accounting (financial and managerial), and identify and understand DoD accounting goals and challenges.
- Discriminate between proper and improper use of appropriated funds, reimbursable funds and revolving funds. Understand the management issues associated with these three funding mechanisms.
- Understand and apply the critical issues of stewardship related to DoD finances, including managing significant cost drivers, the relationship between contracting and financial management, and administering internal control programs.
- Comprehend contemporary issues in DoD financial management to increase situational awareness and to hone relevant analytical skills.

Course Description:

This course is designed for MBA students and presumes the student has a foundation including the PPBE system and Congressional Authorization and Appropriation processes (provided in GB4053). This course concentrates on financial management practices within DoD as distinct from policy and budgeting theory. The course covers the actors and activities and mechanics of building and defending budgets. It covers funding mechanisms for government programs and activities, addressing the proper use and management of appropriated, reimbursable, and revolving funds. Basic

principles of federal fiscal law are explored. It then addresses financial management and stewardship topics including budgetary accounting, management of cost drivers, the relationship between comptrollership and contracting, and internal controls. Contemporary financial management issues are discussed. Exercises and case studies are used to develop the students' ability to apply financial management concepts to real life situations.

Major Topics Covered:

- Appropriated funds and basic fiscal law
- Intragovernmental transactions
- Revolving fund management
- Budget Building and Defense
- Budget Execution
- Governmental (obligation-based) accounting and how it differs from corporate (accrual-based) accounting
- Performance measurement
- The relationship between contracting and financial management

Typical textbooks and readings:

Practical Financial Management: A Handbook of Practical Financial Management Topics for the DoD Financial Manager, 6th Ed., 1st Rev. (January 2005). This is a locally-produced text.

Cases include:

"National Service Trust: A Case Study," NPS-GSBPP-05-010IR, Naval Postgraduate School, Monterey, CA, July 2005.

"Case Studies in Basic Fiscal Law (A) and (B)," NPS-GSBPP-05-011IR & -012IR, Naval Postgraduate School, Monterey, CA, July 2005.

Other readings are assigned as appropriate from public sector academic and practitioner journals such as *Public Administration Review, Public Budgeting & Finance, Armed Forces & Society,* and *Armed Forces Comptroller*.

GB4510: Strategic Resource Management (4-0)

Course Instructor: J. Shank, Professor (AY04, AY05, AY06)
J. San Miguel, Professor (AY03, AY07)

Prerequisites for the Course: GB3051
GB4052
GB4014

Course Objectives:

For survival and growth in the global marketplace an organization must effectively allocate its strategic resources, which include human, physical, and financial assets, across operations and processes. Strategy must be supported by cost management systems that assist managers in decision-making and performance assessment.

The objective of this course is to apply strategic thinking to cost management concepts and practices. Case studies of real companies and readings will be used to illustrate the importance of financial analysis, business analysis, and strategic analysis to basic business decisions concerning allocation of resources. These management tools are used for assessing costs, profits, strategies, and performance measurement. Topics to be covered include activity-based management, value reengineering, value-chain analysis, target costing, economic value added, and cost of total quality management.

Course Description:

GB4510 is a required Subspecialty course in the Financial Management and the Defense Systems Analysis curricula. The course makes use of major strategic management concepts such as Porter's five forces, market positioning strategies, strategic resource management, and strategic core competencies to examine cost management issues. This is a case study course that demands both quantitative and qualitative analyses. Each case discussion concludes with the students' recommendations to management or actions that the managers should take. Analysis of the case numbers is prerequisite. To reinforce individual preparation of the assigned questions, small study teams of three or four students are strongly encouraged. There are two exams given in the course. The exams and class participation are equally weighted in assigning a course grade.

Major Topics Covered:

- Strategic, Business, and Financial Analysis of a New Market Segment Opportunity
- Activity-Based Management of Strategic Resources and Capacity Allocation
- Activity-Based Management, Customer Profitability, and Value Engineering
- Strategic and Competitive Analysis for a Bundled Line of Business

- Profit Analysis of Marketing Activities and Performance Measurement
- Value Chain Analysis for Assessing Competitive Advantage
- Value Chain Analysis, Target Costing, and Reengineering Business Processes
- Pricing Strategy, Cost Analysis, and Total Quality Management
- Strategic Resource Management and the Balanced Scorecard
- Strategic Cost Management and the Cost Accounting Standards

Typical Textbooks and Readings:

Hammer, E. (1990) "Reengineering Work: Don't Automate, Obliterate," *Harvard Business Review*, July-August 1990.

Kaplan, R. & Norton, D. (1992) "The Balanced Scorecard—Measures That Drive Performance," *Harvard Business Review*, January-February 1992.

Prahalad , C.K. & Hamel, G. (1990) "The Core Competence of the Corporation," *Harvard Business Review*, May-June 1990.

Porter, M. (1979) "How Competitive Forces Shape Strategy," *Harvard Business Review*, March-April 1979.

San Miguel, J.G. (1996) "Value Chain Analysis for Assessing Competitive Advantage," Management Accounting Guideline #41, The Society of Management Accountants of Canada.

Shank, J.K. (1996) *Cases in Cost Management: A Strategic Emphasis*, Southwestern.

Shank, J.K. & Govindarajan, V. (1993) *Strategic Cost Management*, Free Press.

GB4520: Internal Control and Auditing (2-0)

Course Instructor: J.Webb, Assistant Professor (AY05)

Prerequisite for the Course: GB3051

Course Objectives:

With regard to internal control, the objectives are to understand the purposes and the components of internal control in an organization and to be able to diagnose the controls present or absent in a specific situation. That is, the students should be able (1) to identify controls in place and their objectives, (2) to identify weaknesses in controls or important controls that are missing and the errors or fraud that may occur as a consequence, and (3) recommend improvements in controls. With regard to auditing, the objectives are to understand the purposes of financial, operational, and compliance audits and to be familiar with the types of evidence used and the tests employed to obtain that evidence.

Course Description:

GB4520 is a required Subspecialty course in the Financial Management and the Defense Systems Analysis curricula. The course begins with an overview of internal control and of the audit function in the economy. It then examines generally accepted auditing standards and Government Auditing Standards and auditors' reports. There is then a detailed analysis of the objectives of financial and operational audits, the roles of risk and materiality in the audit process, and audit evidence and tests. The course concludes with several case studies designed to develop a facility for diagnosing internal controls in specific applications.

Major Topics Covered:

- Internal control:
  - Objectives for both accounting and operations
  - Components, with emphasis on the control environment and control activities
- The audit process:
  - Audit objectives, including management assertions and misstatements
  - Audit risk and its components
  - Materiality in audit planning and reporting
  - Audit sampling
  - Types of audit evidence
  - Audit tests
- Financial audits:
  - Auditing standards

    - Auditors' reports and types of opinions on financial statements
- Operational audits:
    - Phases of the audit process
    - Performance measures and standards
    - Audit reports

Typical Textbooks:

Arens and Loebbecke, Auditing, 10th edition, Prentice-Hall.
Knapp, Cases in Auditing, Thompson, 2006.

GB4530: Management Control Systems (3-0)

Course Instructors: Mary Malina, Assistant Professor (AY04, AY05, AY06)
Danny Matthews, Senior Lecturer (AY06), K. J. Euske (AY07)

Prerequisites for the Course: GB 3051

Course Objectives:

The goal of this course is to aid students in developing an analytic framework for the design and evaluation of management control systems. Specifically, the objectives of this course are to help you develop your abilities to:

- Operationally define and describe management control systems
- Identify problems or concerns with management control systems
- Identify appropriate concepts to analyze problems or concerns
- Understand how to apply the concepts so that practical workable solutions to the problems and concerns can be found.

Course Description:

This course covers theory, concepts, and practices underlying management control. The course focuses on the interaction of behavioral and structural e;ements in the design, implementation, and operation of management control systems in large organizations in all three sectors of the economy..

Major Topics Covered:

- The Control Function of Management
- Management Control Alternatives and Their Effects
    - Results Control
    - Action, Personnel, and Cultural Controls
    - Designing and Evaluating Management Control Systems
- Financial Results Control Systems
    - Planning and Budgeting Systems
    - Transfer Pricing and Responsibility Centers
- Performance Issues and Their Effects
    - Performance Dependent Rewards
    - Accounting Performance Measures and Their Effects

- Ethical Issues and Management Control
- Environmental Factors Influencing Management Control Systems

Typical Textbooks and Readings

Simons, Robert. *Performance Measurement & Control Systems for Implementing Strategy: Text & Cases*, Prentice-Hall, 2000.

Merchant, K. A. and W. A. Van der Stede. *Management Control Systems: Performance Measurement, Evaluation and Incentives,* Prentice-Hall, 2003.

GB4540: Conrad Seminar in Financial Management

Course Instructors:

- VADM Thomas Hughes, USN (ret.), Conrad Chair for Financial Management (AY06, AY07)
- CAPT John Mutty, USN (ret.), Senior Lecturer, AY06, AY07)
- Lt Col Fred Bellamy, USAF, Lecturer, (AY07)
- Joe San Miguel, Professor, (AY07)

Course Description:

- **Curricula served:** Financial Management (837)

- **Course Description**: This course provides DoD military officers with an awareness of real life implementation of the education they have received (MBS (FM) curriculum). There are lectures on the Budgeting process and pending changes thereto, an exercise in taking a hypothetical reduction, and five VTCs originating in the Pentagon by FMB, Director of Navy Resource Requirements (N-8), Resource Director for the JCS (J-8), ASN (FM&C) Council (FMC), Director of Navy Budget (N-82) and Graduates presently in their "Pay Back" tour. There is also an Air Force Cohort, which covers about 40% of their course and addressing Air Force "Unique" processes and paralleling the framework of the Navy/Marine Cohort. Sixty percent of the Air Force course is jointly conducted with the Generic part of the Navy/Marine allowing for more Joint education. International Students are welcomed to participate as an elective.

- **Prerequisites:** GB3510. defense Financial Management Practice.

- **Security Classification**: N/A

- **Pass/Fail status**: Currently P/F, but required for MBA (FM) Degree.

Course Syllabus: Copy Appended below.

Justification- Nature of Request: This course is part of the Financial Management curriculum and is required to satisfy ESRs and meeting the requirements for award of MBA (FM) Degree. This is simply a **request to update the course description**. A significant portion of this course is devoted to: (1) VTC seminars with top-level financial management personnel in the DoD; and (2) a practical budget process simulation exercise. The nature of both of these activities is better suited to a pass/fail assessment.

Duplication: Modification to existing course. No duplication.

Resources: Modification to existing course. Results in no effect on resources.

Schedule: Continuing, every Winter and Summer quarter.

Typical textbooks and readings:

- Fiscal Law Cases and Materials (NAV50 P-3685)
- Fiscal Year Appropriations Act (including General Provisions)
  Power Point Slides before each VTC

Conrad Seminar in Financial Management GB4540 (837)

Course Objectives:

- Provide an opportunity to appreciate reality in implementing the Graduate Education being received.
- Reinforce students knowledge of Budget Formulation; Process (Past, Present, Future Trends); and Execution.
- Help transition from academic environment to Financial Management operational environment.
- Lead military Financial Management Education into more "JOINTNESS" wherever feasible.

Course Outline:

- Intro/Fy06 Appropriations Act (2 hours)
- Budgeting (2 hours)
- Four VTCs (8 hours) plus two 2 hour "In person" lectures
- Problem/ Data/ Homeland Security (2 hours)
- Exercise (hours)

Course Schedule:

1000-1150 PDT 07	**NPS Location	Topic	Delivery By
Thurs 05 Jul (All)	IN-260	INTRO/FY07 APPN Act	Hughes (Conrad Chair)
Thurs 12 Jul / Fri 13 Jul	IN-260	Budgeting	Hughes (Conrad Chair) / Lt. Col. Bellamy USAF
Thurs 19 Jul */ Fri 20 Jul *	IN-260	PPBE Changing Trends	VADM Jon Greenert (N-8) Maj. Gen. Tim Jones, USAF
Thurs 26 Jul (All) *	IN-260	PPBE Future Trends from Joint Staff/OSD Vantage Point	COL Camille Nichols, USA (J-8)
Thurs 02 Aug (All) *	IN-260	Fiscal Law	Ms Andria Brotherton (FMC)
Thurs 09 Aug / Thurs 09 Aug	IN-368/IN 260	Budget FY 07/Future Trends	Maj. Gen. Faykes, USAF (FMB) In person / RADM Bozin (FMB) In person
Thurs 16 Aug (All)*	IN-260	"Pay Back" tour panel	(CDR Koczur; LCDR Patton; LT McGee (T); CAPT. Harris, USAF)
Tues 21 Aug (All) (In person) 1500-1630	King Hall	Experiences of a Senior Government Resources Executive (Dean GSBPP Sponsor)	Mr. Charles Nemfakos Past FMBB (Navy)
Thurs 23 Aug (All)	IN-260	Problem/Data Files/Homeland Security	Hughes/Mutty/ Bellamy
Thurs 30 Aug (All)	(As scheduled by Team Leaders)	Team Meetings as directed by Team Leaders (2) Hours in class and (2) hours of homework prep	Teams
Thurs 06 Sept / Fri 07 Sept	IN-260	Teams 5 & 6 (cohorts), Out Brief Thurs 06 Sept; Teams 1 & 2, Out Brief Fri 07 Sept (All 1 hr ea)	Teams Hughes/Mutty/Bellamy
Thurs 13 Sept / Fri 14 Sept	IN-260	Teams 3 & 4, Out Brief Thurs 13 Sept; Team 7 (cohorts), Out Brief Fri 14 Sept (All 1 hr ea)	Teams Hughes/Mutty/Bellamy

*VTC-Originates in the Pentagon 1000-1150 PDT; 1300-1450 EDT **IN = Ingersoll Hall (T) Tentative USAF Cohort Classes in Red

GB4550: Advanced Financial Reporting (4-0)

Course Instructors: C. Troy, Assistant Professor (AY06)
J. San Miguel, Professor (AY06, AY05, AY04)

Prerequisites for the course: GB3050
GB3051

Course Objective:

The overall course objectives are to broaden our knowledge of financial accounting and reporting by organizations and develop skills for understanding and analyzing the information contained in financial reports.

Course Description:

GB4550 is a required Subspecialty course in the Financial Management and the Defense Systems Analysis curricula. The course is taught as a seminar, with each class session devoted to discussion and analysis of relevant case studies. The central purpose of the case-course is to provide students with advanced instruction in financial reporting concepts and practices such that they may informed users of financial information. Emphasis is placed on (a) the conceptual models underlying financial reports, (b) the principles underlying the measurement and communication of accounting information and the environmental factors that influence the application of those principles in practice, and (c) the analysis of the information contained in financial reports. Reporting and analysis issues related to financial position and operating performance are addressed. The course takes the perspective of managers and users of financial information.

Major Topics Covered:

- The Financial Reporting Model
  - Overview of Reporting Models
  - The Accounting Cycle and Recording
  - The Content and Structure of Financial Statements
  - Accounting Elements / Interrelationship
  - Financial Reporting Theory and Policy
  - The Conceptual Framework
  - Economic Consequences of Accounting
- Financial Reporting Questions
  - Recognition of Revenue & Assets
  - Capitalization of Costs
  - Amortization of Costs
  - Valuation of Assets
  - Recognition of Liabilities
  - Valuation of Liabilities (leases)

    - Measurement of Uncertain Obligations
    - Owners Equity
- Accounting and Financial Analysis
    - Quality of Earnings Analysis
    - Cash Flow Analysis
    - Financial Ratio Analysis:
    - Profitability Analysis
    - Risk Analysis
    - Valuation Analysis
- Alternative Financial Reporting Models
    - Not for Profit
    - State & Local Government
    - International
    - Federal Government
        - Agency Level
        - Defense/Navy
        - Appropriated Funds Activity
        - Working Capital Funds
        - Field Level
        - Ship Level

Typical Text:

Stickney and Brown, Financial Reporting and Statement Analysis, Dryden press, 8th ed.

Case studies written by the instructors and related readings and articles from the business press (e.g., Wall Street Journal, Business Week, Forbes, Fortune, etc. are assigned for each topic.)

GB4560: Defense Financial Management (3-0)

Course Instructors: John E. Mutty, Senior Lecturer (AY06, AY07)

Prerequisites for the Course: None

Course Objectives:

As the Department of Defense continues to consolidate activities and looks for other efficiencies, it has become increasingly important that the financial management community understands how all the parts fit together as well as the contribution of each sector. Too often, we have a tendency to focus only on our daily responsibilities and are oftentimes unaware of where we fit in the "big picture". To address this shortcoming, this course is designed to provide students with the knowledge necessary to:

- Identify and understand the primary processes in DOD financial management, including the cycle, timing, negotiation and resolution of financial issues.
- Identify and understand the primary participants in DOD financial management including their roles, biases, influences, and strategies.
- Understand the parameters and constraints that determine how funds can be obligated and moved within DOD. Understand the origins and purposes of those limitations.
- Understand DOD accounting principles in conjunction with principles of corporate accounting (financial and managerial), and identify and understand DOD accounting goals and challenges.
- Understand Defense Manpower Management both military and civilian, as used in financial management, the processes for estimating manpower requirements for budgetary purposes and reporting manpower numbers to the Office of Management and Budget (OMB).
- Understand internal control standards, techniques, and documentation required in the DOD Management Control Program.
- Understand the laws regarding availability of appropriations as to purpose, time, and amount, applicable Comptroller General decisions, special purpose laws (Credit Reform, Foreign Assistance, Arms Export Control Acts), and penalties and sanctions under law
- Understand the purpose and authority for audits, DOD standards and policy, the role and authority of Audit Policy boards and Comptroller General auditing standards.

Course Description:

This course focuses on the competencies required of a Defense Financial Manager. It examines the diverse concepts, theories, and practices addressed in numerous specialty courses and ties them together in the framework of Defense Financial Management. The areas of coverage include: the Government Resource Management Environment, the Defense Resource Management Environment, Personnel Management,

Manpower Management, Management and Internal Controls, Fiscal Law, the Planning, Programming, Budgeting, and Execution System (PPBE), Cost and Economic Analysis, Business Management Process Improvement, Accounting, Finance, and Auditing.

Major Topics Covered:

Module 1

- The Government Resources Management Environment
- The Defense Resource Management Environment
    - Defense Manpower Management
        - Personnel Management
        - Manpower Management
- Management and Internal Controls

Module 2

- The Planning, Programming, Budgeting, and Execution (PPBE) System
- Cost and Economic Analysis
- Business Management Process Improvement

Module 3

- Accounting
- Finance
- Auditing
- Fiscal Law

Typical textbooks and readings:

Enhanced Defense Financial Management Training Course; American Society of Military Comptrollers, October 2006

GB4570 Advanced Finance (3-0)

Course Instructor(s):

Nayantara Hensel, Assistant Professor (AY 07 and AY08)

Prerequisites for the Course:

GB 4052

Course Objectives:

This course seeks to provide MBA students with additional tools in finance to build on their preexisting foundation of corporate finance. The course is a mixture of lectures, cases, interactive discussion and problem-solving. By the end of the course, students should be able to understand the different players in the financial markets and the trading process, the portfolio management process and the portfolio measurement, how to value derivatives (futures and options) and how to use them to hedge against risk, international finance (exchange rates, currency hedging, financial crises), as well as the impact of different corporate governance structures around the world on aligning the incentives of managers and shareholders.

Course Description:

The course is divided into four modules: Module I begins with an introduction to financial players, the trading process, and the organization of financial exchanges, then examines the venture capital industry and its application to DoD, and, finally, discusses market efficiency and technical analysis. Module II focuses on portfolio management, diversification across countries and asset classes, applications to DoD, and evaluating and measuring portfolio performance. Module III examines the pricing of options and futures (with an application to stock index futures) and how they can be used to manage risk. Finally, Module IV focuses on international finance—basics of exchange rates (fixed and floating exchange rates, currency pegs, the gold standard), hedging currency risk with options and futures, financial crises, European monetary union, and the impact of corporate governance on economic growth.

Major Topics Covered:

The course covers:

- The basic layout of financial exchanges in the US and the trading process, as well as recent developments in financial exchange mergers
- The venture capital process within the context of DoD,
- Review of market efficiency and the various evidence supporting the different forms
- Technical analysis,
- Review of portfolio theory and applications of diversification across foreign markets and across different asset classes

- Portfolio management strategies and evaluation and measurement of portfolio performance (Treynor measures, Sharpe measures, Jensen's alpha)
- Pricing futures contracts and using them to hedge risk
- Pricing options, various options strategies to hedge risk
- Determinants of exchange rates (purchasing power parity, covered and uncovered interest parity, impact of interest rates, economic growth, government spending, inflation, etc.)
- Various exchange rate regimes' (gold standard, currency pegs, currency boards, etc.) history and costs /benefits
- Using options and futures to hedge currency risk,
- Financial crises,
- (m)European monetary union
- Impact of various corporate governance mechanisms across countries on economic growth.

Typical textbooks and readings:
Main textbook is Investment Analysis and Portfolio Management (8th edition), by Frank K. Reilly and Keith C. Brown (Thomson Southwestern, 2006).

Other readings include chapters from Foreign Exchange, by Tim Weithers (Hoboken, NJ: John Wiley, 2006), International Investments, by Bruno Solnik and Dennis McLeavey (Boston: Pearson / Addison Wesley, 2003), Manias, Panics, and Crashes. 4th edition, by Charles P. Kindleberger, (John Wiley & Sons, 2000), An Introduction to Global Financial Markets, 4th edition. by Stephen Valdez and Julian Wood (New York: Palgrave MacMillan, 2003), and Global Political Economy, by Robert O-Brien and Marc Williams (New York: Palgrave Macmillan, 2004).

Examples of journal articles which are required reading for the class include: R. La Porta, F. Lopez-de-Silanes, and A. Schleifer. "Corporate Ownership Around the World," Journal of Finance, 54 (April, 1999), and R. La Porta, F. Lopez-de-Silanes, A. Schleifer, and R. Vishny, "Legal Determinants of External Finance," Journal of Finance 52 (July, 1997).

MN4157: Seminar in Management Accounting (3-0)

Course Instructor:

- Don Summers, Lecturer (AY06, AY07)

Prerequisites for the Course:

- GB3050: Financial Reporting and Analysis
- GB3051: Cost Management

Course Objectives:

Title 10, United States Code (USC), section 1104 established professional certification and credential standards for professional accounting position within the DoD. Therefore, the primary objective of this course is to provide the students with an opportunity become professionally certified by reviewing and learning new management accounting concepts to successfully pass the Certified Management Accountant (CMA) exam in order to obtain the CMA professional certification. The Institute of Management Accountants (IMA) certification programs objectives are:

- To establish management accounting and financial management as recognized professions by identifying the role of the professional, the underlying body of knowledge, and a course of study by which such knowledge is acquired
- To encourage higher educational standards in the management accounting and financial management fields
- To establish an objective measure of an individual's knowledge and competence in the fields of management accounting and financial management; and
- To encourage continued professional development.

The benefits, according to the IMA, of the certification programs are to:

- Communicate your broad business competency and strategic financial mastery.
- Obtain contemporary professional knowledge and develop skills and abilities that are valued by successful businesses.
- Convey your commitment to an exemplary standard of excellence that is grounded on a strong ethical foundation and lifelong learning.
- Enhance your career development and professional promotion opportunities.

Course Description:

- MN4157 complements the financial management program by covering significant topics not otherwise included in the program to prepare students to obtain the Certified Management Accountant (CMA) designation. This course covers topics in the theory and application of management accounting and reviews in more depth topics covered in the introductory cost management course. Emerging

issues include practical problems in activity-based costing, accounting for manufacturing costs, cost and profitability analysis, short-run and long-run decision-making, constrained resource allocation, and performance measurement, including non-financial as well as financial indicators. Topics may vary.

Major Topics Covered:

Part 1
Business Analysis

A. Business Economics
Factors affecting the individual firm including demand, supply, and elasticity; consumption of goods; production factors and their cost; market structures and pricing; issues in macroeconomics such as inflation, employment, and economic growth; GDP; the nature of business cycles; fiscal and monetary policies.

B. Global Business
Comparative advantages of trade; free trade and protectionism; barriers to international trade; nature and theory of foreign exchange; international capital investments; financing international trade; legal and ethical issues.

C. Internal Controls
Internal control environment, procedures, and standards; responsibility and authority for internal auditing; types of audits; assessing the adequacy of the accounting information system.

D. Quantitative Methods
Quantitative methods and techniques including regression analysis, learning curves, linear programming, sensitivity analysis, network analysis, probability concepts, expected values, decision trees, simulation, and other appropriate aids to decision making.

E. Financial Statement Analysis
Development of accounting standards; financial statement assurance; interpretation and analysis of financial statements including ratio analysis and comparative analysis; limitations of ratio analysis; market value vs. book value; international issues.

Part 2
Management Accounting and Reporting

A. Budget Preparation
(Planning process, purposes of planning and budgeting; budgeting concepts; annual profit plans and supporting schedules; types of budgets, including activity-based budgeting, kaizen budgeting, project budgeting, and flexible budgeting.

B. Cost Management

Cost concepts, flows and terminology; alternative cost objectives; cost measurement concepts; cost accumulation systems including job order costing, process costing, and activity-based costing; overhead cost allocation.

C. Information Management
Nature of management and accounting information systems; systems development and design; techniques and terminology applicable to the development of computer-based accounting information systems; networks and client/server systems; electronic commerce; ERP systems.

D. Performance Measurement
Factors to be analyzed for control and performance evaluation including revenues, costs, profits, and investment in assets; variance analysis based on flexible budgets and standard costs; responsibility accounting for revenue, cost, contribution and profit centers; balanced scorecard; quality considerations.

E. External Financial Reporting
Principal financial statements and their purposes; limitations of financial statement information; asset and liability recognition and measurement; equity recognition and measurement; revenue, expenses, extraordinary items, and earnings per share; the SEC and its reporting requirements; the annual report.

Part 3
Strategic Management

A. Strategic Planning
Strategic and tactical planning; manufacturing paradigms such as JIT, MRP, and theory of constraints; value chain analysis; benchmarking; ABM and continuous improvement.

B. Strategic Marketing
Strategic role of marketing; market segmentation; managing products and services; pricing strategies; promotional mix and distribution strategy.

C. Corporate Finance
Types of risk; measures of risk; portfolio management; options and futures; capital instruments for long-term financing; dividend policy; factors influencing the optimum capital structure; cost of capital; and managing and financing working capital.

D. Decision Analysis
Logical steps to reach a decision; relevant data concepts; cost-volume-profit analysis; marginal analysis; cost-based pricing; income tax implications for operational decision analysis.

E. Investment Decision Analysis
Cash flow estimates; time value of money; discounted cash flow concepts; net present value; internal rate of return; non-discounting analysis techniques; income tax

implications for investment decision analysis; ranking investment projects; risk analysis; real options.

Part 4
Business Applications

All topics from parts 1, 2, and 3, plus organization management, organization communication, behavioral issues, and ethical considerations.

Typical Textbooks and Readings:

- Text: Gleim and Flesher, CMA Review, Parts 1 – 4, 12th edition, Gleim Publications.

Software: Gleim's CMA Test Prep

Course Abstracts

Additional Components:

Operations & Logistics

GB3420: Supply Chain Management

Course Instructors: Associate Professor Geraldo Ferrer

Prerequisites for the Course: GB 3042 Operations Management

Course Objectives:

The objectives of this course include:

- Developing a basic competence with the tools and techniques used in Supply Chain Management.
- Understanding the tradeoffs involved in designing and implementing different types of supply chain structures.
- Understanding the strategic supply chain management issues and their relationships with the other functional areas of the organization.

Course Description:

This course is designed to provide an introduction to supply chain management (SCM). A supply chain is a network of organizations that supply and transform materials, and distribute final products to customers. Supply chain management is a broadly defined term for the analysis and improvement of flows of material, information, and money through this network of suppliers, manufacturers, distributors, and customers. The objective of SCM is to deliver the right product to the right customer at the right time. SCM emphasizes inventory-service level tradeoffs across the chain of players that together provide the product to a customer.

There is probably no universal agreement on the distinction between logistics and supply chain management. However, we might say that logistics has traditionally focused on materials issues within and downstream from the factory while SCM looks at the entire network of players, both up and down stream, and perhaps has more of an emphasis on information flows through the network. Logistics has traditionally been considered a more tactical topic and less likely to capture the attention of upper management while SCM has risen to prominence in last few years, attracting high level attention. Many companies and/or divisions have added Supply Chain Analyst positions that frequently report to high level managers.

Ultimately, logistics and SCM activities are concerned with coordinating demand and supply. Common elements in that coordination are the management of materials (inventories), the location of materials (warehouses), and the movement of materials (transportation). As part of the coordination an analyst must consider product and process designs as well as information flows between various players in the networks. These elements will form the basis of this course. We will review some elements of basic theory and consider applications of the theory in cases that span operational and strategic concerns.

Major Topics Covered:

- Supply Chain Information – The Bullwhip Effect
- Network Design
- Facility Location
- Supply Chain Management in Practice
- Outsourcing
- Risk Pooling
- Postponement
- RFID and SCM
- Reverse Logistics
- Opportunities and Advances in SCM
- E-Business and the Supply Chain

Typical Textbooks and Readings:

Simchi-Levi & Kaminski. Designing and Managing the Supply Chain

GB4410: Logistics Engineering (4-0)

Course Instructor: Professor Keebom Kang

Prerequisites for the course: GB3420 (Operations Management)

Course objectives:

The objective of this course is to provide the student with the *ability to be credible, proactive and influential in the logistics **process***. Logistics is concerned with the entire life-cycle of a system: from the requirements determination through the acquisition process and from the fielding process to sustainment and retirement processes. Logistics Engineering constitutes all system support-related activities that concern the overall system design and development. Logistics Engineering covers (1) the design of mission equipment and related system for supportability, and (2) the design of the overall support capability for the system.

Course description:

The course will cover analytical tools, computer models, and the state-of-the art software packages. The student will obtain an understanding of elements of logistics and the knowledge pertaining to the design for optimum supportability so that the student should be able to define and discuss the maintenance concept, hardware and software design, production and operational support, life-cycle analysis, total ownership cost, and final decision-making. The course will also cover Lean Six Sigma methodologies applicable to logistics process improvements.

Major topics covered:

- Reliability, Availability and Maintainability (RAM)
- Spare parts management
- Stock consolidation
- Integrated Logistics Support (ILS)
- Performance Based Logistics (PBL)
- Sea-based Logistics/ Velocity Management/ Agile Logistics
- Test and Evaluation
- Life Cycle Cost computation for major weapon systems

References:

Blanchard, B. S. (1998), *Logistics Engineering and Management*, 5th Edition, Prentice-Hall. :

Lecture notes and other handouts (GAO reports, DoD documents)

GB4420: Technology and Information Systems for Logistics and Operations (3-0)

Course Instructors: Dr. Tom Housel, Professor
Dr. Johnathan Mun, Professor

Prerequisites for the Course: None

Course Objectives:

- Survey current logistics IT options (e.g., RFID technology, intelligent agent logistics planning software, enterprise resource planning systems)
- Be able to use ROI and real options value/risks estimates for logistics IT portfolio management
- Understand and apply portfolio, integrated risk management frameworks in the development of logistical and operational objectives and strategies.
- Understand how to use ROI and real options valuation/riskiness models to make the business case for IT investments to support logistics and operations processes under uncertainty.

Course Description:

The course will examine the most promising currently used information technologies to support new approaches to logistics and operations. Understanding how to interpret ROI estimates is critical in managing a portfolio of logistics IT options. It is also important for the logistics leader to know how to frame and interpret risk and net value estimates for various logistics IT options. Managing these options as a portfolio should lead to improved supply chain management, reductions in inventory costs while improving productivity and management flexibility. Transformation of the DoD requires that logistics leadership manage limited resources to ensure that mission critical capabilities will be provided the war fighter. The focus of this course is to provide this future leadership with the tools and frameworks they will need to help ensure the success of the transformation.

Major Topics Covered:

- IT valuation: What is the value of IT in Logistics?
- IT Logistics in the Information Age
- Enterprise Resource Planning
- Intelligent Agents in Logistics
- RFID/ Active RFID / Sensor Networks
- Making the Business Case for Logistics IT
- IT Logistics Portfolio Management
- IT Logistics Integrated Risk Analysis Evaluation
- IT Logistics Portfolio Management Analysis
- Valuing IT Logistics Options

Typical textbooks and readings:

Management Information Systems - Custom Edition. (2007). This is a custom text developed specifically for this course and contains three original defense oriented IT logistics cases.

Cases taken from the custom textbook include:

- **Estimating the Performance of an ERP for Flight Operations**
- **The Cryptologic Carry On Program Case**
- A Comparable Market Study of RFID for Manual Item-Level Accountability Inventory and Tracking Systems

GB4430: Defense Transportation System (4-0)

Course instructor: Professor Ira Lewis

Prerequisites for the course: GB3420

Course objectives in relation to the total curriculum:

This course is required for students in the logistics curricula. The purpose of the course is to understand how the Defense Transportation System, including both DOD resources and commercial transportation partners, supports the DOD mission, including:

- The role of transportation within logistics
- Commercial transportation modes
- Defense transportation doctrine and policy
- The Defense Transportation System

Course description:

The course provides an overview of the structure and environment of the Defense Transportation System. Topics include the modes of commercial transportation that are relevant to DOD, the strategic lift triad and tradeoffs concerning their roles and capabilities, and studies and analyses of commercial and defense transportation.

Topics include the overall logistics context of freight and passenger transportation services; carrier and modal competition; regulatory and legal considerations; and managerial resource problems. Carrier and shipper decision perspectives are both developed in general and then related to the DOD as a provider and consumer of freight and passenger service.

Major topics covered:

- Introduction to defense transportation
- The role of transportation and logistics
- Transportation doctrine and policy
- Defense Transportation System

GB4440: Simulation Modeling For Managerial Decision Making (3-0)

Course Instructors: Professor Keebom Kang, Professor Susan Heath

Pre- or Co-requisites for the Course: Introductory Statistics

Course Objectives:

Simulation and modeling has been extensively and successfully applied to a wide range of military problems. In a military context, simulation is a tool for analyzing the performance and operations of weapons, logistics, and communications systems. As the systems have become ever more complex, analytical approaches are intractable or impossible, and extensive field tests are impractical. Naturally, simulation becomes one of the most widely used techniques as a decision support tool in military as well as in civilian sector. Within DoD, the Defense Modeling and Simulation Office (DMSO) was created to lead the implementation of the Defense Modeling and Simulation Initiative (DMSI) that was created in 1990 by the Deputy Secretary of Defense as a new initiative to strengthen the application of modeling and simulation. This course will provide students with modeling and simulation skills that can help them for complex decision making processes.

Course Description:

This course will cover simulation modeling, methodologies, statistical analysis, and model validation/ credibility. The course will cover various case studies in managerial decision making in military as well as in civilian sector problems. Simulation package, ARENA will be used for simulation modeling and graphics animation.

Major Topics Covered:

- Overview of Modeling and Simulation
- Modeling and Case Studies (military applications)
- Modeling Techniques
- Statistical Analysis of Simulation Input/Output
- Verification, Validation and Accreditation (VV&A)
- Military Simulation

Typical Textbooks and Readings:

Kelton, W. D., Sadowski, R. P. and Sturrock, D. (2007), *Simulation with Arena*, Fourth Edition, McGraw-Hill.

Kang, K. and R. J. Roland (1998), Military Simulation, Chapter 19 of *Handbook of Simulation* (ed. J. Banks), John Wiley.

Law, A. M., and Kelton, W. D. (2000) *Simulation Modeling and Analysis*, Third Edition, McGraw-Hill, 1991.

Piplani, L. K., Mercer, J. G. and Roop, C. R. (1994*), Systems Acquisition Manager's Guide for the Use of Models and Simulations,* Defense Systems Management College, 1994.

GB4450: Logistics Strategy (4-0)

MN4470: Strategic Planning and Policy for Logistics Managers (4-0)

This course has two course numbers. (GB4450 from MBA and MN4470 for MSPM program.)

Course Instructor: Senior Lecturer Donald R. Eaton

Prerequisites for the Course: Permission from the Instructor

Course Objectives:

This course explores and analyzes the role of the service Acquisition Logistician in Systems Acquisition in DoD. The course emphasizes the concepts, processes and methods of strategic logistics planning and execution. The course stresses proactive techniques for the timely insertion of logistics elements and influence on major weapon systems acquisition as well as optimizing cost effective life-cycle management of fielded systems.

This course will examine and focus on key opportunities for effective logistics influence in requirements development, reliability and maintainability, test and evaluation, support planning, program planning, support analysis and effective teaming. It will also examine the methods to optimize logistics outcomes for contracting, source selection, and contractor incentivization.

Course Description:

The course employs lectures, guided discussions, case studies, role-playing, and major team projects. The focus of the course is to develop critical thinking from a logistics perspective to recognize, develop and produce logistics elements in such a way as to ensure maximum effectiveness in life-cycle support. Starting with Operational Requirements Determination, the entire life-cycle is critically examined from the logistics requirements perspective. For the final examination project, the class is divided into teams and produces a comprehensive strategic plan for logistics life-cycle management for a fictitious major program.

MN3370: Leadership in Supply Chain Management (0-2)

Course Instructors: Professor Keebom Kang

Prerequisites for the Course: None

Course Objectives:

Being a leader in managing end-to-end supply chain elements requires a broad perspective that includes sharing experiences with leaders in eminently successful private enterprises. It is intended that the student will get first-hand presentations that they can integrate into their course-work experience to optimize course value.

Most of the seminars will be given my experts in military and commercial logistics and supply chain management fields. This seminar enables the student to interview proven leaders in a classroom forum in such areas as: production, manufacturing, air transportation, electronic commerce, Sealift, rail shipment, and Defense policy formulation.

The objective of the seminar will be achieved by engaging the students with the concepts and issues of leaders in logistics, transportation and supply chain management.

Course Description:

This course is built upon carefully selected experts and leaders in any of the transportation and supply chain elements, i.e. from acquisition to factory to foxhole. This seminar experience provides the students with insights that enrich their understanding of logistic requirements in all of its modes, from concept, performance verification to delivery to sustainment.

Major Topics Covered:

- Transportation Modes and Nodes
- Logistics Support Planning
- System Support Sustainment

Typical Textbooks and Readings: None

Course Abstracts

Additional Components:

Manpower Systems

MN2111: Navy Manpower, Personnel and Training Issues I (2-0)

Course Instructors: Bill Hatch
CDR Kim Hill

Prerequisites for the Course: None

Course Objectives:

By the end of the course the student should have a higher level understanding of the MPTE processes, how they can be applied it to a business model. In addition the student should be able to relate the MPTE processes to other courses in the MBA program.

Course Description:

This course will use a workforce planning model and will overlay Military manpower processes on the model. It is intended to expose the students to not only a business model for workforce planning but also the current MPTE processes employed by the US Navy, USMC and other military organizations. In addition, during each class session a MPTE issue will be discussed to bring current ongoing MPTE events to the attention of the students.

A pair of students will lead a 30-50 minute discussion on a current military MPTE issue. This issue could come from a periodical (Navy Times, Marine Corps Time, Link, or professional journal). The article is not limited to USN or USMC topics and can be from another service or country.

Major Topics Covered:

- Business Strategy/Business Plans
- Work Demand
- Manpower Demand
- HR IT systems
- Workforce supply
- Matching Demand to Supply

Typical Textbooks and Readings:

National Defense Strategy
National Military Strategy,
CNO Guidance, Commandant Guidance
Singapore DS21
German Strategic Plan

MN2112: Seminar in Manpower, Personnel and Training Issues II (0-2)

Course Instructors: Bill Hatch
CDR Kim Hill

Prerequisites for the Course: MN2111 or consent of instructor

Course Objective:

Upon completion of this course the student will complete a thesis proposal and have an understanding of the process for writing and routing a thesis. In addition the course will be a forum for MPTE discussions as they relate to the military MPTE process and issues.

Course description:

The course will be taught through a series of lectures and discussions of thesis requirements, thesis topics, and the thesis process in support of accomplishing a Masters of Business Administration as part of the Manpower Systems Analysis curriculum**.**

Major Topics Covered:

- Thesis vs. MBA project
- Thesis topics
- Ongoing research within GSBPP
- Thesis processing
- Thesis day

Typical Textbooks and Readings:

Articles and studies relating to the MPTE enterprise within the Department of Defense.

MN3111: Analysis of Human Resource Management

Course Instructors:

- Benjamin J. Roberts, Senior Lecturer, Course Coordinator (AY 06-07)
- William Hatch, Lecturer (AY 06-07)

Prerequisites for the Course: GB 3070

Course Objectives:

While this course will familiarize you with some technical details of issues that are primarily relevant to human resource practitioners (such as the psychometric aspects of test validation, the specifics of job evaluation methodologies, or the intricacies of employment law), the primary orientation adopts the perspective of a general manager and addresses human resource management topics from a strategic perspective, considering how managers and organizations have been able to leverage their human intellectual capital for competitive advantage. Success as a general manager requires the integration of a wide range of knowledge and skills, which include theoretical, operational, environmental and political aspects. The general manager's job is to resolve complex situational issues, to make judgments as to the most appropriate actions to take, to make long-range directional decisions for the organization as a whole, and to marshal the complex of human, physical, and informational resources of the organization.

Course Description:

This course represents a broad coverage of human behavior in the work situation, with key emphasis on the issues of work in the Navy Manpower Personnel and Training Environment. Topical areas covered include selection, placement, training development, and evaluation of personnel; motivation, remuneration, morale, supervision, and working conditions in military organizations; job design and organization development within complex military bureaucracies; equipment design and man-machine interface, and the impact of technological programs within the military. PREREQUISITES: GB3070

Major Topics Covered:

- Criteria and Predictors
- Organizational Planning
- Requirements Generation
- Recruitment
- Selection
- Organizational Factors and Retention
- Jobs and Job Analyses
- National Security Personnel System
- Training and Development
- Performance Management
- Performance Appraisal

- Compensation and Motivation
- Unions

Textbook:

Human Resource Management. Mathis and Jackson, Thompson, 11th Edition. 2006.

Cases in Management, Organizational Behavior and Human Resource Management. Schuler and Buller, West, 6th Ed. 2005.

Readings updated and posted on Blackboard Site and distributed on CD.

MN3760: Manpower Economics (4-0)

Course Instructors: Stephen Mehay, Professor
Elda Pema, Assistant Professor

Prerequisites for the Course: GB 4071

Course Objectives:

The goal of this course is to introduce students to the principles of labor economics, describe the way that labor markets function, and how pay and employment are determined in equilibrium. These principles are applied to the military labor market.

Course Description:

The U.S. military must meet its manpower requirements with volunteers. Hence, it must compete with civilian employers on open, competitive markets for new enlistees and re-enlistees. This course attempts to do several things. First, it seeks to introduce students to the principles of and operations of labor markets in competitive and non-competitive environments. These principles are applied to numerous civilian and military manpower policy problems. Second, the course develops aspects internal labor markets within organizations, which are used in determining pay and in motivating and rewarding employees. Finally, the course attempts to provide an appreciation for the methodology used by labor economists in analyzing labor market and manpower problems.

Major Topics Covered:

- Competitive labor markets
- Demand for labor; demand elasticities
- Applying demand theory
- Labor Supply;
- Compensating wages;
- Principles of investment in human capital
- Worker turnover
- Compensation and internal labor markets
- Gender and race; earnings inequality
- Applications of concepts to military labor markets

Typical Textbooks and Readings:

Modern Labor Economics, 9th edition, by R. Ehrenberg and R. Smith.

Study Guide: *Labor Market Problems and Applications* (optional).

Other readings will be handed out in class.

MN4106: Military Manpower/Personnel Policy Analysis (4-0)

Course Instructor(s):

- Mark J. Eitelberg, Ph.D.
  Professor of Public Policy

Prerequisites for the Course:

- Capstone course for the Manpower Systems Analysis Curriculum

Course Objectives:

- Understand how to *apply* various scientific methods, as learned in prerequisite courses, in analyzing manpower/personnel policy issues and aiding the decision-making process.
- Evaluate and discuss military manpower/personnel issues, situations, problems, and policies from an analytical frame of reference.
- Appreciate the nature, aims, capabilities, and limitations of policy analysis; recognize the contributions one can expect from policy analysis and related aids to decision-making in the military manpower/personnel arena.
- Appreciate the importance of products resulting from policy analysis; and demonstrate the ability to communicate effectively, both orally and in writing.
- Approach manpower/personnel policy issues thoughtfully, objectively, and knowledgeably, as a skilled analyst.

Course Description:

"Study and analysis of military manpower/personnel policy alternatives, with emphasis on identifying the trade-offs involved, the dynamic impact of major policy decisions, and the short-term and long-term consequences of decisions. The course focuses on reviewing, using, and evaluating tools to aid in selecting policy alternatives. Cases are drawn primarily from current issues in US military manpower policy. International perspectives are likewise examined. Credit Hours: 4-0 Prerequisites: MN3760, MN4111."

Fundamentally, this is a course in thinking critically and analytically. The very best policy analysts are skeptics extraordinaire; they ask tough questions; they accept little, if anything, at face value; and they tear away the veneer of seemingly simple issues to find answers. The process of analysis can be as complicated or as simple—as organized or as disorganized—as we make it or as a task demands. Each of us, in our own way, is engaged almost constantly in some form of information collection and processing, some form of inquiry. Whether it pertains to an issue at our job or in the many personal decisions of a typical day, we are constantly problem-solving and seeking informed choice. The methods we employ as researchers, analysts, problem-solvers, and decision-makers, regardless of the time or place, are basically similar, and may differ only in degree.

This course is a "capstone" in the Manpower Systems Analysis Curriculum. It is designed to demonstrate how the knowledge and skills obtained from other courses can be integrated and applied to support the creation of effective manpower/personnel policies.

Major Topics Covered:

- Orientation
- Scope and Objectives of the Course
- Guidelines for Critique of Policy Analysis
- Strengths and Weaknesses of MPT Policy Analysis
- Understanding (Military Manpower/Personnel) Public Policy: Discussion of Concepts
- Topics for Research; Groundwork for Critiques and Class Projects
- Introduction to the Craft of Research
- Policy Analysis in Fact and Fiction: The Case of VEAP (Part 1)
- Hybrid Approach: The Policy Analysis Process
- Tips for Critiques (See Blackboard Posting)
- Applying "The Steps" to Specific Cases
- The End of the Draft and Start of the All-Volunteer Force: Case Study
- Hot Issues in Military Manpower/Personnel Policy Analysis
- Discussion of "Critique of Policy Analysis" Project
- Goldilocks Project: Critique of Policy Analyses
- Don't Ask, Don't Tell, Don't Pursue, Don't Harass: Case Study
- Policy Analysis Mini-Project: Smoking and First-Term Attrition
- Further Discussion of Smoking and First-Term Attrition: Case Study
- The Craft of Research, Parts I, II, and III
- Policy Team Presentations

Typical Textbooks and Readings

- William N. Dunn, *Public Policy Analysis: An Introduction*, Third Edition (Upper Saddle River, NJ: Pearson Prentice Hall, 2004). (Optional; see professor)
- E.S. Quade, *Analysis for Public Decisions*, Third Edition (Englewood Cliffs, NJ: Prentice Hall, 1989). (Required)
- Dan Bednarz and Donna J. Wood, *Research in Teams: A Practical Guide to Group Policy Analysis* (Englewood Cliffs, NJ: Prentice Hall, 1991). (Required; copies distributed)
- Wayne C. Booth, Gregory G. Columb, and Joseph M. Williams, *The Craft of Research*, Second Edition (Chicago, IL: The University of Chicago Press, 2003). (Required)
- Giandomenico Majone, *Evidence, Argument, & Persuasion in the Policy Process* (New Haven, CT: Yale University Press, 1989). (Optional; see professor)

- Aaron Belkin and Geoffrey Bateman, eds., *Don't Ask, Don't Tell: Debating the Gay Ban in the Military* (Boulder, CO: Lynne Rienner Publishers, 2003). (Required)
- Mark J. Eitelberg, "The Theory and Practice of Policy Analysis: Notes and Quotes," July 2006. (Required; handout)

A selection of readings provided in class.

MN4111: Multivariate Manpower Data Analysis II (4-2)

Course Instructors: Elda Pema, Assistant Professor

Prerequisites for Course: A course in statistics and introductory econometrics (GB3070 and MN4110)

Course Objectives:

This course furthers the basic econometric skills introduced in MN4110. The main goal is to provide the tools and intuition required to correctly interpret empirical research and to understand the implications of empirical studies and their policy suggestions. This course also lays the foundation for developing research methods at the level where one can independently analyze data to further the scope of social and behavioral science and to generate policies as a manpower analyst.

Course Description:

An introduction to advanced multivariate techniques used for data analysis. Topics include panel data analysis, two-stage models, binary choice models, and survival analysis. The course also covers special techniques for policy evaluation and reduction of estimation bias due to omitted variables or sample selection. Students apply techniques to manpower databases. The culmination of this course is an individual research project, which employs the econometric tools introduced in class and a dataset of choice to answer various empirical questions.

Emphasis is placed on model specification, application, and interpretation. In addition, the course highlights the differences between the various available techniques and assumptions upon which they are based. Students are trained to select appropriate techniques based on the properties of the estimates they produce, correct for violation of the assumptions, interpret estimation results, and test relevant hypotheses.

A major goal is to provide the basis for continuing education in manpower data analysis on an individual basis. The formal topics covered are intended to provide the basics of statistical education while also laying a foundation for professional growth as a manpower analyst.

Major Topics Covered:

- Heteroskedasticity and heteroskedasticity-robust inference
- Testing for heteroskedasticity (Breusch-Pagan and White tests)
- Functional form misspecification and the Ramsey RESET test
- Proxy solution to the omitted variables problem
- Measurement error
- Missing data, non-random samples, and outliers
- Pooling independent cross sections across time
- Panel data analysis

- First differencing
- Fixed effects estimation
- Random effects estimation
- Policy analysis with pooled and panel data
- Instrumental variables (IV) and two-stage least squares (2SLS)
- Testing for endogeneity and overidentifying restrictions after 2SLS.
- Logit and Probit models
- Correcting for sample selection bias (Heckman model)
- Survival model
- Stata programming and data manipulation.

Typical Textbooks and Readings:

Wooldridge, *Introductory Econometrics* (3rd edition)
Wooldridge, *Student Study Guide with Solutions*
Other readings distributed in class.

MN4114: Foundations of Military Sociology/Psychology (4-0)

Course Instructors:

- Mark J. Eitelberg, Ph.D.
  Professor of Public Policy

Prerequisites for the Course:

- MN3105; curriculum option for MSA (847) students, who are given priority enrollment.

Course Objectives:

- Describe and synthesize sociological/psychological concepts, principles, and theories used in the study of the military.
- Apply scientific method to the study of the military from a sociological/psychological perspective.
- Explain the military as a social institution in the U.S. and in other nations.
- Analyze and discuss contemporary military issues, situations, and problems from a social-psychological perspective.
- Evaluate sociological/psychological research findings related to concepts used in the two fields (as applied to the military).
- Demonstrate the ability to communicate all of the above effectively, both orally and in writing.

Course Description:

Exploration of the concepts, theories, and methods of military sociology and military psychology as applied historically and in the current setting. Study of the military as a social institution, focusing on the internal organization and practices of the armed forces as well as the relationship between the military and society. Review and evaluation of psychological and sociological principles employed in a variety of research areas such as recruit screening and job classification, personnel adaptability and trainability, the military family, population representation, diversity, equal opportunity, personnel security, institutional versus occupational constructs, the military life course, and civil-military relations. Emphasis on representative cases in DoD and the US armed forces as well as cases in the militaries of other nations.

Major Topics Covered:

- Orientation
- Scope and Objectives of the Course
- Introduction to Military Sociology and Military Psychology
- Brief History and Overview of Military Sociology
- Changes in Military and Research Approaches Over Time
- Discussion of Current Research

- The Immigrant Tradition
- Excluded Groups: The Right to Fight
- Social Class and Military Service
- Contemporary Issues in Diversity Management
- On Killing: The Psychological Cost of Learning to Kill in War and Society
- Issues in Population Diversity: Race and Ethnicity
- Issues in Population Diversity: Gender
- The Military and the Media
- The Military and Society: Similarities and Differences
- Contemporary Issues: A Conceptual Model of Population Participation in the Military
- The "Benefits and Burdens" of Military Service
- The "Military Representation Model" Reexamined
- The Evolution of the All-Volunteer Force from a Sociological/Psychological Perspective
- Disciplinary Battles: Economists vs. Psychologists and Sociologists
- Citizenship and the Military: The Case for National Service
- Civil-Military Relations
- Institutional vs. Occupational Constructs
- Other Conceptual Models of Military Service
- Women and Minorities in the Officer Pipeline
- The Military and the Family as Greedy Institutions
- The Civil-Military Gap Reexamined
- History of Testing
- Screening for Service: Selection, Classification, and Assignment
- Becoming Brass: Recruiting, Selection, and Assignment of Military Officers
- The Future of Military Testing and the Role of Military Psychology
- Future Topics in Military Psychology
- Future Topics in Military Sociology

Typical textbooks and readings:

- Charles C. Moskos and Frank R. Wood, eds., *The Military: More than Just a Job?* (Washington, DC: Pergamon-Brassey's, 1988). (Available from the professor.)
- David R. Segal, *Recruiting for Uncle Sam* (Lawrence: University of Kansas Press, 1989). (Available from the professor.)
- Martin Binkin, *Who Will Fight the Next War?* (Washington, DC: Brookings Institution, 1993). (Available from the professor.)
- David R. Segal and H. Wallace Sinaiko, eds., *Life in the Rank and File* (Washington, DC: Pergamon-Brassey's, 1986). (Available from the professor.)
- Mark J. Eitelberg, *Manpower for Military Occupations* (Washington, DC:
- Department of Defense, 1988). (Available from the professor.)
- Mark J. Eitelberg, *Screening for Service* (Washington DC: Department of Defense, 1984). (Available from the professor.)

- Mark J. Eitelberg and Stephen L. Mehay, eds., *Marching Toward the 21st Century* (Westport, CT: Greenwood Press, 1994). (Available from the professor.)
- William Darryl Henderson, *Cohesion: The Human Element in Combat* (Honolulu, HI: University Press of the Pacific, Reprinted, 2003). (Available from the professor.)
- Pat Conroy, *The Great Santini* (New York: Bantam Books, 1976). (For purchase.)
- Lieutenant Colonel Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society* (Boston: Little, Brown, and Company, 1995). (For purchase.)
- Robert Eberwein, ed., *The War Film* (New Brunswick, NJ: Rutgers University Press, 2005. (Available from the professor.)
- Lawrence H. Suid, *Guts and Glory: The Making of the American Military Image in Film*, Revised and Expanded Edition (Lexington, KY: The University Press of Kentucky, 2002). (Available from the professor.)
- Series of Photocopied Articles, Papers, and Reports. (Available from the professor.)
- References for "Population Participation in the Military" can be found on Blackboard, MN4114 Foundations of Military Sociology/Psychology.

MN4115: Training Foundations and Management (4-0)

Course Instructors: Alice M. Crawford
Steve Mehay
William Hatch

Prerequisites for the Course: MN3111
GB3010

Course Objectives:

This course compliments the fundamentals in organization and management for the MS degree in Management, and is a component of the Manpower Systems Analysis (MSA) subspecialty curriculum. Course concepts are applicable to general management situations as well as training and education environments.

In the general management context, this course compliments GB3010 and MN3111 by utilizing a systems perspective to examine the relationships between training and the other components of organizational systems. It can be argued that understanding and managing learning processes is central to effective management. In this respect, the course provides another perspective that can be used by military officers to manage subordinates.

As a component to the MSA curriculum, the emphasis of the course is on analysis of the relationships among manpower, personnel, and training in the Department of the Navy and allied countries.

The key objective of the course is to enable students to systematically and critically analyze issues related to training and education. Subordinate objectives include:

- Understanding the system in which training and education take place. Students learn how the components of organizational systems interact with training, and with each other, to impact training effectiveness. The systems perspective of training and education is revisited throughout the course. From this general concept, students move to study the scope of the military system, and current trends in military and civilian learning systems.

- Understanding and managing learning processes. Students examine three predominant models of learning and explore the different situations in which each model might apply. Additionally, students study learning styles and their implications for pedagogy.

- Understanding the design and development of training and education. Students study research on a wide variety of conditions in which learning takes place, and

examine specific examples of practice in designing and developing training and education.

- Understanding implementation and evaluation of learning programs. Students study technology-mediated learning, media selection as a function of learning theory, and principles of evaluation.

- Understanding research in training and education. In addition to research-based course materials, students engage in training and education research through a course final project.

- Understanding leadership development. Students look at the differences and similarities among training, education, and leadership development.

Course Description:

The course covers a broad range of issues in the domain of training and education. Pedagogy is primarily based on interactive discussions and exercises in which students can discover applications for course readings.

Major Topics Covered:

- The Training System
  - Knowledge, skills, and abilities required for naval and Marine Corps officers in their future roles.
  - The systems view of training and education
  - A systematic approach for analyzing, designing, developing, implementing, and evaluating training
  - The scope of military training and education: structure, trends, and costs
  - Changes to Military training and education
- The Learner
  - Operant conditioning
  - Observational learning
  - The cognitive model of learning
  - Learning styles
- Design and Development
  - Needs analysis
  - Conditions necessary for effective learning. e.g., motivation, feedback, transfer, mental models, etc.
  - Design as a function of what is to be learned
  - Adult learning
- Implementation and Evaluation
  - Methods and media of training and education
  - Media Selection
  - Principles of evaluation

- Integrating Concepts of Training and Education
  - Becoming a teacher to develop leadership
  - Final project research

Typical Texts:

Goldstein, I.L., and Ford, K.J. *Training in Organizations: Needs Assessment, Development, and Evaluation,* 4th Ed. Wadsworth, Thomson Learning, 2002.

O'Connor, Bridget N., Michael Bronner, and Chester Delaney. *Training for Organizations*, 2nd ed. Cincinnati: South-Western Educational Publishing, 2001.

MN4118: Human Resource Information Systems (3-2)

Course Instructors: William Hatch

Prerequisites for the Course: MN2111 or consent of instructor.

Course Objectives:

This course supports educational skill requirements three and five. Advanced Quantitative and Qualitative Analysis - The graduate will have the ability to apply a wide range of advanced organizational, economics, statistical, and mathematical techniques and concepts to manpower and personnel polices and issues. These include the use of econometric techniques in the quantitative analysis of large-scale DoN/DoD manpower and personnel databases, of qualitative techniques in the analysis of survey and personnel data, of manpower decision support systems, and of Markov models in the analysis of force structure and manpower planning, forecasting and flow models. Automated Data Analysis - The graduate will possess the skills in data manipulation, statistics, and exploratory data analysis to be able to formulate and execute analyses of a wide variety of manpower, personnel and training issues. The graduate will have proficiency in computing with mainframe and microcomputer systems to interactively apply a variety of methods to large-scale DoN and DoD databases. The graduate will have a thorough understanding of the manpower information systems.

Course Description:

Analysis of DoD Human Resource Information Systems (HRIS). Major course theme focus on understanding military HRIS from a systems perspective; analyzing instructional program design, implementation, and technologies; and applying methods of needs analysis and program evaluation. Guest speakers, military publications, student cases, and discussion based on experiences of the instructor and students are utilized to maintain the necessary focus on current military applications.

Major Topics Covered:

- Military Human Resource Systems
- Navy & Marine Corp HRIS
- Navy Assignment Information Process
- Knowledge Management
- Group and individual projects
- Decision support systems

Typical textbooks and readings:

- Handouts
- Navy MPT HRIS

- **MN1119: Navy Manpower Requirements Determination (3-0)**

Course Instructors: William Hatch

Prerequisites for the Course: MN2111 or consent of instructor

Course Objective:

Upon completion of the course the student will have an in depth understanding of the Navy fleet and shore Manpower and Personnel system, processes and documents.

Course description:

The course will examine the determination/validation process of fleet requirements as they pertain to deploying unit's Required Operational Capabilities and Projected Operational Environment (ROC/POE) and the resulting Ship Manpower Document (SMD), Squadron Manpower Document (SQMD), and Fleet Manpower Document (FMD).

It will examine the Shore Manpower Requirements Determination (SMRD) process as it pertains to the Mission, Function and Task (MFT) statement and the resulting Statement of Manpower Requirements (SMR). Further analysis will link fleet and shore manpower documents to the Activity Manpower Document (AMD). The Personnel assignment sub-process will be reviewed as it relates to the previous documents and the Enlisted Distribution and Verification Report (EDVR) in support of fleet readiness.

Major Topics Covered:

- Manpower Policy
- Manpower terms
- Analyzing various manpower and personnel documents
- Fleet requirements determination process
- Shore requirements determination process
- Manpower as it applies to graduate education

Typical Textbooks and Readings:

Department of the Navy manpower and personnel governing instructions, documents and various handouts as well as articles and studies relating to the manpower, personnel, training and education enterprise within the Department of Defense as provided from the instructor.

MN4130: Marine Corps Manpower Requirements (3-0)

Course Instructors: William Hatch

Prerequisites for the Course: MN2111 or consent of instructor

Course Objectives:

Upon completion of this course the student will have an in depth understanding of USMC Manpower Management and implementation of management policy techniques through analysis, procedures, organizational and administrative actions to better staff Headquarters Marine Corp management policy issues.

Course Description:

Each student will develop an understanding of the system relationship between the Table of Organization (T/O), Troop List (TL) and the Authorized Strength Report (ASR). Each Officer will complete a Universal Needs Statement (UNS). Each student will be assigned a process with in the Marine Corps HRDP and present the process as a project at the end of the class.

Major Topics Covered:

- Marine Corps Manpower Policy
- Marine Corps Manpower terms
- Analyzing various manpower and personnel documents
- Marine Corps Human Resource Development Process (HRDP)
- Marine Corps Requirements Oversight Council (MROC)
- Total Force Data Warehouse (TFDW)

Typical Textbooks and Readings:

Marine Corps manpower and personnel governing instructions, documents and various handouts as well as articles and studies relating to the HRDP enterprise.

MN4761: Applied Manpower Models (4-0)

Course Instructor: Professor Stephen Mehay

Prerequisites for the Course: MN3760
MN4110
MN4111

Course Objectives:

ESRs for the Naval Postgraduate School state that upon graduation a student will have "the ability to recognize scientific advancements of potential value to the Navy, formulate a research program, perform the necessary research, and report the results." The goal of this course is to acquaint students with the current issues and literature in Navy and DoD manpower and research methodologies employed in the field. In addition, the goal is to build on earlier statistical modeling classes by developing the students' abilities to carry out an assigned data analysis project.

Course Description:

The course surveys various research methodologies and their application to manpower problems. Students are assigned specific readings from the literature on each of several major topic areas. Class meetings involve a discussion of the assigned readings; the readings are read in advance of the class meeting. The following questions will guide the in-class discussions:

- What are the policy or planning issues? Why are they important?
- What methodology (research design) is used in the study?
- What type of data are used?
- How do the conclusions assist policy makers?
- What are the strengths and weaknesses of the study?

Students must complete a term project that involves using a manpower data file provided by the instructor. The project requires that they use the literature to specify and estimate a multivariate statistical model of a manpower issue.

Major Topics Covered:

- Issues in Program Evaluation and Research Design
- Cost-Benefit and Cost-Effectiveness Analysis
- Modeling and Forecasting Enlistment Supply
- Enlisted Attrition
- Modeling and Forecasting Reenlistment
- Officer Retention Issues
- Military Manpower Costs and Productivity
- Compensation

Typical Textbooks and Readings:

"Manpower and Personnel IWAR 2000: Aging the Force," Center for Naval Analyses, 2001

"Analysis of Navy's Cap on Non-High School Diploma Graduates," Center for Naval Analyses, 2001

"Enabling Officer Accession Cuts While Limiting Laterals," Center for Naval Analyses, July 2004.

"Effectiveness of the Voluntary Education Program," Rand Corporation, 2000
"Measuring Return on Investment in Navy Compensation Initiatives," Navy Workforce Conference, 2002.
"The Military Recruiting Productivity Slowdown," Defense and Peace Economics, v. 14, October 2003.

"Predictors of Attrition," Center for Naval Analyses , 2004.

"The Army's Delayed Entry Program," *Armed Forces & Society*, 1992.

"Cost Effective use of Selective Reenlistment Bonuses," CNA, 1994, pp. 19-38

"Why Do Pay Elasticities Differ? CNA, pp. 1-48.

"Economic Analysis of SWO Bonus," SAG Corp., 1997.

"Military Compensation Reform in the Department of the Navy," Center for Naval Analyses, 2005.

Rossi & Freeman, "Randomized Designs for Impact Assessment," and "Non-randomized Designs for Impact Assessment," in Evaluation: A Systematic Approach.

Barnow, et al., "Issues in the Analysis of Selection Bias" Evaluation Studies Review Annual.

Afifi & V. Clark, "Regression Analysis Using Survival Data," chapter in Computer-Aided Multivariate Analysis, 2d edition.

"Human Capital and Productivity in a Hierarchical Organization," Economics of Education Review, October 1999.

"Evaluating the Labor Market Experiences of Veterans Using a Matched Comparison Group Design," Journal of Human Resources, 2004.

Graduate School of Business
& Public Policy

NAVAL POSTGRADUATE SCHOOL

August 2007

Master of Business Administration Program
&
Master of Science in Management Program

VOLUME III

Appendices to Self-Study Report

MASTER OF SCIENCE IN MANAGEMENT
And
MASTER OF BUSINESS ADMINISTRATION

Volume III
Appendices to Self-Study Report

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Appendix 2.1G

CHARTER
ADVISORY COMMITTEE
GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

Authority: The Advisory Committee is chartered in accordance with NAVPGSCOL INSTRUCTION 5420.1

Official Designation: Advisory Committee to the Dean, Graduate School of Business and Public Policy (BPP), Naval Postgraduate School.

Objective and Scope of Activity: The Committee shall:

(1) Advise the Dean on BPP education programs with particular emphasis on assessing and assisting the School in accomplishing its mission with relevance to the current needs of the Navy, USMC and the Department of Defense. The Committee will inquire and make recommendations to the Dean in the areas of research, curricula, instruction, physical facilities, administration, student body, fiscal affairs, resources, and other matters relating to the operation of School programs.

(2) Support the Programs of the School through such activities as sponsorship of curricula and research, and enrollment of students.

(3) Assist the School in identifying new opportunities for support within the Navy and the Department of Defense and by assisting the Dean and the School in developing relationships with potential new sources of research and instructional sponsorship, programs or students. Members of the Committee help to increase the visibility of the School among its stakeholders.

Meetings: The Advisory Committee shall meet for one day twice each year, in April/May and October/November in Washington, DC or Monterey, CA, or other location at the discretion of the Chair. In addition, individual members may be asked to devote addition time for specific assignments related to accomplishing the Committee's mission.

Membership: In accordance with applicable instruction(s) membership shall be comprised of senior military officers and civilians from the services and/or subspecialties represented in the student body of the School. Terms of office shall be two years, renewable for one additional two-year term. Non-federal government civilians from industry and academic institutions may be invited to participate as guests.

Sponsor: Dean, Graduate School of Business and Public Policy, Naval Postgraduate School.

Supporting Agency: Naval Postgraduate School

Estimated Annual Cost: $15,000 per year

Termination Date: Continuing

Adopted: 22 April 2002

Naval Postgraduate School
Graduate School of Business and Public Policy

ADVISORY COMMITTEE

VADM Patricia A.Tracey
Director, Navy Staff

VADM Joseph W. Dyer
Commander, Naval Air Systems Command

VADM Keith Lippert
Commander, Defense Logistics Agency

RADM Albert T. Church (Tom)
Director, Office of Budget of the Assistant SECNAV for Financial Management and Comptroller/Director, Fiscal Management Division (N82)

RADM J. D. McCarthy
Commander, Naval Supply Systems Command

Appendix 2.1I1

DEAN'S STRATEGIC REPORT

July 2002

DRAFT (7/21/02)

NAVAL POSTGRADUATE SCHOOL
GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

DEAN'S REPORT

The Background and the Challenge

The Graduate School of Business and Public Policy (BPP) is in a period of simultaneous change, consolidation and growth. This "trifecta" presents special short-term challenges in terms of strategic direction; program selection, development and management; internal organization; faculty and staff resources and financial support. This document provides a strategic assessment of where the School stands today and addresses the question of strategic direction for the next five years; sets decision guidelines by which questions of organization, staffing and resources can be addressed; and identifies some representative actions and measures of achievement.

BPP was founded in 2001 largely out of the Department of Systems Management. Over the course of 2001 the faculty developed a new curriculum leading to a Master of Business Administration degree and the first students in the new MBA program matriculated in January 2002. The MBA program will is the central resident program for the School. In addition, a resident Master of Science in Management (Manpower Systems Analysis curriculum) is offered to serve the needs of educating and qualifying Naval officers in the human resources specialty. These new resident programs are in a continuous process of review, revision and improvement.

The School also offers a number of non-resident DL degree programs in contract management, program management, leadership development, sponsored by various Navy and other DoD entities. Non-degree management development programs are also offered, with Navy and DoD sponsorship support, in fields such as acquisition, comptrollership, diversity management, change management, and others. In response to demand for the MBA degree and in recognition of the difficulty for Unrestricted Line officers to attend the resident program, the School is beginning a pilot test of an Executive MBA program at Lemoore and Pensacola. If successful, it is anticipated that EMBA programs could grow substantially. Finally, BPP has partnered with the Smith School of Business at The University of Maryland to offer a joint defense-focused MBA program (JMBA) serving the needs of the Washington, DC defense and national security community.

The BPP faculty consists of tenured and tenure track scholars who conduct research, teach and lead programs, non-tenure track faculty who teach and lead programs, and active duty military officers who teach and bring operational perspectives to the

classroom. Many of the faculty are engaged in administrative duties and service within the School. Funding models over the past decade have driven the faculty into individual entrepreneurship, seeking external funding for research and teaching outside the resident programs to secure a full year of earnings.

The School of Business and Public Policy currently operates with the organization, staffing, financial models and administrative processes of the old Department of Systems Management. These legacy systems are not adequate to meet the requirements of a School, particularly as the School is changing and growing its academic programs. BPP is faced with challenge of consolidating the changes that have already taken place and aligning its internal organization and process flows to serve its new role. At the same time, BPP operates within NPS staffing models and financial baselines that are rooted in the old SM Department. BPP and NPS are thus challenged to develop a plan to complete the transition to full School status.

The Strategic Planning Process

This document has been compiled by the Dean but it has been derived from an extensive faculty-led strategic planning process. This process began with a one-day faculty offsite on 5 April 2002. At this session the faculty spent a half-day discussing the history of the School, dating from the original Department of Administrative Sciences, to understand how we got to where the School is today. In the afternoon session, the faculty considered four strategic imperatives that the Dean had identified for consideration. Visions, strategies and resources were discussed for each. The four strategic imperatives are:

- Maintaining a Strong Foundation
- Academic Excellence in Teaching and Research
- Distinctive Relevance
- Growth by Identifying the Right Opportunities

Following on the offsite, a faculty Strategic Planning Task Force was formed to develop the outlines of a strategic plan for the School. Fifteen faculty members, or about one-fourth of the faculty, served on the task force. Others were consulted through an organized reporting and outreach effort during the six weeks that the group deliberated.

On 7 June 2002 a presentation was made to the faculty for discussion. The task force had reached consensus on the following six strategic questions, with the first three being the top priorities. While the strategic direction that follows is organized according to the above four pillars, at least partial answers to these six strategic questions are embedded throughout.

- Identity. What business model and identity do we want to pursue?
- Research. How can we revitalize our research productivity, including increasing our output of DoD relevant and open-literature research?
- Teaching. How can we continually improve our teaching, and make teaching excellence a priority?

- Faculty Cooperation. How can we increase faculty cooperation and work toward a shared identity?
- Decision-Making Criteria. What are our decision-making criteria for adding, maintaining, and dropping academic programs, and our processes for evaluating new and existing businesses?
- Organizational Structure. What structure can we realistically create that fits our business model and identity?

After that session, the Dean assumed responsibility for developing this document based on the faculty work done to date. The Dean also is implementing a recommendation of the Task Force to form a smaller and more permanent Dean's Strategic Advisory Council to provide continuous faculty participation in the ongoing development and refining of the School's strategic direction.

NPS Vision, Mission and Strategic Initiatives

The Naval Postgraduate School has articulated a vision, mission and strategic initiatives for the institution.

NPS Vision

Before 2005, NPS will provide relevant, flexible, cutting-edge academic, research, and continuing education programs to military officers and DoD civilians from around the world at every stage in their careers.
By 2010, NPS will be ranked by education experts as among the top research universities in the Nation.

NPS Mission

Provide relevant, excellent and innovative education to Navy and Marine Corps officers throughout their careers.
Incorporate military and defense civilians worldwide in the education process
Produce technologically competent warriors, rigorous analysts schooled in the most promising innovative military technologies, and critical thinkers.
Focus on the integration of the core elements of teaching, research, and continuing education.
Partner with industry and academia to produce flexible, integrated, interdisciplinary and systems oriented education.
Provide the education when, how and where it is needed.

NPS Strategic Initiatives

Increase the number of Navy Unrestricted Line Officers (URL) with graduate education.
Increase the number of meaningful partnerships and available markets for our services.
Improve the quality and applicability of our research and teaching.
Cut the right costs; invest resources in the right things.

The alignment of the strategic direction of NPS and the strategic imperatives of BPP are shown in the chart at the back of this paper.

BPP Vision, Mission and Goals

To guide the further development and implementation of a strategic direction and action plan for the School of Business and Public Policy, the following are the Dean's vision, mission and goal for the School, consistent with the strategic direction of NPS.

Vision: To transform our students intellectually, professionally and personally; and to transform organizations that engage us.

Education has transformational power. The students we teach, the sponsors we serve, and the organizations we counsel expect something different to result from their interaction with us. Our students should have the opportunity to become different intellectually, personally or professionally through interaction with world-class faculty using innovative teaching strategies and the best instructional technology. Our sponsors should perceive a positive change in their personnel and the management of their programs as a result of their support for the School. Organizations that engage us should experience the opportunity for change and improvement because of the expertise and experience we offer.

Mission: To serve the Nation by educating military officers and DoD civilians in defense-focused business and public policy, by conducting scholarly research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with national defense management policy.

As an element of the Naval Postgraduate School, the School of Business and Public Policy serves the national interest. Our work is focused on providing defense-focused scholarship, graduate education, and intellectual support for the Navy and Marine Corps, the Department of Defense, and other individuals and organizations concerned with national security and national defense.

This mission is operationalized clearly in what had been the SM Department mission statement, slightly revised, as follows.

> Our purpose is to improve the managerial capabilities and leadership qualities of US and international officers and government civilians through graduate education, research, and professional service.
>
> *Education.* To develop students' abilities to analyze, think critically, and take intelligent action so they can more effectively carry out their professional responsibilities, and lead their organizations in complex, and sometimes life-threatening, environment.

Research. To conduct research that supports military decision-making, problem solving, and policy setting, improves administrative processes and organizational effectiveness, contributes knowledge to academic disciplines, and advances the mission of graduate education.

Service. To provide professional expertise that supports the development of the Naval Postgraduate School, the Departments of Navy and Defense, and other branches of Government, as well as our professional and academic organizations.

Goal: To be, and to be recognized as, the Nation's premier defense-focused business management and public policy school.

We strive to be the "school of choice" for students and organizations seeking defense-focused graduate education, research, and intellectual resources in business and public policy management. Our programs will compete successfully with other Schools that offer business and public policy programs to military communities. Our faculty and their scholarship will be recognized for quality by peers in the academic community. We will achieve national recognition for the special educational institution that we are.

The Strategic Direction

The four pillars identified above form a useful framework for the continuous process of planning, decision-making, and acting in the School over the next five years. The following are brief elaborations of these pillars along with listings of considerations and actions that might be taken under each.

Maintaining A Strong Foundation

The foundation of the School of Business and Public Policy is the resident MBA program. This program, accredited by AACSB and NASPAA, anchors the School as an academic institution. It largely defines our reputation and serves as the core for all of our other academic programs. It both requires and justifies a high quality, permanent resident faculty.

- Maintain full enrollment in the resident MBA program
- Maintain a fully-staffed resident research and teaching faculty
- Initiate outreach programs to underrepresented officer communities, particularly Unrestricted Line (URL) officers
- Strengthen ties and stay current with the needs of curriculum sponsors
- Maintain high senior tenured faculty participation in MBA instruction
- Meet the requirements for and keep certification by AACSB and NASPAA
- Increase the technology content of the resident degree programs

- Seek and exploit opportunities to publicize and get public recognition for the MBA program

Academic Excellence in Teaching and Research

Excellence in teaching and research are essential to meeting the demands of our students, our sponsors, professional and scholarly communities, and accrediting agencies. Quality is essential to our competitiveness in the educational marketplace. Excellence is central to our reputation, to the standing of our faculty among their peers, to our ability to recruit good faculty, and to the esteem of our students and alumni. The School is currently accredited by AACSB and NASPAA, the top accrediting organizations for business schools and public administration schools. The BPP Senior Faculty Council is undertaking a review to make recommendations for actions to improve the overall academic excellence of the School.

Teaching

Excellence in teaching is essential to performing the mission of the School. Considerations in teaching include both good course development and effective course delivery. We aim to be excellent teachers across all disciplines, utilizing a broad range of teaching methodologies, in a culture that promotes and encourages excellent teaching. The following policies and actions are intended to foster a supportive environment for continuous improvement in teaching.

- Annual faculty award for teaching excellence
- Teaching quality will be a factor in faculty evaluation and rewards
- Institute teaching workshops and mentorship
- Improved instruction facilities in Ingersoll Hall
- Encourage team teaching
- Widespread teaching by tenure track faculty
- Develop a best practices database to disseminate innovative teaching ideas
- Resource course development adequately
- Instructional mentoring for new faculty

Research

During the recent accreditation process by AACSB, the research productivity of the faculty, as measured by publications in scholarly journals, was cited as marginal and in need of attention. A report to AACSB is required in 2003 with a plan and progress report to demonstrate how the School is addressing this issue. The following actions are contemplated to address the need for improving the climate for research within the School and increasing research capability and publication output.

- Monthly research colloquia
- Inaugural lecture series by arriving and newly promoted faculty

- Encourage production of scholarly papers and technical reports to document and disseminate research results
- Encourage publication of conference presentations
- Host conferences and colloquia, seek opportunities to publish the papers from these events
- Distribute funds for new faculty workload model based on research and publication proposals
- Mentoring on research issues for junior tenure track faculty
- Link student theses and projects to appropriate faculty research
- Release time for publishing and mentoring
- Adequate support staff, including research assistants
- Research "brokering"

Distinctive Relevance

Our defense-focused education programs, research initiatives and intellectual resources comprise our competitive advantage. BPP is a Navy School serving the defense and national security communities. It is our responsibility to retain and nurture that defense focus, stay current on defense management issues, remain connected to defense sponsors, and be responsive to Navy and defense leaders.

- Create sponsored chairs in each concentration area with aligned sponsors, the concentration curricula, and chairholders
- Increase active engagement of the BPP Advisory Board
- Maintain a regular schedule of curriculum reviews
- Create Chair or a Center for Defense Management Research to provide professional service and applied research workshops for Navy and DoD

Prudent and Responsive Growth

BPP is awash in growth opportunities. Challenging new markets appear to exist for both DL degree programs and management development programs. Demand from Navy and other defense communities requires a response. Opportunities exist to expand well beyond the confines of Monterey and to establish a national presence and reputation for the School. If we do not respond to these markets, other institutions will, to the possible disadvantage of the Navy, the students, NPS and BPP. On the other hand, we are resource constrained, and not every new market is the right one to pursue. We commit ourselves to growth in markets that strengthen the School and are the most responsive to the communities that we serve.

- Determine BPP stakeholders' current, short, and mid-term expectations about DL instruction. Develop a plan to respond to these expectations.

- Review current DL programs to assess their congruence with the mission and long-term strategies of the School; identify candidates for consolidation, spin-off, realignment or termination.

- Target potential DL instructional groups, prioritize them, and determine the appropriate programs—degree and management development-- that can be reached using DL technologies.

- Assess the competitive environment for DL instruction and determine BPP's distinctive competence and competitive advantage. Identify partnership opportunities where appropriate.

- Assess, price and scope alternative models for DL VTE instruction that would enable us to better leverage faculty from our current 25:1 student/instructor ratio to a 100:1 ratio.

- Provide all BPP faculty with high-quality, education about learning technology.

- Hire skilled Instruction Design (ID) specialists to assist faculty developing asynchronous DL modules and courses.

- Develop a DL lessons learned and best practices database.

Decision-Making in an Option-Rich Environment

BPP has many options in terms of programs, courses, and faculty activities. Choices will have to be made between many opportunities and ideas that, on their own, will appear meritorious and worth undertaking. Decisional aids will be required to facilitate good decision-making. Among these guideposts will be:

- Consistent with NPS and BPP vision, mission and objectives
- Adequately resourced
- Within our capabilities
- Meets a Navy/DoD need
- Potential "return" for the School

Organization

The School has very little formal organization structure. That which does exist is largely a carryover from the Department of Systems Management. In addition, a number of informal organizations exist – academic, administrative, research, programs – that tend to reflect various process flows among the School's faculty, sponsors, staff and administration. The NPS Functionality Assessment has recommended a standardized

staff organization. The current organization, or lack of organization, does not serve the School adequately. There are uncertainties about processes, unclear lines of authority and responsibility, barriers to effective communication and cooperation, and a resulting high level of organizational stress. A new organization is needed for the School that accomplishes the following objectives.

- Integrates academic, administrative, and programmatic processes
- Recognizes the scholarly community(ies) of the School
- Strengthens and empowers program management within the School
- Simplifies process flows and reduces the overall administrative workload performed by faculty members
- Clarifies relationships and responsibilities within the School
- Is flexible enough to accommodate change and to meet new opportunities

A faculty task force has been appointed and is currently working with the Dean to address these issues and recommend a new organizational configuration for the School.

Organization is closely related to process flows, particularly the flow of financial resources to and through the School. The NPS financial processes are complex and difficult to understand or manage. Within the School they have become even more complex. A faculty group is examining the way we plan for and account for faculty and staff labor with the goal of making the system simpler and easier for faculty and staff to administer.

Resources

The School is inadequately resourced -- in terms of faculty, staff, facilities, and funds -- to meet its current commitments and to pursue the growth opportunities that exist. There is insufficient faculty to meet the current demand for teaching, research and service, let alone to plan for future expansion. There are vacancies in the current staff allocation that cannot be filled due to the hiring freeze, but even after the freeze is lifted the FA staffing model provides insufficient staff to support the mission of the School. Financial resources are severely inadequate to support facilities that are competitive with other top-tier business or public policy schools or to provide the "investment capital" needed to support the marketing and development of new growth opportunities

Faculty. One of BPP's competitive advantages is the mix of the faculty – strong tenure track scholars, excellent non-tenure track teachers and subject matter experts, and active duty military with current fleet experience. Over the past decade, however, faculty recruitment patterns have resulted in tenure track faculty falling to less than 50% of the total faculty. Teaching remains strong and program growth has been made possible largely through the employment of non-tenure track, intermittent and military faculty. Non-tenure track faculty members, however, are not expected to conduct scholarly research. Thus both the number and the percentage of faculty who are available to conduct scholarly research has diminished. The result is the dilution of the scholarly community within the School and the risk of a perceived erosion of academic quality.

Faculty workload varies widely within the School but is, on average, high and not distributed in the optimal pattern for teaching and research. BPP has 27 percent of the students in NPS but only 13 % of the faculty. An analysis of AY 2002 faculty work plans indicates that thirty-two faculty members, half of the faculty, actually planned overloads at the start of the year ranging from 4 to 22 days. Planned faculty workload for AY '02 fell into the following categories:

	All Faculty	TT	NTT
Teaching in Resident Program	26.84%	26.69	27.01
Non-Resident Teaching	15.77%	8.48	23.84
Short Courses	7.35%	2.63	12.58
Course Development	4.89%	3.33	6.63
Thesis Advising	10.59%	10.42	10.78
Reimbursable Research	14.21%	26.59	0.50
NPS Funded Research	4.12%	7.83	0.00
Administration	16.23%	14.03	18.66

This workload distribution is clearly misaligned with the strategic direction of the School.

The following actions are necessary to deal with the issues of faculty resources.

- To address the problem of planned overloads:
  1. Aggressively complete the current (AY '02) faculty recruiting effort to secure a total of ten new tenure track faculty.
  2. Review the non-resident and short course offerings to determine if low priority programs with high faculty demand can be redesigned, reduced or eliminated.
  3. Recognize the campus-wide imbalance with a one-time "catch-up" for BPP in the NPS faculty labor plan, in order to adjust for the one-year lag in the current method of determining the annual baseline.
- To address the distribution of faculty effort:
  1. Reduce the total number of faculty engaged in administration by consolidating and streamlining internal administrative procedures and organization and by hiring or designating full-time professional non-teaching faculty administrators.
  2. Recognize the need for administrative faculty in BPP as it is in other schools at NPS by providing for an increase in time allocation for administration in the NPS BPP faculty labor plan from the current 1.5 work years to 6.0 work years.
  3. As a result of #2 above, realize a shift of faculty activity away from lower priority administration and service to higher priority teaching and research.
- To address the faculty mix issue:

1. Hire at least five new tenure track faculty with strong research and publication potential in AY '03 and five in AY '04.
2. Review current and future requirements for non-tenure track faculty.

Staff. The staffing of BPP is a legacy of the previous departmental organization. It is inadequate to meet the needs of the School in three respects. First, there are vacancies in four key staff positions -- procurement clerk, academic support assistant (ASA), office automation assistant, and program & instructional support assistant -- that cannot be filled during the current hiring freeze. (It is anticipated that some of these positions will be filled as the RIF process is completed over the next sixty days.) Nor can overtime be ordered for the existing staff. While this can be endured for a short period, it is causing severe stress as "workaround" solutions are being employed. Second, and more critically, the planned staffing under the FA study is based on the old departmental model. It is inadequate in both its overall staffing levels and in its inflexibility to meet the future needs of a dynamic organization. Third, the Dean is concerned that some staff personnel (both incumbents and new hires) may not be capable of doing the required tasks in an evolving and dynamic School.

The following actions are necessary to deal with the issues of staff resources.

- Expedite the process for hiring actions for any staff positions not expected to be filled by the RIF process.
- Reflect these positions in the baseline for the AY'02 NPS BPP staff labor budget allocation.
- Revise the FA staffing for BPP to resemble more closely that of other Schools at NPS. Specifically, the following new staff positions should be added.
    1. Three additional ASAs to serve the six concentration areas (similar to support provided to departments in other NPS schools).
    2. One additional program and instructional support assistant.
- One full time Director of EMBA programs (probably more likely an administrative faculty, rather than staff position).
- Appropriate training for all supervisory staff.

Facilities. Improvements accomplished in 2001 and early 2002 have brought Ingersoll Hall up to an acceptable level in most material respects. The building is freshly painted, faculty offices are in good condition, the classrooms are clean and well organized, and the Ingersoll "Museum" makes an attractive entrance. However, the restrooms remain in disgusting condition, making the building an overall negative experience for everyone.

While the material condition of Ingersoll is generally fine, it is a challenge to keep the instructional facilities current with technology. Our students are very technology-oriented. They expect NPS to reflect the technological world they in which they otherwise live and work. BPP has only one "classroom of the future" with fully integrated multi-media presentation technology and computer connectivity. Even here, however, the student laptop ports are not yet operational. This does not make us competitive with other business schools nor does it reflect the technologically

sophisticated Navy we are serving. A long-term capital improvement program, with budget, is needed along with some short-term "catch-ups" to bring the School up to an appropriate standard.

- Immediate Needs
  1. Renovate restrooms in Ingersoll Hall
  2. Connect laptop ports, ISDN lines and power lines in Room 271.

- Short-Term Capital Requirements
  1. Complete Room 325 renovation.
  2. Replace projection screens in Rooms 250 and 224.

- Ingersoll Hall Improvements Recommended for Long Term Capital Investment Plan

1. Ventilation: Install quiet ceiling fans in the classroom.

2. Wired for Network Connection: Another in-class network system is needed to spread the loads of our two Learning Resource Centers (I-224 and I-250), which are heavily used, including 36 notebook computers, two secure laptop cabinets, and NetOp Classroom Software.

3. Adjustable Lighting: All classrooms in Ingersoll Hall with the exception of I-221 and I-271 require installation of individual switches and variable dimming control for each bank of lights.

4. Tiered, Circular Seating: Of the seven classrooms that are not tiered, four can be reconfigured in the tiered circular seating form.

5. VTE Studio: To support our rapidly growing URL targeted EMBA program, an additional VTE studio modeled after the studio in Root 260 is needed. Based on our Root 260 experiences, we know that the studio design significantly increases faculty satisfaction with VTE and increases faculty's ability to generate interaction with remote sites. Numerous DL research studies indicate that interaction is a key factor in student learning.

6. Flexible Seating Arrangement: Remove the long tables fixed to the floor and replace with modular tables in four classrooms.

7. Student chairs: Replace 25-year-old chairs in twelve classrooms.

8. Student Work Area: Install a student work area with computers and network connection to relieve congestion in computer labs.

9. Projection Systems: Staged replacement of multimedia projection systems in all classrooms as they age and deteriorate.

10. Computer and Lab Upgrades: BPP has submitted to NPS a proposed Lab upgrade plan and related equipment request for FY '02 through FY '09.

Financial Resources

It is clear that the financial resources available to NPS and BPP through mission funding have not and will not be sufficient to meet the above requirements in their entirety. In the past, shortfalls in mission funding have been partially met with combinations of deferred maintenance, delayed improvements, cash infusions from generous sponsors, and creative use of reimbursable funding. These strategies will not be adequate to meet the demands of a School that is growing in student enrollment, faculty population, and program growth. Nevertheless, there are some funding strategies that could be employed over the next five years to address these issues.

- A planned "catch-up" for BPP over the next two fiscal years, admittedly involving difficult internal reallocations of NPS mission funds, to bring BPP more into line with the other Schools at NPS in terms of faculty/ student/ curricula ratios, administrative faculty work-year allocations, and staff positions.
- Explore opportunities for targeted non-DoD appropriations to support selected program and growth initiatives.
- Fully-fund Chairs in each academic concentration area.
- Identify infrastructure support for EMBA and other DL growth initiatives to the NPS Resource Sponsor as a new requirement for additional mission funding support.
- Working with the NPS foundation, proactively identify opportunities for private and foundation support for BPP such as:
  1. Endowed faculty awards
  2. Endowed student research support and awards
  3. Endowed faculty chairs
  4. Endowed seminar or colloquia series
  5. Corporate support for upgrades in instructional technology
  6. Dean's discretionary fund
- Obtain annual funding support from curriculum sponsors and Advisory Committee members.
- An organized and staffed communications and advancement program for BPP, coordinated with NPS institutional advancement initiatives.

Measures of Attainment

As we move through the next five years, several interim measures of progress will be developed as part of our management and budget processes: numbers of faculty, students and programs, size of budget, number of faculty publications, number of colloquia and

conferences held, number and funding of chairs, etc. Ultimately, however, our success, or our progress toward success, can probably be measured by a few indices.

- Number and mix of students graduating from our programs
- AACSB and NASPAA accreditation
- Satisfaction of Sponsors and Navy/DoD leadership

Conclusion

In summary, NPS and BPP must achieve three critical management objectives.

1. Complete the Transition from a Department to a School
2. Organize and Resource to Meet Today's Requirements
3. Position the School to Meet Tomorrow's Opportunities

This is an ambitious agenda. It represents further departures from the status quo, but it also rejects a total redesign (such as a complete shift to distance learning). It requires fuel – human energy and financial resources. It requires hard decisions. It changes the models for how we conduct our business. It could fall short or even fail.

On the other hand, there is evidence of high demand for our products. There are signs of support from the Navy and DoD. There is creativity among our faculty. New technologies and new educational models can help us. NPS and BPP are aligning internal processes to facilitate better management, growth, and flexibility. New resource sources are available for exploration. And, status quo is not really an option: in today's environment, organizations that stand still slip backward.

Finally and most important, our students, the Navy and DoD, and the Nation need what we offer – This is work worth doing and worth trying to do well.

Appendix 2.1I2

GSBPP STRATEGIC ISSUES

Draft 11/30/04

Contents

BPP Vision and Mission

Vision: Through scholarship-based education and research to transform our students intellectually, professionally and personally; and to transform the organizations that engage us.

Mission: To serve the Nation by educating military officers and DoD civilians in defense-focused business and public policy, by conducting scholarly research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with national defense business management practice and policies.

Means: We pursue our vision and perform our mission through graduate education, research, and professional service.

- *In Education*: Through resident and distance learning degree and non-degree programs, we strive to develop students' abilities to analyze, think critically, and take intelligent actions so they can more effectively carry out their future professional responsibilities to manage organizations, resources, people, and programs in complex and sometimes life-threatening environments.

- *In Research*: Conduct scholarly, technical, and applied research that supports military decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines; and advances the development of graduate education.

- *In Professional Service*: Provide professional expertise that advances knowledge and business management within NPS, The Department of the Navy, the Department of Defense, and other government agencies; as well as in our professional and academic organizations.

Goal: To be, and to be recognized as, the Nation's premier school for defense-focused business management and public policy. To be the institution that national leaders look to for education, information, and innovation in the management of the business of defense.

Overview of Goals

Stakeholders

BPP will manage our interactions with our primary stakeholders, including those responsible for resource flows, student inputs, curriculum content, and those who "consume" our educational and research outputs, and mitigate the conflicting and confounding factors that result from having multiple stakeholders.

Scholarship

BBP will ensure that faculty in all ranks and tracks maintain their intellectual qualifications and currency in their expertise by fostering a research-supportive environment. BPP policies and practices will encourage, facilitate, and reward defense- and discipline-relevant scholarly activity, including contributions to scholarship and practice. As a result, BPP will maintain accreditation and become recognized as the premier institution for defense-focused management and public policy scholarship. Faculty and student research will be highly valued and respected.

Instruction

BPP will be recognized as the Nation's premier school for defense-focused business management and public policy, so that the Navy and other services place a high value on a BPP degree to help improve Navy/defense business practice, particularly as officers move up in their careers. As such, BPP will be

- The nation's top school for Defense Management scholarship and education.
- The institution that national leaders look to for education, information and innovation in the management of the business of defense.
- The 'go to' place for graduate-level Defense Business Management education.

Resident Education Programs: the BPP resident MBA will be the foundation for all BPP education programs, and be widely recognized, in academia, DoN/DoD, the defense industry, the private sector, and internationally as a top-quality MBA.

Distance Learning (DL) Education Programs: BPP will extend the impact of its educational programs by using appropriate DL technologies to provide graduate education to officers, particularly Navy URL, and DoD civilians unable to attend NPS. We will maintain academic standards consistent with our residential programs. We will also ensure that these DL programs complement, not overtake, our residential programs and that our DL programs not "cannibalize" our residential programs in terms of resources or students.

Management Development and Executive Education: BPP will maintain its niche in the defense educational continuum. As such, we will take a measured approach toward

management development and executive education (MDEE) programs, focusing on those opportunities that exploit our unique capabilities and priorities.

People

Faculty: BPP will recruit and retain quality faculty with the requisite academic and applied skills to satisfy our unique research and instructional mission. We will maintain a workload model for all faculty types that is similar to comparable faculty at other research-oriented business schools. We will support programs to mentor and develop faculty in both research and instruction at all points in their careers. We will foster a collegial community within the BPP faculty.

Students: Our graduates will be sought after to fill jobs within and beyond their military careers because they enter with strong academic qualifications; they experience a unique degree program that blends business and defense relevance; their courses are taught by faculty who are highly skilled in the classroom and ultimately knowledgeable of student backgrounds and needs. All of our national and international students will graduate and leave to tell others that their degree—whether obtained in residence or distance learning—is second to none.

Staff: BPP will fully integrate the staff as participating members of the BPP family, including civilian and military faculty and staff. BPP will provide the support staff with state-of-the-art tools and equipment, including financial management information systems, to enable the staff to provide timely support to BPP's research and educational mission.

Community

Culture: We will create a culture of high-quality scholarship and mutual respect among faculty and staff based on shared identity and motivation to work as a strong team to achieve our strategic goals. Without each part of our BPP community, civilian tenure-track and non-tenure-track faculty, military faculty, and staff we cannot achieve our goal to be the Nation's premier school for defense-focused business management and public policy. Without all of the parts working together as a team, we are only another business school or government organization. We will value collegiality by recognizing that our diversity of professional experience does not translate into divisiveness. Our excellence is in fact due in large measure to our diversity. That diversity is what makes us unique. We should seek ways to achieve true collegiality and a sense of one team by promoting greater understanding and appreciation for our unique cultures, which will in turn allow us to create a whole that is greater than the sum of the parts.

Identity: BPP will develop and maintain a shared BBP identity that highlights BPP's contributions to defense-focused business and public policy education and research; makes BPP faculty, staff, students, and sponsors boastingly proud of their connection to

BPP; and establishes BPP as an essential resource to defense and government decision and policy-makers.

Resources

Financial: To maintain BPP's instructional and research quality, BPP will secure stable and sustainable sources of funding independent of NPS mission funds and independent of NPS internal budgeting process. Collectively, the sources of funds will be sufficient to support faculty at the level of the BPP target faculty workload model.

Facilities: BPP will seek to continually upgrade facilities for research, residential education, and distance learning, including classrooms, DL studios, computer labs, and faculty offices, to ensure BPP has state-of-the-art facilities consistent with our standing as the Nation's leading institution of defense-related business and public policy research and education.

Stakeholders

Goal 1: Stakeholders: BPP will manage relations with stakeholders to maximize the resources, students, and support that are available to support the elements of this strategic plan and to reduce the conflicting and confounding factors that result from having multiple stakeholders.

BPP's stakeholders can be seen as internal and external. Internal Stakeholders are the students, faculty, and staff, whose education, profession, career, or jobs are dependent upon the successful operation of the School. External Stakeholders are the various entities who send students, sponsor education programs and research, provide funds, and determine policies that impact the School. Some external stakeholders have a direct stake in the successful operation of the School (e.g., curriculum and student sponsors); others impact the School through policy, oversight, or funding. A representative listing of external stakeholders includes:

OPNAV
- NETC
- BUPERS
- VCNO
- CNO
- N1
- N82
- NAVSUP
- URL Communities: Aviation, Surface, Submarines
- N00T
- Curriculum Sponsors

Accrediting Agencies: AACSB, NASPAA
DAU
Academic/Professional Communities
Student Sponsors/Detailers
Services: Army, Air Force, USMC
Research Sponsors
Employers of BPP Graduates
NPS Community
- Mezzanine
- Other NPS Schools and Departments
- Alumni

BPP interaction with these stakeholders is varied and complex. (Figure 1 [pg. 9] provides a diagram.) We have extensive and direct involvement with the NPS Mezzanine, and we interact with some OPNAV entities both directly and through the Mezzanine. We negotiate programs and research engagements directly with sponsors, but these

agreements are subject to NPS oversight. NETC impacts us directly through oversight of the EMBA but they stand between BPP and the resource sponsor (N00T).

Similarly, the relative importance of individual stakeholders to BPP is different, may vary over time, and may receive attention that is disproportionate to their importance. Resource stakeholders can be very important and demand a lot of time and attention during key points in the budget cycle. On the other hand, OPNAV policy makers also have significant potential and real impact on BPP, yet we tend to spend relatively little time with them. There is also considerable interaction between stakeholders: faculty-sponsor, students-detailers, Mezzanine-curriculum sponsors. Occasionally their interests conflict and no stakeholder is consistently dominant over time.

This confounded stakeholder picture explains some of the organization tensions that BPP experiences as it attempts to respond to and serve these disparate interests. At the same time, the lack of a dominant stakeholder helps define a strategic position for BPP that comes with a diversified portfolio.

Strategic Objectives

- *Students*: Optimize the number of academically qualified students selected for BPP resident and DL programs.

- *Resource Stakeholders:* Increase and diversify the amount and sources of financial resources available to support BPP programs.

- *Policy and Oversight Stakeholders*: Be proactive in working with policy/oversight stakeholders to align policies and oversight with the strategic objectives and operational requirements of BPP.

GSBPP STAKEHOLDERS

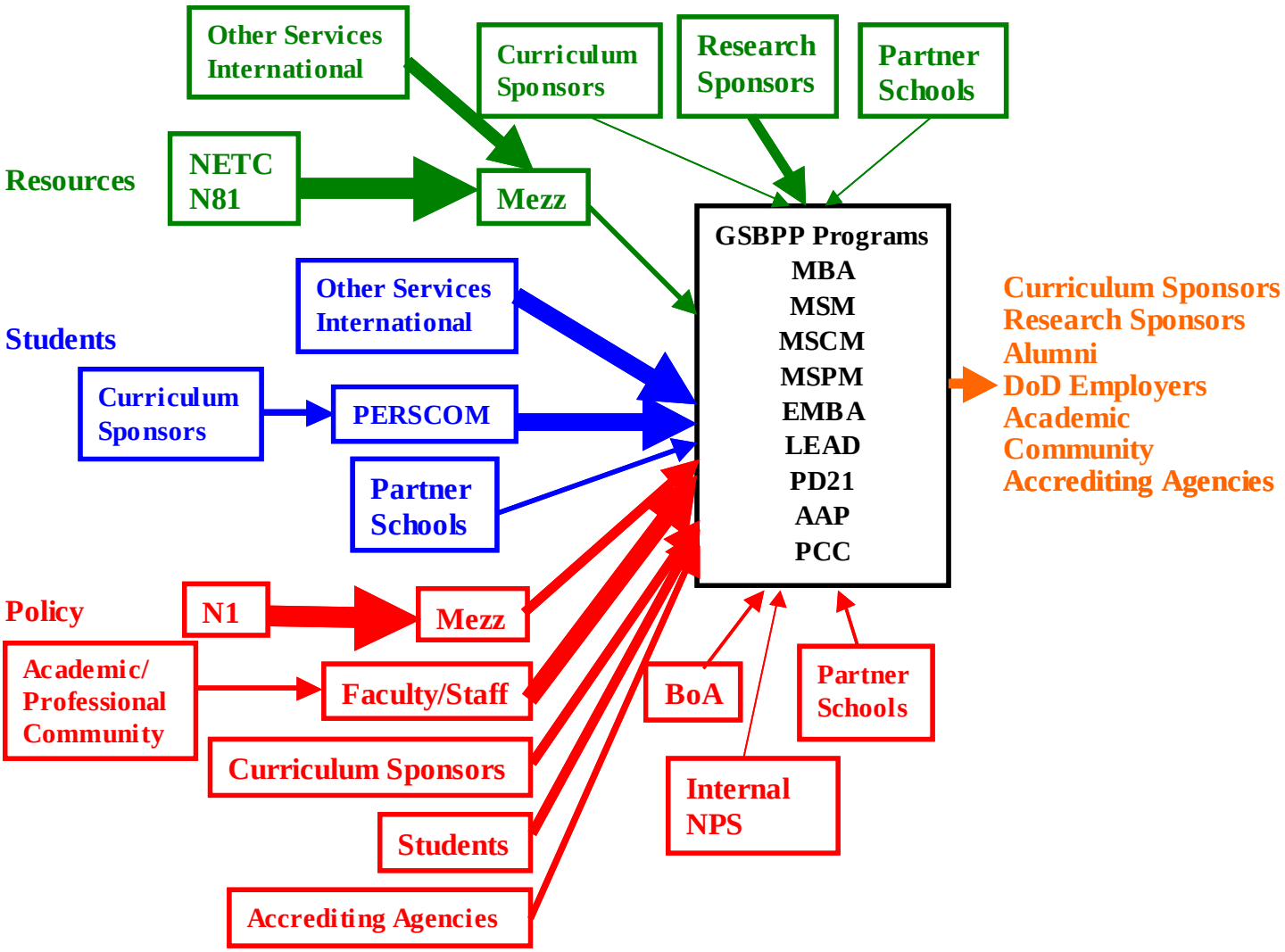


Figure 1

Scholarship

Goal 2: <u>Scholarship</u>: BPP will ensure faculty in all ranks and tracks maintain their intellectual qualifications and currency in their expertise by fostering a scholarship-friendly environment in BPP. BPP policies and practices will encourage, facilitate, and reward defense- and discipline-relevant scholarly activity, including contributions to discipline and practice.

Strategic Objectives:

- *BPP Scholarship Focus:* Promote on-going faculty dialogue and continual self evaluation to ensure that BPP is accomplishing its scholarly objectives, that these objectives are appropriately aligned, and that scholarly activities receive the appropriate attention and support relative to other BPP activities.

- *Scholarship Incentives:* Establish incentives that reward continued scholarly productivity for both tenure- and lecturer-track faculty members, including faculty release time and funding for travel and equipment, and celebrate the faculty receiving these incentives.

- *Scholarly Productivity:* Monitor faculty contributions to discipline-based scholarship and practice to ensure that the quality, quantity, and mix of BPP research outputs are appropriate to BPP's mission and faculty mix, including our need to maintain intellectual qualifications and currency.

- *Tenure-Track Workload Model:* Ensure that NPS and BPP continue to provide internal research funding, including workload relief funding and cost-sharing, to maintain a workload model that is consistent with a research university.

- *Lecturer-Track Workload Model:* Promote scholarly activity within the lecturer-track faculty by providing the opportunity for release time, supporting efforts to secure reimbursable research funding, and funding scholarly activity through internal cost-sharing and direct research funding, as possible.

- *Faculty Collaboration:* Exploit the diverse knowledge and experience in the BPP faculty by encouraging collaboration between all faculty constituencies, including tenured and untenured tenure-track faculty, lecturers, senior lecturers, and the military faculty.

- *Faculty Mentoring:* Hire highly qualified tenure- and lecturer-track faculty members and maintain a robust mentoring program that provides all faculty members the best possible chance for successful promotion and tenure decisions.

- *Scholarship-Oriented Environment:* Through research seminars and informal brown bag lunches, create a scholarship-oriented environment that encourages intellectual discovery and exchange within the BPP faculty, and between the BBP

faculty and subject matter experts from other universities and throughout the government and industry.

- *DoN/DoD Connectivity:* Maintain connectivity to DoN, DoD, and other government and international policy and decision makers to ensure our scholarly products remain relevant and at the forefront of our academic disciplines.

- *Funding Relationships:* Develop long-term funding relationships to support BPP faculty scholarship, drawing on MOUs and other long-term relationships established by the Dean, BPP Chairs, and entrepreneurial faculty members, and broker this funding through an objective, transparent internal proposal evaluation process.

- *Scholarship Support Capabilities:* Facilitate BPP scholarly productivity by maintaining a qualified and properly resourced support establishment, including BPP staff and research assistants, research faculty, and post-doctorates, where appropriate.

Graduate Education

Goal 3: <u>Graduate Education Programs</u>: To be, and to be recognized as, the Nation's premier programs for defense-focused, graduate-level management education, and hence the 'go to' programs for Defense Business Management education. To have the Navy and other services place a high value on a BPP degree, particularly as officers move up in their careers, to help improve Navy/defense business practice. As such, BPP graduate programs are to be

- **Uniquely tailored to the educational needs of the US and international defense communities**
- **Recognized for exceptional quality and relevance**
- **Adaptable and responsive**
- **Coherent with the Navy PME Continuum**

Strategic Objectives:

- *Instructional Excellence*: Encourage and facilitate excellence in instruction by creating programs and opportunities to support faculty teaching development and recognition of faculty instructional accomplishments. Solidify and expand the Teaching Effectiveness Program. Develop and provide significant and recognized rewards and acknowledgments for teaching excellence.

- *Faculty Capabilities*: Move toward all faculty becoming capable and experienced in both resident and DL instructional modes and competent with technologies that support each mode.

- *Accreditation*: Maintain current AACSB and NASPAA accreditations. Expand NASPAA accreditations to encompass DL programs. Develop learning objectives and Assurance of Learning programs for all degree programs.

- *Sponsor Relationships*: Establish or maintain program sponsorship (or championship) for all BPP degree and non-degree programs. Maintain connectedness to sponsors and promote sponsor involvement to send students, fund chairs, provide speakers, generate project research topics, and provide resources.

- *Marketing and Promotion*: Create a well-developed marketing plan for instructional programs within the larger framework of a marketing plan for BPP. Support the marketing effort with staff attention and resources to develop persuasive marketing materials and develop channels to officers and sponsors. (Slogan: "Scholarship-Based Education"; "Management for Defense")

- *Educational and Curriculum Leadership*: Provide participation and leadership in defining the business and public management educational needs of the Navy and Defense Community

- *Financial Stability*: Generate strong support for high-quality Navy/defense-focused degree programs, resulting in stable and adequate students loads and dependable financial resources.

Resident Education Programs

Goal 4: <u>BPP Resident Education Programs</u>: The BPP MBA will be widely recognized in academia, DoN/DoD, the defense industry, and the private sector as a top quality MBA, and the pre-eminent defense-oriented MBA. The resident Defense-Focused MBA will continue to be, and be recognized as, one of the School's flagship degree programs. As such,

- **The MBA remains a foundation of the School's reputation as the leading school for defense management education.**
- **Our graduates stack up with top programs in the country and are sought after to fill jobs within and beyond their military careers.**
- **The MBA program acts as a foundation for, and a source of, innovation and development valuable to all BPP education programs.**

Strategic Objectives:

- *Program and Curriculum Development*: Develop hybrid programs combining the MBA with technical concentrations from other NPS schools (e.g., MBA-OA, MBA-IT, MBA-SE, MBA-ENGR, MBA-NSA). When presented with the appropriate opportunities and sponsorship, develop new resident curricula within the MBA program (e.g., Shore Installation Management). Establish a Defense Management curriculum, independent of sub-specialty code requirements.

- *Certificate Development*: Examine the opportunities to create and market graduate certificate programs for each of the major BPP curricula (FM, ACQ, LOG, MSA, MGMT). Potential markets for certificates may include students from other NPS schools who are able to extend one quarter or graduates from the EMBA program able to attend NPS for one quarter to establish a specialization just-in-time prior to a utilization tour.

- *Curriculum Integration*: Reinvigorate BPP efforts to achieve integration of the resident MBA program by further development and acceptance by faculty of the Integration Framework. Rely on incremental integration as a means toward program coherence horizontally, vertically, across disciplines, with project.

- *Student Growth*: Promote and accept gradual growth in resident student enrollment toward a capacity of 225 new students (9 cohorts) per year. Promote growth in underutilized curricula. Promote growth of URLs.

- *Student Quality*: Attract high-quality, well-prepared students motivated by future career benefits from their BPP MBA, both in and after their military careers. Increase the quality and academic preparation of resident students. Consider heightened academic admissions qualifications, participation in the admissions process, refresher opportunities, and expanded pre-arrival outreach activities.

- *Student Intellectual Life*: Create an academic environment that encourages, permits, and provides opportunities for intellectual exploration and discovery. Elements of this include relaxing student workload, providing flexibility within standard curricula programs, developing a seminar/workshop program (a la PAED), and a BPP speakers program.

- *Instructional Facilities***:** Maintain a continuing program of renovation and retrofitting to assure all classrooms are presentable (at least as nice as IN271 or CEE spaces) and state-of-the-art technologically. Create a classroom within Ingersoll capable of holding 150. (Reconfigure IN122.)

- *Resident Program Funding*: Annually, establish a recognized pool of funds to support resident instructional initiatives and delivery (e.g., course development, case development, Teaching Effectiveness Program, integration entrepreneurship, and workload relief).

Distance Learning Education

Goal 5: <u>Distance Learning Programs</u>: The NPS strategic plan says, "NPS must provide education to officers wherever they are." With a 52 percent decrease in URL officers at NPS between 1995 and 2004, we are encouraged to find ways to provide graduate education not only to those officers who can come to Monterey, but also to those who cannot. To support the NPS strategy, BPP will use appropriate DL technologies to provide our unique, defense-focused management education to DoN URL officers, and DoD civilians. .

Strategic Objectives

- *EMBA Enrollment*: Stabilize the EMBA program at four cohorts until there is significant demand from other Navy communities or other services to increase beyond this level.

- *MS Programs Enrollment*: Maintain MSPM, MSCM, and LEAD input at one cohort per year

- *Evaluate New Programs*: Create new DL programs only if there is strong customer demand. If there is strong demand, establish new programs only if they meet the following criteria: program pricing not only breaks even but supplies at least a 10 percent cost contingency, student target market does not cannibalize our residential programs, and the program mix of instructors mirrors the BPP faculty mix discussed in Goal 7.

- *Development of DL Faculty*: Encourage faculty to complete Introduction to Distributed Learning (IDL) so each faculty member can determine to what extent web-based learning can be incorporated into his/her class. The BPP objective is to have all new faculty complete IDL within 3 years of coming to BPP and to have all current faculty complete IDL by 2008. All faculty teaching in DL programs should be required to take the IDL course, and if possible the VTE course. Where this is not possible, a faculty member experienced in the DL should be assigned to mentor the new DL teacher.

- *Development of Web-based Instruction*: Provide incentives that spur faculty to incorporate web-based materials and modules into our programs to the maximum extent possible.

- *Staff Support*: Insure that an adequate number of skilled DL support staff are in place to meet student and faculty needs so that they can focus exclusively on learning. Provide DL support staff with office space enabling them to easily interact, the technology needed to do their jobs efficiently and well, the incentives and rewards to recognize their work, and the leadership and administrative structure to coordinate their work.

- *DL Technology*: Provide high-quality DL technology (e.g., VTE studios, streaming video) that support faculty-student interaction and the full range of instructional strategies faculty use to meet learning goals

Management Development and Executive Education

Goal 6: <u>Management Development</u>: BPP will take a measured approach toward involvement in management development and executive education (MDEE) programs.

Although at this time we will not initiate these type of programs, we will participate in NPS- or CEE-created programs only if program content requires the current expertise of BPP faculty, BPP and its faculty are adequately compensated for their time, and participation adds to BPP's instructional and/or research mission as well as furthers NPS's strategic goals. Faculty participation in these programs will not compromise the quality of instruction we provide in our residential and distance learning degree programs.

Strategic Objectives

- *Stakeholders*: Monitor the needs of our stakeholders to determine their MDEE requirements. Act as fair brokers to help our stakeholders determine whom they should turn to for MDEE programs

People: Faculty, Students, Staff

Faculty

Goal 7: Faculty: BPP will recruit and retain quality faculty with the requisite academic and applied skills to satisfy our unique research and instructional missions. We will maintain a workload model for all faculty types that is similar to comparable faculty at other research-oriented business schools. We will support programs to mentor and develop faculty in both research and instruction at all points in their careers. We will foster a collegial community within the BPP faculty.

Strategic Objectives: Faculty Composition:

- *Faculty Mix*: Hire new faculty as needed to support instruction programs, but governed by the future target mix of faculty to be 70 percent tenure-track, 30 percent lecturer-track.

- *Military Professors*: Develop a model for the creation of positions for Permanent Military Professors, one for each concentration area. Officers complete doctorates funded by the service with follow-on positions at NPS. PMP officers have comparable careers to their civilian counterparts. A PMP career path leads to promotion for successful service as professors.

- *Military Faculty (MILFAC)*: Establish wider Military Faculty representation across BPP curricula areas. Re-establish a MILFAC billet in FM. Create a MILFAC billet in Logistics.

- *Adjunct Professors*: Establish a stable group of academically-qualified, part-time instructors with continuing attachment to BPP to accommodate the fluctuations in instructional demand. The use of lesser-quality adjunct faculty hired ad hoc to fill teaching gaps should be minimized. Academic Associates should monitor the performance of adjunct faculty.

- *Chaired Professors*: Establish a chaired professor position in the Management area. (One role: chaired professors serve as executive advisors to new faculty, providing a strong link to research opportunities within DoD that are matched to the new faculty member's expertise and interests.)

- *Research Professors*: Attract high-quality Research Professors to support BPP's research mission on a short-term and continuing basis as research opportunities and funding allow.

Strategic Objectives: Faculty Workload:

- *Tenure-Track Standard*: Develop funding mechanisms to provide tenure-track faculty with 3 months of release time for scholarly activities (refereed publications). Continued support should be conditional on successful productivity. Standard annual workload profile to be: 6 months instruction, 3 months direct research (2 from NPS, 1 from BPP), 3 months self-generated support.

- *Lecturer-Track Standard*: Develop funding mechanisms to provide lecturer-track faculty with 1 month of release time for scholarly activities (practictioner publications). Continued support should be conditional on successful productivity. Standard annual workload profile to be: 9 months instruction, 1 month direct support, 2 month self-generated support.

- *Sabbaticals*: Endorse and encourage a sabbatical program for BPP faculty. Every 7 years tenure-track faculty should be provided sabbaticals to "recreate" themselves. The requirement that a faculty member spend the sabbatical away from NPS is rescinded due to recognition that this requirement creates undue financial and familial hardships for faculty with young children and working spouses.

Strategic Objectives: Faculty Development and Assessment

- *Faculty Development*: Establish a robust mentoring program that provides all faculty members the best possible chance for successful promotion and tenure decisions. Establish faculty development processes modeled on those at top business schools and other outstanding employers.

- *Performance Agreements*: Establish a program of performance agreements for both new and existing faculty with their mentors and the Dean that outline expectations and provide a clear roadmap towards tenure or promotion.

- *Performance Assessment*: Consolidate and integrate the different currently existing feedback mechanisms (collegial review, performance review, SOFs, pay step review, promotion and tenure, etc.). Align performance assessment systems with the actual work and activities required to be performed by faculty.

- *Faculty-wide Contributions*: Monitor faculty contributions to discipline-based scholarship and practice to ensure that the quality, quantity, and mix of BPP research outputs are appropriate to BPP's mission and faculty mix, including our need to maintain intellectual qualifications and currency.

- *Incentive and Reward Systems*: Institute a faculty incentive system that encourages and rewards activities that are consistent with faculty expectations and performance agreements. Ensure that these incentives are clearly linked to the behavior they reward.

Students

Goal 8: <u>Students</u>: Our graduates will be sought after to fill jobs within and beyond their military careers because they enter with strong academic qualifications; they will experience a unique degree program that blends business and defense relevance; their courses will be taught by faculty who are highly skilled in the classroom and ultimately knowledgeable of student backgrounds and needs. All of our national and international students will graduate and leave to tell others that their degree—whether obtained in residence or distance learning—is second to none.

Strategic Objectives

- *Student Qualifications:* To create a superior learning experience for both students and faculty, increase the quality and academic preparation of students selected for BPP resident and DL programs. Consider heightened academic admissions qualifications, participation in the admissions process, refresher opportunities, and expanded pre-arrival outreach activities.

- *Student Intellectual Life***:** Our students come to us as talented managers and leaders. We will transform them to also value intellectual exploration and discovery. To create this environment, we should explore relaxing student workload and providing flexibility within standard curricula programs.

- *Faculty Qualifications:* To truly transform our students intellectually, personally, and professionally, our students must leave our programs, highly satisfied, knowing that we have provided the best teachers for every aspect of their learning experience. To do this, and to back up our claim that we have a defense-focused MBA, we must ensure that all faculty members are fully qualified to teach in a manner that meets the needs of our unique students. This implies an understanding and appreciation of the national and international defense cultures from where our students come.

- *Faculty Assignments:* Consideration should be given to assigning our best teachers in the first quarter of all of our programs. “Best” refers to good teaching skills, experience with our students, and those willing to help “set the tone” for the graduate education experience and NPS standards. New faculty and adjuncts should not be used in first-quarter classes.

- *Program Integration:* Regardless of whatever formal program integration mechanisms are developed, all faculty members should attempt to stay abreast of content and scheduling of courses taught in the same quarter. To further enhance the learning experience, faculty should seek means of integrating content across quarters, within subspecialty or core curricula.

- *Student Input:* To acquire data to improve our programs, and to communicate that we value student experience and opinion (i.e., that we truly see them as a stakeholder), we should continue to give students a mechanism to give us feedback periodically, e.g., every other quarter, during the time they are in a resident or DL program.

Staff

Goal 9: <u>Staff</u>: Ensure that BPP staff are fully integrated and participating members of the BPP family, i.e., faculty, military members, and civilian staff. That endeavor consists of:

- **One School – designed to be responsive, competitive, and a partner with DoD sponsors to meet the needs of an ever changing world environment and that is accomplished by working as…**
- **One Team – all faculty, military, and civilians appreciate and value what each group brings to the table in order to meet…**
- **One Mission – to deliver the best defense focused graduate education in order that our graduates are fully prepared to meet the needs of the defense department**

Strategic Objectives

- *Hiring*: To hire qualified people and ensure that they receive the training and tools necessary to carry out their duties

- *Organization:* To ensure that all the positions are organized in such way that is the most productive and efficient and that all those positions are filled. To cross train the staff to optimum utilization of their abilities

- *Facilities*: Ensure that the staff has access to all the necessary equipment and facilities so that they can do their jobs effectively and efficiently, which then enables the faculty (both military and civilian) to deliver the best possible education to officers

- *Integration*: Staff is considered an integral part of the team. To create a pleasant, challenging, and exciting work environment where all factors come together to create an atmosphere of mutual respect and teamwork.

Community

Culture

Goal 10: <u>BPP Culture</u>: To create a culture of high-quality scholarship and mutual respect among faculty and staff based on shared identity and motivation to work as a strong team to achieve our strategic goals. Without each part of our BPP community, civilian tenure-track and non-tenure-track faculty, military faculty, and staff we cannot achieve our goal to be the Nation's premier school for defense-focused business management and public policy. Without all of the parts working together as a team, we are only another business school or government organization. We should value collegiality by recognizing that our diversity of professional experience does not translate into divisiveness. Our excellence is in fact due in large measure to our diversity. That diversity is what makes us unique. We should seek ways to achieve true collegiality and a sense of one team by promoting greater understanding and appreciation for our unique cultures, which will in turn allow us to create a whole that is greater than the sum of the parts.

Strategic Objectives

- *Commitment:* Create a strong sense of commitment to our mission and continual self-improvement in research, instruction, and service.

- *Morale and Collegiality*: Act to develop high morale and collegiality in the BPP community. Develop an environment such that faculty/staff will look forward to coming to work. Encourage participation in BPP functions, such as faculty meetings, seminars, brown-bags, etc.

- *Culture of Scholarship:* Hold a distinguished scholars series where top-notch researchers in a wide variety of areas give lectures on a topic of interest to almost all faculty. Also, each area should have its own brown bag research discussion forum where faculty from that area (and other areas, if appropriate) talk about their work in a relaxed, collegial venue. Invite students to attend where appropriate.

- *Collaboration:* Seek numerous avenues of collaboration across disciplines and between tenure-track and non-tenure-track faculty through team teaching, service, and research. Provide equal support for tenure-track and non-tenure-track faculty to conduct research and publish their work in both A-journals and practitioner publications.

- *Commitment to continual professional development:* Provide resources for faculty to engage in a variety of means of self-improvement in research and instruction. Identify and provide opportunities for staff development, such as short courses related to particular fields plus courses in leadership and management, so that

they, too, share in the value the culture places on learning. Encourage interested staff to enroll in the MBA program.

- *Military culture:* Continue to educate civilian faculty about the values of the military cultures through military "field trips" and talks given by members of the military faculty. Such talks could include discussions of the work, structure, and values of a military organization in which officers have served, and the core values of their service .

- *Academic culture:* Provide information to our new faculty members about the linkages between the academic culture and the NPS mission. For example, new military faculty may interpret the BPP culture in a negative manner that reflects a lack of awareness of academic traditions and scholarship. Be clear on what the underlying values are of the academic culture.

- *Staff culture:* Survey staff to determine their concerns and values, share with faculty, and take action to improve the staff work quality of life.

- *Staff roles in the BPP system:* Provide tasks and communications that help staff to understand the bigger picture of NPS/BPP mission, their parts in the system, and the meaning and significance of the work they do. Hold staff meetings in which faculty members give short briefs on research, programs, and/or curricula. Where possible, send staff TDY to work on off-site projects or programs. Encourage staff to visit at least one class per quarter. The staff needs to be considered as an integral part of the BPP team.

- *Celebrations:* Hold periodic, joint celebrations of faculty and staff achievements. Schedule events only for the purpose of recognizing progress and achievements such as significant publications, high SOFs, faculty and staff awards, etc. Encourage everyone to attend.

- *We vs. They:* We work in the cumbersome, often-difficult NPS/DoD system. To fully accomplish the goals of that system, BPP administration should commit to problem solving and protecting from interference the faculty and staff who are doing the work toward the mission. Faculty and staff should commit to support BPP administration through willing and quick responses to information needed. Faculty should also value and support their colleagues who have chosen to undertake administrative responsibilities, whether on a full- or part-time basis.

- *Respect:* We have had a limited but significant history of harassment, insults, and other derogatory behavior on the part of faculty and staff. Harassment, insults, and other derogatory behavior should not occur and where they do, there should be appropriate action taken by the administration. Faculty and staff are not expected to tolerate such behavior in the workplace, nor should they suffer any consequences for reporting it.

A Shared BPP Identity

Goal 11: Identity: Develop and maintain a shared BBP identity that highlights BPP's contributions to defense-focused business and public policy education and research; makes BPP faculty, staff, students, and sponsors boastingly proud of their connection to BPP; and establishes BPP as an essential resource to defense and government decision and policy-makers.

Strategic Objectives:

- *BPP Signature Events:* Establish conference, symposia, and workshop series that exploit BPP's comparative advantage in defense-focused business and public policy education and research to reach a broader audience in academia, the military, the government, and business. Examples might include the Acquisition Research Conference; symposia on the "Business of Defense," etc.

- *BPP Signature Publications:* Develop a publication series highlighting defense-focused business and public policy research, such as the "BPP Journal of Defense Management," the "Working Paper Series in Acquisition Research," etc. Publications may or may not be peer-reviewed, open to submission from outside BPP, and distributed in hard copy or electronically as appropriate.

- *Distinguished Speakers Program:* Establish a Distinguished Speakers Program that periodically brings inspiring speakers to BPP and enables BPP faculty and students to interact with the speaker during their visits.

- *Distinguished Professor/Researcher Program:* Establish Distinguished Professor and Distinguished Researcher Programs to bring noteworthy experts to BPP for extended periods to interact with BPP faculty and students in both research and instruction.

- *BPP Case Study Series:* Establish the BPP Case Studies series to focus on defense-related cases studies for use within BPP, the service academies, and other defense-related educational programs.

- *Collegial Interaction:* Promote shared BPP identity through BPP events, such as BPP golf tournaments, softball/volleyball teams, parties, potlucks, 5K runs, and logo merchandise.

RESOURCES

Financial Resources

Goal 12: **<u>Resource Independence</u>: BPP will have stable, sustainable sources of funding independent of NPS mission funds and independent of NPS internal budgeting process. Collectively, the sources of funds will be sufficient to insure faculty support at the level of the BPP target faculty workload model.**

Strategic Objectives

- *Chair Professorships*: Each Chair should bring in between 500-750K to help support reimbursable research in that area.

- *Umbrella Projects*: Establish funding in the form of umbrella projects, with minimal direction for end products expected.

- *Reimbursable Education*: Insure the financial resources are raised to provide compensation aligned with the BPP DL workload model.

- *Sponsor Support*: Develop significant funding from each/all major DoD/DoN communities.

- *NPS Foundation*: Continue relationship with NPS Foundation as a means for developing private sector sponsorship of BPP activities and programs.

- *Fenced Direct Funds*: Move toward additional fencing of direct funds within the NPS mission budget (a la EMBA) for specific BPP programs currently funded from the NPS Mission budget.

- *Classroom Sponsorship Program*: Continue renovation and technological upgrades of individual classrooms through extension of the classroom sponsorship approach.

- *Resident Instruction Fund*: Annually, establish a recognized pool of funds to support resident instructional initiatives and delivery (e.g., course development, case development, Teaching Effectiveness Program, integration entrepreneurship, workload relief).

Facilities and Systems

Goal 13: **<u>Productive Facilities and Systems</u>: BPP will seek to continually upgrade facilities for research, residential education, and distance learning, including classrooms, DL studios, computer labs, and faculty offices to ensure BPP has state-of-the-art facilities consistent with our standing as the Nation's leading institution of defense-related business and public policy research and education. BPP will establish and upgrade management systems and processes to provide for the effective support of Faculty and School activities.**

Strategic Objectives:

- *Resident Instructional Facilities***:** Maintain a continuing program of renovation and retrofitting to assure all classrooms are presentable (at least as nice as IN271 or CEE spaces) and state-of-the-art technologically. Create a classroom within Ingersoll capable of holding 150. (Reconfigure IN122.)

- *DL Instructional Facilities*: Build sufficient state-of-the-art VTE studios to support all faculty teaching in DL programs. Build one studio in 2005.

- *Labs*: TBD

- *Financial Systems*: Create financial system and processes to provide readily available managerial financial information. System to provide information on budget execution and program/activity costs. Create a financial management system that is, to the extent possible, transparent to the faculty so they can focus on mission.

- *Management Systems*: TBD

‘just thinking….

META- ISSUES

Continuing strategic tensions

Trajectory:	Growth vs Consolidation
Direction:	Navy vs Wider Defense Community
Orientation:	Academic vs Military
Focus:	Core Business vs Diversification
Mission:	Instruction vs Research

Appendix 2.1I3

SWOT Analysis:
Opportunities, Threats, Strengths and Development Needs

July 2006

As part of our self-study and planning process we identified the following opportunities, threats, strengths and areas to develop:

Opportunities

- High demand for distance learning and off-campus programs
- Untapped opportunities to develop programs for government civilians
- Partnership opportunities with other business and public policy schools
- Short courses and certificate programs as part of life long learning
- Research opportunities in a constantly evolving defense environment
- Management expertise required to address the complex environment inherent in DoD's organizational changes
- Research and instruction opportunities to address the significant changes associated with the Global War on Terror

Threats

- Continual pressure to reduce the Navy's infrastructure
- Limited ability of officers from some career fields to participate in resident programs
- Constrained defense resources in the near-term and possibly beyond
- Senior military decision makers under-valuing unique, defense-relevant educational programs
- Navy and NPS bias toward science and technology
- Loss of flexibility and agility as NPS computer and other support services and process are centralized at NPS, regionalization in San Diego and standardized
- Expanding competition from other institutions (resident and part-time degree programs, distance learning, etc.)

Program Strengths

- Highly motivated and mature students with significant professional experience
- International students with diverse perspectives
- Growing service diversity in resident programs
- Student camaraderie and common defense focus
- A diverse faculty from a wide variety of disciplines and experiences

- Senior military officers and civilian equivalent faculty members that provide program relevance
- A proven, integrated core curriculum
- Active faculty involvement in curriculum development
- Rapid adaptation to change
- Sponsor-focused student-centered programs
- Regular interaction between faculty, students, sponsors, graduates and the research and professional communities
- Innovative, entrepreneurial, quality-focused faculty engaged in both classroom instruction and research
- Customized high quality academic programs driven by sponsors' needs and defense relevance
- Cohesive faculty sharing a common vision and mission
- A “can do” staff sharing the same vision and mission
- A research environment promoting forward thinking
- Significant output of solutions to DoD problems (student and faculty research)

Areas to Develop

- Updated and expanded facilities to modernize and meet growing student enrollment
- Classrooms that promote innovative instructional methodologies, including case studies and student collaboration and discourse
- Faculty expertise in distance education and innovative instructional technology
- Involving non-DoD organizations in the School
- Geographic separation and isolation from Washington, DC
- Excessive faculty workload to support innovative programs
- Incorporating lessons learned regarding instructional innovations
- Inconsistent instructional and research priorities due to constantly changing senior military leadership
- Bureaucratic rules and processes inconsistent with an innovative academic environment

Appendix 2.1I4

Dean's Vision and Goals

July 2006

In 2005, Robert N. Beck became Dean of the Graduate School of Business and Public Policy. At the beginning of his appointment he shared his vision for the School. This vision has provided direction for the school as it goes through the many changes taking place in the Department of Defense and the global economy.

Dean Beck's vision is for GSBPP to be known as the leading defense-focused business and public policy school, which, through scholarship-based education and research, transforms our students intellectually and professionally and transforms the organizations that engage us.

In order to achieve that vision, the Dean believes we must achieve the following broad goals:

- **BE RECOGNIZED FOR SUPERIOR CUSTOMER SATISFACTION -- SPONSORS AND STUDENTS**

Have those who leave the School proudly testify that they learned a lot that will help them in their careers, had a great experience and made life-long friends while they were here. (Our alumni are ambassadors of our School!)

Practice what we teach, both faculty and staff -- be great role models. Demonstrate good management and use resources effectively.

- **HAVE EXCEPTIONAL ASSOCIATES -- FACULTY AND STAFF**

Attract exciting people – people who have passion about what they do and want to be engaged in all aspects of our School. Recognize and respect diversity as an asset. Have fun at what we do! Recognize and reward those who go above and beyond their normal job expectations and make GSBPP a truly great place to work.

- **BE KNOWN EVERYWHERE FOR QUALITY IN EVERYTHING WE DO**

Do fabulous work, known around the world for its innovation and impact. Dot the 'i's, cross the 't's, answer the phones in a helpful way, respond to emails promptly, and never forget to do it right the first time. Constantly ask ourselves and our customers "How are we doing?"

Have no question ever surface about our ethics or integrity. It is one of our hallmarks.

- **REMEMBER THAT IT IS OUR SCHOOL; IT IS WHAT WE MAKE IT**

Respect each other regardless of position and promote a collegial, supportive, fun-filled environment. Raise hell when necessary and question "the way things are done around here" when they don't seem to make sense. Never rest on our laurels ("today's laurels are tomorrow's compost"). Expect to have some new ideas that don't work the first time as we explore new approaches. Learn from those experiences.

Recognize our people are smart and experienced. Rely on people -- faculty and staff -- for leadership, not on rules and unnecessary bureaucracy.

- **MAKE GSBPP A GREAT PLACE TO WORK FOR ALL**

Hold each member of our School responsible for creating and growing the kind of culture in which we want to work; a culture that reflects our passion to be the best at what we do. Attract exciting customers who see us as the educators and researchers of choice, who stretch us, and from whom we can learn and grow.

Create an environment where sponsors, students, other educational institutions, professional organizations and the community enjoy working with GSBPP and want to participate in our venture to be the best.

Appendix 2.1I5

GSBPP STRATEGIC DIRECTIONS
July 2007

GSBPP Vision and Mission Statements

Vision

To be recognized as the nation's premier school for defense-focused business management and public policy education and research. To be the institution that national leaders look to for education, research, information, and innovation in the management of the business of defense. To be recognized by our students, alumni, and other stakeholders for our excellence in defense-focused education and research.

Mission:
To serve our Nation by educating US and international military officers as well as defense civilians in defense-focused business and public policy, by conducting research in defense management and public policy, and by providing intellectual resources for leaders and organizations concerned with defense business management practices and policies.

Means: We pursue our vision and perform our mission through graduate education, research, and professional service.

- *In Education*: Through resident and distance learning degree and non-degree programs, we develop students' abilities to analyze, think critically, and take intelligent actions so they can more effectively carry out their future professional responsibilities to manage organizations, resources, people, and programs in complex, sometimes life-threatening environments.

- *In Research*: Conduct research, using the scholarships of discovery, application, integration, or teaching, that supports defense enterprise decision-making, problem solving, and policy setting; improves business management processes and practices; contributes knowledge to academic disciplines via dissemination in high-quality refereed research journals or suitable practitioner-oriented journals; and advances the development of graduate education.

- *In Professional Service*: Provide professional expertise that advances knowledge and business management within GSBPP, NPS, the Department of Navy, the Department of Defense, and other government agencies, as well as in our professional and academic organizations.

Research / Scholarship Directions

Research Assumptions

1. GSBPP is viewed as a graduate research school with prominent corporate stakeholders.
    a. Scholarship and effective instruction are intrinsically intertwined.
    b. Scholarship is critical to maintaining NASPAA and AACSB accreditation.

2. The four categories of scholarship include: discovery, application, integration and pedagogy.

3. All participating faculty should engage in scholarship appropriate for their rank and career status.

    a. Anonymous peer-reviewed articles are an important measure of tenure-track research quality.
    b. Non-tenure track faculty members are encouraged to engage in non-peer-reviewed publications appropriate to their field of study as well as peer-reviewed articles where appropriate.
    c. All faculty members are encouraged to participate in conferences where they report their research results.

4. NPS direct funding will support faculty instructional activities and no more than one quarter of tenure-track faculty research activity.
    a. Tenure-track faculty will need to attract either one or two quarters of research support to maintain the standard tenure-track faculty workload model (two quarters instruction/two quarters scholarship)
    b. Non-tenure-track faculty members will need to attract one quarter of research support to maintain the standard non-tenure-track faculty workload model (three quarters instruction/one quarter scholarship)

5. GSBPP's scholarship strategy should be consistent with the NPS strategy.
    a. NPS is moving in a direction that increases the value of research/scholarship.
    b. Body of research produced by the faculty should largely support the GSBPP/NPS mission.

Strategic Planks -- Scholarship

Vision: GSBPP will sustain a level of scholarship productivity consistent with being a graduate research school. GSBPP will ensure faculty in all ranks and tracks maintain their intellectual qualifications and currency in their expertise by fostering a scholarship-friendly

environment in GSBPP. GSBPP policies and practices will encourage, facilitate, and reward defense- and discipline-relevant scholarly activity, including contributions to discovery, application, integration and pedagogy.

A. Scholarship Culture

1. *Scholarship-Oriented Environment:* Promote a scholarship-oriented environment that encourages intellectual discovery and exchange within the GSBPP faculty, and between the BBP faculty and subject matter experts from other universities and throughout the government and industry.

2. *GSBPP Scholarship Focus:* Promote on-going self evaluation to ensure that: GSBPP is accomplishing its scholarly objectives; these objectives are appropriately aligned; and scholarly activities receive appropriate attention and support relative to other GSBPP activities.

3. *Scholarly Productivity:* Monitor faculty contributions to scholarship to ensure that the quality, quantity, and mix of GSBPP research outputs are appropriate to GSBPP's mission and faculty mix, including our need to maintain intellectual qualifications and currency.

4. *Scholarship Incentives:* Establish incentives that reward continued scholarly productivity for both tenure- and lecturer-track faculty members, including faculty release time and funding for travel and equipment, and celebrate the faculty receiving these incentives.

5. *Faculty Collaboration:* Exploit the diverse knowledge and experience in the BPP faculty by encouraging collaboration between all faculty constituencies, including tenured and untenured tenure-track faculty, lecturers, senior lecturers, and the military faculty.

B. External

1. *DoN/DoD Connectivity:* Maintain connectivity to DoN, DoD, and other government and international policy and decision makers to ensure our scholarly products remain relevant and at the forefront of our academic disciplines.

C. Financial

2. *Funding Relationships:* Develop long-term funding relationships to support GSBPP faculty scholarship, drawing on MOUs and other long-term relationships established by the Dean, GSBPP Chairs, and entrepreneurial faculty members, and broker this funding through an objective, transparent internal proposal evaluation process.

3. *Chair Professorships*: A role of the Functional Chairs associated with each academic area is to help support faculty and student scholarship activities,

increasing the amount of external or reimbursable funds for support through established relationships and processes.

4. *Umbrella Projects*: Establish funding in the form of umbrella projects with a mix of directed end products and open-ended research funding.

D. Workload

1. *Tenure-Track Workload Model:* Ensure that NPS and GSBPP strive to provide internal research funding, such as workload relief funding and cost-sharing, to maintain a workload model that is consistent with a research university.

2. *Tenure-Track Standard*: Develop funding mechanisms to provide tenure-track faculty with 3 months of release time for scholarly activities (refereed publications). Continued support conditional on successful productivity. Standard annual workload profile to be: 6 months instruction, 3 months direct research (2 from NPS, 1 from GSBPP), 3 months self-generated support.

3. *Lecturer-Track Workload Model:* Promote scholarly activity within the lecturer-track faculty by supporting efforts to secure reimbursable research funding and funding scholarly activity through internal cost-sharing and direct research funding, as possible.

4. *Lecturer-Track Standard*: Develop funding mechanisms to provide lecturer-track faculty with 1 month of release time for scholarly activities (practictioner publications). Continued support conditional on successful productivity. Standard annual workload profile to be: 9 months instruction, 3 months research (1 month direct, 2 months self-generated).

E. Support

1. *Faculty Development*: Establish a robust mentoring program that provides all faculty members the best possible chance for successful promotion and tenure decisions. Establish faculty development processes modeled on those at top business schools and other outstanding employers.

2. *Scholarship Support Capabilities:* Facilitate GSBPP scholarly productivity by maintaining a qualified and properly resourced support establishment, including GSBPP staff and research assistants, research faculty, and post-doctorates, where appropriate.

F. Scholarship Events & Activities

1. *GSBPP Signature Events:* Establish conference, symposia, and workshop series that exploit GSBPP's comparative advantage in defense-focused business and public policy education and research to reach a broader audience in academia, the

military, the government, and business. Examples include the Acquisition Research Conference, co-hosting the Navy Workforce Research and Analysis Conference.

2. *GSBPP Signature Publications:* Develop a publication series highlighting defense-focused business and public policy research, such as the "GSBPP Journal of Defense Management," the "Working Paper Series in Acquisition Research," etc. Publications may or may not be peer-reviewed, open to submission from outside GSBPP, and distributed in hard copy or electronically as appropriate.

3. *Distinguished Speakers Program:* Establish a Distinguished Speakers Program that periodically brings inspiring speakers to BPP and enables GSBPP faculty and students to interact with the speaker during their visits.

4. *Distinguished Professor/Researcher Program:* Establish Distinguished Professor and Distinguished Researcher Programs to bring noteworthy experts to GSBPP for extended periods to interact with GSBPP faculty and students in both research and instruction.

Instruction Directions

Instruction Assumptions

1. Instruction and Scholarship: GSBPP is viewed as a graduate school where effective instruction and scholarship are intrinsically intertwined.

2. Accreditation: GSBPP will continue to achieve both NASPAA and AACSB accreditation.

3. NPS Strategy: GSBPP's instruction strategy should be consistent with the NPS strategy. Instruction themes included in NPS's strategy are:

    a. Focus on Quality
    b. Provide comprehensive graduate-level education
    c. Sustain continuous improvement in the highest quality and relevance in graduate education
    d. Operate as a geographically distributed educational system, extending education to the Total Force
    e. Increase executive and non-degree educational opportunities
    f. Maintain excellence of the in-residence education program and extend that excellence to branch campus activities and distance learning programs.
    g. Attention to URLs. (In DL, increase enrollment level to 600 URLs within the next 5 years.)
    h. NPS is moving in a direction that increases the value of scholarship.

4. Environment: GSBPP's instruction strategy should be cognizant of the current and anticipated future environment. Aspects of the environment suggest:

    a. Fiscal constraints will be tight, both at NPS and among potential program sponsors.
    b. Residential degree programs do not appear to present opportunities for significant growth. Opportunities for program growth appear stronger in the DL arena.
    c. Requirements for DON subspecialty-based (P-Code) degree education has declined slightly, but is relatively stable. Demand for degree education not tied to subspecialty requirements has grown but is unstable and uncertain.
    d. The DoD community is rich with interest in graduate-level education, and lean with resources to support it.

Strategic Planks -- Instruction

<u>Vision</u>: GSBPP will be recognized as the Nation's premier school for defense-focused, graduate-level business and public management education, so that the Navy and other services place a high value on a GSBPP degree to educate officers and civilians and help improve Navy/defense business practice. As such, GSBPP will become

- **The nation's top school for Defense Management scholarship and education.**
- **The institution that national leaders look to for education, information and innovation in the management of the business of defense.**
- **The 'go to' place for graduate-level Defense Management education.**

<u>Brand</u>: GSBPP graduate education programs will be consistent with a GSBPP brand. Characteristics of the GSBPP brand are (will be):

- **Graduate level**
- **Scholarship-based education**
- **Uniquely tailored to the educational needs of the defense communities**
- **Recognized as high quality, relevant, and current.**
- **Adaptable and responsive**
- **Defense-relevant specializations**
- **Coherent with the Navy continuum of education**

Strategic Actions (in support of vision and brand):

A. External:

1. *Sponsor Relationships*: Establish or maintain program sponsorship (or championship) for all GSBPP degree and non-degree programs. Maintain connectedness to sponsors and promote sponsor involvement to send students, fund chairs, provide speakers, generate project research topics, and provide resources.

2. *Educational and Curriculum Leadership*: Be a principal advisor to DoD/DoN leadership in defining the business and public management educational needs of the Navy and Defense Community

3. *Market Analysis:* Comprehensively catalog all business/management education within the DOD community: programs, providers, funding sources, customers, needs. Identify fit between GSBPP "brand" programs and opportunities. Create a well-developed marketing plan for instructional programs within the larger framework of a marketing plan for GSBPP.

B. Programs & Curricula:

1. *Resident Program Foundation*: The GSBPP resident MBA/MSM program will remain a flagship program of GSBPP. The resident program will act as the

foundation for all GSBPP education programs, and be a source of innovation and development, valuable to all GSBPP education programs. The resident program will be widely recognized, in academia, DoN/DoD, the defense industry, the private sector, and internationally for providing a top-quality Masters degree.

2. *Differentiated Degrees*: GSBPP will continue to offer differentiated degree programs to meet student and sponsor needs. (GSBPP will continue the course of differentiating its resident MBA and MSM degrees. The focus of the MBA is "managerial"; the focus of the MSM is "analytical").

3. *Program and Curriculum Development*: Develop hybrid programs combining the MBA/MSM with technical concentrations from other NPS schools (e.g., MSM-OA, MBA-IT, MSM-SE, MBA-NSA). When presented with the appropriate opportunities and sponsorship, develop new resident curricula within the MBA/MSM program (e.g., Shore Installation Management).

4. *Certificate Development*: Examine the opportunities to create and market graduate certificate programs for each of the major GSBPP curricula (FM, ACQ, LOG, MSA, DefMgt). Potential markets for certificates may include 1) students from other NPS schools who are able to extend one quarter, 2) graduates from the EMBA program able to attend NPS for one quarter to establish a specialization just-in-time prior to a utilization tour, 3) stand-alone products offered via distance learning, 4) recognized specialization components of exiting degree programs.

5. *Accreditation / Assessment*: Develop learning objectives and Assurance of Learning programs for all degree programs.

6. *Curriculum Integration*: Reinvigorate GSBPP efforts to achieve integration of the resident MBA/MSM Core program by further development and acceptance by faculty of the integration framework. Rely on incremental integration as a means toward program coherence horizontally, vertically, across disciplines, with project/thesis.

7. *GSBPP Instructional Materials Series:* Establish the GSBPP Instructional Materials / Case Studies series to focus on defense-related cases studies and instructional products for use within GSBPP, the service academies, and other defense-related educational programs.

C. Growth:

1. *Current Programs*:
    a. *Resident mission-funded MBA/MSM Program*: GSBPP will respond to all opportunities and enroll all qualified students.
    b. *Mission-funded EMBA Program*: GSBPP will maintain enrollment at current levels (8 cohorts, 200 students).

c. *Reimbursable MSCM/MSP Programs*: GSBPP will target an enrollment of two cohort starts each (MSCM & MSPM) per year. (AAP ~ 3)

2. *New Programs*: GSBPP will evaluate new program opportunities in accordance with the established program acceptance criteria. Provided at the end, but listed here:
    a. Customer Need
    b. Core Expertise
    c. Comparative Advantage
    d. Faculty Capability
    e. Control
    f. Financial Viability
    g. Leverage Benefit / Risk

3. *DL Education Programs*: GSBPP will extend the impact of its educational programs by using appropriate DL technologies to provide graduate education to officers, particularly Navy URL, and DoD civilians unable to attend NPS. The DL programs will be widely recognized, in academia, DoN/DoD, the defense industry, and the private sector for providing a top-quality Masters degree. We will also ensure that these DL programs complement, not overtake, our residential programs and that our DL programs not "cannibalize" our residential programs in terms of resources or students.

4. *Management Development and Executive Education:* GSBPP will maintain its niche in the defense educational continuum. As such, we will take a measured approach toward management development and executive education (MDEE) programs, focusing on those opportunities that exploit our unique capabilities and priorities. We will participate in MDEE programs if program content requires the current expertise of GSBPP faculty, if GSBPP and its faculty are adequately compensated, and if participation adds to GSBPP's instructional and/or research mission as well as furthers NPS's strategic goals. Faculty participation in these programs will not compromise the quality of instruction we provide in our residential and distance learning degree programs.

D. Faculty

1. *Instructional Excellence*: Encourage and facilitate excellence in instruction by creating a commitment to continual professional development. Provide programs and opportunities to support faculty teaching development and recognition of faculty instructional accomplishments. (Solidify and expand the Teaching Effectiveness Program. Develop and provide significant and recognized rewards and acknowledgments for teaching excellence.)

2. *Faculty Capabilities*: Move toward sufficient faculty becoming capable and experienced in both resident and DL instructional modes and competent with technologies that support each mode. (Support faculty to complete Introduction

to Distributed Learning (IDL) to extend the incorporation of learning technologies into classes. The GSBPP objective is to have all new faculty complete IDL within 2 years of coming to GSBPP and to have all current faculty complete IDL by 2009.)

3. *Faculty Qualifications and Orientation:* To truly transform our students intellectually, personally, and professionally, our students must leave our programs, highly satisfied, knowing that we have provided the best teachers for every aspect of their learning experience. To do this, and to back up our claim that we have defense-focused programs, we must ensure that all faculty members are fully qualified to teach in a manner that meets the needs of our unique students. This implies an understanding and appreciation of the national and international defense cultures from where our students come.

E. Students

1. *Student Quality:* Attract high-quality, well-prepared students motivated by future career benefits from their GSBPP degree, both in and after their military careers. To create a superior learning experience for both students and faculty, increase the quality and academic preparation of students selected for GSBPP resident and DL programs. Consider heightened academic admissions qualifications, participation in the admissions process, refresher opportunities, and expanded pre-arrival outreach activities.

2. *Student Intellectual Life*: Create an academic environment that encourages, permits, and provides opportunities for intellectual exploration and discovery. Elements of this include relaxing student workload, providing flexibility within standard curricula programs.

F. Financial

1. *Financial Stability*: Generate strong support for high-quality Navy/defense-focused degree programs, resulting in stable and adequate student loads and dependable financial resources.

2. *Fenced Direct Funds*: Move toward additional fencing of direct funds within the NPS mission budget (a la EMBA) for specific GSBPP programs currently funded from the NPS Mission budget.

3. *Instruction Fund*: Annually, establish a recognized pool of funds to support instructional initiatives and delivery (e.g., course development, case development, Teaching Effectiveness Program, integration entrepreneurship, workload relief). The Instruction Fund to be resourced from direct and reimbursable programs, and used to support all.

G. Facilities and Support

1. *Resident Instructional Facilities*: Maintain a continuing program of renovation and retrofitting to assure all classrooms are presentable (at least as nice as IN271 or CEE spaces) and state-of-the-art technologically. Create a classroom within Ingersoll capable of holding 150. (Reconfigure IN122.)

2. *Classroom Sponsorship Program*: Continue renovation and technological upgrades of individual classrooms through extension of the classroom sponsorship approach.

3. *DL Instructional Facilities and Technology*: Provide high-quality DL technology (e.g., VTE studios, streaming video, Elluminate) that support faculty-student interaction and the full range of instructional strategies faculty use to meet learning goals. Maintain sufficient state-of-the-art VTE studios to support all faculty teaching in DL programs. Evaluate and introduce emerging DL technologies that enhance the quality of distributed education.

4. *Staff Support*: Insure that an adequate number of skilled resident and DL support staff are in place to meet student and faculty needs so that they can focus exclusively on learning.

5. *DL Business Office*: Organize the direct program support activities for GSBPP DL programs within an integrated, coordinated office. Maintain the DL business office to provide administrative assistance and support to DL Program Managers and faculty to make their teaching experience more productive and effective.

INSTRUCTION PROGRAM EVALUATION CRITERIA

Criteria to Assess Whether GSBPP Offers or Develops a Program

Customer Need: The program meets a well defined stakeholder need:

Core Expertise: The program should be an extension of, and related to, GSBPP's vision and core mission of Defense Business Management graduate degree education and research:

Comparative Advantage: GSBPP should possess an identifiable comparative advantage in providing the program over existing providers or competitors:

Faculty Capability: GSBPP faculty should have the capability (both expertise and capacity) to deliver the program:

Control: GSBPP should be assured sufficient control to maintain academic quality and standards and influence admissions criteria:

Financial Viability: The program pricing must be expected to at least breakeven on all costs (direct and indirect):

Leveraged Benefit / Risk: New programs have consequences that extend beyond the program itself. Mere recovery of costs does not warrant developing or offering a new program. GSBPP should benefit from the program in other ways such as additional financial resources to support GSBPP activities, significant recognition within the defense community for developing and/or offering the program, academic/professional development of faculty, or establishing valuable relationships within academic or professional communities. New programs shouldn't put existing programs at risk, although risks of other sorts are relevant to consider also.

Appendix 2.2B1

NPS FACULTY HANDBOOK – EXCERPT

ACADEMIC ASSOCIATES AND PROGRAM OFFICERS

Program Officers/Academic Associates. The Program Officer/Academic Associate team is an organizational entity unique to the Postgraduate School. The team is responsible for developing, maintaining, and updating curricula to accommodate the needs and academic requirements of the Navy and the Department of Defense and for monitoring the planning and progress of individual students through a program of study.

A naval officer of suitable experience and rank is assigned as the Program Officer, serving as the executive director of the office. One or more assistant program officers may also be assigned to a Program Office and responsibility for a curriculum may be delegated to an assistant.

A civilian member of the faculty thoroughly familiar with the Naval Postgraduate School, the Navy, DoD, and other sponsoring agencies is assigned part-time duty as the Academic Associate. Where the Program Office supports multiple curricula, more than one Academic Associate may be appointed and assigned responsibility for specific curricula.

The Program Officers are responsible to the Director of Programs for the overall operation of their respective Program Offices. The Academic Associates are responsible to the Associate Provost for Academic Affairs, through their Department or Group Chair, for the integrity of the academic features of the Program Office operation. As a consequence of this arrangement, the Program Officers and Academic Associates are close professional associates and their relationship should develop accordingly.

Academic Associates are appointed to this duty by the Provost, on the recommendation of the Associate Provost for Academic Affairs and the Director of Programs, for specific terms not in excess of three years. The budgeted time allotted to perform the duties of Academic Associate are determined by the Associate Provost for Academic Affairs.

General responsibilities associated with the Program Offices are described below. Specific responsibilities of the individuals are covered in either Naval Postgraduate School Instructions or policy directives. Their general responsibilities are:

- Curriculum Sponsor Liaison. The Program Officer/Academic Associate team works with program sponsors and consultants to define pertinent sponsor needs, including professional objectives; to delineate projected utilization of program graduates; and to consult with Department/Group Chairs and faculty to propose useful courses and curricula. These plans and projections consider the impact of developing technology, evolving bodies of knowledge, and changing mission of the Navy and other sponsors. They are prepared, reviewed, and updated during sponsor reviews of curricula.

- Curriculum Development and Management.

    - The Program Officer/Academic Associate team, working with the NPS faculty and staff, develops and maintains a statement of professional objectives for each curricular program under their purview. Consistent with these objectives, they establish and keep current appropriate standard curricula.

- Ensuring that the curriculum meets the professional needs of the Navy or other sponsors rests primarily with the Program Officer. Ensuring that each student's curriculum meets curriculum degree requirements and that the selection and sequence of courses are in accordance with Department/Group or degree requirements rests primarily with the Academic Associate.
- The Program Officer/Academic Associate team develops and maintains procedures for effectively monitoring programs for their continuing adherence to professional and academic requirements. These procedures may be partially standardized for all programs. The Program Officer holds primary responsibility for collaborating with the Naval Postgraduate School staff, sponsors, and OPNAV and for adopting general procedures to meet the particular needs of individual programs. The Academic Associate is responsible for maintaining liaison with academic Departments/Groups, sustaining the relevance of current course content, and fostering faculty participation in the development of useful new courses and programs.
- In the development of new curricula or major revision of existing ones, the Program Officer/Academic Associate team includes each concerned academic Department or Group in the deliberations leading to formulating each proposal.
- Both the Program Officer and Academic Associate are knowledgeable with respect to “transfer field” programs, i.e., other graduate programs appropriately related to those under their purview. They should also be familiar with Navy-related programs offered at civilian educational institutions which might be effectively utilized by sponsors.

- Supervision and Counseling of Students.
  - The Program Officer/Academic Team reviews the records of all students assigned to their curricula and, in consultation with each student – and based on his/her academic background – develops a program of study within the framework of the established curricula. Student academic progress is monitored and program changes or intercurricular transfers made, when deemed necessary, within the limitations of curricular quotas, Navy policies, and academic feasibility. Both members of this team are responsible for the overall quality of a student's program. The Academic Associate holds primary responsibility for evaluating the student's academic qualifications, based on academic Department/Group standards, for pursuing a specific sequence of study. The Program Officer is responsible for ensuring that the program selections are in consonance with curriculum Sponsor policies and needs.
  - Both members of the team counsel all students in the curricula under their purview. The Academic Associate is responsible for academic counseling of the students.
  - The Program Officer, in accordance with prescribed policies and procedures, exercises supervision and direction of students assigned to his/her office. He/she performs requisite administrative duties pertaining to these students, evaluates their performance, and counsels them on pertinent military matters, as necessary.

Appendix 2.2B2

DEPARTMENT OF THE NAVY
NAVAL POSTGRADUATE SCHOOL
1 UNIVERSITY CIR
MONTEREY CA 93943-5000

IN REPLY REFERTO:

NAVPGSCOLINST 1550.lB

NPS (03)
4-Mar-02

NAVPGSCOL INSTRUCTION 1550.lB

From: Superintendent

Subj: GUIDELINES FOR CONDUCTING CURRICULAR REVIEWS

Ref: (a) OPNAVINST 1520.23 (SERIES)
(b) OPNAVINST 1000.16 (SERIES)

Encl: (1) Primary Subspecialty Consultants (Sponsors) for Curricula Offered at the Naval Postgraduate School
(2) Curriculum Review Primary Consultant Presentation
(3) BUPERS Management of Subspecialties Review Slide
(4) Curriculum Review Report
(5) Curriculum Review Status

1. Purpose. To provide guidance for the conduct of biennial reviews of fully funded graduate educational programs taught at the Naval Postgraduate School (NPS) and Civilian Institutions (CIVINS).

2. Cancellation. NAVPGSCOLINST 1550.1A and NAVPGSCOLINST 1524.1A

3. Background. The mission of NPS is to serve as the Navy's Corporate Research University. It exists to increase the Combat Effectiveness of U.S. and Allied Armed Forces and enhance the security of the United States. This mission is accomplished by providing advanced professional studies at the graduate level for military officers and defense officials from all services and other nations. To

accomplish this goal, educational programs are structured around curricula of study that fulfill the present and future needs of the Navy and other stakeholders for technical and managerial education. The various curricula are designed to educate officers in specific Educational Skill Requirements (ESRs). ESRs are the fully funded graduate education component established by the Primary Consultants (PC) or sponsors for each subspecialty in the Navy. Educational Skill Requirements define a specific set of skills that officers should possess to function effectively in a given subspecialty. ESRs are developed by the PCs with the concurrence of NPS. Considering the diverse enrollment of NPS as both the Navy's Corporate University and one of the Department of Defense's (DoD's) critical Research Universities, joint stakeholders play an increasingly important role in defining the requirements for certain curricula. These special joint needs are considered and evaluated as part of defining overall curricula content. Additionally, the curricular review process serves to meet the overall need for continuous improvement of the curriculum and its contents. Curricula and PCs are listed in enclosure (1). To ensure continued quality of education and provide the skills and knowledge needed in the future, references (a) and (b) direct biennial curricular reviews. This instruction assigns responsibility for specific curricular review actions and outlines a structured sequence of events that comprise this continuing cycle of review.

4. Responsibilities. The Superintendent is charged with implementing the Navy's graduate level education programs, acting as academic coordinator for all Navy graduate education programs and maintaining approved curricula. The Superintendent and PC/Stakeholders will jointly approve ESR's and validate curricula at the completion of the formal review.

The PC and joint stakeholders are responsible for defining the current and future community needs in terms of ESR's. The PC/stakeholders will also assemble the data for the Subspecialty Requirements Review (SRR) and other analyses of graduate education requirements. The PC and stakeholders will provide that information to the Program Officer (formerly known as Curriculum Officers). The PC will attend the formal review.

NPS staff and faculty will carry out the following

curricular review actions for programs taught at NPS. For programs taught at CIVINS, paragraph. 5c. applies.

a. The Director of Programs and Associate Provost for Academic Affairs are jointly responsible for coordinating all curricular reviews. They will schedule, standardize and attend all curricular reviews.

b. The Dean of each school is responsible for the direct oversight of the curricular review process and leadership of the curricular review team within their school, which includes the Associate Dean(s), Department Chair(s), Academic Associate(s) and Program Officer(s). The Dean and the Department Chair are responsible for carrying out specific curriculum improvements identified during the review process.

c. Academic Associates and Program Officers work as a team providing the primary interface between the curriculum PC's/stakeholders and NPS.

(1) Academic Associates are responsible for reviewing and matching the delivery of education to PC requirements as outlined in the ESR's. The Academic Associate ensures the curriculum meets NPS degree requirements and is consistent with accreditation standards.

(2) Program Officers will maintain regular communication with the PC/Stakeholders as the NPS representative. Program Officers are responsible for initiating action and assembling data for the curricular review process, and is the primary briefer during the formal review. If a Program Officer is not assigned to the curriculum, then the Academic Associate will perform this function.

5. Procedures.

a. Curricular reviews will be conducted in accordance with the schedule detailed below. These reviews focus on providing the highest quality advanced education tailored to specific ESR's for a given curriculum. The curricular review process includes revision and validation of ESR's by NPS, the PC, and stakeholders. Participants will develop ESR's that reflect current and future graduate education

needs of officer communities and DoD personnel. The curricular review process occurs throughout the two-year period between formal reviews including the collection of appropriate data, such as accreditation documents. Additionally, the following milestones establish a structured approach to accomplishing required tasks in a timely basis:

(1) Twelve months prior: Program Officers and Academic Associates begin coordination with PC's/stakeholders on issues for the next curricular review. All action items from previous reviews should be complete or become discussion/action items for the next review. Dialogue with the PC should occur on a regular basis.

(2) Eleven months prior: Program Officers and Academic Associates will request PCs and major manpower claimants to examine subspecialty coding related to curricula to determine strategic planning guidelines and initiatives. This review will identify graduate education requirements in the short term, long term, and changes needed to existing billets. The Program Officers and Academic Associates will begin collecting required internal data such as exit and alumni interviews, accreditation results, and course content for analysis.

(3) Seven months prior: The school Dean chairs the internal curricular review. The Director of Programs, the school's Associate Dean, Program Officer, Academic Associate and Department/Group Chair assess the quality and relevancy of the curriculum. This assessment is the objective of the internal curricular review and basis for the upcoming formal curricular review.

(4) Two months prior: Program Officer and Academic Associate consult with the PC/stakeholders on the status of the review and gather expected issues. This consultation may be done via VTC, but it is recommended that the Program Officer and Academic Associate visit the PC/stakeholders. Action plans will be drafted for the expected issues.

(5) One month prior: Program Officer and Academic Associate pre-brief the Superintendent, Provost, Associate Provost for Academic Affairs, and the Director of Programs. The pre-brief will include a review of issues and the proposed presentation to the PC. Issues should be

clearly defined and coordinated with the PC. Enclosures (2) and (3) are guidelines for developing the presentation.

(6) Formal curricular review: The formal curricular review will be held at NPS over two days. The review will include a: 1) tour of the school's classrooms, laboratories, and research facilities, 2) meeting with students, 3) meeting with faculty, and 4) a final summary brief of the curriculum status given to the PC Flag Officer and the Superintendent.

The objectives for the above events are listed below:

- 1) The tour of the school's classrooms, laboratories, and research facilities allow the PC/Stakeholders to examine equipment and facilities that support the curriculum. The Department Chair, Academic Associate, Program Officer and the research faculty will attend this tour.

- 2) The meeting between the students and the PC/Stakeholders allows the PC/Stakeholder(s) to gauge the quality of our students, get direct student feedback on the curriculum, and have an opportunity to mentor the students. The Program Officer and Academic Associate will attend this meeting.

- 3) There are several objectives for the faculty/PC-Stakeholder meeting. The Program Officer will lead the meeting. The Dean, Associate Dean, Department Chair, Academic Associate, and select faculty will also attend the meeting. The specific objectives are listed below:
  - Validate ESRs and propose new ESR's if required
  - Validate any joint stakeholder requirements
  - Review degree requirements that may be independent of the ESR's
  - Conduct an assessment of design and execution of the curriculum
    - Does the **design** of curriculum support customer needs
      - Examine fulfillment of ESR's by specific Courses

        - Evaluate curriculum length including effects of JPME, refresher pre-requisites, thesis, USMC-Command & Staff courses
        - Examine faculty specialties and tracks required for the curriculum

    - Does **execution** of curriculum support customer needs
        - Quality metrics/measures (student surveys/promotion rates)
        - Accreditation status
        - Thesis quality and relevance

    - Does the curriculum have sufficient **resources**
        - Faculty – quantity and expertise
        - Internal and sponsor funding
        - Support staff (administrative and technical)
        - Equipment and facilities that support the curriculum

    - Review **research** being done by curriculum faculty
        - Thesis research
        - Faculty research
        - Present summary of research capabilities of NPS schools/institutes
        - Solicit input from PC/Stakeholder for research opportunities

- 4) Lastly, the summary brief will present the Superintendent and PC a summary of the issues discussed during the above events and obtain the Superintendent's and PC's final decision on any issues that may need to be resolved. These decisions should be documented in action items.

(7) Within one month after curricular review: Program Officer originates post review letter/report to N7 via the PC. For joint service curricula, NPS will ensure a copy of the post curricular review letter is sent to N7 and requisite stakeholders. The letter should be structured

similar to enclosure (3) and include, as a minimum, general overview, list of attendees, summary of action items and restatement of ESRs. Action items will identify party responsible for action and due date.

b. The Director of Programs will maintain an up-to-date schedule of curricular review milestones.

c. CIVINS PROGRAMS. The primary consultant will review curricula offered through the Civilian Institutions (CIVINS) program with the assistance of the Director of CIVINS. Factors to be considered include a review of the ESRs, how well the universities on the approved list of schools are meeting the ESRs, additions or deletions to the approved list of schools, budgetary constraints and student administrative issues. The following guidelines are provided to assist in the curricular review process.

(1) Site Visits. In order to assess how well universities are meeting ESRs, and to meet with the students, PC's often conduct site-visits to one or more of the universities on the approved list of schools. These site-visits can be made at any time during the curricular review cycle. NPS will generally send the Director of CIVINS and, if desired by the PC, an NPS faculty member, to assist in these site-visits. Coordination with the Commanding Officer, NROTC or other administrative unit, which provides student support, is recommended.

(2) Location. The formal curricular review will be conducted at a location determined by the PC. For programs with a single approved university, it will often be done at that university. Curricula offered through CIVINS, which have a common PC with NPS programs, may be formally reviewed at NPS at the same time as review of NPS resident programs.

(3) Results. The PC will forward results of the review to N7 via NPS within one month after completion of the review. The results should include a general overview of the review, list of attendees, status of new and old action items, a copy of the ESRs and a list of approved universities. For programs reviewed in conjunction with NPS programs, results may be forwarded by NPS to N7 via the primary consultant.

(4) Changes to Approved List of Schools Changes to

the approved list of universities may be made at any time during the review cycle. The PC should forward recommended additions or deletions to the list to N7 via NPS. Justification for changes should be provided which addresses how the university meets the ESRs, availability of year-round study, proximity to naval activities that can provide administrative support, and budget considerations.

6. Reports. Correspondence with PCs will be as required by paragraph 4 of this instruction. Curricular review reports will be structured in the form of enclosure (4) and will be forwarded by the Superintendent, via the cognizant PC to CNO (N7). Post-review report is due one month after completion of the curricular review.

D. E. Ellison

Distribution:
NAVPGSCOLINST 5605.2R (List 1)

PRIMARY SUBSPECIALTY CONSULTANT (SPONSORS)
(For curricula offered at the Naval Postgraduate School)

CURRICULUM	SPONSOR
360/OPS RESEARCH	N81
361/OPS LOGISTICS	N4
365/JOINT C4I SYSTEMS	J6,N6
366/SPACE SYSTEMS OPERATIONS	N61,J6
368/INFORMATION TECHNOLOGY MGT	CNCTC
372/METEOROLOGY	N96
373/AIR-OCEAN SCIENCE	N96
374/OPERATIONAL OCEANOGRAPHY	N96
375/OPERATIONAL OCEANOGRAPHY	Oceanographer of the Navy
380/ADVANCED SCIENCE	USNA
382/CHEMISTRY	NAVSEA
382/CHEMISTRY	NAVSEA
440/OCEANOGRAPHY	N96
510/NAVAL CONSTRUCTION AND ENGINEERING	NAVSEA
510/NAVAL CONSTRUCTION AND ENGINEERING	NAVSEA
520/NUCLEAR ENGINEERING	NAVSEA
520/NUCLEAR ENGINEERING	NAVSEA
525/ UNDERSEA WARFARE	N87,N85
533/COMBAT SYSTEMS ENGINEERING	NAVSEA
570/NAVAL ENGINEERING	NAVSEA
590/ELECT SYSTEMS ENGINEERING	SPAWAR
591/SPACE SYSTEMS ENGINEERING	NAVSEA
595/INFORMATION WARFARE	CNSG, J39
596/ELECTRONIC WARFARE	SPAWAR
610/AERO ENGINEERING	NAVAIR
6ll/AERO ENGINEERING AVIONICS	NAVAIR
612/TPS/COOP	NAVAIR
680/INTL RELATIONS AND DIPLOMACY	N511
681/NSA-MIDEAST/AFR/S.ASIA	N3/5
682/NSA-FAREAST/SE ASIA/PAC	N3/5
683/NSA-WESTERN HEMISPHERE	N3/5
684/NSA-EUR/RUSSIA	N3/5
688/STRATEGIC PLANNING	N3/5

690/INTL RELATIONS AND STRATEGY	N511
699/SOLIC	SOCOM
810/SUPPLY ACQ/DISTRIB MGMT	NAVSUP
811/PETROLEUM MGMT	NAVSUP
813/TRANSPORTATION AND LOGISTICS MGMT	NAVSUP
814/TRANSPORTATION MANAGEMENT	COMMSC
8l5/ACQUISITION AND CONTRACT MANAGEMENT	ASN(RD&A)
816/SYSTEMS ACQUISITION MANAGEMENT	ASA (AL&T) DACM
819/SYSTEMS INVENTORY MANAGEMENT	NAVSUP
825/INTEL INFO MANAGEMENT	DNI
827/MATERIAL LOGISTICS SUPPORT MANAGEMENT	NAVAIR
830/RETAILING	NAVSUP
835/CONTRACT MANAGEMENT	ASN(RD&A) DACM
836/PROGRAM MANAGEMENT	ASA(AL&T) DACM
837/FINANCIAL MANAGEMENT	N82
847/MANPOWER, PERSONNEL, AND TRNG ANALYSIS	PERS2
856/LEAD	USNA
860/SUBSISTENCE TECHNOLOGY	N511

Table 1

Encl(1)

CIVINS PRIMARY SUBSPECIALTY CONSULTANTS (SPONSORS)
(Curricula offered at civilian institutions but may be reviewed with related curricula at NPS)

(Curricula offered at civilian institutions with no comparable curricula at NPS; curricular review conducted by CIVINS)

CURRICULUM	SPONSOR
47X/FACILITIES ENGINEERING	NAVFACENG
472 /OCEAN ENGINEERING	NAVFACENG
630/PETROLEUM ENGINEERING	NAVFACENG
867/EDUCATION AND TRAINING MGMT	CNET
880/ ENVIRONMENTAL LAW	NAVJAG
881/MILITARY JUSTICE	NAVJAG
882/TAX LAW	NAVJAG
883/OCEAN LAW	NAV JAG
884/CRIMINAL LAW	NAVJAG
885/HEALTH CARE LAW	NAVJAG
886/LABOR LAW	NAVJAG
887/INTERNATIONAL LAW	NAVJAG
920/PUBLIC AFFAIRS	CHINFO
97X/ RELIGION	CNET
990/JOINT INTELLIGENCE	ONI-15

Table 2

SUMMARY BRIEF

1. The following is a recommended structure for the Flag Officer, Executive Review presentation to be briefed to the Superintendent, the primary consultant, and important stakeholders. This guidance is provided in the interest of standardizing presentations to the PCs and stakeholders, and to aid in preparing for preliminary reviews. This list includes core elements for the brief and is not intended to be limiting in any way.

a. Provide Summary of Last Curricular Review
   - Date of last curriculum review
   - Status of former action items
   - Any other information relevant to the current review

b. Issues from Qualitative Curricular Review
   - Validate existing ESR's/Propose New ESR's
   - Validate any existing joint stakeholder, i.e.(USMC/USA/USAF/CIV)requirements
   - Propose new requirements
   - Review degree requirements that may be independent of the ESR's

c. Issues from Quantitative Curricular Review Aspect
   - Validate quantitative billet/quota function
   - Examine subspecialty inventory versus requirements
   - Examine subspecialty code utilization and payback
   - Examine joint stakeholder utilization

d. Issues from PC, Stakeholder & Faculty Curriculum Assessment for Design and Execution. The brief should only contain the top-level issues only.

   - Does the **design** of curriculum support customer needs
     - Examine fulfillment of ESR's by specific courses
     - Evaluate curriculum length including effects of JPME, refresher pre-requisites, thesis, USMC-Command & Staff courses

- Examine faculty specialties and tracks required for the curriculum

- Does **execution** of curriculum support customer needs
  - Quality metrics/measures (Student surveys/promotion rates)
  - Accreditation status
  - Examine thesis quality and relevance
- Does the curriculum have sufficient **resources**
  - Faculty – quantity and expertise
  - Examine internal and sponsor funding
  - Evaluate support staff (administrative and technical)
  - Evaluate equipment and facilities that support the curriculum
- Review **research** being done by curriculum faculty
  - Thesis research
  - Faculty research
  - Present summary of research capabilities of NPS schools/institutes
  - Solicit input from PC/Stakeholder for research opportunities

e. Examine all new initiatives in view of meeting customer needs from one year to ten years in the future.
   - Provide status on any Distance/Distributive Learning initiatives within the curriculum
   - Provide status on any initiatives pertaining to the Learning Continuum as it applies to the curriculum
   - Other topics as appropriate (i.e. Centers of Excellence, Institute interfacing, industry partnering)

f. Conclusion
- Action item assignment and review
- Summary of assessment
- Required documentation

2. Course matrices and other details/data pertaining to the curriculum, students, research, etc., should be available at the Executive Summary and all preparatory meetings if asked for, and then used later during the curriculum review working sessions.

Enclosure(2)

Letterhead

1550/
(Ser)
(Code)

From: Superintendent
To: Chief of Naval Operations (N-7)
Via: (Primary Consultant)

Subj: BIENNIAL REVIEW OF (Curriculum name (curriculum no.)

Ref: (a) OPNAVINST 1520.23B

Encl: (1) List of Participants (typical)
(2) Revised Educational Skill Requirements (typical)
(3) Revised curriculum matrix (typical)
(4) List of action items

1. Per reference (a), a detailed review of (curriculum name) was conducted on (date review conducted). Senior participants conducting the review were (names and titles). The curriculum meets (or does not meet) the sponsor's requirements.

2. The following issues were discussed during the review: (bulletized listing of agenda/major discussion items and findings)

3. (summary/closing paragraph).

(Superintendent)

Note: Complete as appropriate

Enclosure (3)

Appendix 2.2C

Selected Assessment Instruments

- **NPS Student Opinion Form (SOF)**
- **MBA/MSM Core Curriculum Survey**
- **Example Subspecialty Curriculum Survey**

Appendix 2.2C

MBA / MSM Core Curriculum Survey

Below are the GSBPP Exit Survey Questions. All surveys are created and administered in Zoomerang. All surveys are anonymous and confidential.

1. Please indicate your Service:

2. Please indicate your curriculum:

3. Please indicate your rank:

4. Please enter your approximate QPR (also known as your Grade Point Average):

5. How would you describe your overall level of satisfaction with your FM or Defense Systems Analysis program at NPS? How would you describe your overall level of satisfaction with your FM or Defense Systems Analysis program at NPS?

6. Ratings of Individual Courses

This part asks you to rate each of the MBA core courses along each of three dimensions:

- Value of the course in your future career
- Degree of Defense relevant content in the course
- Overall satisfaction with the course

Each of these is discussed a bit more here:

A. Value in your Future Career:

We intend the education in the MBA core to have value to you in both your military and, perhaps later, civilian career, both by providing specific knowledge and skills and also developing analytical and critical thinking abilities. How do you perceive each course in terms of its value in your future career? The scale will be:

"I perceive this course as having…"

4 = High value in my future career
3 = Moderate value in my future career
2 = Little value in my future career
1 = No value in my future career

Course Number	Course Title	VALUE
GB3010	Managing for Organizational Effectiveness	
GB3012	Communication for Managers	
GB3013	Problem Analysis and Ethical Dilemmas	
GB3020	Fundamentals of Information Technology	
GB3040	Managerial Statistics	
GB3042	Operations Management	
GB3050	Financial Reporting and Analysis	
GB3051	Cost Management	
GB3070	Economics of the Global Defense Environment	
GB4014	Strategic Management	
GB4043	Business Modeling and Analysis	
GB4052	Managerial Finance*	
GB4053	Defense Budget and Financial Management Policy	
GB4071	Economic Analysis and Defense Resource Allocation	
GB3031	Acquisition and Program Management**	
GBxxxx	Core Elective***	
NW3230	Strategy and Policy: The American Experience****	

B. Defense Relevant Content of Individual Courses:

It is our intent that the "Defense-Focused MBA" lives up to its name. It should provide a graduate level education that is unique and of particular relevance to individuals within the Defense community. Clearly, the Specialization part of the MBA program is designed with this intent.

The MBA Core courses are also designed to contribute to the Defense relevance of the program, although different courses may contribute to different degrees.

This asks you to score the specific courses in the MBA Core in terms of the degree to which each course was Defense-focused and/or contained Defense-specific content. The scale will be:

"I would assess this course as having...."

4 = High Defense focus or Defense content
3 = Moderate Defense focus or Defense content
2 = Little Defense focus or Defense content
1 = No Defense focus or Defense content

Course Number	Course Title	DEFENSE RELEVANCE
GB3010	Managing for Organizational Effectiveness	
GB3012	Communication for Managers	
GB3013	Problem Analysis and Ethical Dilemmas	
GB3020	Fundamentals of Information Technology	
GB3040	Managerial Statistics	
GB3042	Operations Management	
GB3050	Financial Reporting and Analysis	
GB3051	Cost Management	
GB3070	Economics of the Global Defense Environment	
GB4014	Strategic Management	
GB4043	Business Modeling and Analysis	
GB4052	Managerial Finance*	
GB4053	Defense Budget and Financial Management Policy	
GB4071	Economic Analysis and Defense Resource Allocation	
GB3031	Acquisition and Program Management**	
GBxxxx	Core Elective***	
NW3230	Strategy and Policy: The American Experience****	

C. Overall Satisfaction with individual courses:
On the SOFs that you have filled out at the end of each quarter, one question asked to rate "the course". We would like to get your impression again now, having completed all of the courses within the MBA Core. The scale will be:

"Overall, I would rate this course...."

4 = Outstanding

3 = Very Good
2 = Fair
1 = Poor

Course Number	Course Title	SATISFACTION
GB3010	Managing for Organizational Effectiveness	
GB3012	Communication for Managers	
GB3013	Problem Analysis and Ethical Dilemmas	
GB3020	Fundamentals of Information Technology	
GB3040	Managerial Statistics	
GB3042	Operations Management	
GB3050	Financial Reporting and Analysis	
GB3051	Cost Management	
GB3070	Economics of the Global Defense Environment	
GB4014	Strategic Management	
GB4043	Business Modeling and Analysis	
GB4052	Managerial Finance*	
GB4053	Defense Budget and Financial Management Policy	
GB4071	Economic Analysis and Defense Resource Allocation	
GB3031	Acquisition and Program Management**	
GBxxxx	Core Elective***	
NW3230	Strategy and Policy: The American Experience****	

7. Identify three courses that you were MOST SATISFIED with, and briefly explain why:

8. Identify three courses that you were MOST DISSATISFIED with, and briefly explain why:

9. In the following space please make any comments you wish concerning the Curriculum. Do not feel constrained, but in thinking about comments you may make, you

might consider the following general question: "What changes to the curriculum at NPS do you believe might have made your experience here more valuable to you in your subsequent career?"

10. For USN: Did you complete JPME? If not, why?

11. For USMC: Did you complete Command & Staff? If not, why?

TO: Financial Management Curriculum Graduating Class

SUBJECT: ASSESSMENT OF THE FINANCIAL MANAGEMENT (837) CURRICULUM

With you now in your final quarter here at NPS, you have completed most of the courses that make up your FM curriculum. We're interested at this point in getting your thoughts on your academic experience. The link below will take you to a short, anonymous survey that asks for your assessment of the FM curriculum. Please take a few minutes to fill it out and submit it (by ---date--). Your feedback on your BPP experience is valuable to us and helps us to improve the program for those who will follow after you

Put Zoomerang link here

Additionally, a feedback meeting has been scheduled on __fill in date__. The purpose of the meeting will be for us to hear further from you about the curriculum. We will have tabulated your responses from the survey prior to the meeting. We'll let you know what you "said' in the survey and then use that as a starting place for further discussion of your experience in the Financial Management curriculum.

Thanks for your help

Joe San Miguel, Academic Associate for FM

EVALUATION OF THE FM PROGRAM – CONTINUOUS IMPROVEMENT

How would you describe your overall level of satisfaction with your program at NPS?

____ Very Satisfactory
____ Satisfactory
____ Neither Satisfactory Nor Unsatisfactory
____ Unsatisfactory
____ Very Unsatisfactory

The following question asks for your assessment of specific **courses** in your graduate program at NPS. On the SOFs that you filled out at the end of each quarter, you were asked to rate the value of courses. We would like to get your impression again now, at the end of your program here.

Please use the following five numbers to indicate your level of satisfaction with courses: "Overall, I would rate this course...."

5 = Very Satisfactory
4 = Satisfactory
3 = Neither Satisfactory Nor Unsatisfactory
2 = Unsatisfactory
1 = Very Unsatisfactory

If you did not take a specific course, just leave your response for that course blank.

Value	***Financial Mgmt -- Courses In The Core***
5 4 3 2 1	GB3050 Financial Reporting & Analysis
5 4 3 2 1	GB3051 Cost Management
5 4 3 2 1	GB4052 Corporate Finance
5 4 3 2 1	GB4053 DoD Resource Mission, Structure & Resource Determination

Financial Mgmt -- Required Courses

5 4 3 2 1	GB3510 Financial Management in the Armed Forces
5 4 3 2 1	GB4530 Management Control Systems
5 4 3 2 1	GB4510 Strategic Resource Management
5 4 3 2 1	GB4520 Internal Control and Auditing
5 4 3 2 1	GB4540 Seminar in Financial Management (Conrad Seminar)
5 4 3 2 1	GB4580 Modeling For Planning & Control

5 4 3 2 1 MN3331 Systems Acquisition and Project Management

5 4 3 2 1 GB4550 Financial Reporting: Standards & Models

5 4 3 2 1 GB4570 Advanced Finance

Financial Mgmt -- Curriculum Options

5 4 3 2 1 MN4157 Seminar in Management Accounting

5 4 3 2 1 GB4560 Defense Financial Management

Project/Thesis

5 4 3 2 1 Your MBA Project/Thesis Project

Other Required Courses (Non-Financial Management)

5 4 3 2 1 GB3020 Fundamentals of Information Technology

5 4 3 2 1 GB3040 Research Methods & Data Analysis

5 4 3 2 1 GB3070 Economics for Defense Managers

5 4 3 2 1 MA1000 College Algebra

5 4 3 2 1 GB3010 Organizations as Systems and Structures

5 4 3 2 1 NW3230 Strategy & Policy

5 4 3 2 1 GB3012 Communications for Management

5 4 3 2 1 GB3041 Analytical Tools for Managerial Decisions

5 4 3 2 1 GB4071 Economics & Cost Benefit Analysis

5 4 3 2 1 GB3042 Operations Management

5 4 3 2 1 GB3030 Marketing Management

5 4 3 2 1 GB4021 E-business for Defense

5 4 3 2 1 GB4014 Strategy Making

In the following space please make any comments you wish concerning the Financial Management Curriculum. Do not feel constrained, but in thinking about comments you may make, you might consider the following general question: " What changes to the curriculum at NPS do you believe might have made your experience here more valuable to you in your subsequent career?

Did you complete JPME? Yes No If not, why?

Thanks for your comments.

Appendix 2.2C1

NPS ALUMNI SURVEY

Introduction

Information for Participants

1. Introduction. You are invited to participate in a survey of NPS alumni. Answering these questions will provide you the opportunity to evaluate and comment on the educational processes you experienced at NPS. Please read the statements below and indicate if you agree to participate in the survey.

2. Background Information. The Naval Postgraduate School Office of Institutional Research is conducting this study.

3. Procedures. Please click on the appropriate answer for each survey question. Mandatory questions are marked with an asterisk. These questions must be answered for the survey to be submitted correctly.

4. Risks and Benefits. This research involves no risks or discomforts greater then those encountered in use of a computer.

5. Compensation. No tangible reward will be given. A copy of the results will be available to you at the conclusion of the experiment.

6. Confidentiality. The records of this study will be kept confidential. No information will be publicly accessible which could identify you as a participant.

7. Voluntary Nature of the Study. If you agree to participate, you are free to withdraw from the study at any time without prejudice. You will be provided a copy of this form for your records.

8. Points of Contact. If you have any further questions or comments after the completion of the study, you may contact the research supervisor, Dr. Fran Horvath (831) 656-2228, rfhorvat@nps.edu

NAVAL POSTGRADUATE SCHOOL, MONTEREY, CA PRIVACY ACT STATEMENT

1. Purpose: Survey data will be collected to evaluate the benefits and effectiveness of the education programs at the Naval Postgraduate School.

2. Use: This data will be used for statistical analysis by the Naval Postgraduate School and potentially by the Departments of the Navy and Defense, and other U.S. Government agencies, provided this use is compatible with the purpose for which the information was collected. Use of the information may be granted to legitimate non-government agencies or individuals by the Naval Postgraduate School in accordance with the provisions of the Freedom of Information Act.

3. Disclosure/Confidentiality:
a. I have been assured that my privacy will be safeguarded. The database created from the survey data will not contain individual identification information. In all cases, the provisions of the Privacy Act Statement will be honored.
b. I understand that a record of the information contained in this Consent Statement or derived from the experiment described herein will be retained permanently at the Naval Postgraduate School or by higher authority. I voluntarily agree to its disclosure to agencies or individuals indicated in paragraph 3 and I have been informed that failure to agree to such disclosure may negate the purpose for which the experiment was conducted.
c. I also understand that disclosure of the requested information is voluntary.

PARTICIPANT - VOLUNTARY CONSENT TO BE A RESEARCH PARTICIPANT IN: NPS Alumni Survey

1. I have read, understand and been provided "Information for Participants" that provides the details of the below acknowledgments.
2. I understand that this project involves research. An explanation of the purposes of the research and a description of procedures to be used, have been provided to me.
3. I understand that this project does not involve more than minimal risk. I have been informed of any reasonably foreseeable risks or discomforts to me.
4. I have been informed of any benefits to me or to others that may reasonably be expected from the research.
5. I understand the data will be kept confidential and reported only on a summary level. I have read and understood the “Privacy Act Statement.”
6. I understand that my participation in this project is voluntary, refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled. I also understand that I may discontinue participation at any time without penalty or loss of benefits to which I am otherwise entitled.

Statement of Consent. I have read the above information. I have asked all

questions and have had my questions answered. I agree to participate in NPS ALumni Survey.

- ◯ Yes
- ◯ No

Survey Questions

Please note: throughout the survey, an asterisk (*) in front of the question indicates a mandatory question. All mandatory questions must be answered to submit the survey correctly. Please answer all questions as completely as possible.

What is your current status?

- ◯ Active Duty Military
- ◯ Retired Military
- ◯ Civilian employed by Federal Government
- ◯ Civilian employed elsewhere
- ◯ Other (please specify)

Military Questions

While enrolled at NPS what was your branch of service?

- ◯ U.S. Air Force
- ◯ U.S. Army
- ◯ U.S. Coast Guard
- ◯ U.S. Marine Corps
- ◯ U.S. Navy
- ◯ Other U.S. Service
- ◯ Non-U.S. Service

What is (was) your current (highest) rank or grade?

- ◯ 01
- ◯ 02
- ◯ 03
- ◯ 04
- ◯ 05
- ◯ 06
- ◯ Other (please specify)

How many years have (had) you been an officer?

- [ ] 10 or fewer
- [ ] 11 to 19
- [ ] 20 or more

Survey

At what college or university did you receive your bachelor's degree? (If more than one, please indicate them all.)

Did you have a post-baccalaureate degree before enrolling at NPS?

- ◯ Yes
- ◯ No

As a student at NPS, were you in-residence or distance learning?

- ◯ Resident only
- ◯ Distance Learning only
- ◯ Both
- ◯ Other (please specify)

For how many months were you enrolled as a student at NPS? (Respond for highest NPS degree)

	1-Certificate	2-Bachelor	3-Master	4-Engineer	5-PhD
18 or fewer	◯	◯	◯	◯	◯
19-24	◯	◯	◯	◯	◯
25 or more	◯	◯	◯	◯	◯

What was your primary curriculum as a student at NPS?

What is the highest degree that you received from NPS?

- ◯ Certificate
- ◯ Bachelor
- ◯ Engineer

- ◯ Master
- ◯ PhD
- ◯ No Degree
- ◯ Other (please specify)

In what field was your highest NPS degree? (If other, please specify in lower block)

In what year did you receive that degree?

What was your average grade as an UNDERGRADUATE?

What was your average grade at NPS?

Was it relatively difficult or relatively easy for you to transition SOCIALLY from military or other government duty to student life at NPS?

- ◯ Relatively difficult
- ◯ Relatively easy

Was it relatively difficult or relatively easy for you to transition ACADEMICALLY from military or other government duty to student life at NPS?

- ◯ Relatively difficult
- ◯ Relatively easy

Did the amount of your NPS course work seem generally appropriate to the requirements of your degree(s) or certificate(s)?

- ◯ Yes
- ◯ No

Please skip if not military. If military, to what extend did you find your course work at NPS relevant to your military career?

- ◯ Low relevance
- ◯ Moderate relevance
- ◯ High relevance

Did you have a satisfactory relationship with your NPS curricular/program officer or officers?

- ◯ Yes
- ◯ No (Please comment)

How would you generally rate faculty relationships with students at NPS?

- ◯ Cool
- ◯ Indifferent
- ◯ Warm

While a student at NPS, approximately how many hours in a typical week of about 100 active hours did you spend on each of the following? (Please respond with one answer for each activity)

	10 or less	11-20	21-30	31-40	41 or more
Class attendance	◯	◯	◯	◯	◯
Homework	◯	◯	◯	◯	◯
Research	◯	◯	◯	◯	◯
Community service	◯	◯	◯	◯	◯
Outside employment	◯	◯	◯	◯	◯
Family or other personal	◯	◯	◯	◯	◯

What best describes the FREQUENCY with which you used the following NPS facilities or services? (Please respond with one answer for each service)

	At least once a day	At least once a week	At least once a month	At least once a quarter	Never	Other
Library	◯	◯	◯	◯	◯	◯
Computer Labs	◯	◯	◯	◯	◯	◯
Bookstore	◯	◯	◯	◯	◯	◯
Registration	◯	◯	◯	◯	◯	◯
Academic counseling	◯	◯	◯	◯	◯	◯
Laboratories	◯	◯	◯	◯	◯	◯

How would you generally rate the QUALITY of the following NPS services or facilities? (Please respond with one answer for each service)

	Less than adequate	Adequate	More than adequate
Library	◯	◯	◯
Computer services	◯	◯	◯
Computer access	◯	◯	◯
Bookstore	◯	◯	◯
Registration	◯	◯	◯
Academic counseling	◯	◯	◯
Laboratories	◯	◯	◯

Generally rate the following at NPS (Please respond with one answer for each):

	Less than adequate	Adequate	More than adequate
Overall quality of instruction	◯	◯	◯
Overall quality of faculty	◯	◯	◯
Amount of contact with faculty	◯	◯	◯
Currency of course content	◯	◯	◯
Relevance of education to national security and/or defense	◯	◯	◯
Overall experience	◯	◯	◯

How would you rate the advising you received for your thesis, dissertation, or terminal-project at NPS?

- ◯ Poor
- ◯ Fair
- ◯ Good
- ◯ Excellent
- ◯ Did not seek advisement

How would you rate the overall relevance of your thesis, dissertation, or terminal-project to your career after departing NPS?

◯ Low relevance ◯ Moderate relevance ◯ High relevance

If a recipient of an NPS doctorate, how helpful were your advisors in preparing you for successive academic hurdles on the way to your degree?

◯ Less than helpful ◯ Helpful ◯ More than helpful

Did you attend any workshops to help you write your thesis or dissertation?

- ◯ Yes
- ◯ No

Indicate the importance to your career of the following abilities:

	Low importance	Moderate importance	High importance
Decicison-making	◯	◯	◯
Analytical skills	◯	◯	◯
Leadership	◯	◯	◯
Teamwork	◯	◯	◯
Writing	◯	◯	◯
Research	◯	◯	◯
Ethics	◯	◯	◯

Indicate the extent to which your experience at NPS has enhanced the following abilities:

	Low Enhancement	Moderate Enhancement	High Enhancement
Decicison-making	◯	◯	◯
Analytical skills	◯	◯	◯
Leadership	◯	◯	◯
Teamwork	◯	◯	◯
Writing	◯	◯	◯
Research	◯	◯	◯
Ethics	◯	◯	◯

Would you recommend attendance at NPS to any other service members?

- ◯ Yes
- ◯ No

What one thing did you value most about NPS?

What one thing did you value least about NPS?

What changes would you recommend at NPS?

Have you served in a position which was, or is, appropriate to your NPS certificate or degree?

- ◯ Yes
- ◯ No

If military, to what extent have you found your NPS education useful in any of your subsequent OPERATIONAL assignments?

- ◯ Less than useful
- ◯ Useful
- ◯ More than useful

If military, which one of your NPS courses, if any, have you found most useful in your OPERATIONAL assignments after NPS?

If you are a civilian now, to what extent have you found your NPS education to be useful in your current employment?

- ◯ Less than useful
- ◯ Useful
- ◯ More than useful

My education in GSEAS provided me advanced technical and scientific knowledge so that I am / was confident that I understand / understood the capabilities and limitations of current / future technologies in battle space environments.

- ◯ clearly true
- ◯ mostly true
- ◯ mostly false
- ◯ clearly false
- ◯ no opinion/not observed

My education in GSEAS provided me advanced technical and scientific knowledge so that I am / was confident that I am / was able to apply emerging and advanced technologies to enhanced joint war-fighting capabilities.

- ◯ clearly true
- ◯ mostly true
- ◯ mostly false
- ◯ clearly false
- ◯ no opinion/not observed

My education in GSEAS provided me advanced technical and scientific knowledge so that I am / was confident that I am / was able to anticipate, respond and lead in future complex, rapidly changing technological environments.

◯ clearly true ◯ mostly true ◯ mostly false ◯ clearly false ◯ no opinion/not observed

My education in GSEAS provided me advanced technical and scientific knowledge so that I am/was confident that I am/was able to represent the technical needs and interests of my service both within my service, as well as to other services, constituencies and communities (including OSD, Joint Staff and industry)

◯ clearly true ◯ mostly true ◯ mostly false ◯ clearly false ◯ no opinion/not observed

THANK YOU!

Thank you for your responses. Your efforts will assist NPS in evaluating its programs for future military and defense personnel.

A summary of results, when completed, will be placed on the NPS website (www.nps.edu).

Appendix 2.3C

MBA/MSM PROGRAM CHANGES
Excerpts from 2002-2004 NASPAA Annual Reports

From 2002 NASPAA Report:

The comprehensive review of BPP resident degree programs led to several significant decisions and actions:

- Change of the name of the degree awarded from Masters of Science in Management (MSM) to Masters of Business Administration (MBA). BPP's resident graduate program now leads to a "Defense-Focused MBA".
- Ground up redesign of the set of Core courses within the resident program
- Merging of the Masters of Science in International Resource Management and Planning into the Defense-Focused MBA degree program
- Reorganization of 12 "subspecialty curricula" within the MSM into 6 broader Curricula within the MBA.

BPP's accredited degree programs were significantly revised during the past year. BPP's resident programs have consisted, and continue to consist, of three major parts: (1) a common Management and Public Policy Core, required of all students; (2) a specialization, *i.e.*, subspecialty curricula designed to serve identified Navy education needs; and (3) a thesis/project. The most fundamental changes made were to the Core set of courses.

To initially provide a summary of the revisions, five tables below provide a "previous" vs. "revised" overview of the following aspects of our accredited resident degree program:

- Degree title
- Structure of the degree program
- Graduation requirements
- Required core courses
- Organization of the specialization curricula

A sixth table provides a statement concerning the uniqueness of the program and how it serves our mission to provide graduate level education focused on the defense community.

A detailed (NPS catalog) description of the revised program is in appendix B

DEGREE TITLE	
Previous	**Revised**
• Masters of Science in Management	• Defense-Focused Masters of Business

• Masters of Science in International Resource Management and Planning	Administration

STRUCTURE OF DEGREE PROGRAM	
Previous	**Revised**
Management Fundamentals: 9 courses / 34 credit hours	**Graduate Management Core**: 16 courses / 44 credit hours
Graduate Management Core: 6 courses / 23 credit hours	**Mission-Related Core**: 6 courses / 17 credit hours
Specialization Curriculum: Varies by curriculum 28+ credit hours	**Specialization Curriculum** Varies by curriculum 28+ credit hours
Thesis (or equivalent): 12 credit hours	**Applications Project** (or thesis) 6 (or 12) credit hours
Total: ~97 credit hours	Total: ~95 credit hours

MINIMUM DEGREE REQUIREMENTS	
Previous	**Revised**
Completion or validation of Management Fundamentals (32 credit hours)	Completion of Management Core (44 credit hours)
	Completion of Mission-related Core (17 credit hours)
Completion of an approved sequence of courses in a concentration area	Completion of approved concentration area consisting of a minimum of 24 graduate credit hours
Beyond the Fundamentals, completion of a minimum of 48 graduate credit hours (at least 12 at the 4000 level)	Completion of a minimum of 58 graduate credit hours (at least 22 at the 4000 level)

Completion of a thesis or equivalent	Completion of a thesis or application project report

REQUIRED CORE COURSES					
Previous			**Revised**		
Course *Number*	***Course Title***	**Credits**	**Course *Number***	***Course Title***	**Credits**
MN2150	Financial Accounting	4	GB3050	Financial Reporting & Analysis	3
MN3161	Management Accounting	4	GB3051	Cost Management	4
MN3333	Managerial Communication Skills	4	GB3012	Communications for Management	2
MN2300	Mathematics for Management	5	MA1000	College Algebra	2
MN3105	*Organization & Management*	4	GB3010	Organizations as Systems & and Structures	2
MN3001	Economics for Defense Managers	4	GB3070	Economics for Defense Managers	3
MN3140	Micro Economic Theory	4	GB4071	Economics & Cost Benefit Analysis	3
OS3101	Statistical Analysis for Management	4	GB3041	Analytical Tools for Managerial Decisions	3
OS3006	Operations Research for Management	4		No comparable course	
IS2010	Information Technology	1		No comparable course	
MN3172	Public Policy and Budgeting	4	GB4053	DoD Mission, Structure & Resource Determination	4
IS3185	Mgmt. of Information Technology	3	GB3020	Fundamentals of Information Technology	4
MN4145	Policy Analysis	4	GB4071	Economics & Cost Benefit Analysis	3
MN4105	Strategic Management	4	GB4014	Strategy Making	2
NW3230	Strategy and Policy	4	NW3230	Strategy & Policy	4

MN0810	Thesis	0	GB4090/ GB4091	MBA Project	6
	No previous core course		GB3040	Research Methods & Data Analysis	4
	No previous core course		GB3042	Operations Management	4
	No previous core course		GB3011	Mgmt. of Teams, Power, & Politics	2
	No previous core course		GB3031	Principles of Acquisition Management	2
	No previous core course		GB4021	E-Business for Defense	2
	No previous core course		GB3030	Marketing Management	2
	No previous core course		GB3013	Leadership & Ethics	2
	No previous core course		GB4072	Global Defense Marketplace	2
	No previous core course		GB4043	Risk Analysis & Management	2
	No previous core course		GB4015	Management of Change	3
	No previous core course		GB4052	Corporate Finance	2
Course descriptions for all new GBxxxx courses are available.					

ORGANIZATION OF SPECIALIZATION CURRICULA	
Previous	**Revised**
12 Curricula	6 Curricula / 12 Tracks
813 Transportation Logistics	**Acquisition Management**
814 Transportation Management	Acquisition and Contract Management (815)
815 Acquisition and Contract Management	Systems Acquisition Management (816)
816 Systems Acquisition Management	**Logistics Management**
817 Defense Systems Analysis	Material Logistics Support (827)
818 Defense Systems Management – Int'l	Transportation Logistics (813)

819 Systems Inventory Management	Transportation Management (814)
820 Resource Planning and Management – Int'l	Systems Inventory Management (819)
827 Material Logistics Support	**Financial Management**
837 Financial Management	Financial Management (837)
847 Manpower Systems Analysis	Defense Systems Analysis (817)
877 Shore Installation Management	**Manpower Management**
	Manpower Systems Analysis (847)
	Information Management
	Information Systems Management (870)
	Defense Management
	Defense Systems Management-Int'l (818)
	Resource Planning and Mgmt-Int'l (820)

From 2003 NASPAA Report

Since the major modification to the Core portion of our resident degree program last year, we have continuously sought feedback, particularly from the initial student cohorts starting January 2002, to monitor all aspect of the program. It became clear early on that the effect of the structure of the new Core was to exacerbate materially a problem our students had been experiencing to a lesser degree for a number of years: Excessive academic workload. In responding to evolving and increasing educational requirements of the sponsors of our specialization curricula, we have in recent years added required courses. A significant number of those courses were "small" course (less than the 4-credit hour standard). The cumulative effect on students of added requirements in the specialization curricula (over recent years) and the redesign of the Core portion of our program into smaller, but more, courses (last year) was to increase student workload beyond a level conducive to successful learning.

During Fall 2002, we engaged in a process to correct the student workload problem. Objectives were to:

- Reduce the absolute number of courses (particularly 2-credit courses)
- Reduce the total credit hours in specialization curricula
- Adjust student work assigned in individual courses to correspond to course credit hour size.

The process involved the faculty as a whole in examining the Core portion of the MBA program, the Academic Associates (heads of specialization curricula), in conjunction with group faculty, in examining the Concentration portion of the program, and individual instructors in examining the workload in their courses.

One result of this process was to consolidate a number of the smaller courses within the Core. Overall, the number of courses in the core were reduced by five (from 21 to 16). Total credit hours in the Core were reduced by only one. The table below lists the courses affected and the changes made, with comments.

MBA CORE COURSES -- MODIFICATION CHART

Old Structure			New Structure			
Course #	**Credits**	**Course Title**	**Course #**	**Credits**	**Course Title**	**Comments**
GB3010	(2-0)	Organizations as Systems and Structures	same	(3-0)	Managing for Organizational Effectiveness	Expansion of course by 1 credit hour
GB3011	(2-0)	Teams, Power, Politics				Delete course. Topics redistributed to GB3010, 3012, 4014, 4015
GB3012	(2-0)	Communications for Management	same	(3-0)	Communications for Managers	Expansion of course by 1 credit hour
GB4013	(2-0)	Leadership and Ethics	same	(1-0)	Problem Analysis & Ethical Dillemmas	Reduce by 1 credit. Leadership topics distributed to GB3010, 3012, 4014, 4015
GB4014	(2-0)	Strategy Making	same	(3-0)	Strategic Management	Expansion of course by 1 credit hour
GB4015	(3-0)	Management of Change	same	same	same	Incorporates some of GB3011
GB3070	(3-0)	Economics for Defense Managers	same	(4-0)	same	Incorporates Defense Mkt topics. Expand by 1 credit.
GB4071	(3-0)	Economics & Cost Benefit Analysis	same	(4-0)	Economics & Defense Resource Allocation	Incorporates Defense Mkt topics. Expand by 1 credit.
GB4072	(2-0)	Global Defense Marketplace				Delete course. Topics transferred to GB3070 & GB4071.
GB3041	(3-0)	Analytical Tools for Managerial Decisions	same	(4-0)	same	Incorporates Risk Analysis. Expand by 1 credit.
GB4043	(2-0)	Risk Analysis & Management				Delete course. 1 credit transferred to GB3041.
GB3051	(4-0)	Cost Management	same	(3-0)	same	Transfer Cap. Budgt to GB4052. Reduce by 1 credit
GB4052	(2-0)	Corporate Finance	same	(3-0)	same	Incorporate Cap. Budgt. Expand by 1 credit.
GB3031	(2-0)	Principles of Acquisition Management				SubSpecialty Curricula have Superior Substitute. Keep requirement. Delete Course

A second result of the process was to reduce course and credit hour requirements within each of the specialization curricula. The steps involved deletion of some specialization courses as requirements and reduction of credit hours in selected specialization courses. The table below summarizes the reduction in both the number of courses and total credit hours in our major specialization curricula. (The table reflects the changes to the core course, above.)

Curric	# Qtrs	Old # Courses	New # Courses		Old # Credits	New # Credits		Ave Credits per Qtr
Fin Mgt	6	33	26		97.5	96		16
Def Anal	6	30	25		97.5	96		16
Def Mgt	6	30	24		98	90.5		15.1
REPMID	6	30	25		98	94.5		15.8
LOG	6	36	28		100	95		15.8
Cont Mgt	6	36	29		110.5	99.5		16.6
Prog Mgt	7	43	31		128	111.5		15.9
Manpwr	7	31	29		n/a	111		15.9

Across the curricula, the number of courses have been reduced by at least 5 (17%), up to as many as 12 (28%), across the curricula. The reduction in total credit hours has been significant, although less dramatic, ranging from 1.5 to 16, with the curricula that were most heavily overloaded making the greatest reductions. With these credit reductions, the curricula now average somewhere around 16 +/- hours per quarter, which is a "normal" load.

From 2004 NASPAA Report

Our NASPAA-accredited resident MBA degree program consists of three major parts: A business and public management Core, a defense-relevant Concentration (several specializations available), and an Applications Project. As described in earlier annual reports, this degree program was completely revised during 2001, with the first new class of students enrolled January 2002. The faculty had agreed to conduct a systematic review of the program after the first class had graduated at June 03. This review was initiated during Fall 03 and is continuing. There have been changes in each of the three parts of the program during the past year:

1. Core: The following changes were made to the Core courses. The effect is to reduce the Core by one course and one credit.

MBA Core Courses -- Modifications						
Previous Courses			**Revised Courses**			
Course #	Credits	Course title	Course #	Credits	Course title	Comment
GB4015	(3-0)	Management of Change				Delete course. Change topics transferred to GB3010 &

						GB4014
GB3010	(3-0)	Managing for Organizational Effectiveness	Same	(4-0)	Same	Incorporate Change Management topics. Increased 1 credit.
GB4014	(3-0)	Strategic Management	Same	(4-0)	Same	Incorporate Change Management topics. Increased 1 credit.
GB3040	(4-0)	Research Methods and Data Analysis	Same	Same	Business Statistics and Data Analysis	Focusing of statistics topics in one course. Re-named
GB3041	(4-0)	Analytical Tools for Managerial Decisions				Delete course. Reconstitute topics into GB4043
			GB4043	(3-0)	Business Modeling and Analysis	Re-introduction of course into core.

2. Specialty Concentrations: A new concentration was made available within the MBA program: Information Systems Management. Course within this concentration include:

Required Concentration Courses:

IS3302	(3-2)	Database Management and Decision Support
IS3502	(3-2)	Computer Networks: Wide and Local Area
IS3200	(4-0)	Systems Analysis and Design
IS4182	(4-0)	Information System Policy and Strategy

Career Track Elective Courses

IS3202	(3-2)	Web-Enabled Databases
IS3301	(3-2)	Fundamentals of Decision Support Systems
IS3504	(3-2)	Modern Network Operating Systems
IS4188	(3-2)	Coordination and Collaborative Systems
IS4220	(4-0)	IT-Enabled Re-engineering
IS4300	(4-0)	Software Engineering and Project Management
CS3600	(3-2)	Information Assurance: Fundamentals of Computer Security

3. Application Project: The Application Project was a new part of the curriculum, added at the time of the major program revision in 2001. The Faculty had agreed permit a wide

variety of team-based activities to occur within the Application Project part of the degree program in order to experiment with new and different varieties of student-based learning models. Experience with the Project lead the Faculty to provide some additional structure to the Application Project, in three ways:

- Limits on team size: Student teams were limited to a maximum of three students.
- Limits on Project topics: Application Projects were to address a topic or subject that is “defense-focused” or “defense-relevant”.
- Project Coordinator: A faculty position of “Project Coordinator” was created to facilitate connections between students, advisors and potential Project topics.

Appendix 3.4C

GSBPP Faculty Governance Committees

Proposal for
Faculty Advisory Board

7/07/04

- This proposal recommends the establishment of a standing BPP Faculty committee to serve as the principle faculty advisory body to the Dean.

Domain: The primary role of the Faculty Advisory Board will be to consult with and advise the Dean on BPP-wide issues of policy, strategy, and organization. It is envisioned that both the Dean and the members of the FAB will initiate and propose matters for discussion. Through consultation with faculty, students, administration, sponsors and staff, the FAB will identify issues for consultation with and advice to the Dean. Similarly, the Dean will consult with the FAB to receive faculty advice on matters under his purview

Membership: Membership of the Faculty Advisory Board should satisfy two major criteria:

- Experience: Sufficient experience at NPS so as to understand the mission, organization and operation of the institution. Sufficient experience in BPP so as to know and understand the viewpoints of faculty, students, administrators and staff and the ability and interest to take a School-wide perspective on matters of policy, strategy and organization.

- Representation: Membership of the committee should reflect the types and categories of faculty in BPP.

A suggested membership for the FAB is a committee composed of representatives of faculty groups as follows

- Two members from the tenured faculty
- One member from the untenured, tenure track faculty
- Two members from the Senior Lecturer/Lecturer faculty
- One member from the military faculty
- One faculty member at-large

Members of the Committee shall be selected for two-year staggered terms by election held by each faculty group according to processes decided by each group. The at-large member shall be appointed by the Dean.

Roles, Responsibility and Organization: The responsibility of the FAB is to serve as the standing faculty committee with the broadest perspective on School-wide issues, and to lead the processes of faculty governance in BPP. In this context, the FAB could, for instance:

- Provide recommendations and advice to Dean on policy, strategy and organizational issues, at the initiative of the FAB or at the request of the Dean.
- Act as a task force for developing specific policy recommendations for the Dean
- Recommend that a faculty task force or other ad hoc group be formed to investigate an academic matter or other BPP issue.
- Act as a task force to develop recommendations to be brought to the BPP faculty.
- Exercise oversight and coordination, as necessary, with other groups within in the faculty governance structure.
- Address policies regarding faculty matters such as workload policy, planning and recruiting, orientation, mentoring collegial review, tenure and promotion and quality of worklife.
- The Dean and the FAB will determine the appropriate faculty group to discuss and decide on particular issues.

The FAB shall elect a Chair, and such other officers as deemed necessary. The FAB shall determine its own meeting schedule and agendas in coordination with the Dean.

Proposal for
Faculty Instruction Committee
5/02/04

This proposal recommends the establishment of a standing BPP Faculty committee to serve as the focal point for instructional matters. It comments briefly on three aspects of such a committee:

- Domain: It's sphere of authority
- Membership: Who and why
- Roles and Responsibility: What it's supposed to do

Domain: A first question is what is the domain over which a Faculty committee concerned with instruction and curriculum should have responsibility? Some possibilities, in order of increasingly wider domain, include:

1. MBA Core
2. MBA Program (Core + Subspecialties + Project/Thesis)
3. Resident Programs (MBA + MSM)
4. BPP Degree Programs (Resident Programs + 6 DL Programs)
5. BPP Instructional Programs (Degree + Non-Degree Programs)

As a practical matter, issues related to domain 1 inevitably take place within the context of and involve 2 & 3. Due to the age, history, size and interconnectedness of the resident program, BPP's experience has been characterized by significant faculty interest and attention to the resident program (domains 1-3), with more passive attention to non-resident programs (domains 4 & 5). Without much discussion here, it's recommended that the committee's authority span domains 1-3.

Can't live without an acronym, so a proposed label for the faculty committee focused on resident instruction is the **Resident Instruction Committee (RIC)**.

Membership: Membership of the Resident Instruction Committee should satisfy two major criteria:

- Knowledge: Each member should be expected to be well informed about the Program and it's issues. This argues for the membership to have, through position or activity, significant ongoing involvement with the resident program beyond simply membership on the RIC.

- Representation: Collective membership of the committee should reflect the information and insights of various BPP perspectives on the resident programs.

A suggested membership for the RIC is a committee consisting of the "big 5" AAs, the AA for Internationals, the EARs committee members and the associate dean for

instruction. Each of these individuals would be expected to bring particular relevant and unique knowledge to the committee. Each of these individuals might also be expected to view instructional issues from different perspectives. (The makeup of the committee is designed to encompass all perspectives but permit domination by none.) Here's a table intended to suggest the particular knowledge and perspectives of the committee members:

Title	Incumbent	Area Faculty	Sub-Specialty Students	Core Students	Curric Sponsor	Core Course Sequence	Core Instructors	Core	Admin
AA - FM	San Miguel	X	X		X	X			
AA - OLM	Gue/Kang	X	X		X	X			
AA - ACQ	Snider	X	X		X				
AA – MP&E	Mehay	X	X		X	X			
AA – MGT	Hocevar	X				X			
AA – INTL	Crouch		X						
EARs #1	Crawford			X			X	X	
EARs #2	Doerr			X			X	X	
ADI	Moses			X			X	X	X

Roles & Responsibility: The broad responsibility of the Resident Instruction Committee is to oversee resident instruction programs for the Faculty. In that capacity the RIC would act in three roles:

As Standing Faculty Task Force: Engages major curriculum issues within resident programs. Studies and evaluates issues and proposed actions, and makes recommendations to the BPP Faculty for consideration, as appropriate. (i.e., Acts, on a continuing basis, in the role performed by the Jerry Task Force.) Some examples of matters addressed in this role:

- Content of Core curriculum
- Size, number of credit hours, in the Core
- Size, number of credit hours, in the MBA Program
- Addition & deletion of Core courses
- Creation of new curricula
- Oversight of Sub-specialty curricula

As Instructional Policy Board: Act for the Faculty in making operational policy decisions relevant to resident programs. Some examples of matters addressed in this role:

- Student absences
- Cheating
- Validation
- Part-time students
- Instructor substitutes
- Minimum class meetings

As Advisory Board: Acts as a faculty forum for BPP administration (e.g., ADI) to discuss instructional program issues and initiatives. Provides consultation and advice. Some examples of matters addressed in this role:

- Methods of program integration
- Initiation of a BPP instructional case development program
- Incorporation of JPME into curricula
- Instructional Objectives Program

Proposal for
Faculty Research Committee

7/08/04

This proposal recommends the establishment of a standing BPP Faculty committee to serve as the principle faculty advisory body to the Associate Dean of Research (ADR).

Domain: The primary role of the Faculty Research Committee will be to consult with and advise the ADR on BPP-wide issues of policy and strategy, with the objective of continually improving BPP's scholarly productivity, broadly defined. Both the ADR and the FRC members will initiate and propose matters for discussion.

Membership/Organization: Membership of the Faculty Research Committee should have sufficient research experience and activity to understand the NPS and BPP research organizations and environment. To offer a school-wide perspective on research policy issues, membership should also reflect all types and categories of BPP faculty involved in scholarly activities. Membership for the FRC will include five faculty members representing the diversity of faculty in BPP, including:

- Tenured Professors/Associate Professors
- Untenured tenure-track faculty member
- Lecturers/Senior Lecturers

Members of the Committee shall serve for two year terms, and be selected by the Associate Dean of Research. The FRC will elect a chair or other officer(s) as deemed necessary. The FRC shall determine its own meeting schedule and agendas in coordination with the ADR.

Roles, Responsibility and Organization: The FRC will serve as a standing advisory faculty committee with overall responsibility for promoting the health and vitality of scholarly activity in BPP. In this context, the FRC could:

- Develop recommendations or provide advice to the ADR or the Dean on research policy, strategy and organizational issues, at the initiative of the FRC or at the request of the ADR. Issue might include:
    - Research productivity incentives
    - Distribution and accountability for workload relief funding
    - Internal BPP research funding allocation processes (chair funds)
    - Research mentoring policies (transition from RIP, etc.)
    - Internal research publication outlets (technical reports, e-journal, etc.)
    - Student application project coordination
- Act as a task force to develop recommendations for the BPP faculty.

Appendix 3.4D

NPS Academic Council Policy on adding and Modifying Courses

Chapter 8

Modifying the NPS Curriculum

8.1 Adding and Modifying Courses in the Course Catalog

(Approved: May 17, 1995)

Before offering a new course, a request for approval must be made to the Academic Council Course Review Committee at least four months in advance of its intended initial offering. All requests for adding a new course or changing the NPS Course Catalog description of an existing course must be addressed as shown below:

From: _____Chair, Department of _____
Via: _____Associate Provost for Academic Affairs (Code 06)
To: _____Chair, Course Review Committee
Copy: _____Code 611, all Departments and Curricular Offices

A valid request must contain all of the following information:

1. Catalog description, including the following:
   - Course Number, title and credit hours;
   - Curricula served (if restricted to one or a few);
   - Course description (must highlight DoD/DoN relevance, if any);
   - Prerequisites
   - Security Classification, if any;
   - Pass/Fail status, if applicable

For minor changes to an existing course, an annotated copy of the current Catalog description satisfies (a) and (b).

1. Course Syllabus. This need not be a day-by-day account, but must be detailed enough so that the Academic Council and all affected Departments can determine how much time is spent on each topic.
2. Justification. This is to be a free-form discussion on the rationale for adding new course or changing an existing one. This must include:
   - Whether the course is required to satisfy a degree requirement or Educational Skill Requirement, or is an elective.
   - Whether the course is a prerequisite or a terminal course.
   - Justification for the level of classification of the course.
3. Duplication. A list of courses covering similar topic must be provided. If applicable, a justification of course duplication is also required. If no existing course at NPS covers a similar set of topics, a no-duplication statement must be included.
4. Resources. A statement indicating whether a new or revised course will require a non-negligible increase in extra-departmental resources, such as a new instructor, new laboratory space, or new laboratory equipment. If a significant increase in extra departmental resources is required and endorsement from the appropriate School Dean indicating these resources will be made available must be attached.

5. Schedule. Indicate the proposed schedule for the course (e.g. Every Spring, starting in 1994).

Appendix 3.4G

FACULTY WORKLOAD PLANNING IN GSBPP
9/05

This document attempts to do three things:

- Describe broadly the Workload Planning process in BPP.
- Outline policies and guidelines related to that process.
- Identify normal workload rates for some specified activities

ANNUAL WORKLOAD PLAN PROCESS:

Annual workload plans are filled out by each faculty member shortly before each new academic year. One metric used in the plans is credit hours (ch). A quarter is 11 ch, a full year is 44 ch. All faculty members who plan to be paid for a full calendar year need to identify expected workload totaling at least 44 ch. (Sometimes work is not specified in terms of ch, but rather directly in terms of $ salary or number of days. Translation between the three metrics is possible given that 1 ch equates to about 6 days of work, and faculty have a daily salary rate.)

The workload planning process takes place during summer quarter. Prior to the workload planning process, the annual teaching plan has been developed for faculty in each academic area, coordinated by the AA s and ADI. This teaching plan provides one input to the faculty and serves as a starting point for completion of individual workload plans.

Communication may occur between a faculty member and the SAD or Dean, if desired, or necessary for a workload plan to be completed. The workload plan is a planning document, viewed as an initial agreement, although not a rigid one. Revisions may occur throughout the year in response to changing circumstances.

BBP WORKLOAD PLANNING GUIDELINES

1. The norm for an annual workload is 44 credit hours (ch) of work activities in a year. (1 ch is equal to approximately 6 workdays, with typically about 262 workdays in a year.)

2. Tenured track faculty are normally expected to teach for a minimum of two quarters a year in BPP degree programs (i.e., have 22 ch dedicated to instruction-related work, including teaching, project or thesis supervision, or instructional development.) Lecturers are normally expected to teach a minimum of three quarters a year. Faculty may devote more time to instruction than the expected minimum, if they desire. Faculty may devote less time to instruction than the expected minimum if their instructional services are not required to cover necessary BPP courses, with approval by the Dean.

3. In both cases (lecturers and tenure track faculty), the rest of the year may be made up of a variety of activities including reimbursable projects, BPP or NPS funded research, non-degree instruction, administration, and service work for which BPP offers workload credit.

4. Faculty work does not come in easily separable parts. It is OK to work 46 or 47 ch where work is not divisible. Faculty who face a larger workload year than this should seek relief as soon as the forecast becomes apparent. Faculty whose workload year is in the 50's should seek to shift work to colleagues.

5. Should a "direct-funded" course (i.e., resident and EMBA courses) be cancelled during the school year, tenure track faculty may still be paid. The Dean may assign the faculty member alternative work of benefit to the School. If a reimbursable funded activity falls through, then the faculty member may be expected to bear the responsibility of replacing the workload or accepting leave with out pay. (This is no change from how it has always been done.)

6. For accounting purposes, faculty should at the planning stage try to distribute their activities across the four quarters so that workload in each quarter reaches an 11 ch minimum.

7. Faculty whose workload year does not approximate these guidelines should meet with the Dean or SAD to develop an acceptable profile within the context of BPP needs and faculty considerations.

FACULTY ACTIVITIES

Workload generally falls within four broad areas. What follows is more detail about those categories and indications of workload compensation for particular kinds of activities.

INSTRUCTIONAL ACTIVITIES:

Instructional activities consist of **Teaching**, **Advising**, and **Instructional Development** Activities. The norm (often departed from) for an "Instructional Quarter" is perhaps 8 ch of teaching, with advising and/or instructional development activities filling out an additional 3 ch.

Resident Teaching: BPP develops its annual teaching plan starting during Spring qtr each year. The Associate Dean for Instruction (ADI), in conjunction with AAs and Program Managers (PM), forecasts expected courses needed. AAs, in consultation with their area faculty, coordinate the staffing of those courses.

Workload compensation for resident teaching is:

- *MBA Core courses: 1ch of workload for 1 ch of course credit*
- *Concentration courses: 1ch of workload for 1 ch of course credit*
- *Service courses: 1ch of workload for 1 ch of course credit*

Distance Leaning Teaching: Includes instruction in the BPP DL programs – i.e., EMBA, MSPM, MSCM, AAP, AMDLP, MSSEM (PD21).

Workload compensation for reimbursable teaching: During 2001, GSBPP faculty approved the "DL Matrix", a table that specifies the expected compensation for DL teaching. Expected rates vary depending on mode (VTE or travel) and other factors. (Actual rates have also been affected by a program's ability to pay.)

The broad standard for VTE is:

- *1.5 ch of workload for 1 ch of course credit.*

Instruction in LEAD program:

- *As determined by LEAD program manager. Approximately 1 ch of workload for 1 ch of course credit.*

The actual compensation rate available in AY06 to Acquisition faculty teaching in the MSCM and MSPM programs is to be determined and will depend on the outcome of an Indirect cost relief request. Should the request be rejected, compensation may be reduced to

- *1.2 ch of workload for each 1 ch of course credit*

*Thesis/Project Advising**: Individual faculty specify in their workload plan the amount of workload they expect to come from advising theses or projects. Actual thesis workload accomplished at the end of a year may vary (higher or lower) from the amount planned. No action is taken on annual basis under the assumption that overloads and underloads will average out over the long haul. Continual underloads may lead to the Dean requiring extra course teaching or some other assignment.***

During 2006, MBA project advising will continue to be compensated at the same rate as thesis advising. Regardless of the number of students on a project team, each student carries 1.5 ch of workload. Guidelines for advising workload compensation are:

Workload compensation for <u>thesis or project advising</u>:

- *Primary Advisor:* *1 ch*
- *Co-Advisor:* *.75 ch*
- **Associate Advisor (Reader):** **.5 ch**

Instructional Development Activities: Instructional Development includes various activities directed toward improvement of BPP's instructional programs. These may include activities such as

Development of courses, new or adapted.
Development of teaching cases or other instructional materials
Integration projects
Faculty teaching development
Faculty participation in IDL course
Miscellaneous instruction-related projects

The ADI (for the resident MBA program) and the ADDL and PMs (for DL programs) arrange with individual faculty for development projects. Ch compensation depends on the nature and scope of the project or task.

Some previous examples of workload compensation for course development:

- *EMBA: Approx 1-3 ch range, depending on scope*
- *MBA core: new course: 1 ch of workload for 1 ch of course credit*
- **MBA core: adapted course: .25 ch of workload for 1 ch of course credit**
- *PD21: new course: Up to .75 qtr of workload for 4 credit course*
- *PD21: adapted course: Up to 1/2 qtr of workload for 4 credit course*

Standard compensation for participation in the IDL course: 3 ch.

Compensation for IMET instructional development project: As determined via proposal.

RESEARCH ACTIVITIES

Reimbursable Research: Individual faculty develop their own plans for research, working with sponsors to secure reimbursable funding. Principle investigators (PI) may coordinate with other faculty for their participation on a particular reimbursable research project. Experience is that there may be considerable uncertainty concerning the actual availability of reimbursable research funding for some projects until after the start of the AY.

Workload compensation for reimbursable research: As negotiated with sponsor.

Direct Funded Research: Faculty may have time funded by NPS or BPP to conduct research. NPS funds the Research Initiation Project (RIP) program for newly hired faculty. BPP receives some mission funding from NPS for direct-funding of research. These funds consist principally of a share of the faculty "workload relief" funds secured by NPS starting 2003.

Since NPS has usually not settled on the final budget distribution to the Schools, the amount of funds available to BPP to direct-fund faculty scholarship is typically uncertain at the time faculty are asked to complete their workload plans. The faculty workload planning process helps determine the expected demand for these funds and then permits a comparison with the future 06 budget.

Anticipated workload compensation from direct funds:

- *RIP for new faculty from NPS: Generally 2 quarters for the first two years.*
- *Third year RIP from BPP: Up to 4 months, as necessary to supplement other research funding opportunities.*
- *BPP Workload Relief funds: Nominally, 2 months per tenure track faculty member, but depends on funds available and acceptance of a proposal. Two months, if desired, for untenured junior faculty.*

ADMINISTRATION

GSBPP-Funded Administrative Positions: Responsibility for staffing of these positions rests with the Dean. The period of appointment for these positions rarely coincides with the AY, so incumbents are generally known prior to the annual workload planning process. Workload compensated positions include the Associate Deans (ADR, ADI, ADDL, ADFA), the Academic Associates (AAs) and selected Directors.

Workload compensation for administrative positions:

- *AAs: ½ to 1 quarter, depending on curriculum.*
- *ADs: Has ranged from 1 to 2 quarters.*

Sponsor-Funded Administrative Positions: Resources for these programs are controlled through the Dean. Responsibility for staffing of these positions falls to the Dean. Examples of these positions include the ADDL and PMs of AAP, LEAD, MSCM, MSPM, EMBA.

Workload compensation: As determined through consultation among Dean, PM, and program budget. Nominally, one quarter, 11 ch.

SPECIAL PROJECTS AND OTHER ACTIVITIES

This is catch-all category for any other activities. Faculty may be given "release time" to accomplish activities non-trivial in scope. Special projects may be direct funded by the Dean, by NPS, or through reimbursables. Examples are many and the list below is not exhaustive. (Some of these items could as well have been listed under Administrative activities.

- Program development (e.g., Spadework on the EMBA, Development of Continuing Ed. for alumni)
- Advisors (e.g., Advisor for LEAD program students, NPS Supply Corp Advisor, Army Sponsorship advisor)
- Heading up the BPP accreditation process (e.g., NASPAA, AACSB)
- Development of BPP systems (e.g., development of GSBPP web site)
- Development of a Research Center
- Significant NPS service activity (e.g., NPS Faculty Chairman)
- Significant BPP service activity (e.g., MBA Policy Committee Chair)
- Significant external professional position (e.g., NCMA President)
- Significant external academic position (e.g., Journal editor)
- Program marketing activities
- Management of DAU equivalency
- Quick-time response to request for "consulting" by DoD command.
- Faculty development

Workload compensation for special projects: As negotiated with, or set by, the Dean, PI, PM or other party.

PROFESSIONALISM: UNCOMPENSATED ACTIVITIES

There are activities performed by faculty that carry no explicit workload credit, but are typically expected of faculty in their role as academics. Some broad areas are:

- Routine service on BPP/NPS standing or ad hoc committees (e.g., Faculty Council, Academic Council, FAB, FIC, FRC, Collegial Review committee, DEC committees)
- Routine service to Professional/Academic communities (e.g., journal paper reviewer, membership on professional society committees, membership on DoD boards).
- Faculty Citizenship (e.g., participation in P&T process, participation in faculty meetings, participation in faculty recruiting process)

Appendix 3.4I1

GSBPP Policy on Recruiting and Appointment of Tenure Track Faculty

Approved by the GSBPP faculty, May 15, 2003

Initiation of Recruiting Process

The Academic Associates (AAs) and the Associate Dean for Faculty Affairs (ADFA) are responsible for identifying vacancies to be filled. The AA will consult with other faculty in the area for consensus on the need for recruiting. Recruiting is to be clearly based on specific teaching requirements.

If there is a consensus with the area on the need for recruiting, the AA requests the approval of the Dean through the ADFA to begin the recruiting process.

Recruiting Strategy and Scheduling

The AA consults with all colleagues in the area to determine the recruiting strategy. The strategy will include the selection criteria specific to the position, planned advertising (journals, professional society Web sites, conference interviews), and the schedule for campus visits by candidates. The ADFA then endorses the recruiting strategy and forwards it to the Dean for approval.

The ADFA is responsible for arranging advertising in consultation with the AA, and for ensuring compliance with EEO requirements

All applications, whether hard copy or electronic, are to be addressed to the Dean.
The ADFA forwards all applications to the appropriate AAs.

Where faculty members receive applications directly, they are to be passed to the appropriate AA. Each AA is responsible for reviewing the resume and if appropriate, forwarding it to other AAs where the applicant may have skills corresponding to other areas.

Review of applications

Following receipt of applications, the AA is to circulate the resumes of all candidates to the area faculty, who will conduct preliminary resume evaluation, and create a short list of qualified candidates. Applicants must then be interviewed by phone or in person (such as at a conference) by at least one of the area tenure track faculty prior to be considered for a campus visit.

For candidates under consideration in more than one area, the AAs will coordinate the evaluation effort, while agreeing among themselves as to who will act as lead AA.

Following phone or in-person interviews interviewing faculty will provide a short assessment to all area faculty members, who are responsible for reviewing and ranking the candidates on the short list.

The AA is to request three letters of reference from candidates being considered for a campus visit.

The AA forwards a ranked list of potential candidates for on-campus interviews to the Dean through the ADFA, along with campus visit scheduling recommendations. The Dean approves all campus visits for faculty candidates.

The ADFA is responsible for determining visit dates in consultation with the Dean and AAs. At least three weeks should be allowed between the approval of the visit by the Dean and the start of the candidate's travel to NPS.

Interviews that have the likelihood of resulting in accepted offers early in the year are best. Candidates for tenure track positions should have the potential for achieving promotion and tenure at NPS.

Citizenship Status

For candidates under consideration for a campus visit, the AA should obtain the immigration status of the applicant, i.e.: U.S. citizen, permanent resident of the U.S., or other status. Where the candidate is a permanent resident of the U.S., also determine the foreign citizenship(s) held. For those applicants currently residing in the U.S. that are not U.S. citizens or permanent residents, ascertain the type of visa and expiry date as well as foreign citizenship(s) held.

When a candidate under consideration for a campus visit is not a U.S. citizen, the ADFA will consult with HRO prior to recommending the candidate for a campus interview to the Dean. HRO will advise whether the candidate would potentially be eligible for employment authorization and if applicable, sponsorship for permanent resident status and citizenship.

Candidate Visits

In arranging campus visits, the goal is to invite in no more than four candidates per vacant position. As much as possible, only one candidate should be invited at a time per area. The goal is to stop the process as soon as we have acceptable candidates. We want to avoid canceling someone's scheduled trip if an offer has not been accepted, or if it would be awkward. Area faculty will determine the most appropriate strategy for inviting multiple faculty candidates.

The highest ranked candidates should be scheduled first. Candidates must meet with the Dean, Associate Deans, all available faculty within the area, at least three faculty from other areas, at least two full professors (at least one of whom should be from another area), at least one civilian lecturer or senior lecturer, and at least one active-duty military faculty member.

The AA is responsible for organizing visits, including travel. AAs may share the responsibility for organizing individual visits with other faculty members; this is particularly desirable where a number of visits are planned, or where an individual faculty member has common interests or background with a candidate.

The expectation is that the candidate will be on campus for 1½ to 2 days. The preferred interview days are Thursday and Friday. The expectation will be that the candidates will leave Monterey on Saturday or Sunday, allowing time to visit the area.

The AA should also inquire whether the candidate wishes to meet with a real estate agent, and offer to make an appointment on behalf of the candidate, unless the candidate prefers to deal with an agent directly. The ADFA can recommend an agent to the candidate.

The candidate will give a research presentation to the faculty during the visit. The candidate should be asked to limit the presentation to one hour, and e-mail the presentation to the AA prior to departing for NPS.

The AA will announce the research presentation via e-mail to all GSBPP faculty members, and will post notices on the doors of the multi-purpose and photocopier rooms. The AA should also consider inviting faculty from other academic units who might be interested in hearing the presentation.

The AA will e-mail the Candidate Evaluation Form included at the end of this policy to all interviewers prior to meeting with candidate. The form should also be passed out to all attendees at the research presentation who have not previously received it by e-mail.

Candidate Evaluations and Offers

Following the interviews and research presentation, area faculty are to analyze the Candidate Evaluation Forms and consider candidates. The interviewed candidates are to be listed from best to worst, based on information provided by the candidate, interviews, letters of reference, and any other relevant information.

At the end of the recruiting process, the final ranking should be described and the process of arriving at it should be described in a memo to be included with the documentation described at the end of this policy.

For each candidate there will be written evaluations and a recommendation to the Dean of whether an offer should be extended.

If an individual is to be appointed at the rank of Professor, the candidate will be presented to the senior faculty for their recommendation before the Dean considers the application.

The Dean, in consultation with area faculty, determines who is to be offered positions and at what rank. The Dean negotiates salary, workload, and related compensation and benefits issues with the candidate, and makes offers in accordance with direction from the Provost.

Once the Dean and the candidate have come to an agreement on the prospective offer, the ADFA prepares a recruitment package in consultation with the AA. The Dean approves the recruitment package and forwards it to the Director of Academic Planning.

In preparing the recruitment package, the ADFA will consult with the Office of the Provost to determine the availability of funding to cover relocation costs for the candidate.

Following each offer, the ADFA will write a memo documenting the following:

a. The rank and tenure status of the position offered;

b. Any provisions related to workload; and

c. Any other unique characteristics of the offer.

Records Management

AAs and the ADFA are responsible for preparing records of the recruiting process. These records are to be maintained electronically on at least two Zip disks or compact disks held in separate locations by staff supporting the ADFA. All recruiting process records are to be retained for at least five years.

Documentation will include the following:

a. A register of applicants showing their status, what was done with them and when (i.e. when were they acknowledged, invited to visit, rejected, hired);

b. Resumes, covering letters, letters of reference, and other application materials;

c. All correspondence with candidates including acknowledgement and rejection letters;

d. The seminar announcement for the candidate's presentation;

e. Evaluations and evaluation summaries on candidates who visited NPS as well as travel information;

f. Correspondence between the AA, ADFA and the Dean with respect to the evaluation of candidates;

g. Advertisements in print publications and electronic media; and

h. Candidate travel orders and claims.

NAVAL POSTGRADUATE SCHOOL
Graduate School of Business and Public Policy

Evaluation of Faculty Candidate

Name of Candidate:

Position: _____

Evaluator:

1. What opportunity did you have to evaluate the candidate? *(Check ALL that apply.)*

□ Reviewed vita □ Attended Seminar
□ Interview □ Other (describe)

2. What is your evaluation of the candidate's potential in the following areas? (5=Outstanding; 4=Excellent; 3=Good; 2= Fair; 1= Marginal; Blank= No Opinion)

Publishing in Scholarly Academic Journals _____

Conducting Research Related to DoN and DoD _____

Teaching at NPS _____

Supervising Student Theses/Research Projects _____

Contributing to NPS/GSBPP via Service Leadership _____

3. Comment briefly on overall strengths and weaknesses of the candidate. Use back of page to elaborate.

4. Recommended Action:

Seriously Consider Extending Offer: _____
Re-evaluate Candidate After Interviewing Other Candidates:_____
Reject Candidate: _____

Appendix 3.4I2
NPS Instruction for Annual Faculty Activity Report

7 February 2006

MEMORANDUM

From: Provost
To: Faculty

Subj: FACULTY ACTIVITY REPORTS FOR CALENDAR YEAR 2005

1. Each year, the Faculty Activity Report (FAR) allows you to tell your Chair and/or Dean what your professional accomplishments were for the past calendar year (1 January - 31 December 2005). Department/Group Chairs and Deans use the information in the FAR for your annual appraisal and for the purposes of determining merit pay increases. The FAR consists of the following sections:

A. Narrative Summary
B. Teaching Load
C. Theses Advised
D. Research Summaries
E. Publications
F. Quarterly Workload Forms
G. Suggestions for Improvement

2. Data for sections B and C are generated in Python by your Administrative Support Assistant. The two report titles are “Teaching Load Report” and “Thesis Advisor Report. Both are located in the “Planning” menu of Python. Section F should be on file in your School/Department/Group's office.

3. The Narrative Summary is a faculty member’s opportunity to highlight her/his most significant activities or accomplishments of Calendar Year 2005. The Narrative Summary should be kept brief, normally no longer than two or three pages. Although the format or style of a report may vary, based on the faculty member’s accomplishments and areas of concentration, the activities covered in a Narrative summary are typically divided into three general areas: Instruction, Research, and Service.

4. Suggestions for Improvement are encouraged, but not required.

5. The following documents are attached as background information and further guidance.

- (1) Pages 5-9 of this year's promotion & tenure guidelines. These are examples of information and activities that one could highlight in an activity report.
- (2) Faculty Activity checklist. You can use this as an aid in recalling your important activities of the past year.
- (3) Instructions for Sections D and E.

Please submit the following documents electronically (as a MS-Word file) and in hard copy (if hard copy requested) to the appropriate administrative officer for your Chair or Dean by **March 10, 2006**:

A. Narrative Summary (Faculty member *writes* this, required.)
B. Course sections taught (Faculty member *verifies* this, required.)
C. Theses advised (Faculty member *verifies* this, required.)
F. Quarterly workload forms (Faculty member *verifies* this, required.)
G. Suggestions for improvement (Faculty member *writes* this, optional.)

The submission deadline for sections D and E to the Research and Sponsored Programs Office is also **March 10, 2006**. Sections D & E will be forwarded to your Associate Chair/Dean for Research. Submission must be in Word. Please adhere to deadlines set within your activity to assure submission by March 10, 2006.

D. Research summaries (Faculty member *writes* this, required of Research PIs only.)
E. Publications (Faculty member *writes* this, required.)

EXCERPT FROM PROMOTION & TENURE GUIDELINES

INTERNAL NPS ACTIVITIES

1. Internal Teaching Activities

a. Course and laboratory development. Description of courses developed, instructional materials written, laboratory facilities acquired, and experiments developed. Indicate any development work that supported operational curricula.

b. DoN/DoD applications. Describe any contributions made in instructional-related activities, emphasizing DoN/DoD applications.

c. Teaching techniques developed. List any techniques developed; include information on planning, testing, and evaluation.

d. Thesis supervision. List all theses where the candidate served as
(i) advisor
(ii) co-advisor
(iii)second reader.

Subdivide the listing into the above three groups. Within each subdivision, list these in reverse-chronological order (i.e., the most recent appearing first) with student name, thesis title, NPS degree received, and the month and year of graduation.

e. Self-improvement efforts. Include any attendance at workshops and conferences to improve any aspect of instruction, any auditing courses at NPS or elsewhere, etc.

f. Reading courses taught. List quarter and year, number of students, and subject.

g. Instructional materials. List any materials prepared and updated, any courses administered.

h. Mentoring. Describe any efforts to improve instruction of other faculty, development of instructional staff, etc.

i. Course coordination. List any courses requiring significant efforts to coordinate.

j. Other instruction information. Describe any other contributions to instruction that might be relevant.

k. Other information on evaluation of instruction. Evaluation material must be offered that supplements the SOF. New guidance to offer those data are presented in the Chair's report section. (Summary SOF data are presented in the Chair's report section. Do not include any SOF comments.)

2. Internal Research Activities

a. Summary of research projects. List chronologically all research projects including

(i) title
(ii) sponsor(s),
(iii)funding level,
(iv) identification of the principal investigator,
(v) brief description of the project,
(vi) level of effort (i.e. fraction of WY supported by project funds),
(vii) students participating,
(viii) numbers of staff and other faculty supported,
(ix) the candidate's role in the project, and
(x) publications resulting from the project. (Use reference numbers from the publication subsection below [Subsection III.2.a] to identify the publications.)

b. Thesis Contributions. Describe any contributions to the research efforts of NPS student theses beyond those listed in Section II.1.d.

c. Contributions to interdisciplinary NPS research projects. Describe any contributions to interdisciplinary research. Also include any development of research facilities used for interdisciplinary work.

d. Visiting researchers attracted. Identify any research associates and postdoctoral fellows attracted, any technical staff developed/supported, and/or any development of research programs for improving or enhancing the skills of other faculty.

3. Internal Administrative and Service Activities

a. Committee Service. List NPS faculty committees and councils, department committees, and administrative service activities. Indicate level of effort, and significant contributions.

b. Service as Academic Associate. Summarize by curriculum, number of students, release time, and major activities.

III. EXTERNAL ACTIVITIES

1. External Teaching Activities

a. Courses presented at other universities, installations, etc.

b. Course materials used at other universities, title, and number of places used.

c. Other significant products used externally for instruction, such as computer-aided instruction case studies, laboratory experiments, computer design/graphics products, etc.

d. Short course initiation, coordination and participation. Include hours of instruction, where offered, when offered, evaluation results by course sponsors and attendees, and a summary statement of the responsibility of candidate.

e. Distance Learning course initiation, coordination and participation. Include hours of instruction, where offered, when offered, evaluation results by course sponsors and attendees, and a summary statement of the responsibility of candidate.

[Note: The DEC should make efforts to obtain critical external evaluation of any external instruction products in the above subsections.]

2. External Research Activities

a. Products distributed outside NPS. Chronological list of items segregated into following categories:

(i) books[1]
(ii) chapters in books[1]
(iii) refereed journal papers/cases[2]
(iv) non-refereed journal papers/cases[2]
(v) refereed conference papers[1]
(vi) invited conference papers[2]
(vii) presentations[2]
(viii) refereed technical reports[1]
(ix) non-refereed technical reports[2]
(x) published computer programs[1]
(xi) book reviews[2]
(xii) patents
(xiii) other

3. External Professional and Service Activities (Indicate membership, leadership role, nature of service and accomplishments.)

a. Navy/DoD Activity. List any contributions to the mission of the Navy and Marine Corps, or to other DOD activities, including consulting, workshops, and advisory boards, or temporary assignments to operational units, systems commands, laboratories or headquarters.

b. External Professional Activities. Professional societies, industrial or academic consulting, workshops/conferences/sessions organized (including dates, place, faculty member's role), paper discussant, seminars, etc.

c. Other external service activities including, e.g., community service.

1. For each item, indicate the nature of the review/refereeing process and include a complete citation. Sequentially number all publications so those can be referred to.
2. For these items, include any indicators of quality or significant. Note: a broad range of products is accepted as personal scholarly productivity, but it is crucial that creditable experts outside NPS judge the quality of the work. Methodologies for doing so are described in the report on measuring faculty productivity, aka "The Powers Report"

[Note: A broad range of products is accepted as evidence of external professional and service activities. When the candidate claims a major impact for the activity, it is required that creditable experts outside NPS judge the quality of the work. Methodologies for doing so are described in the report on measuring faculty productivity.][1]

1 The Powers Report

FACULTY ACTIVITY CHECKLIST
(Intended to be used as a memory jogger)

ACTIVITIES RELATED TO TEACHING:

- New courses you have created
- Existing courses you redesigned
- Thesis/dissertation committees on which you served
- Students you have taught individually in independent or directed studies
- Students who have co-authored a journal article or book chapter with you
- Students who have co-presented a paper at a professional meeting with you

ACTIVITIES RELATED TO SCHOLARSHIP:

- Print or electronic refereed journal articles, book chapters, and creative works you have published
- Print or electronic non-refereed journal articles, book chapters, and creative works you have published
- Single-author or join-author books or monographs you have written and have had published by an academic or commercial press
- Manuscripts (e.g., journal articles, books) you have submitted to publishers
- Books, collections, and monographs you have edited
- Books, journal articles, and manuscripts you have reviewed and formally submitted
- Editorial positions you held
- Briefings to sponsors
- Digital programs or development of applications and items for technology transfer (e.g., software development, web-based learning modules) you designed related to your field of expertise
- Provisional or issued patents registered in your name
- Works in progress (e.g., journal articles)
- Invitations you have received to present a professional talk
- Formal presentations you have made at state, regional, national, and international professional meetings
- External and internal grant, contract, and scholarly fellowship proposals you have submitted
- New external grants, contracts, and scholarly fellowships which have been formally awarded to you or NPS on your behalf

Attachment (2)

ACTIVITIES RELATED TO SERVICE:

- Activities related to service in your institution (e.g., faculty council, faculty committees, search committees, peer mentoring, recruiting efforts, reappointment committees, promotion/tenure committees, student activity advisor, other student activity involvement) in which you have engaged
- Outreach activities related to your field of expertise (e.g., community workshops, invited talks to community groups, seminars, lectures, demonstrations) in which you have engaged
- Activities related to your profession (e.g., service on a regional or national committee, service on a self-study visitation team for another institution) in which you have engaged
- Grant proposals you have reviewed related to your field of expertise
- Positions in professional associations where you held a leadership role (e.g., elected officer, committee chairperson, conference chair

INSTRUCTIONS FOR SECTIONS D and E
ANNUAL RESEARCH PROJECT SUMMARIES AND LIST OF PUBLICATIONS/PRESENTATIONS

Encl: (1) Instruction for the Preparation of Research Project Summaries
(2) Instructions for the Preparation of List of Publications and Presentations
(3) Sample Research Project Summary
(4) Sample Bibliographic Notations

1. In conjunction with your Faculty Activity Report (Sections D and E), the Research and Sponsored Programs Office (RSPO) compiles an annual summary of research projects and publications/presentations by faculty. We need to collect the data for the 2005 Research Summary Book. All faculty are expected to submit: (1) a summary for each research project undertaken in CY04, and (2) a listing of all publications/ presentations **completed** in CY05. These data are compiled and published and serve as the official record of faculty research, publication, and presentation activity. They will be posted on the World Wide Web and distributed electronically.

2. Your cooperation in providing complete, accurate, and timely information is very much appreciated. To assist you in the preparation of your project summary(s), the RSPO will provide you with a listing of your funded projects in FY05. This will be provided under separate cover. Please note that your publications/presentations are required even if you did not have a funded research project.

3. Instructions for preparation of the individual summaries and the publication/presentation list are provided as enclosures (1) and (2). Enclosure (3) provides a sample project summary. Enclosure (4) provides sample bibliographic citations.

4. The Associate Chair/Dean for Research will collect the data for each Department/Institute. All information is required in the Research Office by **10 March 2006**, so please adhere to the deadline established by your Associate Chair/Dean for Research in order to allow sufficient time for collection of the data and forwarding to the Research Office.

5. If you have any questions, please call Jodie Dodge (extension 3977 or e-mail rjdodge@nps.edu) or Danielle Kuska (extension 2099 or e-mail dkuska@nps.edu).

Attachment (3)

INSTRUCTIONS FOR PREPARATION OF RESEARCH PROJECT SUMMARY

1. All faculty must submit Research Project Summaries for research undertaken in CY05. Summaries must be provided for sponsored research, institutionally funded research, and any other significant, but unfunded, research project.

2. Only one summary should be submitted for each project unless the project is divided into distinct sub-projects. The project summary is the responsibility of the Principal Investigator, or joint responsibility of co-investigators.

3. The following information must be included for each summary:

   Heading: The heading includes the project title, the names of the investigators, and the sponsoring agency. The first line should list the title of the project, the second line should list the Principal Investigator(s), and the fourth line should indicate the sponsoring activity. The title should be in all capital letters. The investigator(s) name(s) and sponsor should be in upper and lower case. If the project is reimbursably funded, list the outside agency for whom the work was performed. If NPS Institutionally Funded Research (NIFR) funded research, please list NPS as a co-sponsor. If the work was funded by CDTEMS, please list the Center for Defense Technology and Education for the Military Services as the sponsor. If the project is unfunded, please indicate so.

   Objective: Provide a short statement of the research objective. If the work is part of a continuing project, please indicate so.

   Summary: Summarize the work accomplished in 100-200 words using the past tense. Summaries must be written in the third person. If the project is continuing, emphasize the current reporting period.

   Publications: List publications originating from the project, which have been published in CY05. List also any publications resulting from the project that are accepted for publication. Please use proper bibliographic format and do not abbreviate journal titles.

Presentations: List conference presentations originating from the project and delivered during CY05. List also, any presentations resulting from the project that are scheduled for delivery. Please use appropriate bibliographic format. Do not abbreviate conference titles. List city, state/country where conference was held, and date(s) of conference.

Theses Directed: List theses originating from the project and written by students who graduated during CY05 (March 2005, June 2005, September 2005, or December 2005).

Patent Applications: List patent applications originating from the project during CY05.

Other: List other relevant output originating from the project (working papers, papers in progress, software) during CY05. These items may be reported in a single brief paragraph.

Keywords: Provide at least three keywords under which your project can be categorized.

4. Please follow the format in enclosure (3). All faculty should submit this information electronically and in hard copy to their Associate Chair/Dean for Research. All submissions must be in Word.

INSTRUCTIONS FOR THE PREPARATION OF LIST OF PUBLICATIONS and PRESENTATIONS

1. All faculty must submit a List of Publications and Presentations for CY05. This listing will include only those items published/presented within CY05. Please list publications in the categories listed below following proper bibliographic notation as provided in the same at enclosure (4).

2. Categories of publication/presentation are:

Journal Papers/Articles: List only those published during CY05 in refereed journals.

Book Reviews: List critical analysis of a book published in CY05.

Discussion: List the published account of the discussion portion of a conference program' including discussion between individuals, post-paper discussions, round table symposia, clinical conferences, etc. during CY05.

Editorial: List editorials and editorial-like items published during CY05. These items typically contain opinions of a person, group or organization. This section also includes interviews.

Letter: List contribution or correspondence to a journal editor published during CY05, concerning previously published material.

Meeting Abstract: List abstract(s) of paper(s) presented at a symposium or conference during CY05.

Notes: List technical comments shorter than an article and restricted in scope; a brief article as designated as such by the journal, published in CY05.

Reviews: List review articles and surveys, published in CY05, of previously published literature.

Reprints: List articles published previously in other journals.

Conference Papers: List papers published in the proceedings of conferences, symposia, and meetings. List here and not under

“conference presentations” if the published paper was also the subject of a presentation.

Enclosure (2)

Conference Presentations (without paper): List presentations at conferences, symposia, and meetings that are not included in the proceedings.

Books: List books authored or co-authored and published during CY05.

Contribution to Books: List contributions to books published in CY05.

Technical Reports: List NPS Technical Reports and Progress Reports completed in CY05. Also list technical reports prepared and distributed by outside sponsor.

Patents: List any patents issued during CY05 on which you were the inventor or co-inventor.

3. All faculty should submit this information electronically and in hard copy to their Associate Chair/Dean for Research, or the Chair in the case of the Academic Groups. All submissions must be in Word.

SAMPLE RESEARCH PROJECT SUMMARY

TITLE OF RESEARCH PROJECT
David W. Jones, Distinguished Professor
Christopher Smith, Research Assistant Professor
Department of Computer Science
Sponsor: U. S. Air Force Research Laboratory

OBJECTIVE: Briefly state the objective of the research. The objective from your research proposal has been provided to you.

SUMMARY: Summaries are typically 100-200 words and are written in the third person in past tense. If the work is of a continuing nature, this should be stated and the summary should indicate what work was completed in 2005.

PUBLICATIONS:

Smith, R. and Brown, B., "Smooth Local Path Planning for Autonomous Underwater Vehicles," *International Journal of Robotics Research*, Vol. 15, No. 3., pp. 265-289, 2005.

Nickerson, G.R., Johnson, C.W. and Brophy, C.M., "Prediction of Soot Produced in Kerosene Fueled Rocket Engines," *Proceedings of the 35th JANAAF Combustion Subcommittee*, Tucson, AZ, 7-11 December 2005.

PRESENTATION:

Brown, B., "Application of the Systematic Approach in the Eastern Pacific," 15th Annual Hurricane Conference, Miami, FL, 12-18 April 2005.

THESIS DIRECTED:

Smith, N., "Soot Particle Size and Concentration Determination from a Kerosene/Gaseous Oxygen Rocket Plume," Master's Thesis, Naval Postgraduate School, March 2005.

Enclosure (3)

SAMPLE BIBLIOGRAPHIC CITATIONS

Journal Papers/Articles:

Smith, R., Brown, B., Adkins, J., Jones, R., Aaronson, J., Kline, R., et al., "Smooth Local Path Planning for Autonomous Underwater Vehicles," *International Journal of Robotics Research*, Vol. 15, No. 3., pp. 265-289, 2005.

Journal Papers/Articles: (submitted or in review or in press)

Smith, R., Brown, B. and Jones, R., "Smooth Local Path Planning for Autonomous Underwater Vehicles," International Journal of Robotics Research. (submitted) or (in review) or (in press) Note: Submitted, in review or in press articles are not included in the Publication List. Submitted, in review or in press articles should be included in the Project Summary.

Conference Paper:

Smith, R. and Brown, B., "Application of Computational Electromagnetics to Shipboard Systems," *Proceedings of the 15th Annual Review of Progress in Applied Computational Electromagnetics*, pp. 182-185, Monterey, CA, 15-19 March 2005.

Conference Presentation (without publication):

Brown, B., "Application of the Systematic Approach in the Eastern Pacific," 15th Annual Hurricane Conference, Miami, FL, 12-18 April 2005.

Meeting Abstract:

Smith, R., "Smooth Local Patch Planning for Autonomous Underwater Vehicles," abstract in the *Proceedings of the 15th International Conference on Autonomous Underwater Vehicles*, Corpus Cristi, TX, 13-15 January 2005.

Books:

Smith, R., *Handbook of Computational Electromagnetics of Shipboard Systems*, New York, NY: Wesley-Addison Publishing Group, 234 pp., 2005.

Contribution to Books:

Smith, R. and Brown, B., "Implementing a Wide Area Network at a Naval Air Station," *Cases on IT Management in Modern Organization*, pp. 73-86, New York, NY: Idea Group Publishing, 2005.

Technical Reports:

Brown, B. and Smith, R., “Implementing a Wide Area Network at a Naval Air Station,” Naval Postgraduate School Technical Report, NPS-CS-00-005, April 2005.

Patents:

Smith, R., “High Resolution Encoding Circuit and Process for Analog to Digital Conversion,” U.S. Patent 5,678,987,
1 April 2005.

Enclosure (4)

Appendix 3.4J1

GSBPP Annual Review Process

- **GSBPP Collegial Review**
- **Collegial Review Feedback Form**
- **GSBPP Annual Review and Promotion & Tenure Processes**
- **GSBPP Voting Policy**

Appendix 3.4J1

GSBPP Annual Collegial Review Process

February __, 200_

Memorandum

From: Collegial Review Convening Committee (Doug Moses and Steve Mehay)
To: GSBPP Faculty

Subj: **COLLEGIAL REVIEW MEETINGS** (CRM)

THE PURPOSE OF THIS MEMO IS TO INITIATE THE ANNUAL COLLEGIAL REVIEW PROCESS. THE MAIN OBJECTIVE AT THIS POINT IS TO PREVIEW THE PROCESS, ANNOUNCE THE SCHEDULE AND ENCOURAGE FACULTY TO IDENTIFY PRESENTERS AND BEGIN PREPARING VITA PACKAGES.

BACKGROUND: The Collegial Review Meeting process was initiated a few years ago by the tenured faculty. The initial objective was to provide a means by which the senior/tenured faculty might become aware of the progress of the tenure-track faculty toward eventual promotion and/or tenure, and by which the tenure-track faculty might receive some feedback concerning their progress. Participation by the faculty was initially voluntary.

Since 1997, the administration has required a formal review of all tenure-track faculty one year prior to re-appointment. Tenure-track faculty are typically hired with an initial 3-year contract, followed by annual reappointments, so reviews are required annually for untenured faculty, starting Spring of the second year of the initial contract, and continuing until award of tenure or failure to receive a contract renewal. The tenured faculty are expected to participate in the review process and to provide the GSBPP Dean with a formal vote for or against re-appointment. The Dean submits a re-appointment recommendation to the Provost. The faculty vote is not binding on the Dean, but serves as input in determining his recommendation.

In general, GSBPP policy has been to view visiting professors on a par with tenure-track professors. Consequently, most visiting professors seeking reappointment have also been required to participate in the review process.

NPS policy does not require an annual review of Lecturers by the faculty. However GSBPP practice has been to encourage Lecturers seeking reappointment and/or promotion to Senior Lecturer to participate in the review process. Such participation serves the same purpose as with the tenure-track faculty: The faculty becomes aware of the progress of the Lecturer toward promotion, and the Lecturer receives feedback from the faculty.

SCHEDULE: The associate and full professors will meet in April to discuss the progress the untenured faculty and lecturers. GSBPP practice has been to hold review meetings each Tuesday and Thursday in early April, until the process is complete. The following tentative schedule is currently anticipated and should be used for planning purposes. Changes to the schedule may become necessary, depending on the number of faculty to be reviewed or due to other GSBPP meeting commitments, and will be announced when known.

The meeting dates for the tenured associate and full professors to review untenured professors and lecturers are:

X **Tuesday, April 9, 3:00 - 4:30 pm**
X **Thursday, April 11, 3:00 - 4:30 pm**
X **Tuesday, April 16, 3:00 - 4:30 pm** (if necessary)

The meeting date for the full professors to review tenured associate professors is:

X **Tuesday, April 23, 3:00 - 4:30 pm**

Once a complete list of faculty to be reviewed is developed, a detailed schedule assigning individual cases to specific days will be announced.

PROCEDURES concerning these meetings are as follows:

1. Getting on the program: A list of the untenured faculty who must be reviewed will be distributed in the near future. Other untenured faculty and lecturers who additionally desire to participate in the collegial review process, please notify the CRM committee (Doug Moses) of your intent by **March 15**.

Tenured Associate Professors who desire to be reviewed by the Full Professors please notify the CRM committee (Steve Mehay) of your intent by **March 29**.

2. Vita Preparation. A concise written vita summarizing teaching experience, thesis supervision, publications/conference presentations, research projects, and service activities is desired. The vita should provide a summary of career accomplishments, not just the most recent year (i.e., not your faculty activity report).

In addition to the vita, faculty members may wish to provide:

* a one page discussion of future plans.
* if previously reviewed, a one page discussion of what has been done in response to the feedback given by the reviewing faculty at the previous review.
* accomplishments/changes that have occurred during the past year (one easy way to do this is just to show the new items in bold on your vita).

3. Case presentation. Each faculty member to be reviewed is expected to select a senior faculty member (a tenured professor for the assistant professors and lecturers, and a full professor for the associate professors) from GSBPP to make a presentation of her or his case at the meeting. (Your mentor is a logical candidate for this task, but you may choose someone else.) The presenter will make a brief, 10 minute maximum,

presentation of the case at the meeting, respond to questions, monitor the discussion, and provide a summary of the discussion as feedback to the reviewed faculty member.

Untenured faculty, provide the name of your presenter (and any schedule constraints) to Doug Moses by **March 22.**

Tenured Associate Professors choosing to be reviewed, provide the name of your presenter (and any schedule constraints) to Steve Mehay by **April 5**.

4. Vita submission. Vitae need to be submitted at least a week prior to a scheduled review in order to permit copying and distribution. Untenured faculty members please provide your vita to Doug Moses no later than **April 2**. Tenured faculty members, please give your vita to Steve Mehay no later than **April 16**.

5. Vita distribution. Once vitae and the names of presenters have been received, the Convening Committee will set up and distribute a schedule to the faculty indicating the date and order of presentation of individual cases. Vitae will be duplicated by the Convening Committee and distributed to the appropriate reviewing faculty about one week prior to the scheduled review meetings.

6. Feedback. After the presentation, the faculty will provide feedback to the presenter concerning the individual's case. The feedback will involve an assessment of what the candidate needs to do to enhance his or her chances of being promoted. This will consist of specific recommendations where weaknesses are perceived, and/or a general "thumbs up" where the candidate's progress looks strong.

The presenter will convey a written summary of the faculty's assessment to the candidate in a timely fashion. It may be that the candidate wishes more information after the feedback is provided by the presenter. No formal mechanism exists for this. Candidates should feel free to talk with additional faculty members as they desire.

SUMMARY OF IMPORTANT DATES

For untenured faculty and lecturers to be reviewed:

March 22:	Name of presenter (to Doug Moses)
April 2:	Vita due (to Doug Moses)
April 9:	First review meeting

For tenured faculty choosing to be reviewed:

March 29:	Intent to be reviewed communicated (to Steve Mehay)
April 2:	Name of presenter (to Steve Mehay)
April 16:	Vita due (to Steve Mehay)
April 23:	First review meeting

Collegial Review Feedback for <u>John Doe</u>

April 2005

- Circle one number for each category (***no 1/2 ratings, please!***)
- Comments are ***required*** for any category rated ***unacceptable progress*** toward tenure (score of 1-3).
- Laney will compile the distribution of scores and a list of comments in a single document. These scores and comments will comprise the feedback to the candidate, and serve as input to the Dean concerning reappointment decisions.

1. Rate progress toward tenure in terms of **Research**.

Unacceptable			Acceptable		
Very poor 1	2	3	4	5	Outstanding 6

Comments:

2. Rate progress toward tenure in terms of **Instruction**.

Unacceptable			Acceptable		
Very poor 1	2	3	4	5	Outstanding 6

Comments:

3. Rate progress toward tenure in terms of **Service**.

Unacceptable progress			Acceptable progress		
Very poor 1	2	3	4	5	Outstanding 6

Comments:

4. Rate **Overall** progress toward Tenure.

Unacceptable progress			Acceptable progress		
Very poor 1	2	3	4	5	Outstanding 6

Comments:

Appendix 3.4J1

GSBPP Annual Review and Promotion & Tenure Processes

(Approved by the faculty, August 2002)

A. The annual review should be mandatory for those contemplating P&T actions in three years. A minimum of two reviews should be required within three years prior to required P&T actions.

B. The candidate=s material should be distributed to all voting faculty members at least two weeks in advance. Anonymous written comments and questions should be submitted to the presenter who then transmits the comments and questions to the candidate. This way, the candidate would have a chance to clarify questions or issues, or prepare a response before the faculty meets to discuss his or her case. The presenter=s role is to present the candidate=s responses to the voting faculty and prepare a summary of feedback to the candidates. The review session should have 50% of eligible voting faculty in attendance. In addition, attendance in person plus written comments in absentia should have 75 % of the voting faculty to make this annual review official. Submission of written comments from those on travel is highly encouraged.

C. Feedback prepared by the presenter should be reviewed and approved by the voting faculty for accuracy of discussion. The approval is defined as 75% of voting faculty. Ensuing personnel actions such as a contract renewal recommendation should be solicited from the voting faculty.

D. As part of the GSBPP P&T process, a summary of annual reviews should be presented to the voting faculty in addition to, but separate from, the official NPS P&T documentation package as part of the documents for consideration in the P&T decision. (Note: NPS Promotion Council is considering the inclusion of annual review results in the P&T package)

E. The members of the DEC (Departmental Evaluation Committee) should be selected by the voting faculty. Normally, we invite the candidate to nominate one GSBPP faculty member for the DEC. However, the voting faculty should select the DEC members and the chair of the DEC, which may or may not include the faculty member nominated by the candidate, to provide an objective, independent evaluation of the candidate.

F. The candidate may suggest a list of names to serve as external reviewers, but no more than 50% of reviewers selected by the DEC may come from the candidate=s list. External letters from subject matter experts at universities and other organizations should be solicited from a broad cross section of individuals in fields related to the candidate=s work. The list of external reviewers should be reviewed by the voting faculty for independence and broad representation.

G. All unsolicited letters should be treated as part of the candidate=s personal file and included in the candidate=s own documentation if he/she chooses to do so. They should not be treated or labeled as external reviews and included in the section prepared by the DEC.

H. For junior faculty not required to have annual reviews, mentoring sessions should be organized by area faculty to help the junior faculty develop professionally. In addition to annual mentoring, a faculty member may request guidance in the preparation of dossier for P&T actions. The request should be made to the faculty body with the right to vote on the P&T action.

Appendix 3.4J1

GSBPP Faculty Promotion & Tenure Voting Policy

(Adopted by the faculty, August 22, 2002)

The official NPS policy on faculty promotion and tenure procedures is found in the NPS Faculty Handbook, Section IV - School Policies:

> Before a faculty member is recommended for promotion in rank or award of tenure on the Naval Postgraduate School faculty, there is a review of professional qualifications by a Departmental Evaluation Committee (DEC), appointed by the Chairman for this purpose. (The DEC consists of at least three faculty members who are senior to the candidate's current position; one member must be from outside the candidate's Department/Group.) The DEC submits its report to the Department Faculty Promotion Council (DFPC). The specific procedures for this colleague-review are at the discretion of the individual Department/Group, within policy guidelines provided annually by the Dean of Faculty to ensure equitable treatment of all faculty. (P. IV-3, Promotions and Award of Tenure (Civilian): A. Regular Procedures)

The NPS policy states that the specific procedures at the **GSBPP Faculty Promotion Council** level are at the discretion of GSBPP. This policy specifies the review, discussion, and voting of promotion and tenures cases at GSBPP.

1. GSBPP Faculty Promotion Council for promotion to Full Professor rank case is composed of Full Professors.

2. GSBPP Faculty Promotion Council for promotion to Associate Professor rank without tenure case is composed of Associate Professors and Professors.

3. GSBPP Faculty Promotion Council for award of tenure case is composed of tenured faculty regardless of rank.

4. GSBPP Faculty Promotion Council for promotion to Associate Professor rank with tenure is composed of Associate Professors and Full Professors. However, separate votes will be conducted for promotion and tenure decisions and only tenured faculty participate in the voting for award of tenure.

5. GSBPP Faculty Promotion Council for promotion to Senior Lecturer rank is composed of Professors, Associate Professors and Senior Lecturers. Votes from tenured faculty and nontenured faculty will be tallied separately and reported in the Dean's report to NPS Promotion Council.

6. Annual collegial review process is considered equivalent to GSBPP Faculty Promotion Council action for the respective case. Faculty member presenting the case for a candidate must be an eligible member of the GSBPP Faculty Promotion Council.

7. GSBPP Faculty members serving as DEC members must be GSBPP Faculty Promotion Council members. All DEC members, including outside member, must hold a rank senior to the candidate's current position.

Appendix 3.4J2

Policy Concerning Retention and Promotion of GSBPP Non-Tenure-Track Faculty

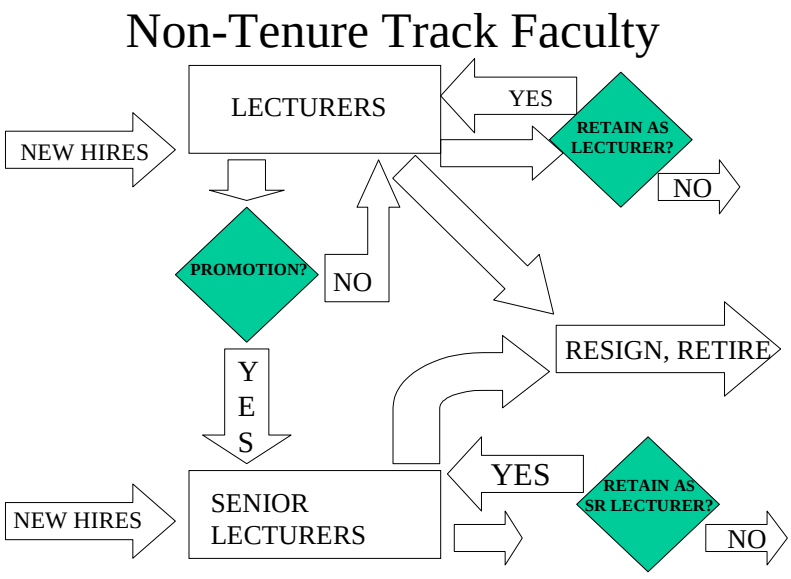
Adopted August 26, 2003

CONTEXT

This discussion applies to full-time lecturers. For purposes of this policy, full-time lecturer is defined as someone who is employed by NPS at least three quarters of the year and the work of the individual meets the GSBPP criteria for a full-time workload.

In the up-or-out system, promotion and retention are necessarily connected, with promotion within seven years being necessary for retention. This document assumes that the up-or-out requirement is removed. With the up-or-out system for Lecturers gone, personnel management of the non-tenure track faculty becomes accordingly more complicated.

In the new environment, GSBPP will make three classes of decisions: hiring, retention and promotion. This is diagrammed below.



- Possession of a combination of relevant academic and professional background is necessary for hiring.
- Satisfying the performance expectations of a Lecturer is necessary for retention as a Lecturer.
- Retention as a Lecturer is not sufficient for promotion to Senior Lecturer.
- Satisfying the performance expectations of a Senior Lecturer is necessary for promotion to Senior Lecturer.

- Satisfying the performance expectations of a Senior Lecturer is necessary for retention as a Senior Lecturer.

FACULTY ROLES

GSBPP makes a distinction between Academic Faculty roles and Administrative Faculty roles. Academic Faculty performs the principal academic activities of the GSBPP relating to instruction and scholarship. Administrative Faculty fill recognized administrative positions and perform activities relating to the management of the GSBPP and its programs. Recognized Administrative Faculty positions include Dean, Associate Dean, Academic Associate, Program Manager, and Program Director. It is recognized that faculty members may choose to divide their time and activities between academic and administrative roles. This document addresses performance expectations and promotion standards for faculty in their academic capacity.

PERFORMANCE EXPECTATIONS FOR NON-TENURE TRACK AS ACADEMIC FACULTY

The performance expectations for Adjunct Lecturers who specialize in the direct instructional activities of teaching, advising theses and projects, and holding office hours are:

1. Effective performance of instructional activities (teaching, advising)
2. Maintenance of currency of academic and/or professional knowledge and qualifications

The performance expectations for Lecturers, individuals whose role is not limited to performing the direct instructional activities of teaching, advising theses and projects, and holding office hours are:

1. Effective performance of instructional activities (teaching, advising)
2. Maintenance of currency of academic and/or professional knowledge and qualifications
3. Participation in the NPS/GSBPP community
4. Intellectual contributions, including contributions to learning and pedagogy, to practice, or to an academic discipline. Contributions in any of these areas are acceptable.

The performance expectations for Senior Lecturers include:

1. Effective performance of instructional activities (teaching, advising)
2. Maintenance of currency of academic and/or professional knowledge and qualifications
3. Participation in the NPS/GSBPP community
4. Intellectual contributions to learning and pedagogy, to practice, or to an academic discipline. Contributions in any of these areas are acceptable.
5. Intellectual contributions specifically to practice and/or academic disciplines.

RETENTION AND PROMOTION STANDARDS

Retention as a Lecturer depends on a) continued meeting of Lecturer performance expectations and b) a continuing GSBPP need.

Promotion to Senior Lecturer is based on demonstrated ability to meet Senior Lecturer performance expectations.

Retention as a Senior Lecturer depends on a) continued meeting of Senior Lecturer performance expectations and b) a continuing GSBPP need.

In determining GSBPP need, consideration is given to both

- The match between a faculty member's areas of instructional expertise and the GSBPP's need for staffing courses or curricula.
- The match between a faculty member's areas of intellectual contribution and the GSBPP's desired portfolio of contributions.

In order to satisfy fully the performance expectations in any of the faculty categories, a faculty member must achieve at least a satisfactory level of performance in all of the performance elements listed for that category.

EVIDENCE OF MEETING ACADEMIC FACULTY PERFORMANCE EXPECTATIONS

Effective Performance of Instructional Activities could be demonstrated by a mix of:

Teaching evaluations provided by current or former students
Teaching evaluations provided by peers
Nomination/selection for a recognized instruction award
Peer review of course materials.

Maintenance of Currency of Knowledge and Qualifications could be demonstrated by activities such as:

Attending professional meetings and conferences
Taking "experience tours" with appropriate functional commands
Continuing education
Earning and maintaining a recognized professional credential
DoD "consulting"
Significant service on national boards or committees in field of practice.

Participation in the NPS/GSBPP community includes activities such as:

Service on NPS and GSBPP committees, task forces, work groups
Interaction with curriculum sponsors

Acting as mentor for faculty or students.
Service as Academic Associate
Service as Program Manager

Contributions to Learning and Pedagogy could be demonstrated by identifiable outputs such as:

Creation of a new course
Creation of new learning materials
Creation of new teaching cases
Creation of a new curriculum
Textbooks or chapters
Presentations to education seminars or conventions
Articles on teaching innovation
Major editorial responsibilities such as editor-in-chief or executive editor of a pedagogical or learning-focused journal.

Contributions to Practice could be demonstrated by identifiable products such as:

Reports from sponsored research on practice issues
Documented practice software
Articles in practitioner journals
Presentations at practitioner seminars or conventions
Major editorial responsibility such as editor-in-chief or executive editor of a practitioner journal
Writing or contributing to technical reports
Conducting or contributing to applied research projects
Presentations at professional conferences
Significant consultation/advisement to senior public officials.

Contributions to Discipline-Based Scholarship could be demonstrated by identifiable products such as:

Published reports from sponsored research
Articles in academic journals
Presentations at academic seminars or conferences
Books, monographs, and chapters
Major editorial responsibility such as editor-in-chief or executive editor of an academic journal.

DEFINING ACTIVITIES AND PERFORMANCE ASSESSMENT

The performance expectations discussed above are applicable to all non-tenure track faculties. The specific activities to meet those expectations would reasonably be expected to differ across the faculty and will be determined for each non-tenure track

faculty member. These activities will be aligned with the previously discussed performance expectations.

Expected activities will be established by the dean and the faculty member at the time of hiring and reviewed periodically based on both the faculty member's professional goals and interests and the needs of the GSBPP. The activities will be defined in ways that make sense both for the faculty member and GSBPP. Both under- and over-specification of these activities reduce the individual's and the GSBPP's effectiveness. For any collegial review, the expected activities will be part of the information that is presented.

The degree to which the expected activities are successfully performed is assessed each year by the dean with input from appropriate faculty. Failure to perform the defined activities can constitute grounds for not retaining the faculty member.

Every five years, or more frequently at the request of the dean, a committee of GSBPP faculty will review the performance of each lecturer and senior lecturer and decide if the individual is qualified to remain on faculty. The dean and the senior faculty jointly appoint the committee. The decisions of this committee are provided to the dean and included as part of the information used during the collegial review process. Participation in the collegial review process is a substitute for a review by the committee.

Appendix 4.1

MEM Program Submission to NPS Academic Council

2 Sep 05

From: Doug Moses, Senior Associate Dean, GSBPP
To: Academic Council
Via: Thomas Hughes, Acting Dean, GSBPP

Subj: Approval request for new resident degree - **Master of Executive Management**

Ref: (a) Academic Council Policy Manual,
Section 5.2: Masters Degrees
Section 8.3: Adding Masters Degree Programs

1. In accordance with Ref (a), GSBPP requests approval for a new resident degree program, Master of Executive Management. Background, rationale, and description of the proposed program follow.

2. The faculty of GSBPP have reviewed and endorsed this proposal.

3. The proposed program is expected to start in Summer 2006. However, for planning purposes, the program sponsor, SAF(ACQ), desires notification prior to October 2005. Request attention of the Academic Council at the September 21st session.

4. Questions concerning this proposal may be directed to Doug Moses (x3218) or Keith Snider (x3621)

Doug Moses
GSBPP

MASTER OF EXECUTIVE MANAGEMENT (MEM)

The proposed MEM degree program satisfies requirements identified to GSBPP by the Air Force contracting career field sponsor (Deputy Assistant Secretary of the Air Force for Contracting (SAF(AQC)) for a 12-month resident Master's degree program for USAF officers selected for Intermediate Developmental Education (IDE).

While the initial motivation for MEM is to meet requirements USAF IDE contracting students, GSBPP recognizes that, once implemented, other sponsors may wish to enroll students in this program. These may be other USAF IDE sponsors or other service sponsors. If such additional enrollments lead to significant changes from the MEM program described in this document, GSBPP will notify or seek approval from the Academic Council as required by the Policy Manual.

1. Background and Discussion.

A. U.S. Air Force Intermediate Developmental Education (IDE).

(1) General. Intermediate Developmental Education (IDE) targets field grade (O-4 to O-5 (sel)) USAF officers. It includes both professional military education (PME) and advanced academic degree programs. Following completion of IDE**,** officers return to follow-on assignments for continued aerospace leadership development. (http://www.afpc.randolph.af.mil/pme/0-IDE-SDE.htm)

The USAF Major Selection Board selects the best qualified officers to be candidates for resident IDE. A percentage (approximately 20%) of selectees with the highest scores from the promotion order of merit list are selected to become candidates for possible school attendance. Thus, resident IDE officers are considered to be the top performers by their selection board. (http://www.afpc.randolph.af.mil/pme/ISS-SSS%20Candidacy%20Fact%20Sheet.htm). A central board also determines which school is most appropriate for the officer (AFIT, NPS, JMIC, ACSC, sister service school, etc.).

Because of their relative seniority, IDE officers can be expected to have a substantial amount of professional training and experience in their respective career fields. For example, an IDE student from one of the acquisition-related career fields will have had at least one acquisition assignment and will possess multiple Defense Acquisition University training certificates. ***This makes the typical IDE student quite different from the typical NPS student who has little or no subspecialty training or experience.*** The IDE student's educational needs are (1) an advanced degree and (2) courses that will provide opportunities for either more in-depth specialty skills or career-broadening skills.

(2) IDE at Air Force Institute of Technology (AFIT). AFIT developed a number of different 12-month management and technical curricula for IDE students. The first group of 80 students graduated in Sep 04; the second (140 students) graduated in Jun

05. In both groups there was also a wide diversity of academic backgrounds and career fields among the students. All of the students were majors, with many in the primary zone of consideration for O-5 promotion.

(3) IDE at NPS. Currently at NPS, IDE programs vary from 12-27 months depending on sponsor request and curriculum requirements. In FY05, NPS received 78 IDE students in a variety of curricula (fig. 1).

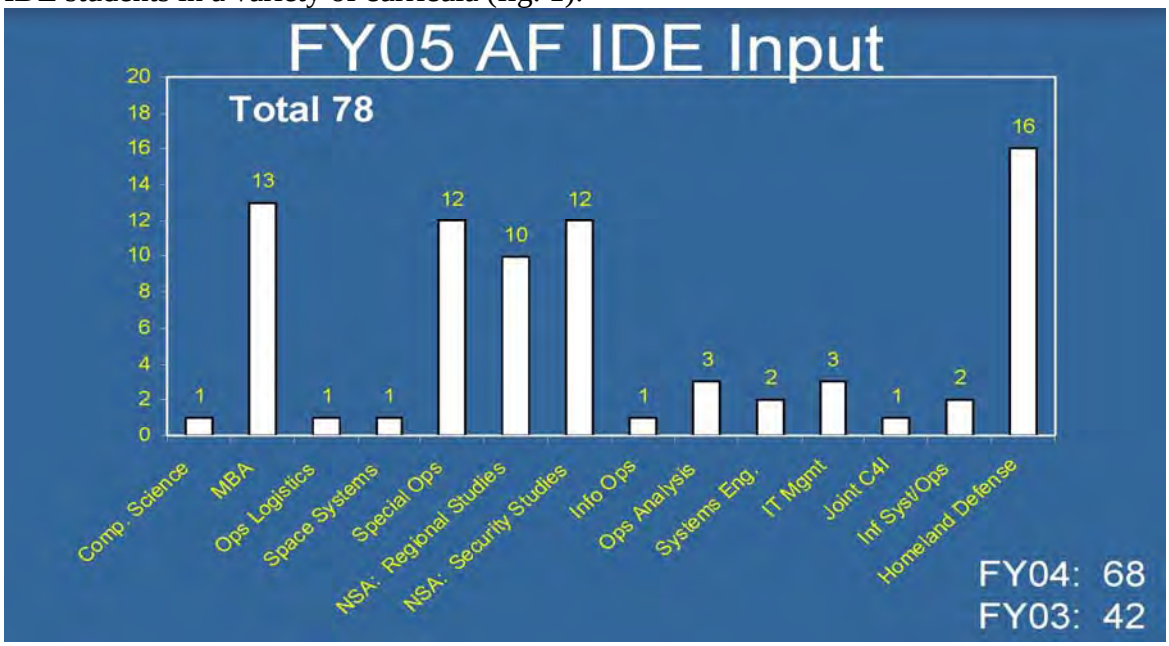


Figure 1.

(4) Contracting IDE students at NPS. Enrollment for students in the contracting career field is projected to be very low (3-6 students per year).

B. Motivation for the MEM degree program.

(1) NPS-AFIT Strategic Alliance. The SECNAV-SECAF Memorandum of Agreement of December 2002 directed that only NPS would offer acquisition graduate education programs. As of July 2005, ***with the exception of its 12-month acquisition program for IDE students***, AFIT had ceased its acquisition graduate education programs, and all USAF acquisition students were attending NPS.

(2) Need for a 12-month IDE program. The USAF contracting career field sponsor (SAF(AQC) has asserted the need for a 12-month curriculum for IDE contracting officers due to (a) USAF contracting command requirements and (b) the need for USAF contracting officers to remain competitive for promotion to O-6. AFIT maintains a 12-month program for acquisition officers to meet this stated need.

(3) 12-month IDE program at NPS. SAF(AQC) has requested NPS offer a 12-month resident program for contracting IDE officers. This request was supported by members of the Joint Oversight Board for Acquisition Curricula (JOBAC) and was an item of interest and discussion at the March 2005 AFIT Board of Visitors meeting. SAF(AQC) has also stated that if NPS cannot offer such a program, AFIT will continue to be the school of choice for acquisition IDE education.

2. Program Description. The MEM is designed for USAF IDE students who, as described in para. 1.A. above, differ from GSBPP's typical resident Master of Business Administration (MBA) students. MEM students:

- are more senior (O-4 to O-5 selects)
- have a career field specialization (i.e., they already have "P-code" equivalents)
- have substantial professional experience in that career field
- have been identified by service selection boards as the top performers of their promotion groups with the highest potential for further promotion

The MEM provides advanced general management education, along with opportunities for career broadening education, to this group of future executives.

A. Design concept. Because of the relatively small numbers of IDE students expected (at least initially) in GSBPP, the MEM relies on existing courses to satisfy degree requirements. MEM consists of:

(1) A required management core sequence of courses drawn from existing MBA core courses. This satisfies the requirement for advanced general education.

(2) A required specialty sequence of courses drawn from existing GSBPP and other schools' (e.g., SI, OA) courses. This satisfies the requirement for career broadening education or for more in-depth education in a student's specialty.

Essentially, students will satisfy MEM degree requirements by taking existing courses offered in other degree programs. MEM start dates will coincide with MBA start dates so that MEM students can "fall in" on MBA course offerings.

It should be noted that, if the number of MEM students increases as a result of other USAF sponsors directing their IDE students to MEM, there will be opportunities to form MEM-only sections of existing courses, or perhaps to develop new courses for MEM students. In this event, GSBPP will notify or seek approval from the Academic Council in accordance with the Policy Manual.

B. Degree requirements. The degree **Master of Executive Management** at the Naval Postgraduate School requires:

(1) Completion of a minimum of 54 credit hours of graduate-level courses, at least 12 hours of which are at the 4000 level;

(2) Completion of an MEM core sequence consisting of a minimum of 37 credit hours of 3000 and 4000 level GB or MN courses

(3) Completion of a specialty sequence of 3000 or 4000 level courses, to be approved by the Academic Associate, totaling not fewer than 15 credit hours in a specialty or specialties appropriate for the student's career field.

The specialty sequence satisfies the "thesis or equivalent" requirement for NPS degrees. These MEM degree requirements meet the NPS Master's Degree minimum standards and requirements set forth in Section 5.2 of the Academic Policy Manual.

C. MEM program:

1 Sum	**GB3010 (4-0) Managing for Organizational Effectiveness**	**GB3050 (3-0) Financial Reporting & Analysis**	**GB3020 (4-0) Fundamentals of Information Technology**	**GB3070 (4-0) Economics of the Global Defense Environment**	**GB3013 (0-2) Problem Analysis & Ethical Dilemmas**	**Credits 16**
2 Fall	**GB3051 (3-0) Cost Management**	**GB3040 (4-0) Managerial Statistics**	**GB4071 (4-0) Economic Analysis & Defense Resource Allocation**	**MEM Specialty Course(s) (var)**		**11 + Spec**
3 Win	**GB4053 (4-0) Defense Budget & Financial Management Policy**	**GB4043 (3-0) Business Modeling Analysis**	**GB3042 (4-0) Operations Management**	**GB3012 (3-0) Communications for Managers**	**MEM Specialty Course (var)**	**14 + Spec**
4 Spr	**GB4014 (4-0) Strategic Management**	**GB4021 (3-0) Strategic Information Technology**	**MEM Specialty Courses (var)**			**7 + Spec**

KEY

MEM core ≥ 37 hrs	**MEM specialty sequence** **1. 15 hrs min. required** **2. Satisfies "thesis or equivalent"** **3. Approved by AA** **4. Drawn from feasible GB, MN, OA, OS, SI, etc. course options.**

D. Sample specialty sequences - Examples of "career broadening" specialty courses appropriate for contracting IDE students:

Program Mgt Specialty Sequence Courses	SI4011 Sys Eng for Acquisition Managers	MN3309 Acquisition of Weapon Sys Software	MN3384 Principles of Acqn Prod & Qual Mgt	OS4602 Test & Evaluation	GB4410 Logistics Engineering
Financial Management Specialty Sequence Courses	GB3510 Defense Financial Management Practice	GB4510 Strategic Resource Management	GB4530 Management Planning & Control Systems	GB4550 Accountability, Control, and Auditing	OA4702 Cost Estimation
Logistics Management Specialty Sequence Courses	OA 4611 Joint & Combined Logistics	GB3420 (4-0) Supply Chain Mgmt	GB4410 (4-0) Logistics Engineering	GB3372 (4-0) Material Logistics	MN 4430 Defense Distribution & Transportation

E. Entry requirements. Entry requirements for MEM are intentionally set and enforced at high levels. This is necessary to achieve the desired "executive" character of the program and to distinguish MEM from other GSBPP degree programs.

- Senior O-4 or above
- Undergraduate degree from an accredited 4-year college or university
- APC of 245
- Identification as a top-performing officer through a service-wide evaluation and selection process. For USAF officers, this is IDE selection.
- Possession of a career field specialization with significant experience (multiple tours) and advanced training

F. Resource impacts. MEM is designed to meet the requirements of a small number of IDE students (3-6 contracting IDE students projected annually; 13 total IDE students entered GSBPP in FY05). With such small numbers, MEM uses existing courses and provides for MEM students to "fall in" on existing offerings of these courses. Thus, no new sections will be required for MEM, as long as student numbers stay low.

In the event that MEM inputs rise in future years, either through increased USAF IDE enrollment or through other service enrollments, it will become possible to offer MEM-only course sections (which may have pedagogical benefits). This increased enrollment may justify additional faculty hiring in GSBPP. Impacts on other schools will be minimal, since the number of MEM students taking any particular specialty course will likely be small.

Since MEM is a resident program, existing admissions, enrollment, and administrative processes are used. Since the number of students is small, impacts on these will be negligible.

G. Course descriptions. Following are course descriptions from GSBPP's existing MBA core courses. These selected courses compose the MEM core. Specialty courses are not shown, since there is such a wide diversity in what may be appropriate

courses for any particular student.

GB3010: Managing for Organizational Effectiveness (4-0)
Description: Organizations - and defense organizations - are viewed as complex, purposive, open systems. As open systems, they face challenges of external adaptation and effectiveness and of internal coherence and efficiency. Our purpose is to understand the structures and processes, which make up organizations in order to appreciate how they succeed and why they falter and fail. Our focus is on " organizational diagnosis", which requires applying relevant theories to better evaluate organizational performance. To do this, we will examine topics that include: organizational structure, motivation and reward systems, organizational culture, power and conflict, effective teams, and the leadership characteristics involved in effectively managing today's organizations. Although these topics are relevant to all organizations, we will pay special attention to their application in the context of the Department of Defense and military organizations. PREREQUISITE: Enrollment in MBA Degree Program

GB3012: Communication for Managers (3-0)
Description: OPEN TO MBA STUDENTS, OR BY PERMISSION OF INSTRUCTOR. This course provides DoD and international military officers and civilians with the communication strategies and skills to manage and lead in the dynamic DoD environment. Instruction focuses on assessing various communication models, making strategic media choices, writing effective informative documents, developing associates' communication competencies through various feedback roles, and giving lucid briefings. Prerequisite: GB3010 or consent of instructor.

GB3013: Problem Analysis & Ethical Dilemmas (0-2)
Description: OPEN TO MBA STUDENTS, OR BY PERMISSION OF INSTRUCTOR. The objective of the Problem Analysis and Ethical Dilemma (PAED) seminar is to provide an introduction to applied analytic decision making involving complex issues and applied ethical dilemmas in a wide variety of seemingly chaotic situations. Problem analysis and ethical dilemmas are two topics that are relevant in a variety of organizational settings. Thus, an essential part of a professional's education is the identification of issues, the analysis among alternatives, consideration of the implications and consequences of alternatives and making a decision that confronts the specific issue at hand, is timely, and ethical. Analysis of problems is a vital competence for leaders in arriving at a decision that may affect their command, the local environment, and even the course of future events. Ethical dilemmas are those unclear situations that seem to have a series of diverse, chaotic variables and where having the facts is not enough. Facts may not take in values, rightness, culture, moral up-bringing, or even religious convictions. This seminar provides an orientation to the process of awareness, identification, contemplation and reflection, consideration of alternative actions, and decision making when presented with an unclear situation.

GB3020: Fundamentals of Information Technology (4-0)
Description: Successful organizations in today's Information Age are more dependent than ever on information technology (IT). This course provides business students and other non-IT majors a broad overview of computer technology, information systems, database/knowledge management, networks and information security. The course focuses on IT as a tool to support business processes throughout an organization, regardless of functional specialty. The study of principles and theory is combined with hands-on laboratory exercises to improve both IT literacy and competency. The knowledge and skills acquired will make the students more effective IT users and help them recognize opportunities where the application of IT solutions can provide a strategic advantage. Prerequisite: Enrollment in the MBA Degree Program.

GB3040: Managerial Statistics (4-0)
Description: This course focuses on the statistical concepts useful for conducting basic managerial analysis. Statistical concepts covered include descriptive statistics for quantitative and qualitative data, basic probability concepts and distributions, sampling distributions, interval estimation, hypothesis testing, goodness-of-fit tests, contingency table tests, and multiple regression analysis. Prerequisite: College Algebra and knowledge of Excel.

GB3042: Operations Management (4-0)
Description: An overview of operations in military and commercial systems. The course has three sections: (1) Creating processes, including a survey of process types, capacity planning, and service system design; (2) Controlling processes, including MRP/ERP systems and the role of information; and (3) Coordinating processes, including inventory management, purchasing, and supply chain management. PREREQUISITE: GB3020

GB3050: Financial Reporting and Analysis (4-0)
Description: This course covers theory, concepts, and practices underlying financial Accounting and Financial Reporting. The conceptual structure underlying the reporting of economic events in the form of the balance sheet, the income statement, and the statement of cash flows is first presented. Accounting recognition and measurement issues surrounding revenues, expenses, assets, liabilities and equity are introduced and analyzed. Finally, different forms of financial analysis based on financial report information are addressed. Throughout the course, emphasis is placed on the manager or user perspective. Attention is given to the Federal Government financial reporting model and standards. PREREQUISITE: Enrollment in the MBA Degree Program.

GB3051: Cost Management (3-0)
Description: This course introduces students to cost management concepts and theories which are used by managers to make decisions on the allocation of financial, physical, and human resources to achieve strategic as well as short-term organizational goals and objectives and evaluate performance using financial and non-financial measures. The course is designed for those having a prior course in financial reporting and analysis or financial accounting. Cost management includes traditional tools and techniques such as cost behavior for decision making, activity costing, cost allocation, and standard costing. PREREQUISITE: GB3050

GB3070: Economics of the Global Defense Environment (4-0)
Description: Develops the fundamental tools of microeconomics and macroeconomics, and applies them to defense management and resource allocation. Course centers on defense applications of economic theory. Topics covered include: defense and the macro economy; markets and their interactions with defense acquisition and contracting; national security implications of globalization; and efficiency in defense decision-making. PREREQUISITE: MA1000 College Algebra or equivalent and enrollment in the MBA Degree Program.

GB4014: Strategic Management (4-0)
Description: This course focuses on strategic management in the public sector, particularly Defense organizations, federal bureaus and agencies. Strategic management includes the setting of an organization's direction and the implementation and evaluation of that direction based on forces and trends in the organization's external environment and the organization's internal capabilities. In previous courses you have concentrated on the functional elements of management-the management of people, structures, processes and tasks (e.g. accounting, finance, acquisition, logistics, contracting, etc.). Now we will address the concerns, issues, and challenges of setting direction and implementing strategies for the total system or whole organization. Cases and approaches from the public and private sectors will enable students to develop the knowledge, skills, and abilities to strategically think, plan, and manage. PREREQUISITE: GB3010, GB3012. .

GB4043: Business Modeling and Analysis (3-0)
Description: This course focuses on the development of mathematical and spreadsheet models, the verification of those models, sensitivity analysis of the solutions generated from a model, and the implementation of those solutions. Topics covered include linear programming, non-linear and integer programming, Monte Carlo simulation and forecasting. The process of modeling and particular modeling tools will be applied to business problems in finance, acquisition, logistics and manpower planning. PREREQUISITE: GB3040 and GB4071.

GB4052: Managerial Finance (3-0)
Description: This course provides an overview of the basic concepts and principles of financial management in the private sector and its implication on government contracting. It is designed to provide insights into the financial decision making process encountered by commercial enterprises. The major emphasis is on financial environment, risk and return analysis, valuation models, cost of capital determination, optimal capital structure, and short-term and long-term financing.

GB4053: Defense Budget and Financial Management Policy (4-0)
Description: This course analyzes the resource requirements process within the Department of Defense (DOD) and in the executive and legislative branches of the federal government. It begins with a summary of the current threat situation and potential changes to it. Once the threat is defined, the study of the resource allocation process to meet the threat begins. The course covers the resource planning and budgeting processes of the Department of the Navy, DOD and the federal government. It includes the politics of executive and congressional budgeting, and DOD budget and financial management processes and procedures including budget formulation and execution. It also includes analysis of the Planning, Programming, Budgeting and Execution system (PPBES) used by DOD to plan, budget and implement national defense resource management policy and programs. Other areas included are budget process and fiscal policy reform and the dynamics of internal DOD competition for resources. Executive and congressional budget processes are assessed to indicate how national security policy is resourced and implemented through the budget process. Spending for national security policy is tracked from budget submission through resolution, authorization and appropriation. Budget formulation, negotiation, and execution strategies are evaluated to indicate the dynamics of executive-legislative competition over resource allocation priorities. Supplemental appropriation patterns and current year budget execution patterns and problems are also considered. PREREQUISITE: GB3010, GB3070.

GB4071: Economic Analysis and Defense Resource Allocation (4-0)
Description: Develops the tools and techniques of economic efficiency to assist public sector decision makers in analyzing resource allocation in government activities. Focuses on developing the principles of cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA). Stresses the application of CBA and CEA to specific investment projects, programs and policies in the federal government, especially in the Department of Defense. PREREQUISITES: GB3051, GB3070

Appendix 4.23A

MBA Projects

For MBA Program Graduates AY2006-2007

Student Curriculum	Curric #	MBA Project Title/Subject	Grad Date
Logistics	814	Cadillac National Case Study Competition: Marketing Plan	Jun-07
Contracting	815	An Examination of Navy Effectiveness in Maintaining and Operating an Aging Aircraft Fleet	Dec-06
Contracting	815	An Examination of the Air Force and Navy's Flying Hour Program	Dec-06
Contracting	815	Analysis of Outsourcing Security Contracts in Deployed Environments	Dec-06
Contracting	815	Analyzing the Structure for Space Acquisition	Dec-06
Contracting	815	Cadillac National Case Study Competition: Marketing Plan	Jun-07
Contracting	815	Commercial Items Acquisition under FAR 13.5	Dec-06
Contracting	815	Common Cents? Analysis of the Role of Pennies in the U.S. Economy	Dec-06
Contracting	815	Computer Resources Life Cycle Management Plan	Dec-06
Contracting	815	Decision Matrix for Analyzing Food Service Operations at AF Bases	Dec-06
Contracting	815	Decision Model for Evaluating Introduction of Joint Modular Intermodal Distribution System in the Defense Distribution System	Jun-07
Contracting	815	Developing a Rapid Analysis of Alternatives Decision Support Tool for the Army's REF	Dec-06
Contracting	815	Evaluation of Contracting Process in UN	Jun-07
Contracting	815	Feasibility Analysis of an All Volunteer Armed Force in Turkey	Jun-07
Contracting	815	Helios Dynamics: a Potential Future Power Source for the Greek Islands	Jun-07
Contracting	815	Implementing Coordinative Acquisition as a Viable Streamlined Acquisition Process	Dec-06
Contracting	815	Industry Analysis for Body Armor Procurement	Dec-06
Contracting	815	Marketing Plan for NPS to the International Defense Communities	Jun-07
Contracting	815	Modeling Adoption Process of Flight Training Synthetic Environment Technology in Turkish Army Aviation	Dec-06
Contracting	815	National Inventory Management Strategy	Dec-06
Contracting	815	Optimized Baseline Transportation and Distribution Processes of the DoD	Jun-07
Contracting	815	Space Policy Challenges in the Dynamic Homeland Support Environment	Dec-06
Contracting	815	Structuring an Optimal Rapid Reaction	Dec-06
Contracting	815	Team Formation in Network Oriented Public Organizations under Crisis Situations	Jun-07

Contracting	815	Total Ownership Cost Reduction Case Study: AEGIS Radar Phase Shifters	Dec-06
Contracting	815	USMC Capital Asset Modernization Planning and Decision Process: Lessons from Continental Airlines	Dec-06
Contracting	815	Who's in Charge?	Dec-06
Contracting	815	Worldwide Husbanding Process Improvement: A Comparative Analysis of Contracting Methodologies	Jun-07
Acquisition	816	"Perfect Storm" Strategic Issues Facing U.S. Army Program	Mar-07
Acquisition	816	An Analysis of Earned Value Management Implementation in the F-22 System Program Office's Software Development	Dec-06
Acquisition	816	Analysis of Outsourcing Security Contracts in Deployed Environments	Dec-06
Acquisition	816	Analyzing the Structure for Space Acquisition	Dec-06
Acquisition	816	Application of a Network Perspective to DoD Weapon System Acquisition	Dec-06
Acquisition	816	Budgeting for Capabilities within a Program Exec Officer Portfolio	Dec-06
Acquisition	816	Developing a Rapid Analysis of Alternatives Decision Support Tool for the Army's REF	Dec-06
Acquisition	816	Does the Foreign Military Sales Program Make for a Safer World: Taiwan Case Study	Jun-07
Acquisition	816	Factors Affecting the Successful Acquisition of DoD Weapons Systems with Regard to Cost, Performance and Schedule	Dec-06
Acquisition	816	Implementing Radio Frequency Identification to Track Medical Records	Dec-06
Acquisition	816	Lean Six Sigma Implementation on the MH-60R Helicopter Production Line at Sikorsky	Jun-07
Acquisition	816	Private Military Industry: Economic Analysis, Uses and Considerations	Mar-07
Acquisition	816	Simulation of Lemoore AIMD	Dec-06
Acquisition	816	Strategic Analysis of the Competitive Positioning of the GSBPP	Mar-07
Acquisition	816	Strategic Analysis of the Competitive Positioning of the GSBPP	Mar-07
Acquisition	816	Trends in Congressional Control of Defense Spending: 1990-2006	Dec-06
Acquisition	816	Worldwide Husbanding Process Improvement: A Comparative Analysis of Contracting Methodologies	Sep-07
Defense Systems	817	Analyzing the Structure for Space Acquisition	Dec-06
Defense Systems	817	Business Case Analysis of the USMC Light Armored Vehicle Inspect Repair Only as Necessary Program	Dec-06
Defense Systems	817	Cost Benefit Analysis of Radio Frequency Identification Implementation at NPS Dudley Knox Library	Mar-07
Defense Systems	817	Development of a Business Case Analysis for the Acquisition of the Agile Rapid Global Combat Support System for USMC	Dec-06
Defense Systems	817	Estimating a Budget Baseline for Developing and Sustaining a Standing Marine Corps Component Capability for US Special Operations Command	Dec-06
Defense Systems	817	Evaluating Leadership's Approach to Implementing Organizational Change across the Naval Aviation Enterprise wiith Focus on Development of Fleet Readiness Centers	Dec-06
Defense Systems	817	Joint Rapid Acquisition Cell: Institutionalizing the Process	Dec-06
Defense Systems	817	Leading Airmen: A Systems Approach to Squadron Leadership	Sep-07

Defense Systems	817	Radio Frequency Identification as a tool for Monitoring Human Use Patterns on Waterways	Sep-07
Defense Systems	817	Resource Allocation in Marine Corps Fire Support	Dec-06
Defense Systems	817	The Sustainability of Corporate Growth in America	Dec-06
Defense Systems	817	USMC Capital Asset Modernization Planning and Decision Process: Lessons from Continental Airlines	Dec-06
International	818	Democratic Oversight over the Ukrainian Intelligence Community: Parliamentary, Executive and Budgetary Practices	Sep-07
International	818	Developing an Acquisition Strategy for Colombian Navy	Jun-07
International	818	Does the Foreign Military Sales Program Make for a Safer World: Taiwan Case Study	Jun-07
International	818	Game Theory View on the Relationship among the U.S., China and Taiwan: Taiwan Strait Issue	Jun-07
International	818	Implementation of Organizational Strategy within the Ministry of Defense of the Czech Republic using Balanced Scorecard Method	Jun-07
Logistics	819	Applicability Analysis of Performance Based Logistics Implementation Model for Turkish Army Advanced Armored Personnel Carrier	Jun-07
Logistics	819	Cost Benefit Analysis of Hydrogen Powered Ground Support Equipment Project	Dec-06
Logistics	819	Cost Benefit Analysis of Radio Frequency Identification Implementation at NPS Dudley Knox Library	Dec-06
Logistics	819	Discrete-Event Simulation Modeling of the Repairable Inventory Process to Support the ARGCS Business Case Analysis	Dec-06
Logistics	819	DLR Management, a Case Study in Carcass Tracking	Dec-06
Logistics	819	How to Promote and Advance Defense Supply Center Richmond Business Systems Modernization Key Performance Indicator Initiatives within DSCR Integrated Supplier Teams	Dec-06
Logistics	819	Process Improvement at Aviation Maintenance Repair Facility	Dec-06
Resource Planning	820	Helios Dynamics: a Potential Future Power Source for the Greek Islands	Jun-07
Resource Planning	820	Private Military Firms	Jun-07
Logistics	827	An Examination of Navy Effectiveness in Maintaining and Operating an Aging Aircraft Fleet	Dec-06
Logistics	827	Budget Submission Justification and Cost Benefit Analysis of POM09	Dec-06
Logistics	827	Cadillac National Case Study Competition: Marketing Plan	Jun-07
Logistics	827	Cost Benefit Analysis of Hydrogen Powered Ground Support Equipment Project	Dec-06
Logistics	827	Development of a Business Case Analysis for the Acquisition of the Comprehensive Maritime Awareness	Dec-06
Logistics	827	Development of a Strategic Logistical Body of Knowledge for the DoD	Dec-06
Logistics	827	Discrete-Event Simulation Modeling of the Repairable Inventory Process to Support the ARGCS Business Case Analysis	Dec-06
Logistics	827	Evaluating Leadership's Approach to Implementing Organizational Change across the Naval Aviation Enterprise wiith Focus on Development of Fleet Readiness Centers	Dec-06

Logistics	827	Optimized Baseline Transportation and Distribution Processes of the DoD	Jun-07
Logistics	827	Process Improvement at Aviation Maintenance Repair Facility	Dec-06
Logistics	827	Reducing H-60 Calibration Turnaround Time	Dec-06
Logistics	827	Simulation of Lemoore AIMD	Dec-06
Logistics	827	USMC Barracks: A Candidate for Outsourcing	Dec-06
Financial Mgmt	837	Affects of Relocation of Yongsan Garrison	Dec-06
Financial Mgmt	837	An Analysis of Earned Value Management Implementation in the F-22 System Program Office's Software Development	Dec-06
Financial Mgmt	837	An Examination of the Air Force and Navy's Flying Hour Program	Dec-06
Financial Mgmt	837	An Independant Study and Evaluation of the Cost Drivers Associated With Los Angeles Class Submarines in the Pacific Fleet	Jun-07
Financial Mgmt	837	Analysis of a Healthcare Commander's Decision to Outsource Physical Therapy Services	Dec-06
Financial Mgmt	837	Analysis of NAVFAC Contracting Processes Using CMMM	Dec-06
Financial Mgmt	837	Analysis of Unliquidated Orders and Expired Balances in the Operations and Maintenance Marine Corps	Dec-06
Financial Mgmt	837	Blank Check Policy of Funding War in the 21st Century	Dec-06
Financial Mgmt	837	Budget Scoring Dilemma for Financing Alternatives	Jun-07
Financial Mgmt	837	Budgeting for Capabilities within a Program Exec Officer Portfolio	Dec-06
Financial Mgmt	837	Cadillac National Case Study Competition: Marketing Plan	Jun-07
Financial Mgmt	837	Choosing a Successful Strategy for Reducing Tricare Pharmacy Costs	Dec-06
Financial Mgmt	837	Commercial Items Acquisition under FAR 13.5	Dec-06
Financial Mgmt	837	Contractors on the Battlefield: An Economic Perspective	Dec-06
Financial Mgmt	837	Cost Analysis of Outsourcing Elmendorf AFB Supply Squadron	Dec-06
Financial Mgmt	837	Cost in Higher Education	Jun-07
Financial Mgmt	837	Decision Matrix for Analyzing Food Service Operations at AF Bases	Dec-06
Financial Mgmt	837	Decision Model for Evaluating Introduction of Joint Modular Intermodal Distribution System in the Defense Distribution System	Jun-07
Financial Mgmt	837	Development of a Business Case Analysis for the Acquisition of the Comprehensive Maritime Awareness	Dec-06
Financial Mgmt	837	Development of a Strategic Logistical Body of Knowledge for the DoD	Dec-06
Financial Mgmt	837	Does the Foreign Military Sales Program Make for a Safer World: Taiwan Case Study	Jun-07
Financial Mgmt	837	Estimating the Total Cost of Personnel Security Clearance	Jun-07
Financial Mgmt	837	Evaluation of Naval Aviation Enterprise Measures of Success	Jun-07
Financial Mgmt	837	Exploration of Factors Affecting the Success of New Technology Adoption and its Budget Implications	Jun-07
Financial Mgmt	837	Feasibility Study and Cost Benefit Analysis of Thin-Client Computer System Implementation onboard US Navy Ships	Jun-07
Financial Mgmt	837	Government Portfolio Analysis using Program Earned Value Management Data	Jun-07
Financial Mgmt	837	Impact of Declining Defense Budgets on the Japanese Maritime Self Defense Force	Jun-07
Financial Mgmt	837	Incentives to Achieve Lasting DoD Financial Mgmt Reform	Dec-06
Financial Mgmt	837	Industry Analysis for Body Armor Procurement	Jun-07

Financial Mgmt	837	Linking PPBES and the POM	Dec-06
Financial Mgmt	837	Marketing Plan for NPS to the International Defense Communities	Jun-07
Financial Mgmt	837	Mergers and Acquisitions of Defense Contractors	Dec-06
Financial Mgmt	837	National Inventory Management Strategy	Dec-06
Financial Mgmt	837	Navy Career Sea Pay: Still Viable?	Jun-07
Financial Mgmt	837	OPNAV N43 Impact	Dec-06
Financial Mgmt	837	Reassessing the Air Force's Selective Reenlistment Bonus Program	Dec-06
Financial Mgmt	837	Solving War Fighter Capability Requirements through Venture Capitalism	Dec-06
Financial Mgmt	837	Team Formation in Network Oriented Public Organizations under Crisis Situations	Jun-07
Financial Mgmt	837	USMC Barracks: A Candidate for Outsourcing	Dec-06
Information Syst	870	Guidance and Implementation Plan of the AF Digital Printing etc.	Dec-06
Information Syst	870	Net Enabled Maintenance Using ARGCS	Dec-06
Information Syst	870	Project Management Model for Employing Software Application Server Suite Portal for NPS	Sep-07

Appendix 4.23B

Master's Theses

For MSM Program Graduates AY2006-2007

Student Curriculum	Curric #	MBA Project Title/Subject	Grad Date
Manpower Analysis	847	An Analysis of Building Human Resource Officers into Human Capital Managers	Sep-07
Manpower Analysis	847	Analysis of Baseline Manning Requirements on DDG	Jun-07
Manpower Analysis	847	Analysis of Marine Corps Delayed Entry Program Attrition by HS Grads and Seniors	Mar-07
Manpower Analysis	847	Analysis of Operational Workload Requirements for Unmanned Aerial Vehicles Aboard US Navy Ships	Sep-07
Manpower Analysis	847	Analysis of Recruiting and Retention Factors Affecting the Active and Reserve Navy Nurse Corps	Mar-07
Manpower Analysis	847	Analysis of Sexual Harassment Policy in USN Brig System	Dec-06
Manpower Analysis	847	Analysis of Social Security Numbers used as Military Identification	Mar-07
Manpower Analysis	847	Analysis of the Officer Lateral Transfer System and its Impact on Unrestricted Line Communities	Mar-07
Manpower Analysis	847	Cost Benefit Analysis of Voluntary Education	Mar-07
Manpower Analysis	847	Cost-Benefit Analysis of Marine For Life Program	Mar-07
Manpower Analysis	847	Determination of Nursing Manpower Requirements in Humanitarian Assistance Missions for Hospital Ships	Mar-07
Manpower Analysis	847	Determining the Right Number of Dental Recruits	Mar-07
Manpower Analysis	847	Effect of Graduate Education on the Performance of AF Officers	Mar-07
Manpower Analysis	847	Effect of Graduate Education on the Survival and Promotion of U.S. Army Students	Mar-07
Manpower Analysis	847	Effect of High School JROTC on Student Achievement	Mar-07
Manpower Analysis	847	Effects of a Reverse Bidding Auction on the Current USMC Selective Reenlistment Bonus Policy	Jun-07
Manpower Analysis	847	Effects of the Global War on Terror on Medical Service Corps Retention Rates	Mar-07
Manpower Analysis	847	Enlistment Decisions of Youth in the 2000s	Sep-07
Manpower Analysis	847	Feasibility of Implementing an All-Volunteer Force for the ROK Armed Forces	Mar-07
Manpower	847	Impact of an Auction Based Retention Bonus for Navy Dental	Mar-07

Analysis		Corps	
Manpower Analysis	847	Impact of Junior Reserve Officers Training Corps First-Term on Retention, Attrition, Promotion and Re-enlistment	Mar-07
Manpower Analysis	847	Logistic Regression Analysis of Retirement Intentions of Mobilized Selective Reservists	Mar-07
Manpower Analysis	847	Manpower Staffing, Emergency Department Access and the Consequences on Patient Outcomes	Jun-07
Manpower Analysis	847	Predictors of Attrition	Sep-07
Manpower Analysis	847	Simulating Effectiveness of an Alternative Salary Auction Mechanism	Dec-06
Manpower Analysis	847	Using an Experimental Approach to Improving the Selective ReEnlistment Bonus Program	Mar-07
Manpower Analysis	847	Voluntary Education of Enlisted Service Members	Sep-07

Appendix 8.1: Faculty Pay Scale

NAVAL POSTGRADUATE SCHOOL FACULTY SALARY SCHEDULE
(ACADEMIC SESSION -- 10 Month Salary)
LOCALITY RATES OF PAY FOR NAVAL FACULTY INCORPORATING THE
LOCALITY-BASED COMPARABILITY PAYMENTS FOR SAN FRANCISCO CMSA

STEP	AD-1 INSTRUCTOR	STEP	AD-3 ASSISTANT PROFESSOR	STEP	AD-5 ASSOCIATE PROFESSOR	STEP	AD-7 PROFESSOR	STEP	AD-9 ADMIN FACULTY	STEP	AD-11 ACADEMIC DEAN
1	$39,855	7	$48,170	17	$62,028	25	$74,144	20	$66,571	I	$126,436
2	$41,241	8	$49,555	18	$63,542	26	$75,659	21	$68,086	II	$126,436
3	$42,626	9	$50,940	19	$65,056	27	$77,173	22	$69,601	III	$126,436
4	$44,012	10	$52,327	20	$66,571	28	$78,688	23	$71,115	IV	$126,436
5	$45,398	11	$53,713	21	$68,086	29	$80,203	24	$72,630	V	$126,436
6	$46,783	12	$55,098	22	$69,601	30	$81,717	25	$74,144	VI	$126,436
7	$48,170	13	$56,484	23	$71,115	31	$83,232	26	$75,659	VII	$126,436
8	$49,555	14	$57,870	24	$72,630	32	$85,066	27	$77,173	VIII	$126,436
9	$50,940	15	$59,255	25	$74,144	33	$86,899	28	$78,688	IX	$126,436
10	$52,327	16	$60,641	26	$75,659	34	$88,732	29	$80,203	X	$126,436
11	$53,713	17	$62,028	27	$77,173	35	$90,566	30	$81,717	XI	$126,436
12	$55,098	18	$63,542	28	$78,688	36	$92,400	31	$83,232	XII	$126,436
13	$56,484	19	$65,056	29	$80,203	37	$94,233	32	$85,066	XIII	$126,436
14	$57,870	20	$66,571	30	$81,717	38	$96,066	33	$86,899	XIV	$126,436
15	$59,255	21	$68,086	31	$83,232	39	$97,901	34	$88,732	XV	$126,436
16	$60,641	22	$69,601	32	$85,066	40	$99,734	35	$90,566	XVI	$126,436
17	$62,028	23	$71,115	33	$86,899	41	$101,567	36	$92,400	XVII	$126,436
18	$63,542	24	$72,630	34	$88,732	42	$103,401	37	$94,233	XVIII	$126,436
19	$65,056	25	$74,144	35	$90,566	43	$105,235	38	$96,066	XIX	$126,436
20	$66,571	26	$75,659	36	$92,400	44	$107,068	39	$97,901		($126,436)
21	$68,086	27	$77,173	37	$94,233	45	$108,901	40	$99,734		
22	$69,601	28	$78,688	38	$96,066	46	$110,736	41	$101,567		
23	$71,115	29	$80,203	39	$97,901	47	$112,569	42	$103,401		
24	$72,630	30	$81,717	40	$99,734	48	$114,402	43	$105,235		
25	$74,144	31	$83,232	41	$101,567	49	$116,235	44	$107,068		
26	$75,659	32	$85,066	42	$103,401	50	$118,070	45	$108,901		
27	$77,173	33	$86,899	43	$105,235	51	$119,903	46	$110,736		
	($78,688)	34	$88,732	44	$107,068	52	$121,738	47	$112,569		
		35	$90,566	45	$108,901	53	$123,571	48	$114,402		
		36	$92,400	46	$110,736	54	$125,405	49	$116,235		
		37	$94,233	47	$112,569	55	$126,436	50	$118,070		
		38	$96,066	48	$114,402	56	$126,436	51	$119,903		
		39	$97,901	49	$116,235	57	$126,436	52	$121,738		
		40	$99,734	50	$118,070	58	$126,436	53	$123,571		
		41	$101,567	51	$119,903	59	$126,436	54	$125,405		
		42	$103,401	52	$121,738	60	$126,436	55	$126,436		
		43	$105,235	53	$123,571	61	$126,436	56	$126,436		
		44	$107,068	54	$125,405	62	$126,436	57	$126,436		
		45	$108,901	55	$126,436	63	$126,436	58	$126,436		
		46	$110,736	56	$126,436	64	$126,436	59	$126,436		
		47	$112,569	57	$126,436	65	$126,436	60	$126,436		
		48	$114,402	58	$126,436	66	$126,436	61	$126,436		
		49	$116,235	59	$126,436	67	$126,436	62	$126,436		
		50	$118,070	60	$126,436	68	$126,436	63	$126,436		
			($119,903)	61	$126,436	69	$126,436	64	$126,436		
					(126,436)	70	$126,436	65	$126,436		
						71	$126,436	66	$126,436		
						72	$126,436	67	$126,436		
						73	$126,436	68	$126,436		
							($126,436)	69	$126,436		
								70	$126,436		
								71	$126,436		
								72	$126,436		
								73	$126,436		
									($126,436)		

[1]The locality rates of pay are considered basic pay for retirement, life insurance, and severence pay purposes and for advances in pay. They are NOT considered basic pay for any other purpose. For within-grade increases, promotions, highest previous rate, recruitment and relocation bonuses, retention allowance, and other payments or benefits calculated as a percentage of basic pay, the Naval Faculty.
Schedule: effective date 8 January 2006 will be used.

Approved: Effective 8 January 2006
R. H. WELLS
Rear Admiral
President

Appendix 9.0

Distance Education

This Appendix describes four GSBPP distance learning graduate degree programs:

- **Executive Master of Business Administration (EMBA)**
- **Master of Science in Program Management (MSPM)**
- **Master of Science in Contract Management (MSCM)**
- **Leadership Education and Development Program (LEAD)**

These programs are separate from the GSBPP NASPAA-accredited programs, the MBA and MSM, and are not distance learning versions of either. As such they are described here in the Appendix, for background, and not under Standard 9.0 of the Self-Study document. The format for the presentation here does, however, follow the format for Standard 9.0.

The material in this Appendix was created August 2006 and has not been updated since. No significant changes have occurred to these programs during the past year.

Appendix 9.0 – Standard 9.0

Distance Education

Standard 9.1 Definition and Scope
Off-campus and distance education programs are offerings and arrangements in which (a) students are located in facilities or at sites other than the main [parent] campus of the program and/or (b) the students do not engage regularly in face-to-face interaction with an instructor who is in physical proximity. Off-campus and distance education programs can satisfy legitimate educational needs. When off-campus and distance education versions of the program serve different missions, student populations, or utilize education technology or learning methods that differ from the parent program, the burden is on the program to provide adequate information that demonstrates:

-the extent to which educational offerings are consistent with and contribute to the mission;

-the extent to which assessment and guidance processes ensure the comparability of the education offered;

-the effects of these differences on students, faculty, administrators, systems, processes, and the allocation of program resources and, therefore;

-the effects of these differences on the education received by all students in the program seeking accreditation regardless of where they are located.

Note: The Graduate School of Business and Public Policy does not seek accreditation for our distance learning programs. This standard provides context for our resident programs.

9.1 Definition and Scope

The Graduate School of Business and Public Policy (GSBPP) has three off-campus or distance learning (DL) degree programs: the Executive MBA, the MS in Program Management and the MS in Contract Management. The NPS Academic Council and WASC have approved all three of these programs. Until June 2006, we offered the MS in Leadership and Human Resources Development, which has since been contracted to another university and will only be described briefly here. These programs are not replicated in resident curricula.

Standard 9.2 Program Mission, Assessment and Guidance
The program shall present a statement of rationale that specifically addresses off-campus and distance education courses, sites, and programs and that explains how this rationale emerges from and contributes to the mission, goals and objectives of the institution's MPA program. The rationale for off-campus and distance education offerings shall be based on the distinctive aspects of the student population to be served and regional needs. The rationale also shall demonstrate its contributions to the mission, goals, and objectives of the program on the main (parent) campus.

9.2A GSBPP's Off-Campus Programs are Mission Driven

The increase in demand for off-campus graduate education for military officers and government civilians, as well as the emergence of new technologies, has caused the Naval Postgraduate School to pursue off-campus and distance education opportunities.

The Graduate School of Business and Public Policy has been exploring the market for graduate management education since 1998 with the inception of the MS in Leadership and Human Resources Development Program. The challenge for the School has been to develop off-campus and distance programs that are:

- Consistent with and contribute to our mission
- Unique and relevant to DoD
- Financially self-sustaining and do not require resources that detract from the resident programs
- In keeping with the academic standards set for our resident program
- Competitive in the market place

All four of our off-campus and distance degree programs are consistent with the NPS and GSBPP mission. All programs are designed to improve the managerial and leadership capabilities of people in public organizations and are offered to military officers or government civilians. These programs enable students who cannot easily come to resident programs to obtain graduate education (e.g., because of operational/ career constraints). This is consistent with NPS strategy that encourages the Schools to reach out to naval officers in Fleet Concentration Areas (i.e., areas of the country where naval officers are concentrated such as San Diego) and, increasingly, to officers in other services and DoD civilians. Within the past year, the highest levels of leadership in the DoD have encouraged this strategy for "Total Force Education".

Like our resident programs, all four of our distance and off-campus programs were generated from sponsors' needs. Similar to our resident programs in GSBPP, a needs assessment was conducted to determine the graduate education requirements for each of the respective sponsors.

Programs use a combination of face-to-face, video-tele-education (VTE) and Web-based delivery. The delivery mechanism is approved as part of the larger course proposal by GSBPP faculty and the NPS Academic Council.

Program objectives and Education Skill Requirements (ESRs) were developed for each of the programs to satisfy GSBPP's academic standards and the specific needs of the students and sponsoring agency. ESRs for each program are provided in Standard 9.4.

Each program has an Academic Associate just as in our resident curricula. Additionally, each program has a Program Manager. Essentially, academic quality is the primary function of the Academic Associate, as is the case with our resident curricula. The Program Manager position is added to deal with the coordination and other operational complexities that are added with conducting a program off site.

9.2B Assessment Practices for Off-Campus Programs

In general, assessment for the off-campus programs has been developed to meet standards for our resident programs. Programs are described in detail in section 9.4; assessment procedures are described in this section.

Master of Science in Program Management -- Program Assessment

The Master of Science in Program Management (MSPM) began operation in April of 1999 and has graduated six cohorts to date. The program uses the following mechanisms to measure student progress and program quality.

Satisfaction

- Graduation (exit) interviews
- Student Opinion Form (SOF) feedback
- Periodic student informal feedback sessions
- Assessment of the technologies used: VTC, on-site (input from students/instructors, and sponsors)
- Biennial Program graduate surveys (performed in conjunction with Curriculum Reviews): Instructor satisfaction, course journals, teaching faculty meetings to address issues and problems
- Continuous sponsor interaction; joint NPS/sponsor monitoring of the program
- Informal feedback system: Academic Associate, Programs Officer, Dean, Associate Dean for Instruction, Provost, Associate Provost for Instruction, President

Student Learning

- Course data (grades, etc.)
- Course assessment results: exams, written case studies, research papers, etc.

- Student critique methods: self, collegial, and instructor
- Evaluation of scholarly joint applied projects and progress (students, advisors, Academic Associate and program managers)
- Continuous review of validity, relevancy, and currency of Educational Skill Requirements (Curriculum Reviews)
- Time analysis: sufficient time for study and reflection

Behavior and Organizational Impact

- Adequacy of resources (libraries, Internet, NPS materials, etc)
- Interviews with managers (middle to top) concerning achievement and validation of learning objectives
- Interviews with students and supervisors to determine behavioral modifications and organizational impact such as, promotions, job enlargement, new initiatives generated, strategies developed or modified, policy formulation and/or execution, sound business practices, cost avoidance, cost savings, and contribution of the body of knowledge

Descriptions of Changes (resulting from assessments of the MSPM program)

- The accelerated resident quarter (DL students here TDY for eight weeks) has been eliminated due to the combined cost of the TDY and the students' lost work at their home station, as well as student desires to limit the amount of time away from work and family
- As a result of the above, students have the option of graduating here at NPS or having a graduation ceremony at their home station
- As students no longer spend an accelerated quarter at NPS, MN2303 (PM Seminar) was eliminated
- The thesis requirement has been replaced with a Joint Applied Project focusing on cross-functional team research, projects and applications
- MN3012 (Communication Strategies for Leaders) was added and subsequently moved earlier in the program as a result of student feedback
- OS4602 was changed from a two-credit course to a three-credit course and designated MN4602
- OS3302 was eliminated, as the content was repetitive with concepts presented in MN3384
- Course eliminations/consolidations allowed a program reduction from 27 months to 24 months
- MN3184 (Production and Quality Management) was placed in a quarter with no other classes due to the amount of team and individual work involved with the 5-2 credit hour course
- MN3115 (Managing from a Systems Perspective, 2-0) and MN4474, (Organizational Analysis, 2-0), were merged into MN4474 (Organizational Analysis, 3-1)

- At the recommendation of sponsors and sponsoring commands, a tuition-based funding approach is being implemented, replacing the program full-funding model used to date.

Master of Science in Contract Management -- Program Assessment

The Master of Science in Contract Management (MSCM) initiated curriculum delivery in October 1999 and has graduated four cohorts to date. MSCM conducts continuous evaluation, assessment and improvement. This process, on both a formal and informal basis, involves several individuals and organizations, including, but not limited to, the students, the instructors, the academic associate, the program's sponsor, the students' employers (immediate supervisor through organization head), NPS administrators and other appropriate individuals/organizations.

The process is intended, at a minimum, to include the traditional four levels of assessment and include appropriate mechanisms as follows:

Satisfaction

- Graduation (exit) interviews
- Student Opinion Form (SOF) feedback
- Periodic student informal feedback sessions
- Assessment of the technologies used: VTC, on-site (input from students/instructors, and sponsors)
- Biennial Program graduate surveys (performed in conjunction with Curriculum Reviews): Instructor satisfaction, course journals, teaching faculty meetings to address issues and problems
- Continuous sponsor interaction; joint NPS/sponsor monitoring of the program
- Informal feedback system: Academic Associate, Programs Officer, Dean, Associate Dean for Instruction, Provost, Associate Provost for Instruction, President

Student Learning

- Course data (grades, etc.)
- Course assessment results: exams, written case studies, research papers, etc.
- Student critique methods: self, collegial, and instructor
- Evaluation of scholarly joint applied projects and progress (students, advisors, Academic Associate and program managers)
- Continuous review of validity, relevancy, and currency of Educational Skill Requirements (Curriculum Reviews)
- Time analysis: sufficient time for study and reflection
- Associate joint applied project advisor from student's organization
- Joint applied project progress: proposal, student progress report (every 6-12 weeks), Academic Associate monitoring/review with principal/associate advisors

- Build on student experience/knowledge
- Parallel Defense Acquisition Workforce Improvement (DAWIA) Act education goals and objectives (including continuous learning)
- Adequacy of resources (libraries, Internet, NPS materials, etc.)

Student Behavior

- Interviews with managers (middle to top) concerning achievement and validation of learning objectives
- Student's culture of inquiry
- Interviews with students to determine behavioral modifications
- Student/supervisor report of learning application and outcomes
- Performance data (promotions, job enlargement, responsibility increases, new initiatives generated)

Benefits to Organization/Profession

- Evaluate the impact of course research papers and Joint Applied Projects
- Application of critical thinking
- Strategies developed or modified
- Impact on policy formulation and/or execution
- Organizational/program changes instituted
- Ethical culture and leadership
- Application of sound business practices
- Dollar impact (cost avoidance, cost savings, etc.)
- Contribution to the body of knowledge
- Organizational commitment extremely high in these programs (associate thesis advisor, time for study, supervisory inter-action, etc)

Program improvement adjustments are made on a continuous basis and as-required basis. The intent is that the same high quality standards achieved by NPS in the resident programs are also achieved in the distance learning programs.

Descriptions of Changes (resulting from assessments of the MSCM program)

- The accelerated resident quarter (DL students here TDY for eight weeks) has been eliminated due to the combined cost of the TDY and the students' lost work at their home station, as well as student desires to limit the amount of time away from work and family
- As a result of the above, students have the option of graduating here at NPS or having a graduation ceremony at their home station
- The thesis requirement has been replaced with a Joint Applied Project focusing on cross-functional team research, projects and applications

- The MSCM curriculum is delivered in eight quarters, vice nine quarters as a result of sponsoring commands' requests to deliver eligible recipients the MSCM degree within a two-year period
- Course eliminations/consolidations allowed a program reduction from 27 months to 24 months
- MN3184 (Production and Quality Management) was eliminated from the curriculum and replaced by MN3318 (Contingency Contracting, 3-1) at the request of sponsors, reducing the curriculum by three total credit hours; the curriculum still includes over 50 credit hours total
- MN3115 (Managing from a Systems Perspective, 2-0) and MN4474 (Organizational Analysis, 2-0) were merged into MN4474 (Organizational Analysis, 3-1)
- At the recommendation of sponsors and sponsoring commands, a tuition-based funding approach is being implemented, replacing the program full-funding model used to date; the "pilot" of the new tuition model is currently being marketed, with an expected class start in October 2006

Executive Master of Business Administration -- Program Assessment

The Executive Master of Business Administration was initiated in 2002. Through assessment mechanisms described above, the following changes have been implement since the beginning of the program:

- The Management Group combined GE4105 (Managing Complex Change in the DoD Environment, 3-0) and GE4016 (Policy Making in the DoD Environment, 3-0) into a single 4-0 course: GE 4016 (Managing Strategic Change) in the spring of 2005 effective in the summer quarter AY05
- The EMBA Academic Associate added GE3109 (Applied Ethics, 3-0) to replace the course that was deleted by above action
- The Financial Management group deleted GE4510 (Strategic Resource Management, 3-0) from the EMBA; after consulting with FM faculty, GE3510 (Financial Management in the Armed Forces, 3-0) was added as a substitute
- GE3306 (Strategic Purchasing and Supply Chain Management, 3-0) was inserted in the curriculum for several cohorts to fill the opening made by the combination of GE4105 and GE4016, where the Applied Ethics course could not be backfilled
- GE4460 (Military Supply Chain Management, 3-0) was developed as a new course for the EMBA to meet a professional skills and knowledge requirement for Naval officers in this area of study
- GE4021 (E-Business for Defense, 3-0) was deleted to make room for GE4460.
- GE4310 (Strategic Acquisition Management, 3-0) was deleted in the final quarter to free up the entire 8th quarter for GE4100 (Capstone)
- GE4100 was revised to add a lecture component (Collaborative Problem Solving, 2-0) and a capstone project (0-8) which fills the entire last quarter

MS in Leadership and Human Resource Development -- Program Assessment

The MS in Leadership and Human Resource Development was designed and managed for the United States Naval Academy (USNA) by NPS for nine years. In June 2006, USNA outsourced this program. The program was delivered in modularized courses one to two weeks in length by NPS faculty who traveled to USNA. Using assessment methods described above, the following changes were made in the nine-year run of the program.

- The counseling course (MN3112) was changed from a 2- to a 3-credit course
- A no-credit course in stress management was eliminated
- The yearly class schedule was changed twice to create an optimal schedule for thesis work, while still leaving time for project work in between classes
- Increasing use was made of VTC for faculty-student meetings, e.g., thesis meetings, meeting where it is desirable to convene the entire faculty to meet with the cohort, etc.
- USNA Institutional Research (IR) became involved in teaching statistical software (as part of the research methods course) to be used in the quantitative courses, providing the opportunity to concurrently teach students how to scope their data requests for their project and thesis work; this created a much more efficient process for both IR and our students
- The research methods class evolved to contain a bigger qualitative analysis component than it did originally, to met the needs of the students and the customers of thesis research
- Several classes evolved to use VTC or the Web to complement their on-site work so faculty members could teach their courses on site, return to Monterey, and allow students to brief project results via VTC; this provided the time students needed to work on these projects, but allowed real-time feedback and interaction with the professor
- The one-week orientation was changed to include a 1 ½-day team-building phase to "break the ice" and speed the group cohesion-building process; this change helped the students enter the first week of class feeling they were quite comfortable with challenging and exchanging ideas concerning the class materials
- The "academic preview" phase of the orientation was also changed to focus more on the nature of research, research writing, generating research questions, conducting research on a topic, integrating and briefing the results and how these apply to the LEAD curriculum

Standard 9.3 Program Jurisdiction
The program shall explain how and by whom educational, student services, and administrative policies and practices relating to off-campus and distance learning, courses, programs, sites, and arrangements are formulated, administered, and assessed, including how comparability is assured.

9.3 Program Jurisdiction

In regards to off-campus programs, the GSBPP faculty and administrators determine policy within guidelines established by NPS. In 1998, after the Leadership and Human Resources Development program began, the GSBPP Department developed a new policy for the development of new programs that subjects each new program to a rigorous internal review. A copy of the policy is provided in Appendix 9.3. This process requires each program to undergo a review by an ad hoc committee that makes a recommendation to the department's voting faculty members for final decision. Considerable debate and discussion has occurred with each new program. All programs that have been proposed to the faculty have been approved.

Standard 9.4 Curriculum
The Core curriculum shall be comparable to the curriculum in the main campus (parent) program. The program shall demonstrate the pertinence of the curriculum design and educational technologies to the program's mission, assessment, and guidance processes as well as with the educational goals of specific offerings; comparability of offerings and requirements; compatibility of the educational technology with course goals and content, and the nature and availability of academic support.

9.4A Master of Science in Program Management (MSPM)

MSPM Curriculum Components

The curriculum is designed to produce professionals capable of intelligent, creative analysis and communication, and action in public service. This program is designed for graduate students. Both the core and specialty curriculum components are assessed for their quality and consistency with the stated mission of the program.

MSPM Educational Objectives

The Master of Science in Program Management Curriculum provides civilians and uniformed officers in the Department of Defense (DoD) and other Federal Agencies an advanced education in the concepts, methodologies and analytical techniques necessary for successful management of program/projects within complex organizations. The curriculum is designed to provide civilians with the knowledge, skills and abilities to manage and lead effectively in the Federal Government acquisition environment.

The curriculum focuses on problem solving and decision-making within the acquisition environment, utilizing case studies, teaming exercises, hands-on applications, active participation and other similar activities. Lecture and laboratory tasks require applying critical thinking to problem solving in actual situations. Student inputs include civilians and uniformed officers from all DoD Services and other Federal agencies.

MSPM Background Information

Credit System:	Quarter
Length of term:	12 weeks
Part-time status:	4-8 credits per quarter
Time limitations:	24 months
Class contact hours:	1 credit = 11 contact hours
Numbering system:	0000s = no credit
	1000s = lower division college
	2000s = upper division college
	3000s = upper division or graduate
	4000s = graduate

Course Credits Distribution

Course Level	Req Prereq	Req Grad	Add Comp	Total
Lower Division	0	0	0	0
Upper Division	0	0	0	0
Upper Div & Grad	0	0	0	0
Graduate only	0	15	35.5	50.5
Total	0	15	35.5	50.5

MSPM Graduate Classes

All courses are for graduate students as NPS is exclusively a graduate school and the GSBPP programs only enroll graduate students. NPS academic policy requires a minimum of 12 credit hours in 4000-level ("exclusively graduate") courses for a master's degree.

MSPM Required Prerequisites

A course in accounting principles, similar to MN2155 (Accounting for Management), and a course in management principles, similar to MN3105 (Organization and Management), are required. Students must also attain Defense Acquisition Workforce Improvement Act (DAWIA) Level II Program Management certification (education and training only).

MSPM Program Design

The MSCM degree program is based on the unique managerial skills and competencies that must be possessed by members of the acquisition workforce as required by the Defense Acquisition Workforce Improvement Act (DAWIA). The program is designed for the program management community within the acquisition workforce after attaining a certain level of proficiency as recognized by the DAWIA certification process. The successful completion of MSPM earns the student an

equivalency certificate for DAWIA mandated Program Management Level III (education and training only), required for many upper-level acquisition professional positions. Several individual courses also provide other qualifying DAWIA certificate equivalencies.

It recognizes the need for a broad-based foundation in advanced management principles and a focused comprehensive exposure to acquisition and program management knowledge and abilities. Both of these components are intended to provide the graduate with the critical thinking needed throughout one's managerial career to effectively address the problems and issues faced in the acquisition environment. The acquisition courses are intended to enhance the graduate's problem-solving and decision-making abilities in both the more immediate tactical situations as well as the longer-term strategic environment. The advanced management courses are drawn from those required of students in the MBA resident program. The acquisition courses were constructed reflecting the experience base achieved by students in the curriculum and the more advanced skills needed to effectively perform at the executive levels within the profession.

MSPM Educational Skills Requirements

- **Management Fundamentals** The graduate will understand the theory of and have an ability to apply accounting, economic, mathematical, statistical, managerial and other state-of-the-art management techniques and concepts to problem solving and decision-making responsibilities as Department of Defense managers. The graduate will have the ability to think creatively, addressing issues and problems in a dynamic, challenging environment.

- **Advanced Leadership and Management Concepts** The graduate will have the ability to apply advanced leadership, management and operations research techniques to defense problems. This includes policy formulation and execution, strategic planning, defense resource allocation, project leadership, cost benefit and cost effectiveness analysis, federal fiscal policy, computer-based information and decision support systems, and complex managerial situations requiring comprehensive integrated leadership abilities.

- **Program Leadership and Management Principles** The graduate will have an understanding of and will be able to apply the principles, concepts, and techniques of Program Leadership and Program Management to the acquisition of major defense weapon systems. This includes the principles of risk management and tradeoff decision analysis using Total Ownership Cost, schedule and performance dynamics from a total life cycle management perspective.

- **Program Management Policies** The graduate will have an ability to formulate and execute Defense acquisition policies, strategies, plans and procedures; an understanding of the policy-making roles of various federal agencies of the Executive, Legislative and Judicial branches of the Government, particularly the

Department of Defense (DoD), the General Accounting Office (GAO), Congressional committees, the Office of Management and Budget (OMB); and an understanding of the strategies necessary to influence policy development and implementation.

- **Systems Acquisition Process** The graduate will understand the theory of and have an ability to lead program teams and manage the systems acquisition process. This involves the system life cycle process for requirements determination, research and development, funding and budgeting, procurement, systems engineering, including systems of systems, test and evaluation, manufacturing and quality control, integrated logistics support, ownership and disposal; the interrelationship between reliability, maintainability and logistics support as an element of system effectiveness in Defense system/equipment design; and embedded weapon system software, particularly related to current policies and standards, software metrics, risk management, inspections, testing, integration, and post-deployment software support.

- **Contract Management** The graduate will understand the role of the contracting process within the acquisition environment including financial, legal, statutory, technical and managerial constraints in the process.

- **Business Theory and Practices** The graduate will have an understanding of the business and operating philosophies, concepts, practices and methodologies of the defense industry with regard to major weapon systems acquisition, particularly the application of sound business practices.

- **Government and Industry Budgeting and Financial Management** The graduate will have an understanding of and an ability to apply the principles of government and private organizational financing including corporate financial structures, cost and financial accounting, capital budgeting techniques, financial analysis, and Defense financial management and budgeting processes to include the Government Planning, Programming and Budgeting System (PPBS).

- **Acquisition Workforce** The graduate will satisfy all requirements of the Defense Acquisition Workforce Improvement Act (DAWIA) and mandatory Program Management courses required by the Defense Acquisition University (DAU) at Levels I, II, and III.

- **Ethics and Standards of Conduct** The graduate will have an ability to manage and provide leadership in the ethical considerations of defense acquisition, including the provisions of procurement integrity, and to appropriately apply defense acquisition standards of conduct.

- **Analysis, Problem Solving and Critical Thinking** The graduate will demonstrate the ability to conduct research and analysis, and proficiency in presenting the results in

writing and orally by means of an applied project and a command-oriented briefing appropriate to this curriculum.

MSPM Curriculum Courses

The following courses are required of all students in the MSPM program:

SI4011	Systems Engineering for Acquisition Managers (3-2)
MN3001	Economics for Defense Managers (3-0)
MN3012	Communications Strategies for Effective Leaders (3-0)
MN3155	Financial Management for Acquisition Managers (2-0)
MN3172	Resourcing National Security: Policy and Process (3-0)
MN3302	Advanced Program Management (2-0)
MN3303	Principles of Acquisition and Contracts Management (4-0)
MN3309	Acquisition of Embedded Weapon Systems Software (4-1)
MN3384	Principles of Acquisition Production Quality Mgmt (5-1)
MN4105	Strategic Management (3-0)
MN4307	Program Management Policy and Control (4-0)
MN4470	Strategic Planning & Policy for the Logistics Mgr (4-0)
MN4474	Organizational Analysis (3-1)
MN4602	Test & Evaluation Management (3-0)
MN4090	Joint Applied Project (0-12)

The numbers in parentheses after a course title indicate both the class hours and the credit hours for the course. The first digit indicates lecture hours per week and the second digit, lab hours. One credit hour is granted for each lecture hour, and one half of a credit hour for each lab hour.

MSPM Analysis of Common Courses

With reference to standard 4.21, this section relates MSPM courses to the areas listed in the standard, and provides rough estimates of the proportion of each course that contributes to an area.

Table 9.4A		
RELATIONSHIP OF MSPM CURRICULUM TO STANDARD 4.21		
The Management of Public Service Organizations, the components of which include:		
-Human Resources		
MN3012	Communications Strategies for Effective Leaders	30%
MN3302	Advanced Program Management	10%
MN3303	Principles of Acquisition and Contracts Management	20%
MN4105	Strategic Management	20%
MN4474	Organizational Analysis	40%
MN4307	Program Management Policy and Control	20%
MN4470	Strategic Planning & Policy for the Log Mgr	15%

-Budgeting and Financial Processes		
MN3302	Advanced Program Management	5%
MN3371	Contracts Management and Administration	10%
MN4105	Strategic Management	10%
MN3155	Financial Management for Acquisition Managers	90%
MN3172	Resourcing National Security: Policy and Process	70%
MN3384	Principles of Acq Production & Quality Mgmt	5%
MN4307	Program Management Policy and Control	20%
MN4470	Strategic Planning & Policy for the Log Mgr	15%
-Information, including Computer Literacy and Applications		
MN3012	Communications Strategies for Effective Leaders	20%
MN3303	Principles of Acquisition and Contracts Management	5%
MN3309	Acqn of Embedded Weapon Systems Software	20%
MN4307	Program Management Policy and Control	5%
MN4470	Strategic Planning & Policy for the Log Mgr	10%
The application of Quantitative and Qualitative Techniques of Analysis, the components of which include:		
-Policy and Program Formulation, Implementation, & Evaluation		
MN3012	Communications Strategies for Effective Leadership	30%
MN3302	Advanced Program Management	50%
MN3303	Principles of Acquisition and Contracts Management	10%
MN4105	Strategic Management	90%
MN3001	Economics for Defense Managers	20%
MN3384	Principles of Acq Production & Quality Mgmt	10%
MN4474	Organizational Analysis	40%
SI4011	Systems Engineering for Acquisition Managers	20%
MN3309	Acqn of Embedded Weapon Systems Software	50%
MN4307	Program Management Policy and Control	75%
MN4470	Strategic Planning & Policy for the Log Manager	70%
MN4602	Test & Evaluation Management	40%
-Decision Making and Problem Solving		
MN3302	Advanced Program Management	70%
MN3303	Principles of Acquisition and Contracts Management	80%
MN4105	Strategic Management	90%
MN3001	Economics for Defense Managers	15%
MN3384	Principles of Acq Production & Quality Mgmt	40%
MN4474	Organizational Analysis	70%
SI4011	Systems Engineering for Acquisition Managers	10%
MN3309	Acqn of Embedded Weapon Systems Software	20%
MN4307	Program Management Policy and Control	90%
MN4470	Strategic Planning & Policy for the Log Manager	70%
MN4602	Test & Evaluation Management	50%

With an **understanding of Public Policy and Organization Environment**, the components of which include:		
-Political and Legal Institutions and Processes		
MN3302	Advanced Program Management	10%
MN3303	Principles of Acquisition and Contracts Management	20%
MN4105	Strategic Management	40%
MN3309	Acqn of Embedded Weapon Systems Software	20%
MN3172	Resourcing National Security: Policy and Process	70%
MN4474	Organizational Analysis	25%
MN4307	Program Management Policy and Control	40%
MN4470	Strategic Planning & Policy for the Log Manager	10%
MN4602	Test & Evaluation Management	5%
-Economic and Social Institutions and Processes		
MN3302	Advanced Program Management	10%
MN3303	Principles of Acquisition and Contracts Management	10%
MN4105	Strategic Management	40%
MN3172	Resourcing National Security: Policy and Process	10%
MN3001	Economics for Defense Managers	100%
MN3384	Principles of Acq Production & Quality Mgmt	25%
MN4474	Organizational Analysis	20%
MN4307	Program Management Policy and Control	20%
MN4470	Strategic Planning & Policy for the Log Mgr	15%
-Organization and Management Concepts and Behavior		
MN3012	Communications Strategies for Effective Leaders	90%
MN3302	Advanced Program Management	40%
MN3303	Principles of Acquisition and Contracts Management	30%
MN4105	Strategic Management	90%
MN3384	Principles of Acq Production & Quality Mgmt	20%
MN4474	Organizational Analysis	90%
SI4011	Systems Engineering for Acquisition Managers	25%
MN3309	Acqn of Embedded Weapon Systems Software	10%
MN4307	Program Management Policy and Control	50%
MN4470	Strategic Planning & Policy for the Log Mgr	60%
MN4602	Test & Evaluation Management	30%

MSPM Project Requirement

Joint Applied Project research provides a capstone experience for analysis, integration and application of the knowledge and skills required.

MSPM Summary – General Competencies

The Master of Science in Program Management (836) consists of three broad phases (advanced management courses, acquisition/program management discipline courses and thesis research)

I. Advanced Management Courses: broad management competencies
    - Public Policy Processes
    - Defense Economics
    - Systems and Organizational Analysis
    - Strategic Management
    - Managerial Communications

II. Acquisition/Program Management Courses: discipline competencies
    - Advanced Program Management
    - Contracts Management
    - Production and Quality Management
    - Test/Evaluation and Systems Engineering Management
    - Systems Software Management
    - Quantitative Tools-Quality Assurance/Reliability Methods
    - Financial and Logistics Management
    - Program Management Policy

III. Joint Applied Project develops competencies for analysis, integration and application

9.4B Master of Science in Contract Management (MSCM)

MSCM Curriculum Components

The curriculum components are designed to produce professionals capable of intelligent, creative analysis and communication and action in public service. This program is designed for graduate students. Curriculum components are assessed for their quality and consistency with the stated mission of the program.

MSCM Education Objectives

The Master of Science in Contract Management (MSCM) Degree is designed to provide civilians in the Department of Defense (DoD) and other Federal Government agencies an advanced education in the concepts, methodologies and analytical techniques necessary for successful management of acquisition and contracting within complex organizations. The curriculum is designed to provide civilians with the knowledge, skills and abilities to manage and lead effectively in hardware systems buying offices, field contracting offices, contract administration offices and contracting policy offices.

The curriculum focuses on problem solving and decision making within the acquisition environment utilizing case studies, teaming exercises, hands-on applications, active participation and other similar activities. Lecture and laboratory tasks require the

application of critical thinking to problem solving within actual situations. Student input includes civilians from all Services and other Federal agencies.

MSCM Background Information

Credit System:	Quarter
Length of term:	12 weeks (distance learning terms)
Part- time status:	4-8 credits per quarter
Time limitations:	24 months
Class contact hours:	1 credit = 11 contact hours
Numbering system:	0000s = no credit
	1000s = lower division college
	2000s = upper division college
	3000s = upper division or graduate
	4000s = graduate

Course Credits Distribution

Course Level	Req Prereq	Req Grad	Add Comp	Total
Lower Division	0	0	0	0
Upper Division	0	0	0	0
Upper Div & Grad	0	0	0	0
Graduate only	0	18.	35.5	53.5
Total	0	18	35.5	53.5

MSCM Graduate Classes

All courses are for graduate students as NPS is exclusively a graduate school and the GSBPP programs only enroll graduate students. NPS academic policy requires a minimum of 12 credit hours in 4000 level ("exclusively graduate") courses for a master's degree.

MSCM Required Prerequisites

A course in accounting principles similar to MN2155 (Accounting for Management) and a course in management principles similar to MN3105 (Organization and Management) are required. Students must also attain Defense Acquisition Workforce Improvement Act (DAWIA) Level II Contract Management certification (education and training only) or have Level I completed with Level II in progress as of the MSCM curriculum start date. Of note, applicants to the program may have completed similar courses and/or may have extensive practitioner background and experiences that may be considered in conjunction with the established prerequisites.

MSCM Program Design

The design of the MSCM degree program is based on the unique managerial skills and competencies that must be possessed by members of the acquisition workforce as required by the Defense Acquisition Workforce Improvement Act (DAWIA). The program is designed for the contracting personnel within the acquisition workforce who have attained a certain level of proficiency as recognized by the DAWIA certification process.

It recognizes the need for a broad-based foundation in advanced management principles and a focused comprehensive exposure to acquisition and contracting knowledge and abilities. Both of these components are intended to provide the graduate with the critical thinking needed throughout one's managerial career to effectively address the problems and issues faced in the acquisition and contracting environment. The acquisition and contracting courses are intended to enhance the graduate's problem-solving and decision-making abilities in both the more immediate tactical situations as well as the longer-term strategic environment. The advanced management courses are drawn from those required of students in the MSM resident program. The acquisition and contracting courses were constructed reflecting the experience base achieved by students in the curriculum and the more advanced skills needed to effectively perform at executive levels within the profession.

MSCM Educational Skill Requirements

Advanced Management Concepts The graduate will have the ability to apply advanced management theory and techniques to problems in both the public and private sectors. This includes policy formulation and execution, strategic planning, resource allocation, Federal fiscal policy, computer-based information and decision support systems, and complex managerial situations requiring comprehensive integrated approaches. The graduate will have the ability to apply state-of-the-art management concepts and practices to problem solving and decision-making responsibilities as middle and senior managers.

2. Acquisition and Contracting Principles The graduate will have an understanding of and will be able to apply the principles and fundamentals of acquisition and contracting within the Federal Government including knowledge of the acquisition laws and regulations, particularly the Federal Acquisition Regulation (FAR) and the Defense FAR Supplement (DFARS); the unique legal principles applied in Government contract law and the Uniform Commercial Code; and the application of sound business principles and practices to Defense contracting problems. Further, the graduate will be able to apply innovative and creative approaches not only to resolve difficult acquisition and contracting issues but to significantly influence the legal and regulatory structure within which acquisition decision-making occurs.

3. Contracting Process The graduate will understand the theory of and have the ability to manage the field contracting, system acquisition and contract administration processes. This involves a knowledge of the defense system life

cycle processes, including requirements determination, funding, contracting, ownership, and disposal; an ability to evaluate military requirements, specifications, and bids and proposals; an ability to utilize the sealed bid, competitive proposals and small purchase contracting methodologies; a comprehensive knowledge of all contract types and their application in Defense acquisition; an ability to conduct cost and price analyses; and an ability to negotiate various contracting actions including new procurement, contract changes and modifications, claims, equitable adjustment settlements, and noncompliance issues.

4. Acquisition and Contracting Policy The graduate will have an ability to formulate and execute acquisition policies, strategies, plans and procedures; a knowledge of the legislative process and an ability to research and analyze acquisition legislation; and a knowledge of the Government organization for acquisition, including Congress, the General Accounting Office, the Office of Federal Procurement Policy, the Federal and military contracting offices, the Boards of Contract Appeals, and the court system.

5. Business Theory and Practices The graduate will have an understanding of the business philosophy, concepts, practices and methodologies of the commercial industrial base (both domestic and global) and the ability to apply these to the Federal Government acquisition environment.

6. Defense Financial Management and Budgeting The graduate will have an ability to apply sound financial management theories, principles and practices to defense acquisition and contracting issues, including fiscal and monetary policy.

7. Production and Quality Management The graduate will have an understanding of the basic principles and fundamentals of Production and Quality Management, with particular emphasis on the Procuring Contracting Officer's and Administrative Contracting Officer's roles and relationships with industry and the Government Program Manager.

8. Analysis and Application The graduate will demonstrate an ability to apply acquisition, contracting and management principles in dealing with the significant issues encountered in managing the contracting process in one of the following areas: (1) major weapon systems acquisition, (2) research and development, (3) field procurement, and (4) facilities contracting.

9. Ethics and Standards of Conduct The graduate will have an ability to manage and provide leadership in the ethical considerations of military acquisition, including the provisions of procurement integrity, and to appropriately apply Defense acquisition standards of conduct.

10. Acquisition Workforce The graduate will satisfy all requirements of the Defense Acquisition Workforce Improvement Act (DAWIA) and mandatory contracting courses required by the Defense Acquisition University (DAU) at Level III.

11. Analysis, Problem Solving and Critical Thinking The graduate will demonstrate the ability to conduct independent research and analysis, and proficiency in presenting the results in writing and orally by means of an applications project and a command-oriented briefing appropriate to this curriculum.

MSCM Common Curriculum Courses

The following courses are required of all students in the MSCM program:

MN3001	Economics for Defense Managers (3-0)
MN4474	Organizational Analysis (3-1)
MN3341	Advanced Contracting Principles (4-2)
MN3155	Financial Management for Acquisition Managers (2-0)
MN3312	Contract Law (4-0)
MN3172	Resourcing National Security: Policy and Process (3-0)
MN3342	Advanced Contract Management (4-1)
MN3012	Communication Strategy for Effective Leaders (3-0)
MN3318	Contingency Contracting (3-1)
MN4304	Defense Systems Contracting (2-0)
MN4105	Strategic Management (3-0)
MN4308	Field Contract Management (2-0)
MN4473	Strategic Acquisition and Contact Management (4-1)
MN4371	Acquisition and Contracting Policy (4-0)
MN4090	Joint Applied Project (0-12)

The numbers in parentheses after a course title indicate both the class hours and the credit hours for the course. The first digit indicates lecture hours per week and the second digit, lab hours. One credit hour is granted for each lecture hour, and one half of a credit hour for each lab hour.

MSCM Analysis of Common Curriculum

With reference to standard 4.21, this section relates MSCM courses to the areas listed in the standard, and provides rough estimates of the proportion of each course that contributes to an area.

Table 9.4B		
RELATIONSHIP OF MSCM CURRICULUM TO STANDARD 4.21		
The Management of Public Service Organizations, the components of which include:		
-Human Resources		
MN3012	Communications Strategy for Leadership	30%
MN4105	Strategic Management	10%

MN3341	Advanced Contracting Principles	5%
MN3342	Advanced Contract Management	5%
MN4371	Acquisition and Contracting Policy	10%
MN4473	Strategic Acquisition and Contract Management	30%
-Budgeting and Financial Processes		
MN4105	Strategic Management	10%
MN3172	Resourcing National Security: Policy and Process	70%
MN3155	Financial Management for Acquisition Managers	90%
-Information, including Computer Literacy and Applications		
MN3012	Communications Strategies for Effective Leaders	20%
The Application of Quantitative and Qualitative Techniques of Analysis, the components of which include:		
-Policy and Program Formulation, Implementation, & Evaluation		
MN3012	Communications Strategies for Effective Leaders	30%
MN4105	Strategic Management	90%
MN3001	Economics for Defense Managers	20%
MN4308	Field Contracting	20%
MN3318	Contingency Contracting	20%
MN3341	Advanced Contracting Principles	25%
MN3342	Advanced Contract Management	20%
MN4371	Acquisition and Contracting Policy	90%
MN4473	Strategic Acquisition and Contract Management	75%
-Decision Making and Problem Solving		
MN4105	Strategic Management	90%
MN3001	Economics for Defense Managers	15%
MN3312	Contract Law	10%
MN3341	Advanced Contracting Principles	25%
MN3342	Advanced Contract Management	20%
MN4308	Field Contracting	20%
MN3318	Contingency Contracting	20%
MN4371	Acquisition and Contracting Policy	75%
MN4473	Strategic Acquisition and Contract Management	60%
With an **understanding of Public Policy and Organization Environment**, the components of which include:		
-Political and Legal Institutions and Processes		
MN4105	Strategic Management	40%
MN3172	Resourcing National Security: Policy and Process	70%
MN3312	Contract Law	75%
MN3341	Advanced Contracting Principles	20%
MN3342	Advanced Contract Management	40%

MN4308	Field Contracting	30%
MN3318	Contingency Contracting	30%
MN4371	Acquisition and Contracting Policy	30%
MN4473	Strategic Acquisition and Contract Management	35%
-Economic and Social Institutions and Processes		
MN4105	Strategic Management	40%
MN3172	Resourcing National Security: Policy and Process	10%
MN3001	Economics for Defense Managers	100%
MN3333	Managerial Communication Skills	20%
MN4308	Field Contracting	30%
MN3318	Contingency Contracting	30%
MN4371	Acquisition and Contracting Policy	10%
MN4473	Strategic Acquisition and Contract Management	50%
-Organization and Management Concepts and Behavior		
MN3012	Communications Strategies for Effective Leaders	90%
MN4105	Strategic Management	90%
MN3341	Advanced Contracting Principles	30%
MN4308	Field Contracting	30%
MN3318	Contingency Contracting	30%
MN3342	Advanced Contract Management	30%
MN4371	Acquisition and Contracting Policy	40%
MN4473	Strategic Acquisition and Contract Management	60%

MSCM Joint Applied Project Requirement

Joint Applied Project research provides a capstone experience for analysis, integration and application of the knowledge and skills required.

MSCM Summary – General Competencies

The Master of Science in Contract Management (835) consists of three broad phases: advanced management courses, acquisition/contract management discipline courses, and thesis research.

I. Advanced Management Courses: broad management competencies
   - Public Policy Processes
   - Defense Economics
   - Managerial Communications
   - Systems and Organizational Analysis
   - Strategic Management

II. Acquisition/Contracting Courses: discipline competencies
   - Advanced Contracting Principles and Management
   - Law

Defense Systems Contracting
Contingency Contracting
Field Contracting
Financial Management
Strategic Contract Management
Acquisition/Contracting Policy

III. Joint Applied Project develops competencies for analysis, integration and application

9.4C Executive Master of Business Administration (EMBA)

EMBA Curriculum Component

The curriculum components are designed to produce professionals capable of intelligent, creative analysis and communication and action in public service. This program is designed for graduate students. Curriculum components are assessed for their quality and consistency with the stated mission of the program.

EMBA Education Objectives

The EMBA was developed in 2002 to provide Defense-focused graduate business education to officers in the Unrestricted Line (URL) aviation community whose career paths and operational assignments are not compatible with traditional resident degree programs. The program remains focused on the Navy URL community as the primary student population, but non-URL officers (including the Marine Corps) and DoD civilians are considered on a space-available basis for each new cohort. This program is designed to be a high quality, high DoD relevant educational program that provides a state-of-the-art perspective on "business management approaches" applicable to the DoD arena and with effective decision making tools and techniques appropriate to military planning and policy settings. The curriculum places particular emphasis on financial management since a Navy subspecialty code is awarded in that area.

EMBA Background

Credit System:	Quarter
Length of term:	12 weeks
Part-time status:	6-7 credits per quarter
Time limitations:	24 months
Class contact hours:	1 credit = 11 contact hours
Numbering system:	0000s = no credit
	1000s = lower division college
	2000s = upper division college
	3000s = upper division or graduate
	4000s = graduate

Course Credit Distributions:

Course Level:	Req. Prereq.	Req. Grad.	Add. Comp.	Total
Lower Division	0	0	0	0
Upper Division	0	0	0	0
Upper Div & Grad	0	33	0	33
Graduate only	0	21	0	21
Total	0	54		54

EMBA Graduate Courses

All courses are for graduate students as NPS is exclusively a graduate school and GSBPP programs only enroll graduate students. NPS academic policy requires a minimum of 12 credit hours in 4000 level ("exclusively graduate") courses for a master's degree.

EMBA Required Prerequisites

None

EMBA Program Design

The design of the EMBA program is specifically tailored to meet Navy/DoD resource management challenges—all courses blend best business practices in civilian and military domains and examine them in the context of DoD process to provide critical skills for leaders and decision makers. The curriculum provides the graduate with the perspective and foundation knowledge needed throughout one's managerial career as problems and challenges requiring broad considerations are encountered, especially those faced at senior executive levels. The more focused financial management area is intended to prepare the graduate for the more immediate and anticipated assignment as functional managers or staff experts in that particular discipline.

EMBA Educational Skills Requirements

Business Ethics and Moral Development The graduate will understand the ethical challenges of the global Defense business environment facing senior Navy corporate business leaders and resource managers, and develop the critical thinking and analytical skills required to address complex issues. In addition, the students will develop a personal approach to achieve ethical outcomes in the decision making process.

- **Complex Systems Thinking** The graduate will be able to diagnose complex Navy and DoD problems from a systems perspective and offer solutions that maintain system alignments.

- **Managing and Leading Complex Change** The graduate will understand the managerial and leadership levers required to institute and manage complex change and the implementation strategies necessary to ensure change initiatives reach all organizational levels.

- **Strategic Thinking** The graduate will have knowledge of senior-level decision-making processes under conditions of significant uncertainty within the unique context of DoD organizations. In addition, students will learn how to implement these decisions, evaluate their effectiveness, and determine steps to take if desired outcomes aren't reached.

- **Understanding of Information Technologies** The graduate will be able to analyze critically, from a senior management perspective, their own organizations in light of electronic-business (e-Business) technologies, business models, and managerial techniques. Students also explore the relationship between Information Technologies (e-Business) strategy and Department of Defense Transformation, and how to integrate both theory and application to effectively organize and manage in the networked, paperless, on-line enterprise of today and tomorrow.

- **Analysis for Efficiency and Effectiveness** The graduate will be able to use various statistical methods to solve complex and unstructured problems in which alternatives will be evaluated and selected based on cost and systems analysis factors. This includes the use of probability theory, decision models and decision analysis, decision trees, forecasting, and simulation to make decisions under conditions of uncertainty with competing objectives.

- **Program Management Policies** The graduate will have an ability to execute Defense acquisition policies, strategies, plans and procedures; an understanding of the policy-making roles of various federal agencies of the executive, legislative and judicial branches of the Government, particularly the Department of Defense (DoD), the General Accounting Office (GAO), congressional committees, the Office of Management and Budget (OMB); and an understanding of the strategies necessary to influence policy development and implementation.

- **System Acquisition Process** The graduate will understand the theory of the systems acquisition process. This involves the major system life cycle process for requirements determination, research and development, funding and budgeting, procurement, systems engineering, test and evaluation, manufacturing and quality control, integrated logistics support, ownership and disposal; the interrelationship between reliability, maintainability and logistics support as an element of system effectiveness in Defense system/equipment design; and embedded weapon system software, particularly related to current policies and standards, software metrics, risk management, inspections, testing, integration, and post-deployment software support.

- **Federal and Defense Budgeting** The graduate will understand the roles of the executive and legislative branches in setting Federal/Defense fiscal policy, allocating resources to national defense, budget formulation, negotiation, and execution strategies. In addition, the graduate will have knowledge of all aspects of the Federal, Defense, and Navy budget cycles including the Planning, Programming, Budgeting and Execution (PPBE) process with emphasis on budget formulation and execution of the budget authority provided by Congress in response to DoD budget requests, including an evaluation of the expected benefits to be derived under funded programs.

- **Defense Financial Management** The graduate will understand how appropriated, revolving, and non-appropriated funds are to be managed in compliance with regulations of the Comptroller of the Navy and the federal government. Also, the graduate will understand and be able to review financial reports, ask pointed questions about budget execution against operating and financial plans, assess the quality of alternate plans based on analyses of an activity's financial performance, and determine the quality of recommendations regarding the reallocation or reprogramming of funds. The graduate will be familiar with federal and private sector financial reporting systems, standards, and practices.

- **Cost Management and Analysis** The graduate will be able to understand and evaluate different costing systems encountered within Defense and Navy organizations and activities as well as those found in private sector organizations conducting business with the federal government. In addition to private sector cost management policies and practices, the graduate will understand cost accounting standards applicable to Federal organizations and to private sector suppliers of goods and service to the federal government.

- **Defense Economics** The graduate will be able to apply the fundamental tools of micro- and macroeconomic theory to Defense management and resource allocation decisions. Additionally, the student will understand markets and their interactions with Defense acquisition and contracting processes, the national security implications of globalization, and efficiency in Defense decision making.

- **Operations/Supply Chain Management:** The graduate will understand the management of manufacturing and service operations and how Defense managers can effectively design and control operational processes to achieve world-class performance in these types of operations. The student will also have a knowledge of the use of strategic purchasing initiatives to derive a competitive advantage from Defense procurement and sourcing strategies to achieve increased efficiency and enhanced performance in the global Defense and commercial supply chain management environments.

EMBA Common Curriculum Courses

The following courses are required of all students in the EMBA program:

GE3011	Managing Teams (2-0)
GE3050	Financial Reporting and Analysis (3-0)
GE3109	Ethics and Moral Development (3-0)
GE3051	Cost Management (3-0)
GE3010	Organizations as Systems and Structures (3-0)
GE3070	Economics for Defense Managers (3-0)
GE3221	Systems Acquisition and Program Management I (3-0)
GE3043	Analytical Tools for Decision Making (3-0)
GE3222	Systems Acquisition and Program Management II (3-0)
GE4052	Managerial Finance (3-0)
GE3042	Operations Management (4-0)
GE4053	DoD Mission and Resource Determination (4-0)
GE4460	Military Supply Chain Management (3-0)
GE3510	Defense Financial Management Practice (3-0)
GE4016	Managing Strategic Change (4-0)
GE4100	Collaborative Problem Solving (Capstone Project, 3-8)

The numbers in parentheses after a course title indicate both the class hours and the credit hours for the course. The first digit indicates lecture hours per week and the second digit, lab hours. One credit hour is granted for each lecture hour, and one half of a credit hour for each lab hour.

EMBA Analysis of Common Curriculum Components

With reference to standard 4.21, this section relates EMBA courses to the areas listed in the standard, and provides rough estimates of the proportion of each course that contributes to an area.

Table 9.4C		
RELATIONSHIP OF EMBA CURRICULUM TO STANDARD 4.21		
The Management of Public Service Organizations, the components of which include:		
-Human Resources		
GE3011	Managing Teams	10%
GE3109	Ethics and Moral Development	10%
GE3010	Organizations as Systems and Structures	60%
GE4016	Managing Strategic Change	10%
-Budgeting and Financial Processes		
GE3050	Financial Reporting and Analysis	90%
GE3051	Cost Management	30%
GE4052	Managerial Finance	40%
GE4053	DoD Mission and Resource Determination	40%

GE4460	Military Supply Chain Management	15%
GE3510	Defense Financial Management Practice	30%
GE3070	Economics for Defense Managers	5%
-Information, including computer literacy and applications		
GE4460	Military Supply Chain Management	20%
GE3043	Analytical Tools for Decision Makers	10%
In **the Application of Quantitative and Qualitative Techniques of Analysis**, the components of which include:		
-Policy and Program formulation, implementation and evaluation		
GE3109	Ethics and Moral Development	20%
GE3011	Managing Teams	20%
GE3051	Cost Management	10%
GE3010	Organizations as Systems and Structures	30%
GE3070	Economics for Defense Managers	15%
GE3221	Systems Acquisition and Program Management I	30%
GE3043	Analytical Tools for Decision Making	50%
GE3222	Systems Acquisition and Program Management II	40%
GE4053	DoD Mission and Resource Determination	20%
GE4460	Military Supply Chain Management	10%
GE3510	Defense Financial Management Practice	30%
GE4016	Managing Strategic Change	20%
GE4100	Collaborative Problem Solving	50%
-Decision-making and problem solving		
GE3011	Managing Teams	20%
GE3050	Financial Reporting and Analysis	25%
GE3109	Ethics and Moral Development	30%
GE3051	Cost Management	43%
GE3010	Organizations as Systems and Structures	20%
GE3070	Economics for Defense Managers	30%
GE3221	Systems Acquisition and Program Management I	40%
GE3043	Analytical Tools for Decision Making	70%
GE3222	Systems Acquisition and Program Management II	40%
GE4052	Managerial Finance	70%
GE3042	Operations Management	100%
GE4053	DoD Mission and Resource Determination	20%
GE4460	Military Supply Chain Management	30%
GE3510	Defense Financial Management Practice	20%
GE4016	Managing Strategic Change	30%
GE4100	Collaborative Problem Solving	60%
With an **understanding of the Public Policy and Organizational Environment**, the components of which include:		
-Political and legal institutions and processes		
GE3011	Managing Teams	10%
GE3050	Financial Reporting and Analysis	10%

GE3109	Ethics and Moral Development	10%
GE3051	Cost Management	5%
GE3010	Organizations as Systems and Structures	20%
GE3070	Economics for Defense Managers	5%
GE3221	Systems Acquisition and Program Management I	10%
GE3222	Systems Acquisition and Program Management II	10%
GE4052	Managerial Finance	20%
GE4053	DoD Mission and Resource Determination	20%
GE3510	Defense Financial Management Practice	20%
GE4016	Managing Strategic Change	10%
GE4100	Collaborative Problem Solving	10%
-Economic and social institutions and processes		
GE3011	Managing Teams	10%
GE3050	Financial Reporting and Analysis	10%
GE3109	Ethics and Moral Development	10%
GE3051	Cost Management	5%
GE3010	Organizations as Systems and Structures	20%
GE3070	Economics for Defense Managers	100%
GE3221	Systems Acquisition and Program Management I	20%
GE3043	Analytical Tools for Decision Making	10%
GE3222	Systems Acquisition and Program Management II	20%
GE4052	Managerial Finance	40%
GE3042	Operations Management	10%
GE4053	DoD Mission and Resource Determination	10%
GE4460	Military Supply Chain Management	20%
GE3510	Defense Financial Management Practice	10%
GE4016	Managing Strategic Change	20%
GE4100	Collaborative Problem Solving	10%
-Organization and management concepts and behavior		
GE3011	Managing Teams	30%
GE3109	Ethics and Moral Development	20%
GE3010	Organizations as Systems and Structures	100%
GE4016	Managing Strategic Change	30%

EMBA Project Requirement

Joint Applied Project research provides a capstone experience for analysis, integration and application of the knowledge and skills required. The requirement is provided in GE4100 Collaborative Problem Solving.

EMBA Summary – General Competencies

The Executive Master of Business Administration consists of education in four major competency areas:

1. Advanced management courses: broad management competencies
2. Acquisition/program management courses: discipline competencies
3. Financial management courses: discipline competencies
4. Analytic techniques: tools for analysis, integration, and application

The one area chosen by the current program sponsor for the student's concentration of study is financial management.

9.4D Master of Science in Leadership and Human Resource Development (LEAD)

LEAD Curriculum Components

The curriculum components are designed to produce professionals capable of intelligent, creative analysis and communication and action in public service. This program is designed for graduate students. Curriculum components are assessed for their quality and consistency with the stated mission of the program.

LEAD Educational Objectives

The Leadership Education and Development (LEAD) curriculum prepares officers to develop leadership in others through knowledge of managing organizations, diagnosing individual and group performance, understanding learning processes, motivating subordinates, providing feedback and serving as positive role models. The curriculum was designed in response to a need for graduate education for Company Officers at the United States Naval Academy (USNA). The coursework provides knowledge and skills that officers will use as Company Officers and in other leadership roles as they become more senior in the military.

The Company Officer is a Naval or Marine Corps officer who is the person most closely involved in the development of a company of 130 midshipmen through responsibilities ranging from disciplinarian to role model. He or she must be a leader; a critical analyst of organizational systems, groups and individuals; knowledgeable of education and development processes; a skilled communicator; and an exemplar of Navy and Marine Corps values. The Company Officer's place of business is Bancroft Hall where all 4000 midshipmen live.

LEAD students are United States Naval or Marine Corps officers (at the 0-3 or 0-4 level) who are assigned to the Naval Academy for full-time graduate education for one year followed by a two-year tour of duty as a Company Officer. Students must have a baccalaureate degree earned with above-average academic performance and an APC of 365.

The LEAD curriculum is taught at USNA by Naval Postgraduate School faculty in one- to two-week modularized courses over a one-year period. The accelerated and modularized nature of the courses requires a high level of coordination among faculty for courses to build on others and become integrated into a logical whole. Courses include topics related to ethics, leadership, Department of Defense (DoD) policy and resource analysis, quantitative analysis, educational theory and organizational behavior.

LEAD: Background Information

Credit system:	Modularized courses based on quarter system credit
Length of program:	One year with new classes every one to three weeks
Full-time status:	Every class must be attended throughout the year
Time limitations:	Fixed one-year program
Class contact hours:	1 credit = 11 contact hours
Numbering system:	0000s = no credit
	1000s = lower division college
	2000s = upper division college
	3000s = upper division or graduate
	4000s = graduate

Course credits distribution:

Course Level	Req. Prereq.	Req. Grad.	Add. Com	Total
Lower division	0	.5	4	4.5
Upper division	0	0	0	0
Upper div. & grad	0	31	0	31
Graduate only	0	19	0	19
Total	0	50.5	4	54.5

LEAD Graduate Classes

All courses in all programs are primarily for graduate students as NPS is exclusively a graduate school and GSBPP programs only enroll graduate students. NPS academic policy requires a minimum of 12 credit hours in 4000-level ("exclusively graduate") courses for a master's degree.

LEAD Required Prerequisites

None.

LEAD Program Design

Unlike the resident GSBPP curricula, which are designed for the MBA or MSM degree, the LEAD curriculum awards an MS in Leadership and Human Resources Development. The degrees are different and the design of the programs is fundamentally

different. Unlike our other programs, which include courses that provide the broad-based multi-disciplinary foundation needed for future general management positions and the more focused subspecialty education needed to prepare the officer for the immediate assignments as functional managers and senior staff experts in a particular discipline, the LEAD curriculum does not differentiate the needs of immediate and future assignments. This is due to the nature of academic study and practice in the domain of leadership. All courses provide a broad-based multi-disciplinary foundation of knowledge and skill needed to address the ambiguities of leading and developing leaders at different points in one's career.

The leadership curriculum is designed to create an analytic approach to leading and developing leaders. Effective leaders realize that their knowledge of this topic is never complete. Thus, there is not a body of knowledge that can be transferred to students, which, when mastered, qualifies them as expert leaders. Rather, courses in this curriculum rely on various disciplines, e.g., psychology, sociology, education, and ethics, to prepare officers to continually assess their strengths and weaknesses, to recognize the consequences of their actions, to learn from successes and failures, and to have a mindset toward continual development. The broad analytic approach of this curriculum prepares officers for their immediate work as Company Officers and for future roles as they become more senior.

The broad analytic focus of the program is complemented by specific examples drawn from the work of Company Officers and officers in the Fleet. We are able to do this due to the unique nature of this program. Because all of our students will become Company Officers immediately after graduation, and because their graduate education is physically located with their place of future work, we are able to design specific Company Officer applications into course projects. In so doing, we maintain a direct link between classroom theory and real-life applications.

The program includes a one-week orientation, which is included to "get the students up to speed" as quickly as possible.

LEAD Educational Skills Requirements

1. Management Fundamentals Leadership, Management, and Organization. Officers will have the ability to apply basic management and leadership practices to organizational operations. Officers will understand the fundamental principles of leadership and management in military organizations. They will be able to implement appropriate structures for organizations and jobs; they will understand state-of-the-art information technologies and planning and budgeting tools; they will become skilled in spoken and written communications; and they will understand the higher-level leadership skills and the systems perspective of organizations in which day-to-day organizational operations and strategy formulation occur.

2. Evaluating and Improving Group Performance Officers will become skilled at analyzing and improving group morale, cohesion, and performance. Graduates of the program will have the ability to analyze and improve group effectiveness through leadership practices that also develop the leadership abilities of subordinates. This ability will be based on knowledge of managing people from diverse backgrounds, teambuilding, conflict management, group dynamics and management of change. Officers will be exposed to varied approaches for building strong shared values within the military

3. Motivating Subordinates Officers will effectively motivate subordinates to achieve high standards in all military endeavors. Program graduates will have the ability to motivate subordinates to provide focus and encouragement as they face the rigorous requirements and goals of the military. This ability requires an understanding of how effective leaders use goal setting, equitable discipline, reward systems, analysis of individual needs, empowerment, coaching, and high expectations to achieve peak performance from individuals.

4. Evaluating and Improving Individual Performance Officers will become skilled in analyzing and improving the performance of individuals. The officers will have the ability to evaluate the performance of subordinates and provide appropriate feedback and counseling. This includes activities that range from formal performance appraisal to informal assessment on an ongoing basis. These skills require knowledge of basic performance measurement and giving feedback, as well as knowledge of how to deal with performance outside of the norms that may lead to violations of military rules and regulations.

5. Being a Role Model for Subordinates Officers will model and otherwise communicate the information about the military that subordinates will need to know to successfully transition to Naval and Marine Corps Leaders. Officers will use the operational experience they bring to the job, in addition to a broader base of knowledge created through the program, to visibly embody the high standards and values of Naval and Marine Corps officers. The Officer will communicate knowledge of the military culture, current policy and operations, and future plans for the Navy and joint operations in the Department of Defense. These abilities are based on knowledge of the military in a democratic society, managing organizational cultures, DoD policy, and the behaviors of good role models and mentors.

6. Managing Educational Processes: Officers will have a foundation of knowledge about educational processes that will enable them to effectively teach and develop their subordinates. The program graduate will have the ability to formulate and answer research questions about educational experiences within the Navy and Marine Corps. Through the thesis process, the officer will explore important issues while concurrently broadening his/her knowledge of training and education in the military.

While graduates of this program are sent directly to the Company Officer position, future possible jobs include work in Navy schoolhouses, NROTC units, the Naval Training Center, or on staff for the Navy Training and Education Command for policy or implementation issues. Completion of the program earns the subspecialty code 4500. The curriculum sponsor is USNA.

LEAD Common Curriculum Course

The following courses are required of all students in the LEAD program:

MN3101	Models of Leadership in Complex Organizations (2-0)
MN3109	Ethics and Moral Development (3-0)
MN3160	Methods of Inquiry (3-0)
MN3162	Tools of Inquiry (3-0)
MN3139	Organizational Design (2-0)
MN3104	Motivation and Empowerment (1-0)
MN4129	Performance Assessment (2-0)
MN0163	Thesis Writing Workshop (0-1)
MN3106	Defense Conflict Management (2-0)
MN3135	Educational Theory (3-0)
MN3138	Adult Development (2-0)
MN4143	Defense Manpower and Personnel Analysis (2-0)
MN3333	Managerial Communications (3-0)
MN3103	Group Dynamics and Teambuilding (2-0)
MN3102	Military Leadership (2-0)
MN3112	Counseling (3-0)
MN4113	Military Sociology and Psychology: Leadership Dimensions (2-0)
MN4120	Managing Diversity (3-0)
MN4101	Leadership in the Military Culture (2-0)
MN4104	Strategic Management (3-0)
MN4124	Defense Management of Change (3-0)
IS3181	Integrating and Leveraging Information Tech (3-0)
MN4080	Research Colloquium (2-0)
MN0801	Thesis (0-8)

The numbers in parentheses after a course title indicate both the class hours and the credit hours for the course. The first digit indicates lecture hours per week and the second digit, lab hours. One credit hour is granted for each lecture hour, and one half of a credit hour for each lab hour.

LEAD Analysis of Core Courses

With reference to Standard 4.21, this section relates LEAD courses to the areas listed in the standard, and provides rough estimates of the proportion each course contributes to an area.

Table 9.4D		
RELATIONSHIP OF LEAD CURRICULUM TO STANDARD 4.21		
The Management of Public Service Organizations, the components of which include:		
-Human Resources		
MN3333	Managerial Communications	30%
MN4120	Managing Diversity	50%
MN3109	Ethics and Moral Development	20%
MN3138	Adult Development	50%
MN3112	Counseling	50%
-Budgeting and Financial Processes		
MN4104	Strategic Management	10%
-Information, Including Computer Literacy Applications		
MN3333	Managerial Communications	20%
IS3181	Integrating and Leveraging Information Tech	100%
The application of Quantitative and Qualitative Techniques of Analysis, the components of which include:		
-Policy and Program Formulation, Implementation, and Evaluation		
MN3135	Educational Theory	70%
MN3138	Adult Development	30%
MN3160	Methods of Inquiry	50%
MN3162	Tools of Inquiry	50%
MN4129	Performance Assessment	50%
MN4143	Defense Manpower and Personnel Analysis	50%
-Decision Making and Problem Solving		
MN3333	Managerial Communications	10%
MN3160	Methods of Inquiry	50%
MN3162	Tools of Inquiry	50%
MN3109	Ethics and Moral Development	30%
MN4129	Performance Assessment	50%
MN4143	Defense Manpower and Personnel Analysis	50%
MN3106	Defense Conflict Management	20%
MN3138	Adult Development	20%
With an **understanding of Public Policy and Organization Environment**, the components of which include:		
-Political and Legal Institutions and Processes		
MN3333	Managerial Communications	10%
MN4113	Military Soc. and Psy.: Leadership Dimensions	50%
MN4104	Strategic Management	70%
MN3139	Organizational Design	50%
MN3102	Military Leadership	30%
MN4101	Leadership in the Military Culture	40%
-Economic and Social Institutions and Processes		
MN4124	Defense Management of Change	20%
MN4104	Strategic Management	20%
MN3103	Group Dynamics and Teambuilding	40%
MN3102	Military Leadership	40%

MN4113	Military Soc. and Psyc.: Leadership Dimensions	50%
MN4101	Leadership in the Military Culture	40%
-Organizational Management Concepts and Behavior		
MN3333	Managerial Communications	30%
MN3109	Ethics and Moral Development	50%
MN3104	Motivation and Empowerment	100%
MN3101	Models of Leadership in Complex Organizations	100%
MN3112	Counseling	50%
MN3139	Organizational Design	50%
MN3106	Defense Conflict Management	80%
MN3135	Educational Theory	30%
MN4120	Managing Diversity	50%
MN3103	Group Dynamics and Teambuilding	60%
MN3102	Military Leadership	30%
MN4101	Leadership in the Military Culture	20%
MN4124	Defense Management of Change	50%

LEAD Thesis Requirement

Thesis research provides a capstone experience for analysis, integration, and application of the knowledge and skills acquired.

LEAD Summary – General Competencies

The Masters of Science in Leadership and Human Resources Development develops broad management competencies in six areas:

Leading and managing organizations
Evaluating and improving group performance
Motivating subordinates
Evaluating and improving individual performance
Serving as a positive role model for subordinates
Understanding and managing learning processes

These competencies are gained by modularized courses taught in one to two week blocks by NPS faculty who travel to Naval Academy for that period of time. All students go through each of the courses. Classroom study is complemented by projects designed to integrate theory with naval officers' future jobs, at USNA and elsewhere. The program also includes a thesis requirement, which develops competencies for analysis, integration, and further application of program concepts.

Standard 9.5 Faculty
The faculty shall be comparable to the faculty in the main campus (parent) program. The program shall demonstrate how: the main campus faculty maintains control over planning, design, delivery, and assessment of curriculum courses, and instruction; off campus and distance education offerings affect faculty workloads and assignments; instruction of off-campus and distance education courses is factored into the institution's retention, promotion and tenure (RPT) and merit review processes and decision criteria; and, policies and practices that promote faculty equity and diversity, and prohibits discrimination in off-campus and distance education, are comparable to those on the main campus.

9.5 Faculty

In regards to off-campus programs, the GSBPP faculty and administrators determine policy within guidelines established by NPS. In 1998, after the Leadership and Human Resources Development program began, GSBPP developed a new policy for the development of new programs that subjects each new program to a rigorous internal review. A copy of the policy is provided in Appendix 3.4C. This process requires each program to undergo a review by an ad hoc committee that makes a recommendation to the school's voting faculty members for final decision. Considerable debate and discussion has occurred with each new program. All programs that have been proposed to the faculty have been approved.

The faculty for off-campus and distance programs are the same faculty who teach in the resident programs for The Graduate School of Business and Public Policy. Faculty who teach in off-campus programs receive teaching load credit that factors into their regular teaching load. A premium of 50 percent is added to standard workload credit for all DL courses. Off-campus and distance courses are factored into merit, promotion, and tenure decisions just as residence courses.

Because of the inherent difficulties in teaching DL courses, new faculty hires are encouraged to teach resident courses, only, initially at GSBPP. This gives them the chance to adapt to our unique environment and students before taking on the additional challenges involved in DL teaching. NPS offers training and assistance for faculty who teach VTC and courses. The NPS Office of Continuous Learning provides excellent instruction, which comes with workload relief for the time spent taking the course.

Standard 9.6 Admission of Students
Admission standards, procedures, and criteria shall be comparable to those used on the main campus.

9.6 Admission of Students

Admission standards for all off-campus programs are the same as for our resident programs. Military officers are selected just as they are in our resident program. Government civilians must meet NPS, GSBPP admission standards, as well as a screening process that occurs at the individual command that evaluates a candidate's work performance. There is one difference in admissions standards for an off-campus program: the EMBA has a higher minimum undergraduate GPA requirement than all other school programs.

Standard 9.7 Student Services
Students shall have access to academic and administrative support services that are comparable to student services available to students on the main campus.

9.7 Student Services

Academic Associates (AA) and Program Managers (PM) work closely with off-campus students to advise them about their program of study. The AA is the key interface with the students. The primary difference between a resident AA and an AA who manages an off-campus program is the significant amount of coordination that is required for a distance program.

Thesis processing, records maintenance, and other functions are handled much the same way as the resident program. Again, the difference is the coordination that is required for the distance sites.

Standard 9.8 Support Services and Facilities
Support services and facilities shall be comparable to those on the main campus. The program should identify contracts and arrangements that assure the on-going availability, access, and performance of services and facilities.

9.8 Support Services and Facilities

Funding: All off-campus and distance programs are currently funded by their respective sponsors. Programs are funded at a level that is both competitive and does not detract from the resident program. Funding includes faculty labor, equipment, technical support, and administration.

Distance-site Support: Programs have a military officer assigned as a liaison for the program as well as technical support personnel at the distance sites.

Library Resources: Off-campus sites have on-line library resource s as well as libraries that are located nearby.

Appendix 9.3
New Programs Policy

Systems Management Department
Guidelines for Development of New Graduate and Executive Development Programs

General Policy:

The Department of Systems Management recognizes the changing environment of graduate education in DoD and the rapid advances in instructional technology. Developing new programs to meet the demands of new customers is encouraged. In order to maintain the high standards and professional reputation of Systems Management Department programs, development of new programs must follow the guidelines discussed below.

Guidelines for New Program Development:

1. New programs include newly created graduate and executive programs for new sponsors and offering of existing programs via media other than the traditional resident graduate programs.

2. The Executive Committee of the Senior Faculty Council shall appoint a three-person ad hoc committee to review a new program proposal and make a recommendation to the department's voting faculty members for final decision. For this purpose, the voting faculty members are defined as tenured and tenure-track faculty and senior lecturers. At least one committee member must be in the specialty area of the proposed new program, and at least one committee member must be from an area different from the proposed program. To facilitate the development work, faculty member(s) responsible for the program development task should seek feedback from the review committee on a regular basis.

3. Keeping the department faculty abreast of program development and progress is essential for eliciting support from the faculty. Faculty member(s) responsible for the program development task should make progress reports to the faculty no less than once a quarter.

4. New program proposals must show adequate support in the areas of faculty expertise, staff support, and technological support, or address the method to correct deficiencies.

5. New courses should be approved by the department's voting faculty members. Proposals for new courses should include the course description and a major topical outline of the course.

6. Funding methods and resource requirements for faculty, staff, course development, and infrastructure support must be addressed by the proposer, reviewed by the voting faculty, and approved by the department chair.

7. Commitment by the department's faculty is essential for the success of a program. Once a program is approved by the department's faculty, participation in a new program by a faculty member, if needed, is considered part of his/her normal workload requirements.

(Adopted March 31, 1998)

NASPAA SITE VISIT REPORT
NAVAL POSTGRADUATE SCHOOL
March 23-26, 2008

SECTION I. INTRODUCTION

A. Summary of Site Visit Activities

1. Members of the site visit team

- W. Earle Klay, Chair, Florida State University.
- George Reed, University of San Diego
- Fred Thompson, Willamette University

2. Dates of the Site Visit.

- March 23-26, 2008

3. Site Visit Schedule

Sunday March 23:

8 PM	Chair of SVT had dinner with Dean Bob Beck

Monday March 24:

8:00 AM	SVT met with Dean Bob Beck and Associate Dean for Academic Operations Chip Franck
9:00	SVT split to do transcript and record reviews and tours
9 – 9:45	Visit to computer lab facilities with Executive Director Christine Cermak and Prof. Doug Brinkley
9:45-10:30	Toured Library with University Librarian Eleanor Uhlinger and Research Assistance and Instruction Manager Ann Jacobson
10:45-11:15	Met with Acquisition Research Program Director Keith Snider
11:45 – 1 PM	Lunch with Faculty
1:00 – 3:30	Met with faculty and administrators on MSM degree
3:30 – 5:00	Met with faculty and administrators on MBA degree
5:30	SVT dinner with Dean Bob Beck, Associate Dean for Academic Operations Chip Franck, and Associate Dean for Research Bill Gates

Tuesday March 25:

8:00 – 9:00AM	SVT met to discuss research activities with: Bill Gates, Keith Snider, and Senior Lecturer John Mutty
9:00 – 10:00	SVT met to discuss faculty and governance issues with Dean Robert Beck, Assoc. Deans Chip Franck and Bill Gates, and Professor Steve Mehay
10:00 – 10:45	SVT met with SSR preparation team
11:00 – 11:30	SVT met with President of the Naval Postgraduate School, Vice Admiral (retired) Daniel T. Oliver
12:00 – 1:15	Lunch with current students
1:15 – 2:00	Met with Alumni
2:00 – 3:00	SVT final exit meting with Dean Bob Beck, Associate Deans Chip Franck and Bill Gates, Prof. Mark Eitelberg, and Assoc. Prof. Doug Moses
3:00	SVT began drafting of report

Wednesday March 26:

SVT departed

B. Summary of basic facts about the institution

1. Type of institution and school

The Naval Postgraduate School is an entity of the Department of the Navy and the Department of Defense, established to provide graduate only education to officers of the US Navy, other US military services, senior federal civilian employees, and officers from allied nations. The NPS has four individual graduate schools, including the Graduate School of Business and Public Policy which offers the MBA and MSM degrees being considered for accreditation.

(NOTE: HEREAFTER THE NAVAL POST GRADUATE SCHOOL WILL BE REFERRED TO AS THE "NPS" AND THE GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY WILL BE REFERRED TO AS THE "SCHOOL.")

2. Date the program was established

The Master of Science in Management (MSM) degree was first awarded at the NPS in 1960. The Master of Business Administration (MBA) degree was established in 2002. The MBA degree program evolved from the MSM degree program and both programs are largely based on the same core courses.

3. Undergraduate and graduate degree programs offered

Neither the NPS nor the School offer undergraduate degrees. The School offers several masters degrees, but accreditation is sought only for the MSM and MBA degrees. The MSM degree program was initially accredited by NASPAA in 1980 and reaccredited subsequently, most recently in 2000. Accreditation was apparently extended from the MSM degree to the MBA degree program. This is the first review specifically for the MBA degree program and the fifth such review for the MSM program.

SECTION II. BACKGROUND AND MISSION

The predecessor of the NPS was originally established in 1901 at Annapolis, MD and has been located in Monterey, CA since 1951. Its mission has been essentially the same from its beginning – graduate education for US Navy officers and others whose careers are closely related to the mission of the US Department of Defense (DOD). Most students are mid-career officers of the Navy. Other students come from other US military services, DOD civilian ranks, and allied military forces.

The missions of the MBA and MSM are stated clearly in their respective Self Study documents. The missions for the two degree programs are essentially the same. What separates the two degree programs are the specialization courses taken by students who otherwise take very nearly the same core required courses.

The common mission of the two degrees can be seen in their statements.

- The MBA mission statement indicates that, "*The mission of the Defense-Focused MBA degree program is to prepare graduates for management and leadership roles in the Defense establishment of the United States or allied nations. The program prepares graduates to manage organizations, resources, people, and programs in complex environments.*

- The MSM mission statement indicates that, "*The mission (of the) Master of Science in Management degree program is to prepare graduates for management and leadership roles in the Defense establishment of the United States or allied nations. The program prepares graduates to manage in complex defense organizations and to conduct rigorous analyses of organizational problems, policies and operations."*

SECTION III. ITEM-BY-ITEM ANALYSIS OF CONCERNS RAISED BY COMMISSION ON PEER REVIEW AND ACCREDITATION

The following are the items raised by COPRA in its interim report.

Item 1: Standard 1.3 Professional Education

Standard 1.3 states, "*The primary objective is professional education preparing persons for leadership and management roles in public affairs/policy/administration*."

COPRA wrote. *"... the SSR remains unclear as to the public service orientation of the degree. Preparing graduates for the Defense establishment as an employment sector is one aspect of the program's public service orientation. However, other components of the educational experience must also meet the threshold for public service orientation.*

The Commission requests further clarification from the program on how the Defense-Focused Master of Business Administration addresses the public sector generally, beyond its unique focus on the Defense Establishment. The Commission instructs the Site Visit Team (SVT) to explore the public service orientation of the degree.

SVT Findings:

The two degree programs do focus primarily on the context of public policy making from a Defense Department perspective. However, there is also an extensive focus on the larger milieu of the public decision making process and the institutional settings in which decisions are made.

The SVT learned that the SSR understated the degree to which Naval officer students are taught about the institutional context of public policy decision making. Specifically, there are three additional courses, as part of the curriculum in the Joint Professional Military Education program taken simultaneously by Naval officers in the degree programs, which deal with stakeholders and institutions in the policy making process.

In its meeting with students, it became evident to the SVT that -- as officers in the military services and as career federal civil servants -- they are deeply committed to public service. They reported that the faculty reinforces that commitment, in part, through the faculty's strong commitment to the students as their clients. Teaching students about the ethical context of public service is incorporated in several different courses. Examination of professional ethics, particularly as they pertain to military officers, is extended throughout the curriculum. Self sacrifice on behalf of the public is a basic tenet of military service and these students clearly exhibit a commitment to that ideal.

Item 2: Standard 2.2 Assessment

Standard 2.2 states that each program "*shall develop and use procedures for determining how it carries out its mission*."

COPRA wrote, *"The mission is clearly stated on the SSR; however, the means for external assessment are under development. As stated in the SSR on page 21, "a survey for alumni is in final draft stages."*

The Commission requests information on the progress made towards the development of the alumni survey. Please provide a copy of the survey, if available. The Commission asks the Site Visit Team (SVT) to examine progress towards implementation.

SVT Findings:

The alumni survey is an NPS wide institutional initiative and is beyond the control of the school. It has not yet been finalized and its completion date is now targeted for summer of 2008. The SVT, on the other hand, did learn about some of the several other means used by the faculty for assessing student progress and mission accomplishment. The team was impressed by the way in which the school uses its relationships with its "corporate sponsors," the Naval commands to which students will return, to assess the degree to which the program is addressing students' educational needs. Reviews are conducted every two years with each of those sponsors. These reviews involve key stakeholders outside the NPS. Multiple means are used to assess the progress of each student. Multiple methods are also used to assess the accomplishment of each degree's mission. The methods referred to here for assessing student accomplishment and mission accomplishment are as described in the SSR.

Item 3: Standard 5.2 Professional Qualifications

Standard 5.2 Professional Qualifications requires that "*At least 75% of the professional graduate program's full-time faculty should hold an earned doctorate or other equivalent terminal professional degree in their field…Full-time faculty actively pursuing appropriate terminal degrees are to be included in the 25 percent not holding a terminal degree.*"

COPRA wrote, *"The SSR states, "Seventy percent (43/61 = 70%) of the nucleus full-time faculty hold terminal academic degrees (p.136)." The SSR further explains, "Seven percent (4/61 = 7%) of the nucleus full-time faculty are military instructors, accomplished practitioners in their fields… Military faculty members are sent to the School for 2 - 3 years. GSBPP reviews officers who may be sent to the school as military faculty, but GSBPP does not hire the military faculty in the traditional sense. If military faculty members are excluded from the nucleus faculty, then seventy-five percent (43/57 = 75%) of the nucleus faculty hold terminal academic degrees (p.136)."*

The Commission requests that the Site Visit Team examine the impact of this terminal degree ratio on instruction and program governance, with respect to the program's mission.

SVT Findings:

The findings of the SVT differ somewhat for the two degree programs so they are addressed here separately.

MSM degree program: Data provided indicate that more than 75 percent of courses taught to students in the MSM degree program are taught by faculty members with terminal degrees. As reported in the SSR, it appears that 78% of all courses taught in the MSM are taught by faculty members with terminal degrees. Due to the strong emphasis on quantitative analytical skills in the MSM degree program, the need for terminal degrees is evident and has guided faculty recruitment

MBA Degree Program: The SSR reported that only 66% of all courses taught in the MBA program are taught by faculty members with terminal degrees. Discussion with faculty members verified that this is the case. The problem does not exist in the teaching of the core courses in the MBA degree program, as 86% of the MBA core courses are taught by faculty members with terminal degrees. The problem lies in the teaching of the curriculum specialization courses and, most especially, in the teaching of the Acquisition Management Curriculum specialization.

In the presentation given to us by Dean Beck, and in the SSR, we learned that the acquisition area faculty number 14. Of these 14 members, only one holds a terminal degree, the academic associate responsible for the specialization. Of the 13 remaining faculty members in that specialization, nine are retired military persons, three are active duty military persons, and one is a former DOD civilian acquisition project manager. All are clearly subject matter experts. The school administrators told us that they had attempted to recruit persons with terminal degrees to teach in the acquisitions specialty but have been unsuccessful in doing so. This area has grown rapidly in recent years, due, in part, to the DOD relying far more on contracting out for services as well as goods. Consequently the Navy needs more officers who are well educated in acquisitions, also known as procurement or purchasing in other settings. It is somewhat ironic that there are few potential terminal-degreed faculty candidates in procurement/acquisitions; it is the field of study that is most devoted to operationalizing privatization.

It was reported to us that the MBA degree program will be able to meet the 75% standard if it hires three more members with terminal degrees. One current acquisitions faculty member, an active duty military lecturer, is currently ABD and plans are being made to try to bring him aboard permanently.

Item 4: Standard 4.21 Common Curriculum Components

Standard 4.21 states, "*The common curriculum components shall enhance the student's values, knowledge, and skills to act ethically and effectively:*

> *• In the Management of Public Service Organizations, the components of which include: Human resources; Budgeting and financial processes; Information management, technology applications, and policy.*
> *• In the Application of Quantitative and Qualitative Techniques of Analysis, the components of which include: Policy and program formulation, implementation and evaluation; Decision-making and problem-solving.*
> *• With an Understanding of the Public Policy and Organizational Environment, the components of which include: Political and legal institutions and processes; Economic and social institutions and processes; Organization and management concepts and behavior."*

COPRA wrote, *"The SSR and course syllabi clearly articulate the general management curriculum components of the MBA. What is not clear is how public service organizations, public service values, and the public service environment are specifically addressed.*

The Commission requests clarification on how the common curriculum of the MBA specifically addresses the public service environment for all curriculum components. The Commission instructs the Site Visit Team to seek clarification of how program courses relate to public service organizations and values, and to explore the relationship between the program's curriculum and program mission.

SVT Findings:

The SVT findings addressed in Item 1 above are fully applicable here.

The core curriculum extensively addresses the broader policymaking environment within which defense policy is made. Students deal with issues related to legislative and executive interactions, multiple stakeholders, and conflicts in the political environment.

The SVT members have never encountered a program in which faculty work harder to assure a close alignment between the structure and content of their curriculum and the accomplishment of program mission. The faculty frequently review fit between their curriculum and the needs of students in their future careers. In 2004 they undertook an extensive strategic review process. Regularized course reviews are substantive, not mere pro forma reviews, and such efforts have resulted in substantive curriculum changes.

Item 5: Standard 5.5 Faculty Diversity

Standard 5.5 states, "*There should be evidence that specific plans are being implemented to assure the diversity of the composition of the faculty with respect to the representation of minorities, women, and persons with disabilities.*"

COPRA wrote, *"The SSR (p.160) states, "While GSBPP has no explicitly articulated program targeted to assure diversity in the faculty composition, we nonetheless have a serious commitment to achieving and maintain a high level of faculty diversity." The SSR explains the tenure and promotion process and notes that in the last five years, eight faculty were reviewed for tenure and/or promotion and all cases were successful. However, six of the eight faculty members who have resigned in the last six years were white females. Additionally, it is not clear from the SSR how the diversity for the two programs differs (p.163).*

The Commission requests that the Site Visit Team explore the measures the program is taking to promote faculty diversity with regard to faculty recruitment, supplemental diversity efforts and providing a positive and supportive atmosphere for women, minorities, and persons with disabilities. The Commission requests clarification on the composition of nucleus faculty with regard to diversity.

SVT Findings:

The SVT saw repeated evidence that the administration considers recruitment of a more diverse faculty to be a high priority. Two of the four most recent hires are female. Since 2002, 34 faculty members have been hired. Of these, six (18%) are members of racial or ethnic minorities. Seventeen (50%) are female. The SVT learned that the school has joined the "Ph.D. Project," a consortium of universities dedicated to increase the diversity of business school faculties. They attract minority students to study in graduate programs and provide a network of peer support for minority students.

The NPS recognizes that retention of female faculty members is a particular problem. The NPS has created an Ad Hoc Committee on Recruitment and Retention to develop strategies to improve retention. Short term priorities include strategies such as subsidized spousal visits on recruitment trips and better targeting recruiting. The SVT discussed ways to help female and minority faculty members develop better networking contacts with potential sponsors of their future research. Female and minority members with whom we spoke said they do not perceive discrimination in dealing with employees of sponsoring organizations once they have made contacts.

Twenty seven percent of current students are non-Caucasian. These students are taking masters degrees in topics such as acquisitions that are in short supply at the Ph.D. level.

The SVT is aware that the military services sometimes sponsor members, who have masters degrees, through Ph. D. programs with the requirement that the member

remain on active duty, often in teaching positions. The SVT will recommend that the NPS and Navy consider sending graduates, especially minority active duty alumni, to Ph. D. programs. Since these alumni already have received specialized education at the NPS in the fields needed by the Navy, it is not necessary, nor possibly even advisable, that their doctoral studies be equally specialized.

SECTION IV. STANDARD-BY-STANDARD ASSESSMENT (not covered in Section III above)

STANDARD 1.0 -- ELIGIBILITY FOR PEER REVIEW AND ACCREDITATION

1.1 Eligibility

Is as stated in SSR.

1.2 Institutional Accreditation

Is as stated in SSR.

1.3 Professional Education

See Section III, Item 1 above.

1.4 Program Length

The length of the two degree programs varies according to the specialization. None are less than 18 months of full time intensive study.

STANDARD 2.0 -- PROGRAM MISSION

2.1 Mission Statement

The mission statements of both programs, as stated in the SSRs, are an accurate reflection of what the faculty devotes itself to accomplishing.

2.2 Assessment

See Section III, Item 2 above.

2.3 Guiding Performance

As stated in the SSRs, the faculty members of both programs use an impressive array of mechanisms to obtain information about their performance. They clearly use these to guide revisions to curriculum as well as revise program direction when needed.

STANDARD 3.0 -- PROGRAM JURISDICTION

3.1 Administrative Organization

As stated in the SSR, both degrees are offered by the Graduate School of Business and Public Policy. Nearly all of its more than five dozen faculty members are involved in the teaching of the two degrees. It is clear from our discussions with the faculty that they

feel a high degree of ownership for the two degree programs.

3.2 Identifiable Faculty

The faculty membership is readily identifiable and is as stated in the SSR.

3.3 Program Administration

Primary responsibility for administration rests with the dean who delegates responsibility for administering the core courses, as well as each curriculum specialization area, to designated tenured faculty members.

3.4 Scope of Influence

All three members of the SVT are former US Army officers. We are aware that a military oriented environment can exert substantial hierarchical control on military sponsored organizations. We therefore looked very closely at the degree to which the program faculty exercises control over its curriculum and related functions. We were pleased to find that the faculty have a very substantial amount of discretion and influence over the program planning, degree requirements, curriculum changes, scheduling, teaching assignments, use of resources, and faculty hiring and promotion. As stated in the SSR, the faculty does not control admissions in the usual manner; selection of students is up to their sponsoring military commands. We were pleased to learn that the President of the NPS strongly supports faculty governance which he stated is essential to maintaining the unique nature of the NPS.

STANDARD 4.0 -- CURRICULUM

4.1 Purpose of Curriculum

The purpose of the curriculum is clearly to prepare students for positions of professional leadership in service to the public.

4.2 Curriculum Components

The site review team conducted a sample review of past students' transcripts. It is evident that students do take the courses in the manner described in the SSR.

4.21 Common Curriculum Components

See Section III, Item 4 above.

We reviewed past students' files to determine whether students had, in fact, taken required courses that were stated in the SSR. This review indicated that there is an active advising process in place to advise students regarding their courses. Student completion of required courses is carefully monitored. The courses that comprise the common core curriculum of the two degree programs are carefully designed through a collegial process to fulfill the program mission.

4.22 Additional Curriculum Components

Each of the curriculum specializations is carefully designed and monitored. The SVT was impressed by the detailed attention and care given to each specialization area. A

faculty member is assigned to be a coordinator of each specialization. Each specialization area is carefully reviewed at least every two years through a formal "curriculum review" that involves active participation by representatives of the sponsoring Naval commands who interact with program faculty. The careful attention given to each curriculum specialization area is a singular strength of the school and of both degree programs.

4.3 Minimum Degree Requirements

The MBA degree program requires completion of at least 78 credit hours.
The MSM degree program requires completion of at least 83 credit hours.
No student file reviewed authorized graduation with fewer credits.

4.4 Internships

All students are mid-career; no internships are offered by the school.

STANDARD 5.0 -- THE FACULTY

5.1 Faculty Nucleus

There are more than five dozen full time faculty members in the School. Most of them have significant teaching responsibilities in one or both of the degree programs.

5.2 Professional Qualifications.

See SECTION III, Item 3 above.

5.3 Practitioner Involvement

The degree of practitioner involvement in deliberations with the faculty is extraordinary. Members of the SVT have never observed such extensive institutionalization of relationships with practitioners.

5.4 Faculty Quality

Procedures for promotion and tenure are as stated in the SSR. Peer review and peer voting is central to the promotion and tenure processes. Faculty members from the school have been consistently successful in obtaining promotion and tenure. The SVT was concerned that the self study reported that, in the previous five years, there had only been five promotions and only three tenure decisions among a faculty of 61 or more persons. When we made inquiries we were told that the small numbers were due largely to a lull in hiring years earlier. That explanation does not account for relatively large portions of the faculty remaining at the associate professor and lecturer levels for many years.

5.41 Instruction

As stated in the SSR, efforts to improve the instructional program are supported by extensive feedback mechanisms including surveys, end of course briefings, and curricular reviews. The SVT observed evidence of changes based on such reviews. Student advisement appears to be a notable strength, and our interviews of students provided evidence of an attentive and supportive faculty. Innovation is fostered primarily

by a close association with sponsors and stakeholders, and is motivated in no small part by a strong desire to remain relevant to their needs.

5.42 Research

The School maintains high scholarly standards. Over two-thirds of the faculty members have published at least one refereed journal article in the past three years. Nearly one hundred percent of the faculty have authored or presented work in their fields of specialization between 2002 and 2007. Lecturers have been nearly as active on this dimension as faculty in the academic ranks. Moreover, the School's faculty members include many highly productive scholars, whose work has appeared in the leading journals in their fields.

5.43 Experience and Service

Every member of the faculty has extensive professional experience, either through military service, service with industry, or through their consulting and/or applied analytical assignments.

5.5 Faculty Diversity

See Section III, Item 5 above.

STANDARD 6.0 -- ADMISSION OF STUDENTS

6.1 Admission Goals and Standards

A review of admissions criteria indicated no inconsistency with representations made in the Self-study under Standard 6.0, Admission of Students. As noted, however, the School's admissions authority is restricted.

6.2 Baccalaureate Requirement

A bachelor degree has been a requirement to be an active duty military officer for several decades. All US students admitted to the programs, therefore, have bachelor degrees. We were told that the international admittees must meet the same requirement and that they undergo competitive scrutiny for selection by their sponsoring countries.

6.3 Admission Factors

The SVT file review confirmed that the program abides by its published guidelines and university requirements, consistent with claims made in the Self-Study. Decisions to assign students to the NPS are made by their sponsoring US Navy commands or by comparable sponsors in other services. The data used by those commands will typically include multiple officer fitness and performance reports and undergraduate transcripts. Sponsoring commands seek to select students with strong potential to succeed in their studies at the NPS and to rise to higher levels of responsibility and rank in future years. Failure to complete studies at NPS has significant negative career ramifications so sponsoring commands are motivated to select students who have the potential to succeed at graduate studies.

STANDARD 7.0 -- STUDENT SERVICES

7.1 Advisement and Appraisal.

Our review of student files revealed that students are closely advised and that records are kept of advice given regarding such things as bypassing courses when students have already done similar coursework elsewhere (bypassing is called "validation".) Completion rates in both degree programs consistently exceed 90 percent. Many of the students who fail to graduate on schedule do so because of an emergency deployment prior to graduation.

7.2 Placement Service

Students are mid-career officers and federal civilian employees who return to service upon graduation. No placement service is needed. Most universities' career services offices define their job in terms of helping students focus their job searches, target appropriate employers, implement appropriate contact and follow-up strategies, and build skills in self-marketing. They help students plan their careers, clarify career directions, write resumes and prepare for interviews. Some organize workshops, panels, networking events and receptions relevant to career search. They also organize on- and off-campus recruiting activities and job fairs. In contrast, all of the students at NPS have their next job waiting for them when they leave. Career counseling varies by branch of service. However, it focuses primarily on longer-term career development. It appears to be excellent and competent.

STANDARD 8.0 -- SUPPORTIVE SERVICES AND FACILITIES

8.1 Budget

Control of the program's budget is exercised by the school dean as stated in the SSR. Funding appears sufficient to sustain the program at its current size. Faculty members are quite successful in obtaining outside funding, primarily from the command sponsors of the programs' curriculum specialization areas.

Facilities are adequate, although not elegant. The SVT noted that space is at a premium but events in the immediate future may solve some of the School's problems, including construction of a 10 thousand square-foot annex.

8.2 Library Services

The SVT was very impressed with the campus library and the superior services provided by library staff, as well as the quantity of academic material available for the students and faculty.

8.3 Supportive Personnel

The support staff is as stated in the SSR. The support staff members were especially helpful to the SVT and appear adequate to the needs of the programs.

8.4 Instructional Equipment

Faculty and students indicated that appropriate instructional equipment is available.

8.5 Faculty Offices

Each member of the faculty has an adequate private office with computer as stated in the SSR.

8.6 Classrooms

Classrooms are well equipped with appropriate instructional technology available.

8.7 Meeting Area. A lounge for students is available though sometimes crowded.

STANDARD 9.0 -- OFF-CAMPUS PROGRAMS

Neither the MSM degree nor the MBA degree is offered off-campus. Both are resident degree programs.

SECTION V. COMMENDATIONS AND RECOMMENDATIONS

COMMENDATIONS

- The faculty maintains a close relationship with the practitioner community and demonstrates a high degree of responsiveness to practitioner needs

- Faculty shows a high degree of dedication both to the accomplishment of the programs' missions and to their students.

- Faculty members show a strong commitment to accomplishing research, particularly practitioner relevant research, but also to publish more broadly to a more general academic community. Most tenure track faculty members have published in recent years in refereed outlets. Particularly noteworthy is the degree to which lecturers and senior lecturers have engaged in research, a trend that has steadily increased since 2001.

RECOMMENDATIONS

- Completion of the Joint Professional Military Education courses by most students adds an important dimension of instruction in topics related to public service education, such as policy making in complex, politicized environments. Fuller recognition of completion of that curriculum within students' degree programs will better serve to fully represent what students learn while at the NPS.

- The school is encouraged to strengthen its efforts to recruit minority faculty members. We recommend that consideration be given to identifying minority graduates of the school -- who have gained valuable specialized knowledge that is in short supply at the doctoral level -- for doctoral training and then assignment to the NPS as faculty members.

- The school should consider bolstering its efforts in faculty retention by conducting a faculty climate survey that identifies issues that affect job satisfaction. Considering the problems associated with the very high cost of housing in the Monterey area, as well as the caps on federal pay that create extensive salary compression across ranks, addressing other possible sources of dissatisfaction seems advisable.

- For the most part, NPS did a first-rate job of backing up the claims made in the self study report. One salient exception to this generalization is the section of faculty research and publications. This is not a criticism of faculty research at NPS. By any reasonable standard, NPS has a commendable research program. However, the bibliography of Graduate School of Business and Public Policy publications (2002-2007) we were given was very sloppy. Looking at the citations to refereed journal articles, we found page locations omitted, volume/issues missing, publication dates wrong, etc. In some cases, the articles could be not found at all, whether we searched on article, journal, or author. Finally, many of these articles are not in refereed journals or, if they are in refereed journals, they are not the kind of publications that are refereed (e.g., book reviews). The SVT was told that this list was compiled from information provided by individual faculty members. This should be cleaned up.

- A singular strength of the faculty is derived from the fact that a genuine tenure process exists. It is the impression of the SVT that this enables the faculty to speak to the Navy's sponsoring organizations from a position of strength and relative independence. We were impressed that the president of the NPS is aware of this fact and believes that the NPS' tenured faculty enables the NPS to provide a valuable service to the Navy when "truth needs to be spoken to power."

From this perspective, it is especially important that the school not continue its long-term trend of increasing reliance on non-tenure track faculty, most of whom lack terminal degrees. It is very important, therefore, that the school redoubles its efforts to hire more tenure-track faculty members with terminal degrees. The above strategy recommended for recruiting minority faculty – sending active duty military officer graduates of the NPS to doctoral programs – should be considered for non-minority alumni as well.

We encourage NPS to redouble its efforts to staff 75 percent of its MBA courses with faculty with terminal degrees, and to protect against any possible future slippage below that level for the MSM degree. While NPS's professionally qualified lecturers add valuable knowledge of government policies and applied analysis, over reliance on these personnel threatens to unbalance NPS's professional Masters programs, the ultimate effect of which would be the transformation of graduate degrees into vocational training programs. Maintaining a predominance of faculty members with tenure -- who

understand the problems of the DOD and Navy well -- will help assure that the NPS has the needed institutional presence and independence to tell higher level policy makers what they need to hear.

NAVAL POSTGRADUATE SCHOOL

100 Years of Relevance and Excellence:
Education and Research Serving National Security

The Naval Postgraduate School (NPS) will celebrate its centennial in 2009. In anticipation of this milestone, the over-arching theme of the accreditation review is "100 Years of Relevance and Excellence: Education and Research Serving National Security." Central to the theme is the NPS mission.

Provide relevant and unique advanced education and research programs in order to increase the combat effectiveness of the U.S. and Allied armed forces and enhance the security of the United States.

NPS' mission is unique among higher education institutions. Nowhere else can military officers and federal civilians pursue graduate degrees in a wide range of disciplines while immersed in a defense-oriented community and focused on defense issues. NPS' institutional ability to provide first-rate graduate education with a defense focus has enabled its graduates over the years to bring enormous value to the military services of the United States and its allies.

In pursuing this mission, NPS has mastered the art of balancing creative tensions. One tension is in its research program, in which the NPS maintains a range of projects from pure to applied research. With this mix, NPS is able to advance the state of knowledge while simultaneously producing useful applications. A second creative tension is in its education program, in which NPS provides pathways to master's degrees for many students who have not been in school recently and who do not have undergraduate degrees in the same field as their graduate studies. NPS curricula provide rich mixtures of dual-level courses that review undergraduate material while introducing advanced graduate courses, and a thesis or project that enables every student to demonstrate graduate proficiency. A third creative tension is between academic inquiry, which is deliberate and reflective, and operational readiness, which is immediate, focused and action oriented. NPS must be agile and adaptive to meet the needs of the defense community in its education and research programs, while maintaining academic standards of excellence.

This accreditation effort will focus on NPS mission and how competing requirements are balanced while still meeting WASC academic standards. In particular, this proposal will consider the themes of integrating a campus-wide program of continuous improvement, supporting an evolving academic enterprise and strategic planning for the next NPS centennial. NPS will use the opportunity to look at its past and its successes and consider the future and how NPS may better accomplish its mission.

INSTITUTIONAL CONTEXT

History

The idea for a graduate education program for naval officers first emerged in the late 19th century. Initially, the concept found few advocates. However, great advances in technology, including Marconi's invention of the "wireless" in 1901, the Wright brothers' flight in 1903, and

the global trek of the steam-powered Great White Fleet from 1907 to 1909, turned that around. By 1909, many naval leaders supported advanced education for U.S naval officers.

On June 9, 1909, less than four months after the completion of the record-setting world cruise of the Great White Fleet, Secretary of the Navy George von L. Meyer established a school of marine engineering at Annapolis, Maryland. This small program, consisting of 10 officer students and two Navy instructors, would later become the Naval Postgraduate School. The Navy Secretary's order placed the fledgling school under the direction of the Naval Academy Superintendent, who was charged with "securing ample use of the educational plant of the Naval Academy to students and instructors of the school without interfering with the instruction of midshipmen." This translated into two attic rooms being set aside for the new school's classroom and laboratory space.

On October 31, 1912, Secretary Meyer signed Navy General Order No. 233, which renamed the school the Postgraduate Department of the Naval Academy. The order established courses of study in ordnance and gunnery, electrical engineering, radio telegraphy, naval construction, and civil engineering, and also continued the original program in marine engineering. With the additional curricula, enrollment increased to 25. Officers who attended the school finished their academic programs at accredited civilian institutions such as Yale, Harvard, the Massachusetts Institute of Technology, and Johns Hopkins and Columbia universities.

During World War II, Fleet Admiral Ernest King, Chief of Naval Operations and Commander-in-Chief of both the Atlantic and Pacific fleets, established a commission to review the role of graduate education in the Navy. The recommendations from this group, the Pye Commission, were regarded highly within the Navy and Congress. In 1945, Congress passed legislation to make the school a fully-accredited, degree-granting graduate institution.

In December 1951, in a move virtually unparalleled in the history of the academy, the Postgraduate School moved lock, stock, and wind tunnel across the nation, establishing its current campus in Monterey. The coast-to-coast move involved 500 students, about 100 faculty and staff, and tons of books and research equipment. The move, supervised by Rear Adm. Ernest Edward Herrmann, pumped new vitality into the Navy's efforts to advance naval science and technology. NPS was first accredited in 1955, becoming the first of the nation's military graduate institutions to achieve this status.

Since its move to Monterey, NPS has continued its tradition of relevant, high-quality graduate education programs to serve national security. NPS' programs, the student body, and the customers served have grown over the years. Today, about 1,800 graduate students, including 300 international students, are enrolled in master's and doctoral degree programs in residence in Monterey. They study traditional engineering and physical sciences, as well as operational and information sciences, information security, modeling and simulation, space systems, defense-focused business, security studies programs in civil-military relations, stabilization and reconstruction, and regional studies. Students come from all branches of the U.S. defense community, as well as from the Coast Guard, the National Oceanic and Atmospheric Administration, and the services of more than 58 allied nations. NPS programs are also open to federal and other government civilians, and a limited number of defense contractors. NPS also offers more graduate degree and certificate programs for non-resident students worldwide, delivered in various combinations of online, web-enabled, video tele-education, and visiting faculty members. Non-resident graduate degree and certificate programs include Electrical Engineering, Mechanical Engineering, Systems Engineering, Information Systems and Operations/Technology, Space Systems, and Contract Management. NPS also offers short

courses and other educational programs, both in Monterey and abroad, to more than 49,000 people each year.

NPS has been the first in a number of important areas. It started a master's degree program in military operations analysis (operations research) in the 1950s. It incorporated the concepts of network-centric warfare into the defense analysis curriculum in the 1990s. It created the nation's first master's degree program focused on homeland security in 2002 as part of the response to the 9/11 attacks. NPS has other unique programs in systems engineering, space systems engineering, space systems operations, information warfare, and undersea warfare. The collaboration-rich environment is ready to create new graduate programs in new areas of importance to national security.

Faculty

NPS faculty are accomplished scholars and professionals. The 242 tenure/tenure track faculty members are part of a robust mix that also includes research faculty, lecturers, senior lecturers, military faculty, and visiting faculty. Almost all civilian tenure track faculty members hold doctorates and the military faculty have a minimum of a master's degree and bring extensive operational expertise to the classroom. NPS faculty are the strength of the learning institution. NPS recruits from academic, industry, defense, and government circles. NPS also has 35 Academic Chairs, sponsored by various federal, defense and industry agencies that bring relevance and expertise to degree programs.

Academic Programs

NPS offers degree programs in 43 areas including engineering, science, technology, business, and national security. All programs strive to be both excellent in academic quality and relevant to the needs of the Navy and national security interests. A few of the unique programs are Combat Systems, Defense Analysis for Special Operations, Space Systems Engineering and Space Systems Operations, Joint Command, Control, Communications, Computers and Intelligence, Operational Logistics/Operations Analysis, Manpower Systems Analysis, Information Systems and Operations, Meteorology and Operational Oceanography, Total Ship Systems Engineering, and Undersea Warfare.

Academic Organizations

NPS is organized into fourteen academic departments within four degree-granting graduate schools and three major research institutes.

The Graduate School of Business and Public Policy (GSBPP) offers a unique defense-focused resident MBA program, in addition to master's degrees in five other Department of Defense (DoD)-relevant areas. Faculty teach from the Monterey campus and other Navy and DoD locations around the world through video-teleconferencing and other distributed learning techniques. Faculty research, sponsored largely by Navy and DoD agencies, brings current and relevant issues to the School, and returns valuable results to the sponsors. Continuous entrepreneurial efforts by GSBPP faculty create exciting new educational and research opportunities.

The Graduate School of Engineering and Applied Sciences (GSEAS) has a two part mission. First, it provides cutting-edge graduate technical education to military officers from all services, DoD civilians, and their counterparts from allied countries. Second, it performs relevant, high-quality applied and classified research in the fields of engineering and applied sciences. The Graduate School of Engineering and Applied Sciences offers nine resident curricula leading to traditional Master of Science, Engineer, and Ph.D. degrees. GSEAS also offers several non-resident degree and certificate programs. GSEAS continues to have an outstanding research program supported by the USN, DoD agencies, NSF and a large number of industry firms.

The Graduate School of Operational and Information Sciences (GSOIS) delivers graduate-level education and conducts cutting-edge research responsive to naval and military customers. GSOIS focuses on knowledge domains that have become increasingly important in the last generation: Information Science and Technology, Military Computer Science, Military Operations Analysis and Research, and Special Operations and Defense Analyses. The GSOIS includes graduate resident and non-resident programs consisting of 16 technical curricula and awards Master of Science degrees and Ph.D. degrees across four academic departments.

The School of International Graduate Studies (SIGS) conducts research and offers master's and Ph.D. degrees in international security studies. Its programs seek to identify and address current and emerging security challenges, and to strengthen multi-lateral and bilateral defense cooperation between the United States and other nations. SIGS offers innovative inter-disciplinary curricula—both in-residence and via distributed learning—in regional security studies, strategic studies, civil-military relations, defense resource management, and homeland security.

Three institutes, the Cebrowski Institute for Innovation and Information Superiority, the Wayne E. Meyer Institute of Systems Engineering, and the Modeling, Virtual Environments and Simulation (MOVES) Institute, conduct cutting-edge research activity that is supported and enhanced by the educational, research, and the physical and geographic resources of the surrounding Monterey community. The institutes provide a means to foster cross-disciplinary research on themes of long-standing interest to national security. Through them, the NPS has emerged as one of the most flexible and rapidly adaptable research institutions in the nation.

Governance Structure

The NPS Board of Advisors continues to be the main source of external governance for the Naval Postgraduate School. The Board advises the Secretary of the Navy, the Chief of Naval Operations, and the Commandant of the Marine Corps on the Naval Postgraduate School and graduate education. Upon the recommendation of NPS, the Secretary of the Navy has taken several steps to enhance the membership of the board by making several stakeholders in defense graduate education *ex officio* members of the board. NPS also relies on Navy leadership for graduate education policy and resources. The Navy is currently in the process of realigning its personnel, education, and training functions into a single organization focused on the recruiting, development, and retention of human capital. NPS has been involved in the development of this new organization over the past two years. This reorganization has created better communication among NPS, the United States Naval Academy and the Naval War College.

The NPS Faculty Council serves as the voice of the faculty at NPS and is asked to provide representation on significant NPS councils, committees, and task forces. The Faculty Council has standing committees that govern areas such as professional practices, and provide advice on facilities and other matters of significance. The Faculty Executive Board, together with the

Provost, Deans and Associate Provosts, comprise the Joint Policy Council. The Academic Council, chaired by the Provost with representation from all academic departments, is the authoritative board on academic issues.

Research and Sponsored Programs

NPS has a strong sponsored program that has grown steadily. In the fiscal year ending September 30, 2006, NPS faculty brought in over $140 million in sponsored program funding. The research program at the Naval Postgraduate School supports and is fully integrated into the graduate education of the students. It does so by providing relevant thesis topics that address issues related to today's operations and the science and technology that is required to sustain the long-term effectiveness of the Navy, Department of Defense and other sponsors. It keeps NPS faculty current on Navy/DoD issues, and maintains the content of the upper division courses at the cutting edge of their disciplines.

Resources

The NPS operating budget, which supports the base teaching mission and academic support structures, is approximately $90 million per fiscal year. This funding is provided by the Navy. The total annual funding, including reimbursable research and teaching, tuition, and other funds, is close to $240 million. In keeping with its mission of relevant and advanced education and research, NPS continues to enhance and develop the resources critical to that function. The Dudley Knox Library, named the 2004 Federal Library/Information Center of the Year, provides substantial references both in traditional forms and online. Online reference services were added in 2004 and now handle 20% of all reference questions.

Information Resources has also met the demand for current and relevant technologies. Regional and statewide consortia provide NPS with access to broader network capability, including Internet2. Technology for the classroom ranges from the basic computer and data projector to advanced video teleconferencing.

Facilities are also being upgraded. The most recent upgrades are a $40 million renovation to Herrmann Hall Bachelor Officer Quarters and a $12 million addition to Glasgow Hall, home of the Graduate School of Operational and Information Science. Funding for facilities is provided by the Navy through the Commander of the Navy Region Southwest. Major construction projects are funded through the Congressional Military Construction process.

Worldwide Partnerships

To accomplish its far-reaching mission of education and research, NPS has formed worldwide partnerships with institutions of higher education, research, and defense. These partnerships run the gamut from the U.S. Department of Homeland Security and U.S. Department of Defense to NATO's Partnership for Peace. Faculty and students at NPS work closely with institutions such as the Lawrence Livermore National Laboratory, University of California Santa Barbara, the Air Force Institute of Technology (AFIT), George Mason University, Virginia Tech, and many others.

APPROACH TO THE PROPOSAL

In 2005, an accreditation planning group began to prepare for the drafting of this proposal. This small group established initial timelines and started to familiarize the campus with the upcoming accreditation activities. Key constituencies of the campus, e.g., Executive Council, Deans and Chairs, Faculty Council, President's Student Council, were regularly updated.

Communication was recognized early as critical to successful accreditation. In addition to presentations and updates to major committees, a web site was designed and established on the campus intranet. This site makes available all documentation regarding accreditation to the entire campus – students, staff, faculty and administration. All background documents, WASC publications, meeting minutes and proposal drafts are posted on this site. E-mail, intranet notices and other communication efforts direct the campus to this site for information.

To identify and understand the important issues facing NPS, two major information collection efforts were conducted. In early 2006, the Executive Council, which consists of the President, Provost, Deans and other key administrators, identified and analyzed NPS strengths, weaknesses, opportunities and threats (SWOT). Each area was invited to present their most important issues, which were then combined into one document. Following this effort, a survey was distributed to all faculty and staff asking for input on identifying these same issues. During this timeframe, NPS was also involved in a search for a Provost. Through this search process, the campus had an additional opportunity to identify issues important to the future of NPS.

An NPS Accreditation Steering Committee was appointed by the Provost to provide guidance and direction to the accreditation efforts over the next four years. This committee consists of eight faculty members representing each of the schools, the Faculty Council and Research. There are also administrative representatives from Information Resources, the Library, Comptroller, Human Resources, and the Director of Programs. Students are represented by a member of their operating council. A faculty member and the Associate Provost for Academic Affairs co-chair the committee which is staffed by the Director for Institutional Research.

One of the first tasks of the Steering Committee was to study the results of the two SWOT studies with the goal of identifying issues which would form the basis of the accreditation themes. An initial draft proposal was made available to the campus community through the website. Steering Committee members also sought feedback directly from their constituencies and from various campus groups. The Proposal presented here incorporates comments made by all the various review groups.

RESPONSE TO WASC RECOMMENDATIONS

Following the reaccreditation visit in 1999, the WASC final report contained a number of recommendations for NPS. Since that time, significant progress has been made in each of the areas mentioned in the team report. Some of the highlights are described in the summaries below.

Program Review and Assessment

At the time of the last WASC visit, the main program review activity was the curriculum review by an external Navy or other sponsor. This review provides departments with feedback from the future employers of NPS graduates. During a review, Departments negotiate

Educational Skill Requirements (ESR) with their sponsors and review their performance against the educational outcomes specified in the ESR. This review occurs approximately every two years. The WASC team recommended that NPS also institute program reviews that focus on the quality of education, the faculty, and on fiscal and physical resources inherent in each academic program. This external review, known as Academic Program Review, was developed and implemented over the past year and a half. The two reviews —curricular and academic — bring together assessments of the military and academic approaches in graduate education. How these processes are brought together will be one of the foci of this current accreditation review.

Also recommended by the WASC team was the systematic collection and documentation of the assessment of student learning outcomes. Each curriculum has a set of learning objectives, which is detailed in the NPS catalog. Each degree program requires a thesis, a culminating project, or a comprehensive exam. Departments are moving toward more detailed documentation of how each of these is evaluated for quality. NPS programs are also accredited by specialized accrediting agencies, including ABET (Accreditation Board for Engineering and Technology, NASPAA (National Association of Schools of Public Affairs and Administration, and AACSB (Association to Advance Collegiate Schools of Business). One of NPS' goals is to both leverage assessments developed for these accreditation reviews and assure the creation of complementary tools and assessments.

Distance Learning Programs

NPS recognizes the importance of distance and distributed technologies, which make its programs available to those who cannot come to the Monterey campus. For NPS, this means the ability to deliver programs not just to other land-based sites, but also to the naval fleet and other operational units around the world. Additionally, international security environments and the technological sophistication of defense systems are changing at unprecedented speed. NPS represents a unique repository and source of scientific, technical, management, and security expertise, all of which is shared throughout the defense community. NPS offers a variety of graduate courses and professional development opportunities to students whenever required, wherever they may be located, employing the most efficient and effective distributed learning (DL) methods.

Methods of delivering graduate level courses include visiting NPS faculty (Mobile Education Teams), video tele-education (VTE) systems, and streaming video. NPS is increasing its provision of online learning opportunities through web-based or web-supported education. Schools and departments maintain responsibility for the academic quality of programs. The Office of Continuous Learning (OCL) was chartered to develop, coordinate, and deliver focused, relevant, quality learning opportunities. OCL, through its faculty development role, also assists faculty in further developing the best practices in the assessment of student learning outcomes.

To maintain the high quality programs for which NPS is known, all new degree programs, whether resident or non-resident, are submitted to the Academic Council for approval. This process includes the development of program and course descriptions, scheduling, expected outcomes, and resources.

Strategic Planning and Budgeting

Recognizing that a strong and coherent strategic plan acts to both guide the institution and prioritize its commitments, NPS developed a new strategic plan as a result of the most recent

WASC visit. This plan, called "A View to the Future," specifies four major initiatives by which NPS will achieve its vision. These initiatives are: (1) increase the number of Navy URL (unrestricted line officers) with graduate education; (2) improve the quality and applicability of research and teaching; (3) increase the number of meaningful partnerships and available markets for NPS services; (4) cut the right costs and invest resources in the right things. To the extent possible, NPS utilizes these initiatives to drive budget requests of the Navy and Department of Defense.

At the start of the recent BRAC (Base Realignment and Closure) decisions, NPS recognized the urgency of having data that clearly define the revenues and costs associated with graduate education and research. BRAC is a politically insulated process for closing and realigning military installations in the United States, provided by public law that considers every installation. As a military installation, NPS needed to account for effective and efficient spending of public funds, as well as relevancy to the defense mission. In response to this need, NPS developed and implemented several cost models for education and research that incorporate a high level of detail as to the types and sources of students (by service, by country, by location of instruction, etc), types and sources of funds (military service, grants, other countries, etc.), and faculty workload. These models continue to be refined in order to identify actual (direct and indirect) costs and to streamline them where possible.

The other issue that BRAC brought clearly to the forefront was the need for NPS to better inform its constituents (service officers, Department of the Navy, Department of Defense, alumni, local community, granting agencies, etc.) of the educational and research outcomes it produces. For many public institutions (in particular, for one that has traditionally obtained students through military assignment), the need for marketing and communication was not given high priority. From BRAC, NPS learned that there must be a significantly elevation of efforts to communicate successes and offerings in carrying out the mission. The Office of Institutional Advancement is working on development of a Communications Plan, addressing both internal and external constituents. NPS is also developing a consistent series of publications that tell the NPS story. The new communications stream will improve the understanding and knowledge of NPS across all constituencies.

Faculty Development

The quality of the faculty is central to the NPS mission. Faculty specialties, in research and instruction, are clearly in the forefront of defense-related knowledge. Yet, despite their areas of expertise, many new faculty members come to NPS with limited understanding of military and government structures and functions. Additionally, few graduate schools train future faculty in the various forms and methods of pedagogy and it is incumbent upon the institution to make that development possible. NPS continues to develop and enhance new faculty orientation programs as well as workshops in best teaching and assessment practices.

To assist faculty in the development of courses using advanced technologies in distance learning, the Office of Continuous Learning (OCL) has implemented a training program that introduces faculty to good instructional design and the various support tools available (e.g., Blackboard). Additionally, so that faculty may concentrate their efforts on the more important aspects of course content, a team of technology experts is available to develop web sites, add streaming video, etc. The OCL is preparing a faculty development plan to keep faculty up to date with the best practices in the field.

Governance

The Board of Advisors (BOA) has taken an active role in the governance of NPS. In accordance with WASC recommendations, the Board meets in person twice a year with the spring meeting held on campus. Interactions between campus administration and the Board have increased with attendance of key administrators (President, Provost, Associate Provost for Academic Affairs, Deans, Strategic Planner, Comptroller, and others) at the meetings. The result has been a more informed Board of Advisors. The senior leadership of the Navy and US Marine Corps (USMC) has taken significant interest in NPS and has demonstrated that interest through engagement with the BOA.

APPROACH TO THE CAPACITY AND PREPARATORY REVIEW

In developing an approach to the Capacity and Preparatory Review (CPR), NPS will be guided by its mission and endeavor to demonstrate the foundation of resources and infrastructure that underlie the academic and educational activities, as identified in the WASC standards. In doing so, NPS will depend on the engagement of not only faculty, staff, and students, but also the broader constituencies of alumni, the Navy and DoD, and the local community. NPS will accomplish this through direct consultation surveys and task forces, and by inviting community comment on data and draft reports. Regular reports to established committees such as the Faculty and Student Councils, as well as a newsletter, will help ensure all members are informed and all constituents are given ample opportunity to comment.

The CPR will be divided into two sections. The first will present the general results of the self-study relative to the Criteria for Review. The interwoven data elements will demonstrate the capacity of NPS to carry out its mission and vision. The second section will focus more specifically on the issues that the local community has deemed in need of special attention. Here, with a more thorough examination and analysis, those capacity issues directly related to the themes of the accreditation review and the educational effectiveness review will be addressed:

- Work with departments to ensure that their processes for continuous improvement are effective. Work with departments to ensure that faculty participate in development programs and design curricula that meet the stated learning objectives. Develop an institutional portfolio, which allows departments to track trends such as enrollments, numbers of graduates, graduation rates, student and alumni feedback, etc. Evaluate the progress of Academic Program Reviews, with a resulting report on best practices by departments. (Criteria for Review 2.2, 2.4, 2.7, 2.10, 3.4, 4.4, 4.7)
- Document and evaluate how requirements have changed as the institution has grown in levels of instruction and research. In particular, identify staffing requirements, business processes, and infrastructure, which may no longer be sufficient in size or capability. Document the current organizational structure and decision-making processes. (Criteria for Review 3.1, 3.3, 3.5, 3.8)
- Document evidence regarding how the strategic plan is used at multiple levels of administration to determine budgetary allocations. (Criteria for Review 4.1, 4.2)

The NPS Accreditation Steering Committee and its appointed task forces will conduct the preparation of the CPR. The preparation of data and other evidence will be coordinated through the NPS Accreditation Resources Committee, a group comprised of representatives from every support area (Comptroller, Human Resources, Registrar, Alumni, Institutional Advancement,

Command Evaluation, Staff, etc.). The Director of Institutional Research chairs this committee. The Resources Committee will gather, analyze, and present data, as required by the Task Force and Steering Committee.

APPROACH TO THE EDUCATIONAL EFFECTIVENESS REVIEW

In approaching the Educational Effectiveness Review, approaches suggested in extensive campus conversations and campus opinion surveys were considered, most notably the SWOT surveys described previously in this report, the findings during BRAC data gathering, and results from the Provost search. Steering Committee members also interviewed administrators and faculty from other institutions who had recently completed their own re-accreditation process.

The campus chose a thematic approach to frame the review. This approach provides NPS with an opportunity to choose several areas to explore within a larger framework of assessment and improvement consistent with the WASC Standards.

Three themes were chosen. The choices were made after consideration of those areas that are most responsive to institutional interest. The themes are:

1. Strategic planning for the next NPS centennial
2. Integrating a campus-wide program of continuous improvement
3. Supporting an evolving academic enterprise

These themes represent the central issues in defining an effective educational experience at NPS. The institution must seek to continuously improve the curricula and research programs. It must periodically examine the support structures and services to determine the best configuration and level of support for the mission. Finally, the university community must develop strategic directions to guide the institution as it undertakes program improvements and accommodates an evolving academic enterprise.

Because care was taken to select the themes, based on institutional priorities and campus community interest, the institution is prepared to make a long-term commitment to the thorough and meaningful consideration of the areas in question. Once the institutional proposal is approved, the formal process of identifying appropriate information and groups to conduct the inquiry will occur. The NPS Accreditation Steering Committee will provide general guidance to the process, while a number of subgroups will be named to assist. In guiding this work, the committee decided to agree upon general principles of inquiry:

– Transparency and engagement — Regular reporting and consultation with members of the campus community (faculty, staff, students, alumni, and the Board of Advisors) is a must. Stakeholders and sponsors also need to be engaged — leadership in the local community, Department of the Navy, Navy leaders, Department of Defense, Department of Homeland Security, international sponsors, etc. This will be carried out through regular requests for feedback, re-accreditation status as standing agenda items for major institutional meetings (Provost's Council, Executive Council, Deans/Chairs/Directors, Faculty Council, Student Council, Board of Advisors, etc.), a regular series of newsletters, a web site dedicated to WASC, and other measures.

– Visible institutional support for the Re-accreditation effort — NPS leadership has pledged the resources necessary for the re-accreditation effort for the entire time period of the process.

– Institutional integrity — This is in keeping with the commitment made that the re-accreditation process would maintain an ongoing connection to institutional relevance; that is, current institutional processes.

– Institutional commitment to the sustainability of changes recommended through the re-accreditation process.

THEME ONE: Strategic planning for the next NPS centennial

The last accreditation self-study was an opportunity to update the NPS strategic plan. That effort resulted in the publication of the current strategy, articulated in "A View to the Future," published in 2002. This document has guided institutional actions since that time, and it still provides an inherently sound vision of where the organization is headed.

The Base Realignment and Closure (BRAC) data collection and preparation efforts have, over the past several years, provided significant evidence that this strategy was successful, including the highest scores of any DOD educational institution for military relevance and effectiveness. BRAC was a rallying point for the NPS campus, providing a common goal. As NPS approaches the next few years, however, it is again time to re-evaluate the campus' direction.

The tremendous growth experienced at NPS brings significant challenges in terms of funding, monitoring, planning, and allocating resources. The upcoming NPS Centennial provides an opportunity to celebrate the past and consider the future. NPS can build upon the current plan and either continue in the same direction, or reset it one or more ways. Either way, it will require that there is effective communication and that the plan is articulated and understood by all stakeholders.

In exploring this theme, NPS will address the following questions:

– How are the appropriate stakeholders involved in strategic planning?

– Are resources allocated properly to achieve the vision?

– Is NPS sufficiently focused on the future?

– How well are the competing demands of academic excellence and defense relevance balanced?

NPS anticipates the following outcomes from this inquiry:

– Defined planning that incorporates opportunity for stakeholder input at appropriate and frequent intervals

– Resource allocation linked to planning

– An updated strategic plan

– A communication strategy and plan

THEME TWO: Integrating a campus-wide program of continuous improvement

NPS has a number of mechanisms for assessing the effectiveness of its academic programs and support activities. It is not clear, however, that their use is as effective as it might be, in order to continuously improve the curricula and research programs. NPS curriculum reviews provide

insight into how well the needs of sponsors and students are met. The educational outcomes are refined and validated during these reviews. Academic program reviews validate NPS academic quality. Surveys of students, faculty, alumni, and staff provide valuable information about educational quality and support services. And, faculty members use a variety of methods to assess student learning and achievement of educational outcomes. Nearly every student completes a thesis, or major project, as a culminating experience in his or her degree program. NPS is also expanding the faculty development program to address more effectively the issues of student learning, assessment, and innovation in teaching.

NPS programs are also accredited by AACSB, NASPAA and ABET. Departments and faculty members have developed ways to assess effectiveness in support of these other accreditation self-studies, or in ways to improve their own individual performance. As NPS moved into distributed learning, there have been improvements in the way faculty teach and enable learning in their classrooms, both on campus and in a distributed learning environment. However, currently there is no systematic way of identifying, validating, and sharing good practices. The feedback loop is not documented as effectively as it should. When those experiences are identified and collected, NPS will be far more effective as an institution.

In considering this theme, NPS will address the following questions:

- How are assessments used as a measure of NPS' effectiveness as an institution?
- How well does the faculty development program prepare faculty for the current and future learning environment?
- What isn't known about educational effectiveness and how might it be measured?
- How does NPS better integrate the curriculum and academic program reviews in a way that enhances both relevance and academic excellence?
- Is NPS prepared for the future in terms of students, technology, and innovations in learning?

NPS anticipates the following outcomes from this inquiry:

- The development of a more robust system of assessments and feedback to provide a more complete picture of effectiveness and an integrated framework for aligning resources to improve quality.
- A Faculty Development program that enables faculty to tap into the full system of assessments and understand how to improve student learning.
- Enhancements to current assessment tools and development of new assessment mechanisms.

THEME THREE: Supporting an evolving academic enterprise

NPS has changed significantly over the past 10 years. The institution has grown from a small collection of departments and research areas to the establishment of four academic schools and three major research institutes. While the number of students has increased only nominally, the external research program has doubled in size. Today, fewer than 50% of the students are Navy. All of the U.S. military services are represented, together with a small number of Department of Defense civilians. Approximately 20% of the students are officers or defense ministry personnel from other nations.

The trajectory of change has been significant, and the support services have struggled to maintain adequate support of the academic mission. In considering this theme, NPS will address the following questions:

- How well are administrative support areas serving the academic enterprise?
- How does NPS assess the efficiency and effectiveness of administrative support areas?
- How does NPS take advantage of best practices at other institutions to inform improvements?
- What better mechanisms can be developed to provide ongoing monitoring of service levels, ensuring the appropriate calibration of investments in support areas with programmatic expansion?

NPS anticipates the following outcomes from this inquiry:

- The development and implementation of comprehensive service support assessment tools
- The development and implementation of performance metrics for the major administrative support areas
- Applying benchmarking information from a group of peer institutions
- Development and adoption of an external review process for major administrative areas

TIMELINE

Proposed timetable for the Capacity and Educational Effectiveness (EE) reviews:

November 2006	Appointment of task forces for the themes
January 2006 – December 2007	Collection, review, and analysis of data
January - March 2008	Data analysis continues Steering Committee reviews task force reports & recommendations
April - June 2008	Data analysis continues First Draft of CPR
July - September 2008	Data analysis continues First reading and comment by campus; first revisions
October - December 2008	Data analysis continues CPR Report out to campus for review and comment
January - March 2009	Data analysis continues Final Revision of CPR Report
April - June 2009	Submission of Final CPR Report to WASC and Visit Completion of data analysis for EE Review
July – December 2009	First Draft of EE Review
January - March 2010	First reading and comment by campus; first revisions
April - June 2010	EE Report out to campus for review and comment
July - September 2010	Final Revision of EE Report
October - November 2010	Submission of Final EE Report to WASC and Visit

EFFECTIVENESS OF DATA GATHERING AND ANALYSIS SYSTEMS

Since the 1999 WASC visit, NPS has made substantial progress in data gathering and analysis. In 2002, the Office of Institutional Research (IR) was established to increase University effectiveness by providing and promoting information to enhance understanding of the institution. The office functions to:

a) collect and preserve data, working with other campus offices to ensure data reliability and consistency;

b) analyze and interpret institutional and higher education data, including benchmarking with peer institutions;

c) develop systems, methodologies, and tools for effective analysis;

d) develop print and web-based informational resources, with a schedule of periodical institutional analyses, surveys, and statistical and narrative reports;

e) design and produce routine and ad hoc reports for internal constituencies, federal, and other external agencies;

f) support assessment and accreditation processes by assisting academic areas to develop measures of educational effectiveness and improvement, by providing support in research and survey design and through coordination of accreditation reporting.

Over the past two years, the Office of Institutional Research has worked with the Registrar's Office, Information Technology, and other offices to improve the data integrity and reliability of the student data system. The Office of IR has also instituted a series of standard reports, such as a Factbook, an annual report, and other documents to disseminate institutional data more broadly. Finally, a new series of surveys and analyses have been developed, to collect data from incoming and current students as well as alumni, in order to systematically obtain feedback from those constituents.

Data dissemination from other campus offices has also improved over the past two years. The Registrar's Office enhanced its reporting capabilities through the development of an online analytical processing module that makes enrollment reports more consistent and gives easy access to more detail. In addition, the office has increased the types of reports and established regular timelines for delivery. There is an ongoing effort to enhance the student data system to better accommodate the growing number of students who are obtaining degrees and certificates through distance learning methods.

In response to many external accountability requests, NPS has developed a cost analysis model that is used to determine costs per student within each program. In addition, a data retrieval system is under development, intended to bring together student, faculty, and cost information. This system also provides information to departments on faculty workload and grading for strategic planning purposes.

Finally, NPS is committed to strengthening and enhancing the connection to its alumni. The new Director of Alumni Relations will be developing and implementing new strategies for better alumni tracking.

The high level of expertise and increased collaboration among data collection and analysis offices leads us to conclude that the current NPS data gathering systems are more than adequate to provide information in support of the re-accreditation efforts.

DEPARTMENT OF THE NAVY
NAVAL POSTGRADUATE SCHOOL
1 UNIVERSITY CIR
MONTEREY CA 93943-5000

IN REPLY REFER TO:

Institutional Stipulations

1. The Naval Postgraduate School is using the review process to demonstrate its fulfillment of the two Core Commitments. We will engage in the process with seriousness and candor, present data that are accurate and the Institutional Presentation will fairly present the School.

2. The Naval Postgraduate School has published and made publicly available policies in force as identified by the Commission. Such policies will be available for review on request throughout the period of accreditation. Special attention will be paid to the School's policies and recordkeeping regarding complaints and appeals.

3. The Naval Postgraduate School will abide by procedures adopted by the Commission to meet United States Department of Education (USDE) procedural requirements.

4. The Naval Postgraduate School will submit all regularly required data, and any data specifically requested by the Commission during the period of Accreditation.

5. The Naval Postgraduate School has reviewed its off-campus programs and distance education degree programs to ensure that they have been approved as required by the WASC Substantive Change process.

Colonel David A. Smarsh
United States Air Force
Acting President
Naval Postgraduate School

NAVAL POSTGRADUATE SCHOOL HEADCOUNT ENROLLMENT BY LEVEL (FALL TERM)

Average on Board

The Naval Postgraduate School operates on a modified quarterly school year – every three months new students arrive and new classes begin. Unlike many civilian universities, the summer quarter is a full three-month quarter. These factors combine with traditional military transfers, occurring at two peak times during the year, to create widely varying numbers of student on board (i.e., enrolled) from one quarter to the next. The Average On Board (AOB) student count is derived by averaging enrollments, that is, unduplicated headcounts, from each of the four quarters. AOB is used to describe the annual trends in student numbers, primarily for those seeking a degree.

Degree Program Student by Type of Enrollment
Average on Board Trends Since 2000

Year	2000	2001	2002	2003	2004	2005
Full Time Resident	1,279	1,269	1,244	1,314	1,481	1,560
Distributed Learning	111	180	221	247	322	523
Total	1,390	1,449	1,465	1,561	1,803	2,083

NAVAL POSTGRADUATE SCHOOL DEGREES AND CERTIFICATES GRANTED BY LEVEL (ACADEMIC YEAR)

Year	Total	BS	Post-Baccalaureate*	MS	Ph.D.	BS	Post-Baccalaureate*	MS	Ph.D.
2001	703	4	12	672	15	0.6%	1.7%	95.6%	2.1%
2002	798		3	781	14		0.4%	97.9%	1.8%
2003	674		9	653	12		1.3%	96.9%	1.8%
2004	940	9	6	916	9	1.0%	0.6%	97.4%	1.0%
2005	1057			1049	8			99.2%	0.8%

Percentage entries are all normalized on the first column of the report.

+ NPS is not required to submit IPEDS data; IPEDS Completions data are available only from 2003 and 2005; all other years are from NPS Student Records

* Post-baccaulareate degrees include post-masters certificates as defined by IPEDS

NAVAL POSTGRADUATE SCHOOL KEY FINANCIAL RATIOS

As a Department of Defense institution, NPS financial records are kept in accordance with Federal regulations and laws. As such, the rules used by most institutions, FASB or GASB, do not apply. NPS, as a federal institution without financial aid, is not required and does not submit the IPEDS Financial report. What appears on this chart are a series of ratios that best correspond to the WASC data request.

Return on Net Assets Ratio:

As a Department of Defense (DoD) Navy institution, measuring growth of institutional resources is calculated through growth in sources of funding. Direct allotted funds from the DoD (Navy) for education and sponsored funds for education and research are the sources.

Suggested Direct ratio: Change in Direct Allotted Funds Year 2/Direct Allotted Funds Year 1

Suggested Sponsored ratio: Change in Sponsored Funds Year 2/Sponsored Funds Year 1

Suggested Total Funding ratio: Change in Total Funds Year 2/Total Funds Year 1

Return on Net Assets Ratio (000s)

	FY02	FY03	FY04	FY05	FY06
Direct	48,806	61,732	74,630	76,533	90,126
$chg		12,926	12,898	1,903	13,593
%chg		20.9%	17.3%	2.5%	15.1%
Sponsored	80,578	104,084	107,891	116,593	114,116
$chg		23,506	3,807	8,702	-2,477
%chg		22.6%	3.5%	7.5%	-2.2%
Total	129,384	165,816	182,521	193,126	204,242
$chg		36,432	16,705	10,605	11,116
%chg		22.0%	9.2%	5.5%	5.4%

Net Income Ratio:

The measure of operating within the available resources is governed by Appropriation law as outlined in United States Code Title 31, specifically 31 USC 1517, 1301 and 1341. According to the Anti-Deficiency Act, DoD institutions are prohibited from overspending and can only obligate funds for the intend appropriation. As this is federal law, no ratio meets the definition.

Operating Income Ratio:

The measure of operating activities meeting expenses can be stated in ratio terms: Allotted and Sponsored Funds/Expenses

Operating Income Ratio (000s)

	FY03	FY04	FY05	FY06
funds in	190,816	212,521	223,745	240,067
expenses	165816	182521	193126	204242
%	86.9%	85.9%	86.3%	85.1%

Viability Ratio:

As a Department of Defense (DoD) Navy institution, we do not carry debt, therefore a ratio is not applicable. The US government funds this institution annually through the National Defense Authorization Act each fiscal year. The current Future Year Defense Plan has funding identified through FY2013 to maintain this institution.

Instructional Expense per Student:

FY03 = $26,313

FY04 = $25,621

FY05 = $26,017

FY06 = $26,000 (estimated, as final cost/student not calculated)

Net Tuition per Student:

As a DoD funded entity, this Institution does not charge a "per student" tuition as practiced by civilian universities. For comparison purposes, the Instructional Expense per Student can be considered for this category.

FY03 = $26,313

FY04 = $25,621

FY05 = $26,017

FY06 = $26,000 (estimated, as final cost/student not calculated)

Naval Postgraduate School Faculty by Employment Status

Year+	Total Headcount	Full-Time Faculty*	Part-Time Faculty	Total Faculty FTE
2001	398	398		398.0
2002	448	448		448.0
2003	454	454		454.0
2004	509	434	75	471.5
2005	513	488	25	500.5

Percentage entries are all normalized on the first column of the report.

+ NPS is not required to submit IPEDS data; IPEDS Staff data are available only from 2003, 2004 and 2005; all other years are from NPS Academic Planning

Military and contractor faculty are not included here as IPEDS does not collect this data.

* Faculty include both tenure/tenure track and non-tenure track which includes research faculty. Administrative faculty are not included.

Naval Postgraduate School					
Inventory of Educational Effectiveness Indicators					
Degree Programs					
	Have formal learning outcomes been developed?	Where are these learning outcomes published?	Other than GPA, what measure/indicators are used to determine that graduates have achieved the stated outcomes for the degree?	Date of last program review for this degree program**	Date of next program review for this degree program**
THE GRADUATE SCHOOL OF OPERATIONS AND INFORMATION SCIENCES					
Information Systems and Operations	Yes	Catalog: print & online	Thesis	1-Aug-02	Overdue
Computer Technology (DL)	Yes	Catalog: print & online	Capstone Paper		
Operations Analysis	Yes	Catalog: print & online	Thesis	18-Aug-06	2008 Aug
Operational Logistics	Yes	Catalog: print & online	Thesis	4-Oct-05	2007 Oct
Human Systems Integration	Yes	Catalog: print & online		N/A	2007 Oct
Master of Systems Analysis - MSA (DL)	Yes	Catalog: print & online	Group Project		
Joint C41 Systems	Yes	Catalog: print & online	Thesis	1-Mar-02	Overdue
Computer Science	Yes	Catalog: print & online	Thesis	3-Jun-04	2006 June
Software Engineering	Yes	Catalog: print & online	Thesis	N/A	N/A
Software Engineering (DL)	Yes	Catalog: print & online	Thesis		
Information Systems and Technology	Yes	Catalog: print & online	Thesis	1-Sep-02	Overdue
Modeling, Virtual Environments and Simulations	Yes	Catalog: print & online	Thesis	1-Sep-02	Overdue
Information Sciences	-	Catalog: print & online	Written/Oral Exams & Dissertation	N/A	N/A
Information Warfare	Yes	Catalog: print & online	Thesis	1-Sep-02	Overdue
Electronic Warfare Systems (International)	-	Catalog: print & online	Thesis	1-Sep-02	Overdue
Joint Information Operations	Yes	Catalog: print & online	Thesis		
Special Operations and Irregular Warfare	Yes	Catalog: print & online	Thesis		

THE GRADUATE SCHOOL OF ENGINEERING AND APPLIED SCIENCES					
Systems Engineering (DL)	Yes	Catalog, & online	Capstone Project	N/A	2007 July
Space Systems Operations (DL)	-		Thesis		
Space Systems Operations (International)	Yes	Catalog: print & online	Thesis		
Space Systems Operations	Yes	Catalog: print & online	Thesis	2-Nov-04	2008 Aug
Meteorology	Yes	Catalog: print & online	Thesis	2006 May	2008 May
METOC	Yes	Catalog: print & online	Thesis	2006 May	2008 May
Operational Oceanography	Yes	Catalog: print & online	Thesis	2006 May	2008 May
Applied Mathematics	Yes	Catalog: print & online	Thesis		
Oceanography	Yes	Catalog: print & online	Thesis	2006 May	2008 May
Undersea Warfare	Yes	Catalog: print & online	Thesis	7-Feb-05	2007 Feb
Undersea Warfare (International)	Yes	Catalog: print & online	Thesis		
Combat Systems Science and Technology	Yes	Catalog: print & online	Thesis	24-May-05	2007 May
Underwater Acoustic Systems (DL)	-		Thesis		
Mechanical and Astronautical Engineering	Yes	Catalog: print & online	Surveys of graduates, alumni, employers, curriculum sponsor; Thesis evaluation; engineerig licensure exam; student presentations; Thesis		
Reactors/Mechanical Engineering (DL)	-		Reactor Design Report		
System Engineering (Resident) - **PENDING APPROVAL**	Yes	Catalog: print & online	Thesis	Start July 06	TBD
Electronics Systems Engineering	Yes	Catalog: print & online (www.nps.navy.mil/ece/)	Surveys of graduates; quarterly surveys of exiting students; annual surveys of ECE faculty; quarterly surveys of thesis and thesis presentation quality; biennial curriculum	ABET Fall 2001 w/ Fall 2003 followup; Curric Review 10/1/2002	ABET Fall 2007; curriculum review Fall 2006

THE GRADUATE SCHOOL OF ENGINEERING AND APPLIED SCIENCES					
Systems Engineering (DL)	Yes	Catalog, & online	Capstone Project	N/A	2007 July
Space Systems Operations (DL)	-		Thesis		
Space Systems Operations (International)	Yes	Catalog: print & online	Thesis		
Space Systems Operations	Yes	Catalog: print & online	Thesis	2-Nov-04	2008 Aug
Meteorology	Yes	Catalog: print & online	Thesis	2006 May	2008 May
METOC	Yes	Catalog: print & online	Thesis	2006 May	2008 May
Operational Oceanography	Yes	Catalog: print & online	Thesis	2006 May	2008 May
Applied Mathematics	Yes	Catalog: print & online	Thesis		
Oceanography	Yes	Catalog: print & online	Thesis	2006 May	2008 May
Undersea Warfare	Yes	Catalog: print & online	Thesis	7-Feb-05	2007 Feb
Undersea Warfare (International)	Yes	Catalog: print & online	Thesis		
Combat Systems Science and Technology	Yes	Catalog: print & online	Thesis	24-May-05	2007 May
Underwater Acoustic Systems (DL)	-		Thesis		
Mechanical and Astronautical Engineering	Yes	Catalog: print & online	Surveys of graduates, alumni, employers, curriculum sponsor; Thesis evaluation; engineerig licensure exam; student presentations; Thesis		
Reactors/Mechanical Engineering (DL)	-		Reactor Design Report		
System Engineering (Resident) - **PENDING APPROVAL**	Yes	Catalog: print & online	Thesis	Start July 06	TBD
Electronics Systems Engineering	Yes	Catalog: print & online (www.nps.navy.mil/ece/)	Surveys of graduates; quarterly surveys of exiting students; annual surveys of ECE faculty; quarterly surveys of thesis and thesis presentation quality; biennial curriculum	ABET Fall 2001 w/ Fall 2003 followup; Curric Review 10/1/2002	ABET Fall 2007; curriculum review Fall 2006

Systems Acquisition Management	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief. Curriculum reviews.	7-Oct-05	2007 Oct
Defense Systems Analysis	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief. Curriculum reviews.	N/A	Ongoing 2007
Defense Systems Management (International)	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief.	N/A	N/A
Supply Chain Management	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief. Curriculum reviews.	5-May-05	2007 May
Resource Planning and Management for International Defense	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief.	N/A	N/A
Materials Logistics Support Management	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief. Curriculum reviews.	5-May-05	2007 May
Contract Management (DL)	Yes	Catalog: print & online	Application Project	24-Aug-06	2008 Aug
Program Management (DL)	Yes	Catalog: print & online	Application Project	7-Oct-05	2007 Oct
Financial Management	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief. Curriculum reviews. Conrad Honors program	4-May-05	2007 May
Manpower Systems Analysis	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey.	11-Sep-02	2006 Feb

Information System Management	Yes	Catalog: print & online	MBA Project/Thesis. MBA Core survey. Exit survey and exit brief. Curriculum reviews. Thesis day		TBD
THE SCHOOL OF INTERNATIONAL GRADUATE STUDIES					
Homeland Defense and Security (DL)	Yes	Catalog: print & online	Thesis		
Middle East, Africa, South Asia	Yes	Catalog: print & online	Thesis and/or comp exams	30-Aug-05	2007 Aug
Far East, Southeast Asia Pacific	Yes	Catalog: print & online	Thesis and/or comp exams	30-Aug-05	2007 Aug
Western Hemisphere	Yes	Catalog: print & online	Thesis and/or comp exams	30-Aug-05	2007 Aug
Russia, Europe, Central Asia	Yes	Catalog: print & online	Thesis and/or comp exams	30-Aug-05	2007 Aug
Civil-Military Relations	Yes	Catalog: print & online	Thesis and/or comp exams	2005 Dec	TBD
Security Studies - Stabilization and Reconstruction	Yes	Catalog: print & online	Thesis	2005 Dec	TBD
Defense Decision-Making and Planning	Yes	Catalog: print & online	Thesis and/or comp exams	2006 Jan	TBD
Counterterrorism Policy and Strategy	Yes	Catalog: print & online	Thesis	2006 Feb	TBD
Homeland Defense and Security - Resident	Yes	Catalog: print & online	Thesis	ongoing	2007 Sept
SYSTEMS ENGINEERING AND ANALYSIS CURRICULUM COMMITTEE					
Systems Engineering and Analysis				TYCOM Review in 2003	TBD

Naval Postgraduate School
List of Distance Learning Degree Programs
Included in Accreditation Review Process

Program	Degrees Awarded
Computer Technology	MS Computing Technology
Master of Systems Analysis - MSA	MSA Master of System Analysis
Software Engineering	MS Software Engineering
	PhD Software Engineering
Systems Engineering	MS Systems Engineering or MS Systems Engineering Management
Space Systems Operations	MS Space Systems Operations
Underwater Acoustic Systems	MS Engineering Acoustics
Reactors/Mechanical Engineering	MS Engineering Science (ME)
Electrical Engineering	MS Electrical Engineering (MSEE) or MS Engineering Science (MSES-EE)
Systems Eng Management (SEM)	MS Systems Engineering Management, Systems Engineering, Product Development
Product Development	
Executive Master of Business Admin.	EMBA
Contract Management	MS Contract Management
Program Management	MS Program Management
Homeland Security and Defense	MA Security Studies (Homeland Security and Defense)

BARRIERS TO SUCCESS

Governance Issues

- **NPS/SW Region/NETC/Navy Issues.** General negative climate. The answer is readily "no" rather than how can we innovatively find a way to do this (if it makes good business sense?) Everyone is supportive of accountability but numerous audits and an environment where no one can be trusted makes people almost not want to do anything because they fear they will be accused of something that will then take a great deal of time and effort to unravel.

- **Regionalization** has made work more difficult. San Diego has a high volume of work and it is generally understood that NPS is low on their priority list, so many support actions (PW, HRO, etc.) are more difficult to obtain and take longer.

- **Visibility of NPS** – need closer relationship with the Foundation. Acknowledgment that we are a research university that must be able to communicate with constituents, stakeholders, industry, civilian universities. This means support for communications vehicles (publications, a professional web operation, local conference support, stronger ties with other universities, etc.). Often told that NPS cannot engage in promotional initiatives – that work with other agencies, universities is not a priority supported by Navy/NETC/region.

Financial Issues

- **Contracts.** The contracting process is difficult, confusing, restrictive, and more time-consuming than it needs to be. In addition, the rules seem to be constantly changing. Using FISC has proven problematic for ITACS in the past. Please see attached *Contracting Issue* that documents the problem.
- **Funding issues.**
    - Timing of funding is often problematic – not receiving funds until well into fiscal year. At times, not until very late in the fiscal year.
    - Not being able to roll-over funds into subsequent years sometimes makes for bad purchasing decisions and ones not in the best interest of the institution.
    - Multiple budget planning requests. Requests for information are often redundant, deadlines are unrealistic, and follow-through information not provided.
    - Unfunded mandates. For example, we are told to follow industry best practices but not funded for these. IPv6 mandated but not funded. Life cycle management of networks, of IT equipment, etc.

IT Issues

- **Department of Defense, Department of Navy governance issues in IT.** Governance seems to be the focus rather than improvement of IT services. Over the past 2 years, there has been a significant increase in tasking, data calls and additional

requirements. Many data calls may not be applicable to NPS but we are required to go through the drill. Many data calls (including IT inventory requests) overlap. It is never clear in what tasking NPS needs to participate. When we do participate, we rarely hear the outcome, how it relates to the improvement of Navy IT services, impact, etc.

- **Responding to DOD**. Other commands complained to the new ACNO-IT during a recent phone conference about the same thing. Many feel uncomfortable responding to DoD without going through DoN and asked if Navy commands could respond to calls from Navy only and then ACNO-IT would coordinate responses to DoD. Also, there are many IT authorities within DoN – some, at times, seem to suggest lack of coordination (DoN CIO, NETWARCOM, NETC, etc.).

- **NMCI/FAM process** has overwhelmed with data calls, inventories, multiple rules, changing rules, conferences, VTCs, etc. The higher education IT environment includes requirements that are predicated on assumptions of flexibility, agility, innovation, and responsiveness. Our reputation with our faculty and students depends on our quick response, being able to provide the right technology support to the right research problem, being able to support the right technology to the educational program, etc.

- **Network Access** – not permitting foreign nationals on DoD networks. Nearly 1/3 of our students are foreign nationals. Short course enrollments have higher percentages. Not permitting access to certain sites; firewall rules not permitting access to certain networks/resources. Our academic programs involve contact with countries, resources, networks that are not permitted access in standard DoN networks.

- **NETC.** Recent IT spending freeze paralyzed ITACS operations for a time. Replaced with $25K limit on IT expenditures and mandated NETC review process. Submitted two waiver requests on March 11, 2004 (money identified for an academic program: $50K for laptops for EMBA and $150K for EMBA VTC facility) – no response until May 13, 2004 when waivers were granted. This kind of delay is unsatisfactory and unacceptable for execution of our mission.

- **Life cycle management** of equipment is mandated but not funded.

Human Resources Issues

- **Personnel processes.** The hiring process is lengthy and confusing. Programs permitting hiring of certain positions open and close. Programs permitting special pay provisions open and close. Example, developed service level agreement for Homeland Security Digital Library. The library required 2 hours response time. Instead of adding staff, we wanted to offer "stand-by" pay. Or retention bonuses when told "stand-by" was not permitted. Both were denied.

- **Training.** Training for certain levels of administrative support positions should be standardized and regularly available. Too often, staff members are thrown into

positions where they have to learn complex procedures, use awkward and unfriendly software and have little or no training to accomplish the tasks. This sends a message of inefficient and insensitive management.

- **Documentation.** In addition to training, all positions should have written documentation which lists clearly and in enough detail the various job processes for each position. This should include timelines of when these processes should occur.

- **Orientation.** Incoming Faculty, Staff and Administration need a more comprehensive introduction to the campus, its environment and its processes.

- **Organization Chart.** New personnel are hired, new positions are created without communication to the entire campus. As a result, it is difficult to know the parties responsible for various activities.

- **Clarification of Faculty and Staff Roles.** Much confusion exists on campus regarding identification of faculty. All personnel who are have faculty status should be clearly identified and be processed through Academic Planning. Other personnel who are eligible to teach courses should also be clearly identified.

Facilities Issues

- **Quality of work environment.** Lack of adequate space for type of work performed. Janitorial services. Quality of air conditioning/heating. Due to lack of space and basic services (heat, janitorial, etc.), the QOL of employees has considerably declined so productivity and general morale are adversely affected.

- **Condition of classrooms, laboratories.** Ongoing complaints about overflowing trashcans in classrooms met with a recent NPS-wide email announcing that all trashcans would be removed from classrooms. Lack of ongoing, sustainable funding for life-cycle management of physical conditions of classrooms as well as electronic and audio-visual equipment has created an end result of unacceptable conditions in NPS classrooms.
    - ITACS conducts an annual inventory of classrooms, which documents the condition of NPS classrooms. Photographs are included as part of the inventory, as well as detailed information about the age of equipment, estimates of the last time the rooms were painted, recarpeted, new window coverings installed, HVAC upgraded, etc.

Administrative Issues

- **Internal Communications**. While a number of emails are sent out to the campus regarding various events, there is no regular communications stream, either electronic or in hardcopy. There needs to be a method by which all personnel are informed of major changes on campus, new personnel, highlights of events, major accomplishments, etc.

- **Administrative systems.** Administrative systems are generally geared to reporting up to larger Navy organizations rather than to NPS departments. As a result, a great deal of time is spent in reconciliation of accounting processes. Using a database structure, with management information reporting could improve a number of business processes.

- **Travel.** Travel authorizations have to be done by department heads rather than administrative assistants within departments. The amount of time this takes is inconsistent with efficient management practice. Conference fees are now handled through a separate process – creating another level of bureaucratic process for departments.

    - Put ITOs (Invitational Travel Orders) on DTS. Eliminate the time consuming task of manually filling out paperwork, signatures by individuals around campus, and routing. Why can't it be handled as though it were an NPS traveler?

- **Paperwork audit.** A comprehensive audit of paperwork should be completed. NPS for two reasons: 1) to identify those processes that can be eliminated entirely due to redundancy or automating many current processes that are currently manual; 2) use of social security numbers and other privacy act information can be better safeguarded. A case study example for both of the above reasons is timekeeping.

Academic Processing Issues

- **Student Database systems.** The current system needs to be fully supported and updated to accommodate both the expanding certificate and short course programs.

- **Academic Processes.** With new programs and certificates in all schools, a review of admissions, registration, enrollment, transcript and degree awarding procedures should be conducted so that all degrees, programs, certificates, etc. are processed in the same manner.

    - The guidelines and regulations regarding PhD students needs to be reviewed and upgraded so that the numbers of these students and their progress toward degree can be clearly identified.

- **Information Capture and General Processing**. There is little formal documentation regarding various business processes which involve correctly processing students as they move through the system. At each level, the proper offices are not always known; data entry into the student system is not always consistent; data entry at all levels – schools and programs, student, administration – needs to be clearly specified with appropriate timelines and staffing.

POSSIBLE SOLUTIONS:

- Change financial/authority alignment away from NETC.

- Explore special charter status within Navy and/or DoD. A number of institutions nationally are state universities with special charters with their respective states. Rutgers, The State University of New Jersey, has a charter that established it as a public university in 1956. As such, it is exempted from certain state regulations and policies. The UC system has a similar charter. Similar charter status for NPS would underscore the distinctive requirements of a research university.

  The Navy Higher Education IT Consortium (NHEITC) was formed to document the IT requirements of the Navy's higher education institutions. We did that and submitted a report with concomitant recommendations to the VCNO in August 2004. Since then, we have worked to identify common processes, to leverage investments, and find ways to set some common goals. It would be helpful to have the Navy acknowledge the distinct mission of higher education institutions and provide the flexibility to permit more effective and efficient execution of our mission. Working with the other Navy higher education institutions has reinforced our position, and provided additional political voice to our recommendations.

  Including USNA and NWC is a possibility that might reinforce the argument regarding higher education mission requirements more generally. The charter could be proposed for a term (e.g. ten years) that could then be evaluated. Progress on a number of institutional goals could be accelerated if NPS did not have to respond to the relentless numbers of regulations, data calls and inventories, and documentation about compliance to said regulations.

- Strengthen Board of Advisors

- Restore local authority for currently "regionalized" services/functions

- Create a database structure for administrative systems with management information reporting capabilities.

Naval Postgraduate School
Report on the WASC Survey
Summer 2006

Introduction

On October 15, 2006, NPS submitted its proposal to the Western Association of Schools and Colleges (WASC), the organization responsible for regional accreditation. This proposal outlines the themes and issues which the campus will explore as it proceeds with accreditation. The submission of the proposal precedes a campus visit in 2009 by a WASC team, comprised of appointed representatives from various institutions of higher education, who will conduct thorough inquiries into various aspects of NPS to certify that the institution has a clear mission, can demonstrate fiscal stability, and maintains high levels of academic quality, institutional integrity and educational standards.

Methodology

In July 2006, the WASC survey was distributed campus-wide, via email and the WASC website, to the faculty and the staff of NPS. The survey took the form of open-ended SWOT questions (Strengths, Weaknesses, Opportunities and Threats). Strengths and weaknesses are generally considered to be internal factors, opportunities and threats external (see appendix for survey). Two email requests from the Provost and one from the President were sent to all faculty and staff, and a posting was placed on the NPS Intranet Home Page requesting participation in the survey. The purpose of the survey was to gather feedback from campus constituents on the key issues facing NPS, and to incorporate that information into the themes of the WASC proposal.

Results

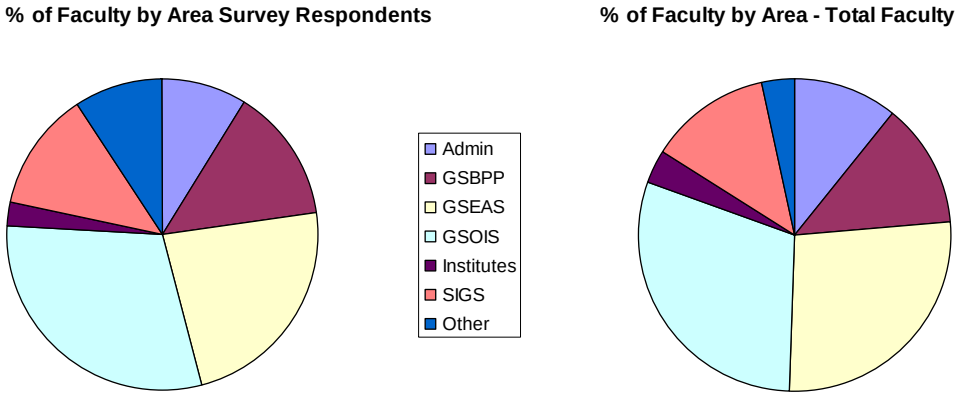
Of 1,521 surveys distributed, 398 responses were collected for a 26% response rate. Within those respondents, faculty response rate was 35% (229 responses from 650 distributed surveys).

The distribution of all respondents by area and employment type is noted below.

Area	Total Number of Respondents	% of Total
Administration	60	15%
GSBPP	42	11%
GSEAS	75	19%
GSOIS	86	22%
SIGS	36	9%
Institutes	7	2%
Tenant	14	4%
Unknown/Other	78	20%
Grand Total	398	100%

Status	Total	% of Total
Contractor	24	6%
Faculty	229	58%
Non-Supervisory GS	77	19%
Supervisory GS	41	10%
WG	8	2%
Other	19	5%
Grand Total	398	100%

Faculty respondents, the largest single group to answer the survey, matched the overall faculty population in representation of schools, institutes and administration.



Members of the Steering Committee analyzed the data from the SWOT surveys. Survey responses were grouped into more general descriptions and then grouped again so that each area (strengths, weaknesses, opportunities and threats) was reduced to five or six major factors. The survey results can be found on the tables that follow.

In the category of Strengths, the SWOT survey reflected the following responses:

Rank	Strengths – SWOT Survey (WASC)	Number of Responses
1	**GRADUATE EDUCATION**	**239**
	Military relevance/Tackle problems of national importance	
	Agility/Responsiveness to stakeholders needs	
	High-quality programs/High-quality and prestigious degree	
	Excellent Distance Learning programs	
	Interdisciplinary	
2	**FACULTY**	**213**
	High-quality/Committed/Talented	
	Knowledgeable/Innovative thinkers/Motivated to excel	
	High percentage with prior military experience	
3	**STUDENTS**	**158**
	Dedicated/Diverse/Motivated	
	Highly competent/Mature/High-quality	
	Strong work ethic	
	International students	
4	**RESEARCH**	**147**
	Defense-oriented/Flexible/Strong	
	Adaptive/Leading-edge	
	Linked with DoD and other high level institutions	
5	**STAFF**	**50**
	High-quality/Technical/Dedicated	
	Professional/Concerned for the students	
	Strong IT staff support	
	Leadership/Dedicated/Forward-thinking	
6	**MISCELLANEOUS**	**49**
	Location	
	Outstanding facilities	
	Premium service to military families	
	OJT and job advancement	
	Relationship with community	

In the category of Weaknesses, the SWOT survey reflected the following responses:

Rank	Weaknesses – SWOT Survey (WASC)	Number of Reponses
1	**BUSINESS PROCESSES**	**217**
	Budgeting/Contracting processes/Unpredictability	
	Bureaucracy/Paperwork	
	Faculty workload	
	Delays in hiring process	
	DTS	
2	**LEADERSHIP**	**150**
	Vision	
	Low morale	
	Favoritism	
	Internal politics	
	Lack of support for faculty research/publishing	
	No clear articulation of priorities/lack of SOPs	
	Unqualified faculty/bad tenured faculty/too many contractors	
	Lack of incentives rewards (inadequate pay)	
3	**ORGANIZATIONAL STRUCTURE**	**93**
	Governance	
	School "stovepipes"	
	Erosion of Academic Standards	
4	**COMMUNICATION**	**89**
	Lack of communication	
	Lack of support for faculty research/publishing	
5	**REGIONAL SUPPORT**	**61**
	Regional support	
	Poor/lacking facilities (labs, classrooms, library)	
	Parking-not enough	

In the category of Opportunities, the SWOT survey reflected the following responses:

Rank	Opportunities – SWOT Survey (WASC)	Number of Reponses
1	**PARTNERSHIPS**	**305**
	W/industry	
	W/universities	
	W/federal, non-DoD agencies, including federal labs	
	W/international	
	W/local	
2	**NPS TRANSFORMATION TO DOD U (FOCUS ON RESEARCH GRANTS)**	**122**
	Grow in area research grants and non-Navy funds	
	Make Foundation a true Foundation working for researchers	
	Focus more on becoming DoD U/Less focus on Navy, more on DoD/Create strength via "Naval University" concept	
3	**NPS STRENGTHS AND FOCUS AREAS TO CAPITALIZE**	**111**
	Distance/Distributed Learning	
	Homeland Security	
	GWOT	
	Irregular Warfare, Counter-Terrorism and Insurgency, IED, etc.	
	DoD need for science and technology (including IT)	
	Joint forces applications from curricula to field and career	
	Policy and Think tanks	
	Civilians and Contractors	
4	**SOURCE AND TYPE OF STUDENTS**	**105**
	More emphasis on joint forces -- not just Navy	
	Train and recruit federal/civilians, including DoD and non-DoD	
	More international	
	Specifically - Increase PhD students (not just Masters)	
5	**IMPROVE COMMUNICATIONS (INTERNAL AND EXTERNAL)**	**59**
	IP/Patents	
	Alerting leadership about value of NPS	
	Media/local involvement	
	Alumni Relations	
	Branding and Institutional Advancement	

In the category of Threats, the SWOT survey reflected the following responses:

RANK	WASC -- Threats	
1	**LACK OF VISIBILITY/IGNORANCE OF NPS IMPACT**	100
	NPS means "National Park Service"	
	Not getting the message out to DoD and DoN	
	Ignorance of NPS' potential and value	
	Lack of partnership w/ City of Monterey and surroundings	
	Lack of reputation as research facility	
2	**LACK OF NAVY/DOD SUPPORT**	92
	Lack of support for graduate education	
	Lack of understanding of the importance of graduate education	
	Lack of understanding of the difference between education and training	
	Lack of Navy Support for Applied AND Basic Research	
	Seen in budget as well as policy directives	
	Competition between graduate education and JPME/ESRs	
3	**LACK OF STUDENTS**	77
	Fewer students because of GWOT and force reduction	
	Fewer Navy students because degree not a career boost	
	NPS not open to other students such as civilians, other government	
	Lack of PhD students hurts research program	
	Reduced interest in true science and engineering education	
	Weak admissions criteria (eg GRE) means less qualified students	
	Perception of being Navy keeps other services away	
	Commands have relationships w/ local universities rather than send to NPS	
4	**COMPETITION FOR DOD FUNDING**	70
	Budget uncertainties because of lack of DoD support	
	Budget uncertainties because of war efforts	
	Need for more infrastructure support	
	Minimal linkage to alumni and other fundraising sources	
	Increased competition for grants	
	Lack of outside funding sources	
5	**DECREASING FACULTY QUALITY**	56
	Low salaries due to caps	
	High cost of living locally	
	Upcoming retirements	
	Reduced quality of faculty due to poor hiring decisions	

6	INTERNAL WEAKNESSES RESULT IN EXTERNAL THREATS	43

Lack of president, provost means no representation in DC or DoD
Lack of strategic plan
Too much passivity and doing things the same way
Low morale
Too much administrative overhead weakens NPS budgetarily
Not maintaining relevance/chasing after the latest thing
Not keeping teaching the primary focus/balance

Summary

As the major themes were developed for the WASC proposal, the survey results provided evidence and guidance as to the campus community's viewpoints. Other sources of information (standing committees, past surveys) were also utilized. How the categories of responses from the SWOT surveys were used as a foundation for each theme is noted below. Responses will be utilized further as each theme is more fully developed across the accreditation process.

Theme One: Strategic planning for the next NPS centennial

Strengths noted in the SWOT surveys under this category include the military relevance and problems of national importance that are tackled by NPS, the high-quality of faculty, students, staff and research at NPS, and the many opportunities and services offered by NPS to military students and their families. Partnerships with industry, universities, other federal, non-DoD, local and international agencies scored the highest on the SWOT surveys in the category of Opportunities. Threats to long term planning come from lack of Navy support, ignorance of NPS value, lack of students, and diminishing faculty quality.

Theme Two: Integrating a campus-wide program of continuous improvement

Strengths emphasized in the SWOT surveys in this category include knowledgeable, dedicated, talented and highly-motivated faculty coupled with adaptive, leading-edge research produced by NPS agility, responding to stakeholder needs In the category of Opportunities, responses were distributed almost equally in the areas of academic programs and delivery methods such as distributed learning and Homeland Security, as well as the capacity to expand in areas related to funding outside of the Navy, growth in research grants and partnership opportunities. Identified threats included a lack of students, faculty workload, and a lack of Navy support and understanding of the importance of graduate education.

Theme Three: Supporting an evolving academic enterprise

Strengths in the area of support included high quality and dedicated staff and strong IT staff support. High levels of weaknesses were noted in the SWOT surveys in this area, including budgeting, contracting and hiring processes, problems with leadership, issues of governance, poor facilities, lack of communication and bureaucratic gridlock. Opportunities included improved communications in the areas of alumni relations, branding, institutional advancement, and expansion of the NPS Foundation. Threats included need for infrastructure support, continuing budget uncertainties.

January 22, 2008

From: President, Naval Postgraduate School
To: Mr. Pete Dausen, Director of Base Operations
Captain Kathryn Hobbs, Dean of Students
Mr. Kevin Little, Comptroller
Ms. Lynn Murch, Command Evaluation

Subj: STRATEGIC PLAN

The NPS Strategic Plan is now finalized and is being prepared for publication. We will be discussing the metrics framework at our January 25, 2008 meeting of the Academic Policies and Plans group. The Provost and I will review the final proposed framework and move to implementation. We now have a strategic plan in place, endorsed by our Board of Advisors, the Chief of Naval Operations, and the Secretary of the Navy. It was vetted through Faculty Council and numerous committees on campus with nearly everyone given the opportunity to comment. We have made good progress in this last year and I thank you for your contributions to that process.

I would like to take the planning process to the next level of campus engagement by asking each of you to align your areas' plans with the institutional plan. Some of you already have formal strategic plans, while others have more informal mechanisms for planning. Each of the key administrative and academic support areas of NPS should have a formal strategic plan that should be aligned with the four goals of the institutional plan. For those of you who already have strategic plans, please take this as an opportunity to review your plans and update as necessary.

Each plan should be responsive and tailored to your unique challenges and opportunities, while at the same time using common touchstones from the NPS plan: Reference to our mission statement, direct reference to each of the four strategic goals of the university plan, and a common framework of goals, metrics or milestones, engagement with your stakeholders, assessment, and improvement. As with our institutional planning process, the process in each of your areas should embody principles of collegial consultation, management effectiveness, and aspirations that are both realistic and inspire NPS to a greater level of accomplishment.

I would like to proceed using a phased approach which will begin with submission of a strategic planning outline. This will give us an opportunity to discuss the process you have defined, and our expectations for next steps. If needed, I will be glad to meet with you to discuss any questions you might have. Please send Dr. Christine Cermak your plan outline by February 29, 2008.

The final plans for your areas should be completed by May 30, 2008. Thank you again for contributions in setting the course for NPS' future.

DANIEL T. OLIVER

C: Provost Ferrari
Chief of Staff Smarsh

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Type	Name	Modified	Modified By
	Memos	7/11/2009 2:29 PM	Horvath, R (Fran) (CIV)
	Metrics and Other Data	7/28/2009 8:09 AM	Horvath, R (Fran) (CIV)
	Strategic Planning Council Agendas	10/8/2008 7:13 AM	Horvath, R (Fran) (CIV)
	Strategic Planning Council Minutes	10/8/2008 7:14 AM	Horvath, R (Fran) (CIV)
	Draft EER Meeting List 9-27-10	9/28/2010 10:00 AM	Horvath, R (Fran) (CIV)
	Goal 1	1/25/2010 5:05 PM	Horvath, R (Fran) (CIV)
	Goal 2	1/25/2010 5:05 PM	Horvath, R (Fran) (CIV)
	Goal 3	2/17/2010 3:15 PM	Horvath, R (Fran) (CIV)
	Goal 4	2/17/2010 3:14 PM	Horvath, R (Fran) (CIV)
	Strategic Plan Final 2008	10/7/2008 10:07 AM	Horvath, R (Fran) (CIV)
	WASC SPC Update - Prep 9-27-10 - Short	9/28/2010 10:00 AM	Horvath, R (Fran) (CIV)
	wasc2010 AMP	9/28/2010 10:00 AM	Horvath, R (Fran) (CIV)
	wasc2010 Concluding Thoughts	9/28/2010 10:00 AM	Horvath, R (Fran) (CIV)
	wasc2010 RAP Framework	9/28/2010 10:00 AM	Horvath, R (Fran) (CIV)

The San Francisco Chronicle (California) - May 18, 2008 Sunday FINAL Edition

Navy's Monterey school is lab for terror war

Jim Doyle, Chronicle Staff Writer
Sunday, May 18, 2008

(05-18) 04:00 PDT Monterey --

In the 1920s and 1930s, silent film stars Charlie Chaplin and Jean Harlow threw lavish parties and skinny-dipped in the Roman plunge of the Hotel Del Monte near the Pacific's sandy shores.

The hotel's swimming pool has long since been filled with sand, and Marine sentries stand guard at the gates of what is now the Naval Postgraduate School - an institution that since 9/11 has expanded rapidly as a think tank, laboratory and testing ground in the war against global terrorism.

"Ten years ago, people thought of us as the school that gives master's degrees to naval officers. We're so much more than that," said Provost Leonard Ferrari. "Even our own Navy doesn't understand all the things that we do."

The school has become a major research facility with laboratories embedding artificial intelligence in aerial drones, building electromagnetic railguns that allow warships to fire projectiles farther and faster than any ship in today's fleet, testing robots that dock in space to help refuel satellites, and developing space-based lasers that are reminiscent of "Star Wars" gunships.

Researchers are field testing unmanned vehicles, pint-size subs and fast boats in Monterey County's hilly terrain and reservoirs, and working closely with Lawrence Livermore National Laboratory to test a new generation of radiation detectors capable of spotting "dirty bomb" components in cargo containers.

And that's just the stuff they can talk about.

In recent years, the Pentagon and private defense contractors have poured hundreds of millions of dollars into research projects at the school - through low-key funding that has grown 20 percent annually - reaching more than $85 million this year.

"Today, the Naval Postgraduate School touches every continent on the globe," said retired Vice Adm. Daniel Oliver, the school's first civilian president. "We have become one of the nation's top 100 research institutions."

Diverse array of disciplines

The school's scientists and experts are at the forefront of many disciplines - not only creating futuristic combat systems, but also focusing on such pressing issues as how to rebuild failed states and how to best deliver humanitarian relief.

Wieslaw Maslowski, an oceanographer, recently predicted that global warming will cause the Arctic to experience ice-free summers as early as 2013. William Colson, a physicist, is exploring the potential use of free electron lasers on warships to shoot down incoming missiles. Cynthia Levine is a leading practitioner of computer security. Nancy Haegel developed a "friend-or-foe" patch for soldiers that emits an infrared signature to deter friendly fire incidents during nighttime operations.

One of the school's joint projects with Lawrence Livermore lab involves work on establishing a wireless network around San Francisco Bay, enabling Coast Guard boarding teams to transmit sensor data to scientists at the lab who can analyze spectrographs to determine whether ship cargo poses a threat. They are also experimenting with "drive-by detection" methods to determine from a distance whether a vessel is carrying a nuclear device. Similar work is being done to deploy radiation detectors on the U.S.-Mexico border.

Still other researchers are exploring the use of ultra-wideband, a radar imaging technology that enables remote sensors and other surveillance equipment to see through walls. One plan is to detect electromagnetic emissions, no matter how small, from nuclear fission-related activity by North Korea and other nuclear states.

Historic setting

The Naval Postgraduate School was founded in June 1909 as the Naval Academy's school of marine engineering in Annapolis, Md. It moved to Monterey in 1952, in part to distance itself from the influence of Washington politics.

It now is on the site of the Hotel Del Monte, built in 1880 by railroad pioneer Charles Crocker as a resort that became popular among industrialists, business executives and celebrities. Destroyed twice by fire, the resort was rebuilt in 1924 in a Spanish Revival architectural style. Part of the hotel currently serves as the school's administration offices.

The school's 627-acre campus, whose clusters of classroom and laboratory buildings echo the hotel's red-tile ambiance, is a stone's throw from downtown Monterey. And its lush, botanical gardens are still full of exotic, tropical plants and Canada geese.

School's expanding role

Since its founding almost 100 years ago, the Naval Postgraduate School's primary mission has been to enhance the technical competence of naval officers. But the school is moving beyond its traditional role and is opening its doors to civilians from key government contractors as well as from federal agencies such as the Department of Homeland Security, the State Department and various intelligence-gathering operations.

It was the first university to offer a master's in homeland security. Among its 1,800 students are 250 from the armed services of other nations. Its faculty boasts not only meteorologists and aeronautical engineers, but also historians, political scientists and economists. Offerings include seminars on guerrilla warfare and terrorist financing, cyber-defense, undersea warfare and Islamic fundamentalism, along with crash courses focusing on hot spots where officers will be deployed.

Andrew Marshall, the Pentagon's futurist, has asked the school to ponder such weighty questions as: In what direction as a society and world power is China going?

"We are all very conscious that it's not just an academic exercise," said David Tucker, a former Foreign Service officer for the State Department who teaches courses on terrorism at the Monterey campus. "We apply academic research to the type of real problems that no other institution's students have. For our students, it's a very practical business of fighting terrorism. It's something that distinguishes us as an institution."

Faculty and students who specialize in "hastily formed networks" were among the first to respond to Hurricane Katrina, setting up a communications web for emergency officials when phone and computer lines in New Orleans faltered.

"Our Ph.D.s are growing, our civilian enrollments are growing. Our research is growing," Oliver said. "We are here to ensure that our future leaders in national and global security have the knowledge to prevent wars if possible, but to win wars if necessary."

High-tech applications

But it's the school's commitment to research with high-tech applications that is most eye-catching.

One major effort involves collaborating with Lawrence Livermore lab to establish the National Security Institute to pursue research and development - with a focus on surveillance, remote sensing, and defeating improvised explosive devices. UC Santa Barbara, a leader in

nanotechnology and basic research for the military, is also participating in this joint venture.

The Monterey researchers have also increased their projects for U.S. intelligence agencies. For example, they are exploring ways to protect computer networks, including methods to "harden" critical infrastructures such as power grids against terrorist attacks. And they have worked with the National Security Agency to develop computer search algorithms to monitor suspected terrorists. They are also examining various scenarios forecast by the intelligence community.

On the 'bleeding edge'

"Over the last few years, we've been branching out into new areas that we haven't pursued in the past," said Dan Boger, the school's dean of research.

He said the school has developed "bleeding-edge technologies" for the Army's Special Forces and the Navy SEALs - producing reliable communications that have a low chance of being intercepted, and sensors that provide real-time data that is relayed to battlefield decision-makers. Students who have served as military officers in Afghanistan and Iraq have also devised warlike scenarios in which new or custom equipment such as small, handheld communications devices are field tested and evaluated.

During a recent tour of the school by The Chronicle, a Navy lieutenant could be seen testing a virtual-environment training tool that simulates a terrorist attack on a naval warship.

He was trying to determine whether an approaching vessel was a combatant with a rocket-propelled grenade or a fisherman before squeezing off any rounds from a virtual 50-caliber machine gun.

Other researchers are studying the ways that acoustic waves propagate underwater and can be used by submarines to hide.

They are also examining the effects of low-frequency active sonar used to detect submarines, and exploring whether there are other methods for Navy warships to train while reducing the risk to marine mammals.

In another laboratory, researchers are adding artificial intelligence to an unmanned submarine the size of a golf bag that can detect the shapes of explosive mines in a harbor. By embedding the sub with autonomy, its sensors can help it avoid underwater obstacles.

"What allows this stuff is the miniaturization of computers," said Doug Horner, a former Navy SEAL who serves as the associate director of the autonomous vehicles laboratory. "We're able to do things that we couldn't have done 10 years ago."

One of Horner's key projects is a modified Scan Eagle, an aerial drone with a 10-foot wingspan and a streaming video camera that is being designed to provide surveillance on land and river patrols and covert operations.

Anthony Healey, who chairs the school's department of mechanical and aeronautical engineering, said the pilotless aircraft are useful "any time you want an eye in the sky to help you."

"This is not made in China, but the Chinese would love to get their hands on it," he said.

Space-based lasers

In another area of the facility, scientists are conducting futuristic research on space-based laser technology, with the aim of being able to identify and hit any target with pinpoint accuracy as well as to improve satellite imagery and laser communications, using high bandwidths to relay vast amounts of sensor data.

If the research ever becomes reality, field commanders envision a network of twin-mirror satellites that can relay the high-energy beams of ground-based lasers to any corner of the globe.

The Bifocal Relay Mirror Spacecraft project's potential military applications include detecting and identifying the use of chemical warfare agents, spotting installations that have been camouflaged, lighting up a battlefield at night, and detecting aircraft as well as emissions from underground structures and bunkers.

Headed by spacecraft designer Brij Agrawal, it is being funded by the National Reconnaissance Office and the Missile Defense Agency, and enables researchers to use a $10 million "inertial reference unit" to simulate spaceflight and find ways to correct jitters on fast-moving satellites. They are also focusing on laser beam control, using adaptive optics to correct for disturbances in the atmosphere that can compromise either the fine-point accuracy of a laser beam, or the imagery it transmits.

In a basement lab, researchers are creating docking mechanisms for small robots that are roughly the size of the robot R2-D2 in filmmaker George Lucas' mythical "Star Wars" franchise. The robots, once joined, can multiply their power to communicate, transmit images and attend to other chores. Powered by lithium-ion batteries, the robots use compressed-air thrusters and gyros to navigate on an epoxy floor made for race car pit stops. The docking devices were used last year on the military's Orbital Express satellite, a test flight for robotically refueling satellites.

School's value questioned

A decade ago, politicians and developers eyed the Monterey campus' pricey real estate, questioning the school's purpose and the value of its programs.

Some critics question the school's new direction and quiet transition, calling it a duplication of programs already offered by the Department of Defense and civilian institutions.

They point out that the Navy already has the Naval War College in Newport, R.I., where midcareer and senior officers can pursue a graduate program in international studies, policy and conflict.

Provost Ferrari and the Navy's top brass defend the school's courses and research programs.

"This is a highly specialized education," Ferrari said. "It's a lean situation. We don't have a football stadium. When all is said and done, I think we're pretty cost-efficient."

"This is an important part of the Navy's future," said Adm. Patrick Walsh, vice chief of naval operations.

Walsh, a former Navy fighter pilot whose deployments have included tours of duty in the Middle East, said today's naval officers need not only the technical skills to operate electronic warfare systems, but also in-depth knowledge of the world's flash points.

"We can be the force that kicks the door down if necessary," he said. "We're also capable of providing humanitarian aid."

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The San Francisco Chronicle (California) - May 18, 2008 Sunday FINAL Edition

Old hotel that houses school was high-class hideaway

BYLINE: Jim Doyle

SECTION: Main News; Pg. A15

LENGTH: 429 words

In its heyday, the Hotel Del Monte encompassed 20,000 acres of botanical gardens, mystical beaches and undeveloped forests on the Monterey Peninsula.

It was touted as California's largest resort complex and one of the world's pre-eminent luxury destinations for travelers and sports aficionados.

The fabled resort, whose original property covered portions of what is now the city of Monterey and all of Pebble Beach, drew Hollywood legends Clark Gable, Carole Lombard and Marlene Dietrich, President Theodore Roosevelt, aviation pioneers Amelia Earhart and Charles Lindbergh, and novelist and adventurer Ernest Hemingway.

The hotel, built in 1880 by railroad pioneer Charles Crocker as a wooden Gothic structure, was destroyed by fire in 1887. It was rebuilt, but it would burn again in 1924. Its latest incarnation in Spanish Revival architecture still stands - as Herrmann Hall of the Naval Postgraduate School.

The old Hotel Del Monte was the beginning and endpoint of a wondrous 17-mile driving and horseback riding excursion that passed Cannery Row and Pacific Grove before winding through deep groves of Monterey pines and cypress trees in the fog-ridden Del Monte Forest, and then along the rocky shoreline in sight of shallow tide pools to the exclusive Hotel Del Monte Park Reservation - the precursor to the Pebble Beach Lodge.

By 1915, the hotel had fallen on lean times. Samuel F.B. Morse, a former All-American quarterback for Yale University, was hired by the Pacific Improvement Co. to liquidate the hotel and other railroad properties.

Instead, he created an unrivaled sports empire with facilities for equestrians, fishermen, yachtsmen, golfers and race car drivers, along with tennis courts, polo fields and swimming pools.

Morse built the world-renowned Pebble Beach Golf Course and bought the Hotel Del Monte himself, with the backing of San Francisco banker Herbert Fleishhacker. He subsequently built more golf courses including Cypress Point and the Monterey Peninsula Country Club.

The Hotel Del Monte reached its zenith during the Jazz Age and the Roaring Twenties, and its popularity continued into the 1940s. Frequent guests included Mary Pickford, Charlie Chaplin, Bob Hope, Bing Crosby and Ginger Rogers.

In the late 1940s, Morse sold the once-famous hotel and more than 600 acres of surrounding land to the U.S. Navy and focused his business operations on Pebble Beach, where he further developed the Del Monte Forest into an enclave of luxury homes.

The Naval Postgraduate School, formerly in Annapolis, Md., moved in 1952 to the old Hotel Del Monte site.

Monterey County Herald (California) - May 18, 2008 Sunday

Memorial Day concert set at Naval Postgraduate School

BYLINE: The Monterey County Herald

SECTION: BREAKING

LENGTH: 169 words

The Naval Postgraduate School joins the Monterey Bay Symphony, Monterey Symphony and Monterey Opera in hosting a free Memorial Day concert on the lawn beginning at 2 p.m. May 26.

This concert will be the first time the two symphonies have ever performed together. Both Dr. Carl Christensen, music director of Monterey Bay Symphony, and Max Bragado-Darman, music director of the Monterey Symphony, will conduct parts of the concert. The program will include Robert Padgett's "Fanfare for the Eagles," which won the Monterey Symphony competition for fanfare compositions, with Padgett joining the orchestra on violin.

Monterey Opera is sponsoring baritone-magician Patrick Bell, who will simultaneously perform two arias and magic tricks. Bell will also open the concert by singing the national anthem.

NPS gates open at 10 a.m. for the general public, which is asked to use the Third Street entrance. Parking is limited and attendees are encouraged to arrive early. Photo ID will be required of everyone over the age of 15.

From The Lexington Herald Leader (Kentucky) - May 18, 2008 Sunday

7 Democrats seek shot at McConnell

SECTION: CITY & REGION; Pg. B3

LENGTH: 1469 words

1. How will you address the difficult issue of illegal immigration? 2. How long should the U.S. maintain significant numbers of troops in Iraq? 3. What should Congress do about the escalating cost of gasoline?4. What should Congress do to make health care more accessible and affordable?5. How would you influence the funding and timeline for disposal of aging chemical weapons at the Bluegrass Army Depot in Richmond?

Michael G. Cassaro Born: Feb. 7, 1956 Residence: Prospect Occupation: Physician Education: Bachelor's degree in civil engineering, University of Louisville; medical school, U of L Family: Wife, Donna; two children. Public office: None Web site: www.cassaroforsenate.com
Illegal immigration is costly to American taxpayers. I would support legislation to provide law enforcement agencies with the means to prosecute employers that hire illegal immigrants and to streamline the process for immigrants to come legally to America. We should be there for the shortest amount of time that is logistically possible. The Iraqis are selling their oil by which they can fund Iraqi security forces. I would have voted in 2003 against funding this war. Congress needs to stop the economic policies of Bush and McConnell that have devalued our dollar. The weaker the dollar, the higher the cost of gasoline. Instead of legislating a gas holiday, Congress must distance itself from oil interests. We must improve our health insurance environment. Congress should enact legislation that makes health insurance policies portable, tailors health insurance policies to meet individual health care needs and holds insurance companies accountable for denying medical care. As a Democratic senator, I will see to it that this project remains a top priority with the new Democratic administration. I will fight to see that Kentucky companies get the remaining contracts, hire Kentucky workers and pay prevailing wage.

Greg Fischer Born: Jan. 14, 1958 Residence: Louisville Occupation: Chief executive officer of Dant Clayton Corp., which makes aluminum bleachers; founder and chairman of Iceberg Ventures, a Louisville investment firm Education: Bachelor's degree in economics, Vanderbilt University Family: Wife, Alexandra; four children Public office: None Web site: www.gregfischer.com

America is a land of immigrants, and we must have fair, consistent policies for those who wish to legally pursue citizenship. At the same time, we must secure our borders against those who wish to enter illegally. There is no military solution to Iraq, and the United States cannot maintain an endless campaign in Iraq. Our troops have done everything we've asked them to do. Now we must immediately begin to withdraw troops. Long-term, we must raise automobile fuel efficiency standards, provide incentives for energy conservation and launch a crash program to develop new, renewable, non-polluting sources of energy, such as solar, wind, bio-fuel,

hydrogen, geothermal and others. Congress must reform our health care delivery system to insure that every citizen has access to affordable, high-quality health care. Reforms should be aimed at reducing the administrative cost of health care and increasing the focus on preventative care. Expediting the disposal of chemical weapons at the Bluegrass Army Depot would be one of my first priorities. I will impress upon the president, my colleagues in Congress and the Department of Defense just how important this issue is.

William Bruce Lunsford Born: Nov. 11, 1947 Residence: Louisville Education: Bachelor of arts degree, University of Kentucky; law degree, Northern Kentucky University Occupation: President of Lunsford Capital, which invests in small companies; has $5 million to $25 million in Thoroughbreds and produces movies through Hart-Lunsford Pictures Public office: None Family: Divorced; three daughters, three grandchildren Web site: www.bruce2008.com

I support comprehensive immigration reform that secures our borders and cracks down on employers who hire illegal immigrants. Undocumented workers in good standing must pay fines, learn English and get at the back of the line to become citizens. We must put pressure on the Iraqis to police themselves so we can redeploy our combat troops as soon as it can be done adequately and safely. The Iraqis must understand that maintaining law and order is their responsibility. We must implement both short- and long-term strategies to reduce energy prices. I support a gas tax holiday paid for by oil companies. We must also push companies toward using less oil through incentives and develop alternative energy technology. Congress needs to enact universal health care coverage so all Americans can afford medical care. We must work to expand access to quality health care in rural Kentucky and give Medicare the ability to negotiate for lower prescription drug prices. Mitch McConnell has been promising to dispose of the weapons for years and has yet to deliver. I will proactively work to secure the funds to complete the disposal of these chemical weapons ahead of the current 2017 deadline.

James E. Rice Born: Feb. 9, 1968 Residence: Campbellsville Occupation: Warehouse worker for Amazon.com Education: Bachelor's degree, Eastern Kentucky University Family: Single Public office: None Web site: www.jamesrice.org

We need to close the borders. It's a matter of national security. We have looked away for years to get cheap labor. Illegal immigrants already are here; we may have to find a pathway for leadership. We're to the point of where we may need to put more money in the training of Iraqi soldiers and police. Once they are fully trained, we can withdraw our troops. We can't afford to pull out at once. Short-term, we need to drill in Alaska and the Gulf of Mexico to put more oil on the market. Long-term, we need to get our scientists and universities involved so we are not dependent on OPEC. I'd like to see more education to promote good health. We have to bring everyone involved together and find ways to make it more affordable. We have the best health care in the world, and it's not accessible to anyone. They need to be destroyed in a safe manner. The No. 1 priority is to keep the safety of the citizens in mind.

Kenneth Stepp Born: Sept. 8, 1947 Residence: Manchester Occupation: Lawyer **Education: Law degree, University of Georgia; master's degree, Naval Postgraduate School** Family: Wife, Wilma; three children Public office: None Web site: www.steppforcongress.blogspot.com

Immigration must have strict law enforcement. People with special knowledge should have special immigration quotas. Any "path to citizenship" should require 100 hours of community service. We should withdraw all U.S. troops from Iraq quickly. Iraq has cost over 4,000 American lives, tens of thousands of Iraqi lives, left Iraq divided,and has cost the U.S. over $500 billion. We should encourage more refineries and more drilling. We should quit cooperating with OPEC and keep oil receipts secret. We should expand existing programs such as Medicaid, Medicare, VA, children's medical services, K-CHIP and S-CHIP. I would try to speed up the disposal of aging chemical weapons at the Bluegrass Army Depot with more funding and a shorter timeline.

David Lynn Williams Born: July 3, 1938 Residence: Barren County Occupation: Retired; was co-owner of now-defunct Williams Construction Education: Hiseville High School Family: Wife Joann; five children Public office: None Web site: None

I believe treating everyone fairly. We shouldn't run anyone down. I'd bring them home in 30 days. We should build cars with natural gas. We have plenty of natural gas. I'd work with insurance companies to make treatments and drugs available for everyone at cheaper prices. I'd get rid of them as soon I could.

David Wylie Born: Aug. 14, 1968 Residence: Harrodsburg Occupation: Former U.S. Postal Service employee. Education: Ohio School for the Deaf Family: Single Public office: None Web site: www.wylieforsenate.com

I don't have any problem that they come to America as long as illegal immigrants bring their green cards. If they want to work in America then I think they should pay taxes just like our American citizens. I will vote to bring home the vast majority of U.S. troops now. All our troops should be out in less than a year. I oppose a gas-tax suspension. I prefer the gas tax 365 days a year until we get our economy back on track. Congress needs to set up a subcommittee to develop issues on how to fix the cost of gasoline. We need to improve our health care coverage for every American by lowering costs. Congress should set up a subcommittee to develop ways to do this. We need to set up a subcommittee on this to set a time frame to do this.

The Naval Postgraduate School's Academic Catalog

View the Academic Catalog

The HTML-based, searchable version of the Academic Catalog is available here. This link will open in a new browser window.

Download the PDF Version

A downloadable, PDF version of the catalog is also available and can be saved or printed on your own computer (4mb, PDF).

Past Edition Archives

All available online versions of the catalog are listed.

Printed Catalogs

For a printed catalog, send a request to the address below and include a check or money order for $10 per catalog to cover shipping and handling. Make payable to "U.S. Treasurer."

Naval Postgraduate School
Admissions Office
Attention: Catalogs
1 University Circle, He-022
Monterey, CA 93943

Click to read more

NPS Master Curriculum Chart

The Master Curriculum Chart is the Registrar's official listing of active and pending NPS curricula. Updated quarterly, the chart includes details associated with curriculum management and degrees awarded.

Download Master Curriculum Chart (Last updated on 09/09/2010)

NPS faculty and staff may obtain poster size printouts of this chart from Registrar at registrar@nps.edu.

Please send catalog corrections or suggestions to the NPS Registrar.

FACULTY HANDBOOK

Naval Postgraduate School
Monterey California

June 2006

Page 14 & 15 of Faculty Handbook

Some faculty members hold dual appointments. In such cases, one of the Department/Group Chairs (or Dean of the GSBPP) is assigned the primary responsibility for supervisory tasks such as mentoring and making recommendations for pay raises and promotion. The Department/Group/GSBPP is called the "home" Department/Group of the faculty member.

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Support Faculty Support faculty are non-tenure track faculty who provide a professional-level service function that supports the teaching and research mission of NPS and the administrative duties central to these functions. Support faculty can perform a wide range of activities such as distance learning instruction, research, public service, academic support duties in such areas as student services, student recordkeeping, library functions, and administrative oversight of the business and academic operations of NPS.

Support Faculty positions generally require a Master's degree in an appropriate field, relevant experience, and personal skills specific to the particular appointment. Support faculty appointments are made by the Provost after a written application from the appropriate Dean, Institute Director, or Associate Provost, containing a position description (including the proposed position title); a description of the duties of the position; a clear description of why the duties cannot be done by a Federal civilian staff member, a contractor, or a term employee. Terms for Support Faculty shall not exceed three years, with reappointment possible with satisfactory performance. (Formal evaluation must be done before requesting a reappointment.) Only the Provost can approve the establishment or filling of a Support Faculty position. Positions must be approved in writing by the Provost *before* recruiting can begin.

There are two types of support faculty:

- Academic Support Faculty. Academic support faculty provide professional support in the instructional or research activities of NPS.
- Administrative Support Faculty. The administrative support faculty provide professional support to students and faculty , and perform administrative duties that relate directly to management policies and procedures, or the general business and administrative operations of NPS. Administrative Support Faculty report directly to a Dean, an Institute Director, Associate Provost or the Provost. They are not members of a specific Department/Group.

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Program Officers/Academic Associates. The Program Officer/Academic Associate team is an organizational entity unique to the Postgraduate School. The team is responsible for developing, maintaining, and updating curricula to accommodate the needs and academic requirements of the Navy and the Department of Defense and for monitoring the planning and progress of individual students through a program of study.

A military officer of suitable experience and rank is assigned as the Program Officer, serving as the executive director of the office. One or more assistant program officers may also be assigned to a Program Office and responsibility for a curriculum may be delegated to an assistant.

The part-time duty as the Academic Associate is assigned to a civilian member of the faculty thoroughly familiar with the Naval Postgraduate School, the Navy, DoD, and other sponsoring agencies. Where the Program Office supports multiple curricula, more than one Academic Associate may be appointed and assigned responsibility for specific curricula. (On occasion, the Academic Associate may be a military officer.)

The Program Officers are responsible to the Director of Programs for the overall operation of their respective Program Offices. The Academic Associates are responsible to the Associate Provost for Academic Affairs, through their Department or Group Chair, for the integrity of the academic features of the Program Office operation. As a consequence of this parallel arrangement, the Program Officers and Academic Associates are close professional associates and their relationship should develop accordingly.

Academic Associates are appointed to this duty by the Provost, on the recommendation of the Associate Provost for Academic Affairs and the Director of Programs, for specific terms not in excess of three years. (Reappointments are possible.) The budgeted time allotted to perform the duties of Academic Associate are determined by the Associate Provost for Academic Affairs.

General responsibilities associated with the Program Offices are described below. Specific responsibilities of the individuals are covered in either Naval Postgraduate School Instructions or policy directives. Their general responsibilities are:

- Curriculum Sponsor Liaison. The Program Officer/Academic Associate team works with program sponsors and consultants to define pertinent sponsor needs, including professional objectives; to delineate projected utilization of program graduates; and to consult with Department/Group Chairs (or Dean of the GSBPP) and faculty to propose useful courses and curricula. These plans and projections consider the impact of developing technology, evolving bodies of knowledge, and changing mission of the Navy and other sponsors. They are prepared, reviewed, and updated during sponsor reviews of curricula.
- Curriculum Development and Management.
    - The Program Officer/Academic Associate team, working with the NPS faculty and staff, develops and maintains a statement of professional objectives for each curricular program under their purview. Consistent with these objectives, they establish and keep current appropriate standard curricula.
    - Ensuring that the curriculum meets the professional needs of the Navy or other sponsors rests primarily with the Program Officer. Ensuring that each student's curriculum meets curriculum degree requirements and that the selection and sequence of courses are in accordance with Department/Group or degree requirements rests primarily with the Academic Associate.
    - The Program Officer/Academic Associate team develops and maintains procedures for effectively monitoring programs for their continuing adherence to professional and academic requirements. These procedures may be partially standardized for all programs. The Program Officer holds primary responsibility for collaborating with the Naval Postgraduate School staff, sponsors, and OPNAV and for adopting general procedures to meet the particular needs of individual programs. The Academic Associate is responsible for maintaining liaison with academic Departments/Groups, sustaining the relevance of current course content, and fostering faculty participation in the development of useful new courses and programs.
    - In the development of new curricula or major revision of existing ones, the Program Officer/Academic Associate team includes each concerned academic Department or Group in the deliberations leading to formulating each proposal.
    - Both the Program Officer and Academic Associate are knowledgeable with respect to “transfer field” programs, i.e., other graduate programs appropriately related to those

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DEPARTMENT OF THE NAVY

NAVAL POSTGRADUATE SCHOOL
1 UNIVERSITY CIR
MONTEREY CA 93943-5000

IN REPLY REFER TO:
NAVPGSCOLINST 1550.1D
03
7 Jul 07

NAVPGSCOL INSTRUCTION 1550.1D

Subj: GUIDELINES FOR CONDUCTING CURRICULAR REVIEWS

Ref: (a) SECNAVINST 1524.2B

Encl: (1) Curricular Review Summary Brief
(2) Curricular Review Report

1. Purpose. To provide guidance for the conduct of biennial reviews of Navy sponsored fully funded graduate educational programs at the Naval Postgraduate School (NPS) and Civilian Institutions (CIVINS).

2. Cancellation. NAVPGSCOLINST 1550.1C. This instruction has been revised and should be read in its entirety.

3. Background. The mission of NPS is to provide high-quality, relevant and unique and advanced education and research programs to increase the combat effectiveness of U.S., Allied, and Partner armed forces and enhance the security of the United States. To accomplish this goal, educational programs are structured around curricula of study that fulfill the present and future needs of the Navy and other stakeholders for technical and managerial education. The various curricula are designed to educate officers by means of specific Educational Skill Requirements (ESRs). Educational Skill Requirements define a set of skills and abilities that officers should possess to function effectively in a given subspecialty-coded billet. The ESRs are developed by the curriculum's Sponsor and/or the designated Subject Matter Expert (SME) in coordination with NPS. Considering the diverse enrollment of NPS as both the Navy's Corporate University and one of the Department of Defense's (DoD's) critical research universities, joint stakeholders play an increasingly important role in defining the requirements for certain curricula. These special joint needs are considered and evaluated as part of defining overall curricula content. Additionally, the curricular review process serves to meet the overall need for continuous improvement of the curriculum and its contents. Reference (a) directs biennial curricular reviews to ensure continued quality of education, and provides guidance to be used as a touchstone during each curricula review. This instruction assigns responsibility for specific curricular review actions and outlines a structured sequence of events that comprise this continuing cycle of review.

4. Responsibilities. The President is charged with implementing the Navy's graduate level education programs; acting as academic coordinator for all Navy graduate education programs and maintaining

approved curricula. The President and Sponsor/SME will jointly recommend approval of ESR's and validate curricula at the completion of the formal review. The Sponsor/SME is responsible for defining the current and future community needs in terms of ESRs. Joint stakeholders are invited to attend the formal review and make recommendations to ESR content. NPS staff and faculty will carry out the following curricular review actions for Navy sponsored programs taught at NPS. (Paragraph 5.b. applies to programs taught at civilian universities.):

a. The Director of Programs is responsible for coordinating and standardizing all curricular reviews.

b. The Graduate School Deans are responsible for the direct oversight of the curricular review process and leadership of the curricular review team within their school, which includes the Military Associate Dean, Associate Dean(s), Department Chair(s), Academic Associate(s) and Program Officer(s). The Dean and the Department Chair(s) are responsible for carrying out specific curriculum improvements identified during the review process.

c. Academic Associates and Program Officers work as a team providing the primary interface between the curriculum Sponsor/SME/Stakeholders and NPS.

(1) Academic Associates are responsible for reviewing and matching the delivery of education to SME requirements as outlined in the ESRs. The Academic Associate ensures the curriculum meets NPS degree requirements and is consistent with accreditation standards.

(2) Program Officers will maintain regular communication with the Sponsor/SME/Stakeholders as the NPS representative. Program Officers are responsible for initiating action and assembling data for the curricular review process. If a Program Officer is not assigned to the curriculum, then the Academic Associate will perform this function.

5. Procedures.

a. Curricular reviews will be conducted biannually. These reviews should focus on providing the highest quality advanced education tailored to meet specific ESRs for a given curriculum. The curricular review process includes revision and validation of ESR's by NPS and the Sponsor/SME, and incorporates the recommendations of the joint stakeholders when possible. Participants will develop ESRs that reflect current and future graduate education needs of officer communities and DoD personnel. The curricular review process occurs throughout the two-year period between formal reviews and includes the collection of appropriate data, such as accreditation documents.

Additionally, the following milestones establish a structured approach to accomplishing required tasks in a timely manner:

(1) Twelve Months Prior. Program Officers and Academic Associates begin coordination with the Sponsor/SME/Joint Stakeholders on issues for the next curricular review. All action items from previous reviews should be complete or become discussion/action items for the next review. Dialogue with the Sponsor/SME should occur on a regular basis.

(2) Eleven Months Prior. Program Officers and Academic Associates will review and examine subspecialty coding related to curricula to determine strategic planning guidelines and initiatives with the Sponsor/SME and major manpower claimants. This review will identify graduate education requirements in the short and long terms. The Program Officers and Academic Associates will begin collecting required internal data such as exit and alumni interviews, accreditation results, and course content for analysis.

(3) Seven Months Prior. The school Dean chairs the internal curricular review. The Director of Programs, the school's Military Associate Dean, Program Officer, Academic Associate and Department/Group Chair(s) assess the quality and relevancy of the curriculum. This assessment is the objective of the internal curricular review and basis for the upcoming formal curricular review.

(4) Two Months Prior. Program Officer and Academic Associate consult with the Sponsor/SME/Stakeholders on the status of the review and gather expected issues. This consultation may be done via VTC, but it is recommended that the Program Officer and Academic Associate visit the Sponsor/SME/Stakeholders. Action plans will be drafted for the expected issues.

(5) One Month Prior. Program Officer and Academic Associate pre-brief the President, Provost, Associate Provost for Academic Affairs, and the Director of Programs. The pre-brief will include a review of issues and the proposed presentation to the Sponsor/SME. Issues should be clearly defined and coordinated with the Sponsor/SME. Enclosure (1) is a guideline for developing the presentation.

(6) Formal Curricular Review. The formal curricular review will be held at NPS and will include:

(a) Tour of the school's classrooms, laboratories, and research facilities, as appropriate;

(b) Meeting with students (to include thesis briefs as appropriate);

(c) Meeting with faculty, and;

(d) A final summary brief of the curriculum status given to the Sponsoring Flag Officer and the President.

(7) The objectives for the above events are listed below:

(a) The tour of the school's classrooms, laboratories, and research facilities allow the Sponsor/SME/Stakeholders to examine equipment and facilities that support the curriculum. The Department Chair, Academic Associate, Program Officer and the research faculty will attend this tour.

(b) The meeting between the students and the Sponsor/SME/Stakeholders allows the Sponsor/SME/Stakeholder(s) to gauge the quality of NPS students, get direct student feedback on the curriculum, and have an opportunity to mentor the students. The Program Officer and Academic Associate will attend this meeting.

(c) There are several objectives for the Faculty/Sponsor/SME/Stakeholder meeting. The Program Officer will lead the meeting. The Dean, Military Associate Dean, Department Chair, Academic Associate, and select faculty will also attend the meeting. The specific objectives are outlined in enclosure (1) and are the basis for the final summary brief.

(d) Lastly, the summary brief will present the President and MAS/SME an overview of the issues discussed during the above events and obtain the President's and Sponsor/SME's final decision on any issues that may need to be resolved. These decisions should be documented in action items.

(8) Within one month after curricular review: Program Officer originates post review letter/report to Chief of Naval Operations (N127) via the Sponsor/SME, and copy to N13. For joint service curricula, NPS will ensure a copy of the post curricular review is also sent to requisite stakeholders. The letter should be structured similar to enclosure (2) and include, as a minimum, general overview, list of attendees, summary of action items and restatement of ESRs. Action items will identify party responsible for action and due date.

(a) The Director of Programs will maintain an up-to-date schedule of curricular review milestones.

b. Civilian Institution (CIVINS) Programs. The Sponsor/SME will review curricula offered through the CIVINS program with the assistance of the Director of Programs and the CIVINS Program Manager. Factors to be considered include a review of the ESRs, how well the universities on the approved list of schools are meeting the ESRs, additions or deletions to the approved list of schools, budgetary constraints and student administrative issues.

The following guidelines are provided to assist in the curricular review process.

(1) Site Visits. In order to assess how well universities are meeting ESRs, and to meet with the students, the Sponsor/SME often conducts site-visits to one or more of the universities on the approved list of schools. These site-visits can be made at any time during the curricular review cycle. NPS will generally send the CIVINS Program Manager and, if desired by the Sponsor/SME, an NPS faculty member, to assist in these site-visits. Coordination with the Commanding Officer, NROTC or other administrative unit, which provides student support, is recommended.

(2) Location. The formal curricular review will be conducted at a location determined by the Sponsor/SME. For programs with a single approved university, it will often be done at that university. Curricula offered through CIVINS, which have a common Sponsor/SME with NPS programs, may be formally reviewed at NPS at the same time as review of NPS resident programs.

(3) Results. The SME will forward results of the review to N00T via NPS within one month after completion of the review. The results should include a general overview of the review, list of attendees, status of new and old action items, a copy of the ESRs and a list of approved universities. For programs reviewed in conjunction with NPS programs, results may be forwarded by NPS to N00T via the primary consultant.

(4) Changes to Approved List of Schools. Changes to the approved list of universities may be made at any time during the review cycle. The Sponsor/SME should forward recommended additions or deletions to the list to 7 via NPS. Justification for changes should address how the university meets (or does not meet) the ESRs, availability of year-round study, proximity to Naval activities that can provide administrative support, and budget considerations.

DAVID A. SMARSH
Chief of Staff

Distribution:
http://intranet.nps.edu/Code00/Instructions/IndexNew.html

SUMMARY REPORT

1. The following is a recommended structure for the Flag Officer, Executive Review presentation to the President, the Sponsor/Subject Matter Expert, and stakeholders. This guidance is provided in the interest of standardizing presentations to the Sponsors/SMEs and stakeholders, and to aid in preparing for preliminary reviews. This list is not intended to be limiting in any way.

a. Provide Summary of Last Curricular Review:

(1) Date of last curriculum review;

(2) Status of former action items;

(3) Any other information relevant to the current review.

b. Issues from Qualitative Curricular Review:

(1) Validate existing ESRs/propose new ESRs, as relevant;

(2) Validate any existing joint stakeholder, i.e. (USMC/USA/USAF/CIV) requirements;

(3) Propose new requirements, as relevant;

(4) Review degree requirements that may be independent of the ESR's.

c. Issues from Quantitative Curricular Review Aspect:

(1) Validate quantitative billet/quota function;

(2) Examine subspecialty inventory versus requirements;

(3) Examine subspecialty code utilization and payback;

(4) Examine joint stakeholder utilization.

d. Issues from Sponsor/SME, Stakeholder and Faculty Curriculum Assessment for:

(1) Design and Execution. The brief should only contain the top-level issues only:

(a) Does execution of curriculum support customer needs;

(b) Quality Metrics/measures (Student surveys);

(c) Accreditation status;

(d) Examine thesis quality and relevance;

(e) Does the curriculum have sufficient resources?

(f) Faculty - quantity and expertise;

(g) Examine internal and sponsor funding;

(h) Evaluate support staff (administrative and technical);

(i) Evaluate equipment and facilities that support the curriculum;

(j) Review research being done by curriculum faculty:

(1) Thesis research;

(2) Faculty research;

(3) Present summary of research capabilities of NPS schools/institutes;

(4) Solicit input from SME/Sponsor/Stakeholder for research opportunities;

e. Examine all new initiatives in view of meeting customer needs from one year to ten years in the future:

(1) Provide status on any Distance/Distributive learning initiatives within the curriculum;

(2) Provide status on any initiatives pertaining to the Learning Continuum as it applies to the curriculum;

(3) Other topics as appropriate (i.e. Centers of Excellence, institute interfacing, industry partnering).

f. Conclusion:

(1) Action item assignment and review;

(2) Summary of assessment;

(3) Required documentation;

2. Course matrices and other details/data pertaining to the curriculum, students, research, etc., should be available at the Executive Summary and all preparatory meetings.

NPS Letterhead

1550
(Code)/(Ser)

From: President, Naval Postgraduate School
To: Director, Total Force Programming and Manpower Management Division (OPNAV N12)
Via: (Sponsor)

Subj: BIENNIAL REVIEW OF (Curriculum Name and Number)

Ref: (a) SECNAVINST 1524.2B

Encl: (1) List of Participants
(2) Recommended ESRs (include signature line for all addressees)
(3) Curriculum Matrix (with quarter hours annotated)
(4) List of Action Items

1. Per reference (a), a detailed review of (curriculum name) was conducted on (date review conducted). Senior participants conducting the review were (names and titles). The curriculum meets (or does not meet) the sponsor's requirements.

2. The following issues were discussed during the review: (Summary of agenda/major items, and findings).

3. (Summary/closing paragraph).

(President)

Copy to:
OPNAV N13
Stakeholders

Encl (2)

NPS ACADEMIC PROGRAM REVIEW
APPENDIX A

DEPARTMENT SELF-STUDY

The self-study is prepared by the department (department faculty) and is descriptive, evaluative and aspirational. It provides basic information on the department, its faculty and programs, gives the faculty's assessment of the department's strengths and weaknesses, and presents the faculty's vision for the future. The self-study is the department's opportunity to scrutinize itself, to acknowledge its accomplishments, assess its flaws, and examine future directions.

The department self-study shall consist of a narrative, generally not to exceed 20 pages, accompanied by appendices with tabular material and supporting documents. The narrative and the appendices shall be designed and organized to cover the following areas:

1. Mission / Strategy / Organization
2. Faculty
3. Research / Scholarship Accomplishments
4. Education Programs
5. Students
6. Resources
7. Assessment and Review

MISSION, STRATEGY, ORGANIZATION

The self-study should describe and discuss the department's mission, its strategy for accomplishing that mission, and how the department is organized to fulfill its mission. The self-study would normally include information and discussion related to the following:

Mission and purpose of the department: What does the department do? Why do you do it? Does the department have a stated mission for itself? How does the department contribute to the university's mission?

Strategy: Does the department have a strategic or operational plan?

Organization: Where is the department located within NPS and the NPS schools? What is the department's internal organizational structure? What are the leadership and administrative positions within the department? Does the current organizational structure align with and support the department's mission and strategy? Provide the history of department chair appointments (since last review) and plans for succession.

Future directions: Are there plans for any significant new departmental initiatives? Describe plans related to faculty hiring, new program or curricula development, new facilities, new research programs or thrusts. What does the department plan to do differently in the future?

FACULTY

The self-study should describe the department faculty, the work activities and accomplishments of the faculty, and department policies and practices related to faculty. The self-study would normally include information and assessment related to the following:

Profile of the Faculty: Number and list of the faculty. Classification of faculty (full/part time, tenure/non-tenure track, academic rank/title, regular/associate/adjunct). Faculty qualifications (masters or PhD degree). Changes in the composition of the faculty over the past five years (new hires, departures, retiring faculty). Faculty demographics (gender, ethnicity, age, citizenship)

Faculty recruitment plan: Identification of future faculty requirements. Specific plans for faculty hiring, including discipline areas, type and level of appointment, hiring schedule.

Faculty contributions to graduate programs: Description of faculty involvement in the graduate education mission of the department, including data related to faulty/student ratios, courses delivered and average course load per faculty, average thesis/dissertation load per faculty, and distribution across department; analysis of department teaching evaluation (e.g., SOF) information.

Faculty development and support: Description of the department's programs and practices to support faculty success. May include practices related to faculty orientation, faculty mentoring and advising, faculty development, faculty review and assessment.

Faculty work policies: Description of the department's polices and practices related to faculty work activities. May include practices related to faculty workload, faculty teaching or course loads, expectations regarding participation in scholarship activities and resultant accomplishments, policies and expectations concerning reimbursable activities.

Faculty vita or data sheets: In an appendix, for each individual full-time department faculty member, provide a biography-bibliography, including employment, education, professional experience and competence, scholarship accomplishments (research activities, publications and presentations, other creative activities).

RESEARCH AND SCHOLARSHIP

The self-study should describe and evaluate the research and scholarship accomplishments of the department over the past five years. The self-study would normally include information and assessment related to the following:

Profile of the research and scholarship accomplishments of the department: Description of faculty research, scholarship and other creative activity. Includes full identification of publications and other scholarship output of the department (faculty and students) during the preceding five years. . Indicators of the academic productivity of the department, such as publications/faculty, trends in scholarship output, type of scholarship products.

Academic orientation: Discussion of the specific intellectual strengths of the department. Description of particular specializations and areas of recognized expertise of the department, including research programs and/or research centers. Assessment of the department in relation to nationally ranked public and private research universities.

Profile of sponsored activities: List of sponsored projects completed. External grants submitted and funded. Reimbursable funds created per faculty.

Involvement of faculty in external academic and professional community: Contributions of the faculty beyond the bounds of NPS, including service and positions in academic associations, boards, committees, professional societies, government or DoD organizations.

GRADUATE PROGRAM

The self-study should describe the graduate education programs of the department, including masters and PhD degree programs, curricula and academic certificate programs. The self-study would normally include information and evaluation related to the following:

Program Objectives: Discuss the objectives of the department's educational program(s), individually and collectively. Are there broad, general goals that determine or influence the specific educational programs the department offers, and the composition and content of those programs?

Curriculum and degree programs structure: Describe all graduate programs offered by the department. Delineate all relevant aspect of program/curriculum structure, including different degrees, tracks, curriculum matrices, core courses, thesis or capstone events, degree requirements, etc. If applicable, describe the philosophy and structure of any qualifying, candidacy, and/or comprehensive examinations used by the department within their programs.

Program sponsorship and delivery: Describe and distinguish among the department's programs with respect to sponsors and sponsorship, resources and funding sources, program delivery mode and location.

Current program profile: Provide a description of the graduate program offered during the most recent academic year in terms of courses provided. The description should delineate the delivery of courses by degree program, location (resident or DL), instructor type (tenure-track, non-tenure-track), instructor qualifications (academic degree level), class size.

Program initiatives: Describe new education programs the department is planning for the future.

NPS Catalog: Departments should make available excerpts of the NPS catalog applicable to their programs. It would be expected that the NPS catalog would be an accurate and up to date source for much department program information.

Course syllabi file: A file shall be maintained in the department and made available to

external reviewers or the administration, if requested. A satisfactory department file of course journals would be expected to serve this purpose.

STUDENTS

The self-study should describe the number, composition and accomplishments of students enrolled in the department's graduate programs, including masters, PhD and academic certificate programs. The self-study would normally include information and evaluation related to the following:

Profile of students: Numbers enrolled, by program. Student type (military/civilian, service, navy community/designator, US/international). Student demographics (age, gender, ethnicity). Enrollment status (part-time, fulltime). Distribution of types of undergraduate degrees obtained. Enrollment trends and/or changes in number and composition of students over past five year.

Preparation of students: Please address the background and level of preparation of the graduate students to pursue a graduate degree within the department. State any steps that are being taken to improve the level of student preparation. Does the department offer any programs to address student preparation (refresher quarter; assessment and remediation of student capabilities related to writing, computer or math skills; guidance to students prior to arrival).

Student support**:** Teaching and research assistantships, if relevant.

Student productivity: Number of theses and dissertations last five years. Assessment of thesis/dissertation quality. Student publications and presentations, Degree completion rate. average time to degree

Graduate profile: Number of degrees granted, graduates by degree program. Subspecialty code utilization. Post-graduation accomplishments of graduates.

RESOURCES

The self-study should address the resources of the department and the adequacy of the resources to sustain a quality academic program. The self-study would normally include information and evaluation related to the following:

Administrative staffing: Identify administrative and support staff personnel/positions in the department and of direct support to the department. Address the adequacy of administrative support both at the department and NPS wide level, including staffing.

Facilities and equipment: Identify space (classroom, research, office, laboratory) and equipment (instructional technology, computer resources, IT, laboratory equipment) resources available to the department. Address the adequacy of space and equipment to the department's needs.

Financial resources: Provide a summary profile of the financial resources of the department during the past five years. The profile should identify

- Total budget
- Sources of budget (NPS mission funds, reimbursable sources, indirect funds, etc.)
- Major expense areas (faculty labor, staff, non-labor)
- Budget associated with major identifiable programs or subunits within the department (e.g., a research center, separate reimbursable education programs, etc.)
- Total departmental externally funded (reimbursable) research and education
- Portion of budget used for graduate programs

ASSESSMENT AND REVIEW

The self-study should describe procedures and practices of the department related to assessment and review of its academic programs, and document the changes and improvements to programs that result. The self-study would normally include information and evaluation related to the following:

Previous Academic Program Review: Provide, summarize and review the records and lessons learned from the department's previous APR. Expected elements include: the External Review report, the Campus Closure report, and the Department Follow-up report

Curriculum Review Process: Provide a history of the department's curriculum reviews during the past five years, assembling significant curriculum review documents (briefs, close-out letter, follow-on action items). Review the outcomes of curriculum reviews and any resulting changes to the department and/or its programs.

9/2/08

Other ideas:……

How well do you do what you do, and who thinks so?

Outcomes assessment?
Teaching effectiveness?
Program quality data?
Student surveys and feedback?
Thesis assessment?

Program assessment plans?: recent assessment of program objectives and outcomes and the use of assessment findings for program improvement

ACADEMIC PROGRAM REVIEW PROCEDURES
NAVAL POSTGRADUATE SCHOOL

Updated: December 19, 2005

TABLE OF CONTENTS

1. Objectives

All academic departments and other entities that oversee degree programs at the Naval Postgraduate School shall conduct Academic Program Reviews (APR) every six (6) years. The purpose of a program review is to foster academic excellence, to improve quality of every department, and to provide guidance for administrative decisions in support of continual improvement. Each department will examine the state of their department and degree program(s) with a self-study and create a departmental strategic plan that will provide the foundation for further evaluation from an external review board. These boards will provide input as to the quality of the program, the progress made in the previous few years, and the appropriateness of directions outlined in the department's strategic plan. The objective of the review process is to inform the administration, the faculty, the Navy, Department of Defense, other sponsoring agencies, and public agencies of the following:

1. The overall quality and direction of the research, scholarship, and creative activity of the faculty, in comparison with departments at other nationally ranked research universities.

2. The overall quality and direction of the department's graduate programs, including curriculum, teaching, research, laboratories, and service activities. Reviews are forward looking. While assessment of a program's current status is important, priorities for continual improvement are of prime concern.

3. The advisability and efficacy of changes in the short-term and long-term resource allocations within the department or other academic unit under study. This should not be viewed by departments as an unrestrained request for resources. If additional resources are contemplated, the additional amounts and the specific benefits must be quantified.

4. The progress the department has made over the previous 6 years and provide feedback on the goals and implementation outlined in the strategic plan for the subsequent 6 years.

The APRs should emphasize the department's plans for improvement of instruction and scholarship, in the context of its current strengths and recent accomplishments. Reviews should also address any issues of departmental governance that bear upon the department's ability to conduct its core mission.

In addition to the APRs outlined in this document, NPS will continue to conduct Curricula Reviews with program sponsors on a biannual basis in accordance with Navy instructions (OPNVAVINST 1520.23 series). The primary functions of Curricula Reviews are to ensure the relevance of the academic program, update Educational Skill Requirements (ESRs), consider specific educational goals for students to support the subspecialty code requirements for billeting purposes, and to ensure the graduates satisfy the needs of the Navy and other Services. The APRs have a much broader purpose and focus on the academic and scholarly life of the department and less on the specific subject matter supplied in the various courses.

A successful program must be viewed as critically important to the Navy, Department of Defense or other sponsoring agency. Additionally, the programs will be a recognized leader among academic institutions, maintain currency in its field, and provide inquiry-based education.

2. Scope

All departments or academic units that own graduate degree programs will conduct an APR on a six (6) year cycle. These reviews will consist of a self-study, generation of a strategic plan, and an external program review. This external review will not occur in the same year as the Curriculum Review, which is done biannually. The department's self-study, the strategic plan, and the external review will be organized into three broad areas:

1. Faculty research, scholarship, and creative activity

2. Graduate programs

3. Administrative staffing, equipment, and space

A program review begins with the academic unit undertaking a comprehensive self-study (Appendix A) and creating a strategic planning document (Appendix B) that serve as the basis for self-assessment and for identifying future directions and opportunities. With the approval of the Provost, the timing and cycle of the review as well as the required documentation, such as the self study report, can be altered to better align with, departmental/specialized accreditation review(s), such as the Accreditation Board for Engineering and Technology (ABET). The self-study process is intended to assist the department faculty in establishing the state of the department and the strategic plan builds on this to outline the developmental priorities and identifying strategies for achieving the goal of academic excellence or eminence in the field.

The strategic plan should seek to bring about significant improvement in the relevant rankings or other comparisons factors. Department chairs/deans should identify institutions against which they plan to benchmark their quality, and delineate the sequence of steps the unit will use to attain its desired increase in reputation. The time horizon of the strategic plan will generally be five to seven years.

Both the self-study and strategic plan should be concise. Neither should exceed 20 pages, and data and descriptive material should be placed in appendices.

The next step in the review is the visit by an external review committee. The external reviewers will be asked to respond to a standard charge (Appendix C), which will be reviewed annually by the Provost. The external review committee shall prepare a closure report that will be submitted to the Provost, Dean and Department Chair within one month of the visit.

No later than three (3) months following the closure report, the academic unit under review will submit a follow-up report to the Dean and Academic Review Committee indicating how the unit has responded to the recommendations made in the closure report. Generally the departmental strategic plan should be modified to incorporate suggestions made by the external review board.

Where appropriate, the department's self-study and the external review should consider the potential for prospective graduate programs. If an academic unit administers an interdisciplinary program or teaches a significant number of service courses for other units, advice from all participating departments and divisions will be sought.

3. Conduct of Review; Roles and Responsibilities

The Provost is the Chair of Program Review Committee (PRC) consisting of the academic school deans, the Dean of Research, the Associate Provost for Academic Affairs, the Faculty Chairman, and two (2) at large tenured faculty members appointed by the Provost. The Provost is responsible for general oversight of the review process, approves the slate of external reviewers, extends requests to the external review committee members, chairs meetings of the PRC, and informs the NPS President of the results of each academic program review. The Associate Provost for Academic Affairs administers the program, including keeping track of the review cycle, facilitating communication among participants, and alerts a unit to be reviewed of its upcoming review at least one year preceding the review.

The divisional dean over the department under review is responsible for the day-to-day management of the review. This includes notifying the department, nominating and soliciting review committee members, and scheduling the external review committee meetings, transmitting the review report, and submitting comments.

The department chair, on behalf of the faculty, is responsible for preparing the self-study and strategic plan and responding to the closure report. The Office of Institutional Research will provide staff support for the review, as well as the data requested by the dean and the department chair.

4. External Review Committee

4.1 Configuration

The external review committee shall be comprised of least three distinguished scholars or experts in the relevant field of study, who are not closely affiliated with NPS. The members should have significant diversity in background. It is recommended that two members be from academia and one member be drawn from either DoD/government or the business/industry community.

1. Senior Faculty or Academic Administrator. Generally an eminent scholar or administrator at a well respected, graduate research university from a similar department or college as being reviewed.

2. Senior Navy, DoD, or Government Official. Generally this person should be at the Flag, General Officer, or SES level. This person cannot be the curriculum sponsor or from the same organization as the sponsor. It may be advantageous to have this member from a DoD university or college, or at least someone having significant experience at such an institution. Other possible candidates would be technical directors of labs, service research organizations, or senior DoD staff. This person could be from an intelligence agency, Department of State, Department of Homeland Security, or similar Government organizations. The person must have the credentials and experience to evaluate the academic programs.

3. Industrial or Business Executive. Personnel from non-profits or non-governmental organizations (NGOs) can also be considered. This should be a senior manager with familiarity with the technical or business issues related to the department being reviewed.

4.2 Appointment
The divisional dean may invite the department chair to propose candidates for the review team. The divisional dean shall recommend to the Provost a slate of at least six (6) candidates, having a minimum of two (2) in each category, perhaps with a preferred and an alternate, from which the Provost may choose. A brief biography of each candidate must be included. The Provost will select among the candidates or return the slate to the dean and chair for additional candidate(s).

4.3 Standard Charge
All academic department reviews shall respond to a standard charge (see Appendix C). At their discretion, the Provost and the dean may add to the charge to include specific areas of inquiry. The standard charge is intended to provide comparable assessment for all academic units.

5. Self-study

The unit under review will prepare a self-study typically following the outline in Appendix B. The self-study comprises a narrative description of the department's scholarly and creative direction and graduate program, followed by tabular material provided by the department, the school, the Registrar and the Office of Institutional Research. These appendices shall include, among other things, pending proposals for new degree programs, the previous external review report, closure report, and department follow-up report. For academic units that are accredited by specialized agencies, the most recent documents regarding that accreditation should also be included as appendices to the self-study.

6. Departmental Strategic Plan

Following the self study, every academic unit will draft a strategic plan that describes the future directions and new policies the unit will follow over the subsequent six-year period. Appendix C. describes the elements that the plan should contain. The department chair is responsible for the plan, but it should be a document that reflects a consensus view of the department. The narrative description should document the department's strengths, shortcomings, and perceived opportunities for growth or improvement. This plan will be distributed along with the self study to the review board. The plan should be amended based on feedback from the external review committee.

7. Campus Visit

The Provost will extend the requests for membership on external review committees. The Associate Provost for Academic Affairs shall coordinate with external review committees, the school dean, and department chair for scheduling the campus visit, including all meetings. The external review team shall meet jointly with the dean and the Provost in an entrance interview prior to meeting with members of the department. If practicable, this meeting should be held the evening prior to the formal departmental meeting. Following the entrance interview, the review committee shall meet, at a minimum, with the following representatives, in no particular order:

1. Department chair

2. Department faculty (individuals or groups as appropriate)

3. Department Instruction Committee (if any)
4. Department Research Committee (if any)
5. Students in the department
6. Chairs of departments served by the unit (where relevant)
7. Senior department staff representative

A single exit interview shall be scheduled, with the Provost and the PRC. It is usually good practice to set aside at least an hour and a half on each day of the visit for the team to prepare the draft report.

8. Review Committee Report

The dean shall ask the review committee to submit a report within one (1) month of its visit. The report, based upon the self-study and the interviews, should address the issues described in the standard charge**.**

9. Action on the Report

9.1 Reviewers' Report
The review committee's report shall be submitted to the divisional dean. The dean is responsible for immediately distributing copies to the department chair and the Provost.

9.2 Department's Response
The department shall submit to the dean a written response to the review report within one (1) month. The chair's report should represent a consensus of the department. All tenure track faculty within a department have the right to supply, individually or in groups, additional concurring or dissenting opinions to the chair's report.

9.3 Dean's Response
Within one (1) month of receiving the department response, the divisional dean shall prepare and submit the divisional response, along with the departmental response, to the Provost and PRC.

9.4 Closure Meeting
The Associate Provost for Academic Affairs' office is responsible for scheduling the closure meeting of the PRC upon receipt of the departmental and divisional responses. The closure meeting will ordinarily include the department chair, in addition to the PRC.

The closure meeting will provide an opportunity for a candid discussion of the results of the external review. The meeting agenda shall address the three key areas: (1) Faculty research, scholarship, and creative activity; (2) graduate program; and (3) administrative staffing, equipment, and space. Specifically, the following matters shall be addressed:

1. Factual matters that are in dispute

2. Perspective on priorities as viewed by each agency

3. Prospects for achieving the review recommendations

9.5 Closure Report
The conclusions reached in the course of the discussion shall be summarized in a closure report approved by the PRC and signed by the Provost within one month of the meeting. The closure report shall include a list of questions or action items addressing any outstanding concerns raised in the review.

The Provost shall transmit the closure report to the President and the relevant units. The department chair shall make the report available to all department faculty members.

10. Implementation and Review Follow-up Report

The divisional dean shall implement or otherwise address recommended actions and monitor conditions placed by the administration on the department. Twelve (12) months subsequent to the closure report, the dean shall submit a departmental follow-up report addressing the specific questions appended to the closure report. The follow-up report is submitted to the Provost with a copy to the Associate Provost for Academic Affairs.

11. **Schedule for Program Reviews**

The review closure report will stipulate when the next review will occur. Three years after their establishment, new degree programs will be asked to provide interim self-assessments which subsequently will be incorporated into their administering department's review schedule. The Associate Provost for Academic Affairs' office will transmit an updated list of the department review schedule every fall quarter. Suggestions for procedural changes that improve the overall usefulness of reviews, or that reduce workload without compromising value, may be submitted by the deans to the Provost at any time. Subsequent changes to review procedures, approved by the PRC, will be announced in the annual fall-quarter schedule transmittal.

In isolated cases where there is a justifiable need to defer, accelerate, or otherwise reschedule an external review, the department chair will make a written request to the divisional dean that sets out the justification for deferment or acceleration. Requests for postponement or acceleration may also originate with the divisional dean. The divisional dean will forward the request in writing, together with his or her independent opinion and recommendation, to the Provost. The Provost will consider such requests on their merits, consult with the PRC, take into account the institutional need to maintain the regularity and timeliness of the review process, and will make the final determination regarding whether and how the review will be rescheduled.

APPENDIX A. DEPARTMENT SELF-STUDY

The department shall provide a narrative self-study, generally not to exceed 20 pages, followed by appendices with tabular material. The narrative and the appendices shall be organized by:

1. Faculty research, scholarship, creative activity
2. Graduate program
3. Administrative staffing, equipment, and space

1. RESEARCH AND SCHOLARSHIP

Please describe the research and scholarship accomplishments of the department over the past five (5) years including sponsored research and publications record of all faculty members and students. The specific intellectual strengths of the department, in relation to nationally ranked public and private research universities, should be clearly identified.

2. GRADUATE PROGRAM

Curriculum and degree programs

Please describe all graduate programs offered by the department. The core courses and all available tracks within the program should be delineated.

Examinations

Briefly describe the philosophy and structure of any qualifying, candidacy, and/or comprehensive examination used by the department.

Graduate Students

Please address the background, number, and level of preparation of the graduate-student cohort to pursue a graduate degree within the department. State any steps that are being taken to improve the level of student preparation.

3. ADMINISTRATIVE STAFFING, EQUIPMENT, AND SPACE

Please address the adequacy of administrative support both at the department and NPS wide level, including staffing, IT, equipment, and space.

SELF-STUDY APPENDICES

The self-study will include a table of contents including appendices. Appendices will be grouped to provide separate faculty and student profiles.

Appendix I – Overall Faculty Profile

The department will provide for each of the past five years, where applicable:

1. For each tenured faculty member, a biography-bibliography, including employment, education, professional competence and activity, and published writings and creative activities. Information on teaching, university seminars, public seminars, etc., may be omitted.

2. Total departmental extramural research and education funding awarded (public and private) by year.

3. List of external seminar and colloquium speakers by year.

4. History of department chair appointments (at least since the previous review) and plans for succession.

5. Department course-load policy

6. Faculty recruitment plan (intellectual areas, level of appointment, schedule)

7. External review report from previous review

8. Campus closure report from previous review

9. Department follow-up report from previous review

The Office of Institutional Research will provide for each of the past five years, where applicable:

1. NRC ranking of department in comparison with peer institutions.

2. Tenured-faculty roster and age, gender, and ethnicity distribution

3. Average faculty payroll history by rank

4. Student/faculty ratio history

5. Tenured-faculty course load history

Appendix II – Overall Student Profile

The department will provide:

1. Catalog copy

2. Course syllabi file (A file shall be maintained in the department and made available to

external reviewers or the administration, if requested)

3. Graduate profile (five-year history for each graduate):
    a. Thesis title
    b. Principal adviser
    c. Year of degree award
    d. Job or billet placement

The Office of Institutional Research will provide for each of the past five years, if applicable:

1. Most recent NRC ranking of graduate program, in comparison with peer institutions

2. Number of degrees granted by degree name

3. Graduation rates

4. Results of student surveys for students seeking department degrees

5. Average class size

6. Distribution of types of undergraduate degrees obtained

The Office of Institutional Research will also provide boiler-plate institutional data, as appropriate.

APPENDIX B. GUIDELINES FOR DEPARTMETNAL STRATEGIC PLANS

A departmental strategic plan is intended to provide a road map that is approved by the department faculty, which serves to guide decisions in hiring and resource allocation. A six (6) year time horizon will generally be used, since it coincides with the review cycle, but a department can take a longer view if justified. The plan should generally be short and concise, perhaps 10 pages. The plan should contain:

1. Summary of recommendations

2. State of the department, including strengths, weaknesses and an evaluation of the potential for new educational or research programs.

3. Projection of the number of students and anticipated growth in reimbursable funding.

4. Number and type of faculty that will need to be hired over the six years.

5. Number and type of staff that will be needed along with any changes in organization, training, and compensation.

6. New curricula or degree programs. The need for such programs and a short description are required.

7. New or changing tracks within existing degree programs.

8. Changes in facility requirements.

9. New business practices.

10. Strategic partnerships. State the organizations with which the department plans to form alliances and the nature of the interaction(s).

The plan should have a zero top line growth in budget for the baseline plan. New programs that require additional resources can be outlined. However, the resource requirements in terms of new faculty, departmental staff, other support required outside of the department, and additional office and laboratory space requirements must be clearly stated. These new programs should be itemized and the additional cost and benefits quantified.

APPENDIX C. SAMPLE TRANSMITTAL LETTER AND STANDARD CHARGE

SAMPLE TRANSMITTAL LETTER

Dear Professor Smith:

Thank you very much for agreeing to review the Physics Department at the Naval Postgraduate School in Monterey, California. The department oversees the following graduate programs: M.S. and PhD in Physics.

We request that you address the areas listed in the enclosed charge. To inform your review, we also enclose the department's self-study, its recent academic planning documents, previous review reports, and other information that may be helpful to you. If you have any questions, please contact me at telephone number or e-mail address.

We appreciate the time and effort that it takes to serve on such a review panel, and we are very grateful to you for agreeing to join us. The importance of the external review process to the NPS administration and Faculty Council cannot be overestimated, and we will take your report very seriously. Since time is of the essence, we request that we receive your final report within four weeks of your visit to the campus. Logistics for this committee and your visit will be arranged by name and contact info.

With best regards,

Provost

Enclosures:
Standard Charge
Supplemental letters
Department Self-study

Cc:
Department Chair
Dean
Program Review Committee Members
Director, Office of Institutional Research

STANDARD CHARGE TO EXTERNAL REVIEW COMMITTEE

Based upon the department's previous external review, its self-study, and interviews with faculty, students, staff, and the administration, please evaluate the following elements of the department:

1. The overall quality and direction of the research, scholarship, and creative activity of the faculty, in comparison with nationally ranked public and private research universities of comparable size.

2. The overall quality and direction of its graduate programs, including curriculum, teaching, and co-curricular activities.

3. The appropriateness of the level of resource allocation to matters of administrative staffing, equipment, and space.

Program reviews should emphasize the department's plans for growth and improvement of instruction and research, in the context of its current strengths, weaknesses, opportunities, challenges, and recent accomplishments. Program reviews should also address any issues of departmental governance that inhibit the conduct of collegial discourse.

I. Department Faculty and Scholarly Direction

1. Please evaluate the overall quality of the research, scholarship, and creative activity of the department faculty in relation to both the department's scholarly mission and nationally ranked public and private research universities of comparable size. Describe faculty collaborative efforts, awards, and success in obtaining external funding. Include a one-page curriculum vitae for each faculty member of the department.

2. With respect to faculty renewal and growth, in both the national and international context, are the proposed intellectual directions appropriate and well thought out?

3. Please evaluate the degree and nature of the department's structured exchanges with external scholars via colloquia and seminar series and visiting-scholar programs.

4. Is the overall level of extramural support appropriate for a department of this size and mission?

5. Identify measures used to evaluate the instructional effectiveness of faculty, including exit and alumni surveys, and describe instructional resources, including any incentive structure used to encourage faculty attention to instruction. What is the faculty teaching load overall and for each professorial level?

6. Please comment on the quality and effectiveness of departmental governance.

II. Graduate Program

1. Please evaluate the depth, breadth, and structural coherence of the graduate curriculum, particularly in comparison with similar programs at comparable institutions.

2. Please evaluate the quality of the instruction in the graduate curriculum.

3. Evaluate the appropriateness and quality of the departmental doctoral procedures and their implementation (e.g., qualifying exam, advancement to candidacy, and dissertation defense) appropriate?

4. Evaluate the quality of the learning experience, retention rates, time-to-degree, placement, and morale of the graduate students, as well as any plans for improvement.

5. Describe admission procedures and standards, and identify any competition for graduate students with other institutions.

6. If the department plans to increase the size of the graduate program, are the plans realistic? Is the average size of the program limited by financial support, number of qualified applicants, availability of faculty resources for thesis supervision, staff, or other constraints?

7. Evaluate the availability and quality of resources for student development, including faculty mentoring, career preparation, teaching- assistant training, and student assessment.

III. Administrative Staffing, Equipment, and Space

Please evaluate the adequacy of the following:

1. Administrative and technical staffing, including staff morale.

2. Department resources for seminars, recruiting, and materials and supplies.

3. Administrative and instructional equipment.

4. Office, research, and administrative space.

IV. Other

Please address the specific issues raised in the attached letters from the dean and the Provost. Also, please comment on any additional items that you feel are relevant to the research, academic, and service mission of the department.

GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

EDUCATION PROGRAM EVALUATION CRITERIA

Criteria to Assess Whether GSBPP Offers or Develops a Program

July 2007

Customer Need: The program meets a well defined stakeholder need:

Core Expertise: The program should be an extension of, and related to, GSBPP's vision and core mission of Defense Business Management graduate degree education and research:

Comparative Advantage: GSBPP should possess an identifiable comparative advantage in providing the program over existing providers or competitors:

Faculty Capability: GSBPP faculty should have the capability (both expertise and capacity) to deliver the program:

Control: GSBPP should be assured sufficient control to maintain academic quality and standards and influence admissions criteria:

Financial Viability: The program pricing must be expected to at least breakeven on all costs (direct and indirect):

Leveraged Benefit / Risk: New programs have consequences that extend beyond the program itself. Mere recovery of costs does not warrant developing or offering a new program. GSBPP should benefit from the program in other ways such as additional financial resources to support GSBPP activities, significant recognition within the defense community for developing and/or offering the program, academic/professional development of faculty, or establishing valuable relationships within academic or professional communities. New programs shouldn't put existing programs at risk, although risks of other sorts are relevant to consider also.

NPS Academic Policy Manual

Click below to view or download the Academic Policy Manual. Please email any suggestions or corrections to the NPS Registrar at registrar@nps.edu

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- **Provost's Web Page (internal only)**

NAVAL POSTGRADUATE SCHOOL

OFFICE OF ACADEMIC ADMINISTRATION
REQUEST FOR A NEW CURRICULUM

I. Routing Information

From	David Olwell	Chair, Department of	SE
Via:	Jim Kays	Dean School of	GSEAS
Via:	Vice Provost	Academic Affairs	
To:	Chair	Curriculum Certificate & Degree Requirements Committee	
Copy:	Office of Academic Administration, All Departments, Program Offices, and Deans		

II. General Information

Requestor's Name: David Olwell		Date: 6/1/2008	
Curriculum Number:	***TBD - Assigned by the Office of Academic Administration***		
Curriculum Name:	Systems Engineering (580)		
Curriculum Type:	☒ Degree ☐ Academic Certificate		
Degree/Cert Type	☐ PhD ☐ Engineers ☒ MS ☐ MA ☐ MBA ☐ Cert of Compl		
Degree/Cert Title:	MS Systems Engineering		
DL, Resident or Both:	☐ DL ☒ Resident ☐ Both		
Required APC:	3-2-3	Length (months):	21
Program Office:	Code 76		
Convenes:	☒ Fall ☐ Summer ☐ Spring ☐ Winter		
Educational Skill Requirement:	**See AC Exhibit.** If not included, the requestor must provide this information to the Office of Academic Administration for catalog entry.		
General Description:	**See AC Exhibit.** If not included, the requestor must provide this information to the Office of Academic Administration for catalog entry.		
Requirements for Entry:	**See AC Exhibit.** If not included, the requestor must provide this information to the Office of Academic Administration for catalog entry.		
Program Officer(s):	CDR James Melvin		
Program Manager (DL only):			
Academic Associate(s):	Dr. Cliff Whitcomb		
EdTech(s):	Sandra Stephens		

III. Action Taken by Academic Administration

☐ Submitted to AC for review and approval (CC&DRC). **Date Approved:**

☐ Requested changes completed by:

Python/Curric No.	**Asst Registrar(s)**	**Initials:**	**Date:**
AC Manual Appendix	**Janice Alcantara**	**Initials:**	**Date:**
Application Mgmt System	**Automatically pulls data from Python (two day turn around).**		
Catalog	**Janice Alcantara**	**Initials:**	**Date:**
Curriculum History Chart	**Jeane Kays**	**Initials:**	**Date:**
Master Curriculum Chart	**Janice Alcantara**	**Initials:**	**Date:**

☐ **Inform the following: Irma Fink, Fran Horvath, ITACS Python, NPS Dean of Students, NPS DOSS Officers, NPS Office of Academic Administration, Roger Smith**

June 10, 2008

Memorandum for the Academic Council

From: Dave Olwell, Chair, SE Department
Via: Jim Kays, Dean, GSEAS
Doug Moses, Associate Provost for Academic Affairs
To: Wendell Nuss, Chair, Curriculum, Certificates, and Degrees Committee

Subject: Approval of curriculum 580: Systems Engineering

1. Request approval of the resident 580 curriculum, Systems Engineering.
    a. The curriculum will award the existing Master of Science in Systems Engineering degree (MSSE).
    b. The curriculum satisfies the requirements of 5800 series personnel subspecialty code, Systems Engineering, approved 21 November 2006 by N1.

2. Supporting appendices include:
    a. Appendix A: Background and curriculum rationale
    b. Appendix B: ESRs
    c. Appendix C: Catalog Description

3. By endorsement of this memorandum, the Dean of GSEAS attests that the curriculum is supportable with respect to facilities and faculty.

4. The point of contact for the 580 curriculum is Dave Olwell, x3583.

David H. Olwell
Chair

Appendix A: Background and rationale

Background:

NPS currently has three academic council approved curricula and one certificate program for systems engineering.

Curriculum 308 is the Systems Engineering Analysis curriculum for unrestricted line officers. It is offered in residence only. The SEACC awards the MSSEA degree.

Curriculum 311 is the Distance Learning Systems Engineering curriculum for Navy and DoD civilians. It is offered non-resident only. SE awards the MSSE degree.

Curriculum 721 is the Product Development for the 21st Century curriculum for senior Navy and DoD personnel. It is offered non-resident only. SE awards the MSSE or MSPD degree.

Curriculum 282 is the academic certificate in systems engineering. It is offered to resident and non-resident students. The SE department awards the certificate.

The NAVSEA-NPS board of flag advisors recognized a need in 2004 for a residential curriculum at NPS that produced systems engineers with a strong understanding of a domain or a discipline. N1 established a P-code for those officers (5800) and in July 2006 the first students reported for the new curriculum 580 that supports that P-code. The curriculum and courses were briefed several times to the flag board in 2004, 2005, and 2006, and a mini-curricular review chaired by RDML Benedict was conducted in June 2007 to finalize the structure of the curriculum. In accordance with paragraph 8.3 of the NPS academic council policy manual, this request for approval was originally circulated one year prior to the graduation of the first class of students in this program (September 08), but was reworked based on institutional and sponsor input and is now being submitted for approval.

NAVSEA desires a portfolio of officer competencies. EDOs will continue to be assigned to the Naval Architecture program at MIT and to the 533, 570, and 590 curricula at NPS. However, NAVSEA wants about 25% of the EDO community to have the 5800 P-Code and is assigning officers to the curricula to achieve that goal. NAVSEA desires those officers to be system engineers with basic a foundation in a domain or discipline. The other EDOs will be domain engineers with a basic foundation in SE.

The curriculum consists of one quarter refresher and seven quarters of academic work. In accordance with the ESRs, it calls for both a capstone project and a thesis. Seven courses are reserved for a domain or discipline track. For the first two years, three tracks will be offered: ships systems engineering, combats systems engineering, and network centric systems engineering. Discipline tracks in electrical and mechanical engineering (drawing courses from those departments) are available if student demand develops for them.

The generic matrix is listed below:

SE3100 Fundamentals of SE		OS3130 Prob & Stats for SE	CS2800 Intro to Objects and Programming	SI3810 SE Seminar	**Fall**
SE3302 Systems Suitability	SE3011 Engineering Economics and Cost Estimation		SE3250 Capability Engineering	SI3810 SE Seminar	**Winter**
SE3303 Systems Assessment	SE3351 Human Systems Engineering	SE4352 Engineering Statistics Analysis	SE4150 System Architecting & Design	SI3810 SE Seminar	**Spring**
SE3405 Eng Project Management	SE4153 Systems Life Engineering		SE3003 Software Systems Engineering	SI3810 SE Seminar	**Summer**
SE0811 Thesis	SE4350 Logistics Engineering		SE4151 Systems Integration & Development	SI3810 SE Seminar	**Fall**
SE0811 Thesis	SE4354 Systems Test & Evaluation			SI3810 SE Seminar	**Winter**
SE0811 Thesis	SE0811 Thesis			SI3810 SE Seminar	**Spring**

Figure 1. 580 standard matrix.

There are three domain tracks. Two of them (ship systems engineering and combat systems engineering) make heavy use of the existing TSSE courses. The third, Network-centric systems engineering, makes use of several ECE and IS courses. The tracks are tailorable to student needs and desires, as long as they do not require unique courses and the track representative concurs.

The track matrices are listed below in Figures 2 - 4. Table 1 lists the track electives for the ship systems track.

		SE2003[2] Fund of Mech Systems	SE2101 Fund of E-M Systems	
SE3100 Fundamentals of SE		OS3180 Prob & Stats for SE	CS2900 Intro to Objects and Programming	SI3810 SE Seminar
SE3302 Systems Suitability	SE3011 Engineering Economics and Cost Estimation		SE3250 Capability Engineering	SI3810 SE Seminar
SE3303 Systems Assessment	SE3351 Human Systems Engineering	SE4362 Engineering Systems Analysis	SE4150 System Architecting & Design	SI3810 SE Seminar
SI3400 Eng Project Management	SE4363 Systems Risk Engineering		SE4003 Software Systems Engineering	SI3810 SE Seminar
SE0811 Thesis	SE3360 Logistics Systems Engineering		SE4151 Systems Integration & Development	SI3810 SE Seminar
SE0811 Thesis	SE4354 Systems Test & Evaluation			SI3810 SE Seminar
SE0811 Thesis	SE0811 Thesis			SI3810 SE Seminar

Figure 2: Ship systems engineering track

		SE2003[2] Fund of Mech Systems	SE2101 Fund of E-M Systems	
SE3100 Fundamentals of SE		OS3180 Prob & Stats for SE	CS2900 Intro to Obj and Prog.	SI3810 SE Seminar
SE3302 Systems Suitability	SE3011 Engineering Economics and Cost Estimation		SE3250 Capability Engineering	SI3810 SE Seminar
SE3303 Systems Assessment	SE3351 Human Systems Engineering		SE4150 System Architecting & Design	SI3810 SE Seminar
SI3400 Eng Project Management	SE4363 Systems Risk Engineering		SE4003 Software Systems Engineering	SI3810 SE Seminar
SE0811 Thesis	SE3360 Logistics Systems Engineering		SE4151 Systems Integration & Development	SI3810 SE Seminar
SE0811 Thesis	SE4354 Systems Test & Evaluation			SI3810 SE Seminar
SE0811 Thesis	SE0811 Thesis	SE4362 Engineering Systems Analysis		SI3810 SE Seminar

Figure 3: Combat systems engineering track

		SE2003 Fund of Mech Systems 4 2	SE2101 Fund of E-M Systems 4 2	
SE3100 Fundamentals of SE 3 2		OS3180 Prob & Stats for SE 3 2	CS2900 Intro to Obj and Prog. 3 2	SI3810 SE Seminar 0 2
SE3302 Systems Suitability 3 2	SE3011 Engineering Economics and 3 0		*SE3250* *Capability Engineering* 3 2	SI3810 SE Seminar 0 2
SE3303 Systems Assessment 3 2	[illegible]	[illegible]	*SE4150* *System Architecting & Desig* 3 2	SI3810 SE Seminar 0 2
SI3400 Eng Project Management 3 2	[illegible]		SE4003 Software Systems Engineeri 3 2	SI3810 SE Seminar 0 2
SE0811 Thesis 0 8	[illegible]		*SE4151* *Systems Integration & Devel* 4 2	SI3810 SE Seminar 0 2
SE0811 Thesis 0 8	[illegible]			SI3810 SE Seminar 0 2
SE0811 Thesis 0 8	SE0811 Thesis 0 8			SI3810 SE Seminar 0 2

Figure 4: Net-centric systems engineering track

Additional tracks have been developed for disciplines, such as electrical engineering, and will be offered if student demand appears and once student numbers increase.

Each domain track has a flag sponsor. RDML Kevin McCoy (NAVSEA) is the ships systems sponsor, RDML Chuck Goddard (PEO Ships) is the combat systems track sponsor, and RDML Will Rodriquez (SPAWAR) is the network-centric track sponsor. RADM Steven Johnson (SSP) is the overall sponsor. No sponsors have been identified for the possible discipline tracks.

Resource impact:

This curriculum has been under development for several years. Lab improvements to support it were budgeted in the FY06 POM request and begin September 2007. The SE department is funding the course development with no additional DT requested. Four courses in the tracks remain to be developed and one core course is being developed fall quarter. All remaining courses have been developed.

This curriculum anticipated the SECNAV and CNO requests to NPS to assist with SE revitalization in the Navy. Even if there were a significant financial impact, the mission requires it.

	TSSE Option
TS3000	Electrical Power Engineering
TS3001	Fundamental Principles of Naval Architecture
TS3003	Naval Combat System Elements
TS4000	Naval Combat System Engineering
TS4001	Integration of Naval Engineering Systems
TS4002	Ship Design Integration
TS4003	Total Ship Systems Engineering
	Non-TSSE Option
TS3001	Fundamental Principles of Naval Architecture
TS3003	Naval Combat System Elements
Electives	*Electives (Representative)*
MS3202	Properties, Performance, and Failure of Engineering Materials
MS3304	Corrosion and Marine Environmental Deteriorization
MS3606	Introduction to Welding and Joining Metallurgy
ME4525	Naval Ship Shock Design and Analysis
ME4751	Combat Survivability, Reliability and Systems Safety Engineering
ME3801	Autonomous Systems and Vehicle Control
ME4812	Fluid Power Control
MS4822	The Engineering and Science of Composite Materials
MS4312	Characterization of Advanced Materials
ME3240	Marine Power and Propulsion
ME4420	Advanced Power and Propulsion
EC3130	Electrical Machinery Theory
EC4130	Advanced Electrical Machinery Systems

Table 1: Track electives for the Ship Systems Track

Appendix B: Educational Skill Requirements

Officers entering into the Systems Engineering curriculum will be offered the necessary preparatory level courses to enable them to satisfy the equivalent of a baccalaureate degree in Engineering. By the time they complete the curriculum, they shall meet, as a minimum, the requirements set forth by the Accreditation Board for Engineering and Technology (ABET). In the context of systems engineering, the term "systems" shall be used to include both systems and systems-of-systems (SoS). At the graduate level, the officer will acquire the competence to effectively contribute as a systems engineer to naval systems research, design, development, maintenance and acquisition. The officer will gain the ability to effectively integrate future technological, engineering, and acquisition approaches with existing practice through a combination of core systems engineering courses, specialization studies, and project/thesis research. An officer will meet the below-listed ESRs through the completion of a program of study determined by the officer, the curricular officer and the academic associate. Individual programs and how they support the officer's attainment of the ESRs will be specifically designed to meet the needs of the Navy and the officer's interests.

1. [UNDERGRADUATE MATHEMATICS AND BASIC SCIENCES] Understand and apply engineering-baccalaureate-equivalent mathematics and basic sciences. For mathematics, this includes single and multi-variable differential and integral calculus, ordinary differential equations, probability, and statistics. Basic sciences include physics, chemistry, and terrestrial sciences. This can be met by the appropriate undergraduate work.

2. [CAPABILITY ENGINEERING] Model and analyze military operations in the context of achieving needed capability. Apply model-based systems engineering approaches, based on UML or SysML, and modeling and simulation techniques, and be able to assess legacy systems, emerging technological concepts, and as-yet-to-be-developed concepts into the joint warfighting environment considering technology readiness levels, effectiveness, cost, and risk. Understand the process from warfighting gaps to synthesis of as-yet-realized system concepts to meet emerging capability needs. Understand and apply modeling and simulation to include deterministic and stochastic modeling of systems, economic models, cost models, and life-cycle suitability analyses. This includes the ability to develop original discrete-event and continuous run-time simulations, as well some familiarity with large-scale government and commercial warfighting simulations.

3. [SYSTEM ARCHITECTING] Perform system architecting, applying and integrating methods for both software and hardware aspects. Construct feasible system functional and physical architectures that represent a balanced approach to meeting stakeholder needs and expectations, stated, implied, and derived system requirements, and suitability objectives such as being open, modular, extensible, maintainable, and reusable. Understand system architecture frameworks and their role in architecture development. Use model-based systems engineering techniques, based on UML or SySML to create, define, and develop system architectures. Develop, analyze, and compare alternative architectures against appropriate, system-level evaluation criteria and select the best based on quantitative and qualitative analysis, as appropriate.

4. [SYSTEM DESIGN] Understand and apply the system design process in a holistic context, applying and integrating methods for both software and hardware aspects including identifying capability need, defining requirements, conducting functional analysis and allocation to hardware, software, and human elements, creating a system functional design, designing a system, deriving and defining requirement specifications, allocating requirement specifications to sub-systems (for hardware, software, and human elements), design for suitability, including reliability, availability, maintainability, operability, and logistical supportability, perform system assessment by conducting trade-off studies, evaluating system design alternatives against system capability need expressed as military effectiveness, estimating and analyzing the system cost and risk, including risk mitigation strategies, integrating human elements into the system design, and analyzing and planning for system testing and evaluation.

5. [ENGINEERING DESIGN ANALYSIS] Understand and apply core qualitative and quantitative methods of engineering design analysis, to include problem formulation, alternatives development, alternatives modeling and evaluation, alternatives comparison, optimization, decision analysis, failure analysis, risk analysis, and futures analysis. Mathematical techniques may include multiple criteria optimization, design of experiments, response surface methods, set-based design, real options, systems dynamics, and probabilistic analyses.

6. [SYSTEM INTEGRATION AND DEVELOPMENT] Apply the core skills of system integration and development to include integrating relevant technological disciplines that bear on the system effectiveness and cost, including weapons, sensor and information systems, while being responsive to realistic military capability need and warfighting effectiveness, requirements, functions, specifications, cost, and risk. Integrate systems and analyze aspects during the entire life-cycle. Understand system realization methods and processes, including prototyping and production. Apply production quality methods for continuous process improvement, such as statistical process control, lean, and six sigma .

7. [SYSTEM TEST & EVALUATION] Apply the core skills of system test and evaluation to include system effectiveness while being responsive to realistic military capability need and warfighting effectiveness, requirements, functions, and specifications. Evaluate systems and analyze test and evaluation aspects during the entire life-cycle using inferential statistics methods, including design of experiments (DOE) and analysis of variance (ANOVA). Apply fundamental verification and validation principles to systems development methods.

8. [HUMAN SYSTEMS INTEGRATION] Address human factors during requirements definition, as well as workload, safety, training, operability and ergonomics during design. Conduct functional analysis and allocation to human elements, performing cost-risk-effectiveness trade-offs among hardware, software, and human elements. Evaluate proposed designs for man-machine

integration, human performance testing, and usability during development test and evaluation. Understand basic human biology as applied to human systems.

9. [PROJECT MANAGEMENT] Work as a team member or leader on a military systems engineering project. Demonstrate an understanding of project management principles. Demonstrate competence in the planning and management of complex projects. Understand the principles of and apply current industry approaches and technology to manage systems design, integration, test, and evaluation for large engineering projects.

10. [SPECIALIZATION] Demonstrate in-depth understanding of the principles, technologies, and systems used in at least one major specialty area. These areas can be specific warfare areas, such as combat systems, total ship systems, EW, IW, avionics, undersea warfare, or net-centric systems,, a single traditional engineering specialty, such as mechanical, electrical, software, aerospace engineering, or naval architecture, or specialized disciplines such as human factors, availability, or safety. Demonstrate in-depth understanding of the scientific and engineering principles of the respective specialty, such as sensors, weapons, C4I systems, information systems, ship structures, hydrodynamics, power systems, and reliability. Demonstrate broad understanding of systems context of the specialization. Apply that understanding to the design of system components, sub-systems, and interfaces in the holistic context of the engineering of systems.

11. [JOINT AND MARITIME STRATEGIC PLANNING] American and world military history and joint and maritime planning including the origins and evolution of national and allied strategy; current American and allied military strategies which address the entire spectrum of conflict; the U.S. maritime component of national military strategy; the organizational structure of the U.S. defense establishment; the role of the commanders of unified and specified commands in strategic planning, the process of strategic planning; joint and service doctrine, and the roles and missions of each in meeting national strategy.

12. [THESIS] Conduct independent analysis and research in the area of Systems Engineering, and show proficiency in presenting the results in writing and orally by means of a thesis and command-oriented briefing appropriate to this curriculum.

Appendix C Catalog Entry

SYSTEMS ENGINEERING - Curriculum 580

Program Officer
James Melvin, CDR USN
Code 74, ME Building, Room 115
(831) 656-2033, DSN 756-2033
jemelvin@nps.edu

Academic Associate
Cliff Whitcomb, Associate Professor
Code D/SE, Bullard Hall, Room 201H
(831)656-3834, DSN 756-3834
cawhitco@nps.edu

Brief Overview
Systems Engineering at NPS provides a broad education in systems engineering methods and tools, and depth in a particular domain of application. Several domain tracks are offered, including combat systems engineering, ship systems engineering, and network-centric systems engineering. Other tracks are added based on sponsor and student demand. The tracks consist of eight or more courses to gain depth in the domain area. These tracks complement the standard set of systems engineering courses. The curriculum is interdisciplinary and draws on courses from across campus.

Students come from the uniformed services, civilian members of government, and from foreign military services. Navy Engineering Duty Officers constitute a substantial portion of the students.

Requirements for Entry
Students must have an academic profile code of 323. That implies a 2.2 or better undergraduate GPA, a calculus sequence with a C+ or better grade, and a calculus-based physics sequence with a C+ or better grade.

Entry Dates
Students may enter this curriculum once a year, in ~~July~~ Fall. Students requiring a refresher quarter to meet entrance requirements will begin in ~~April~~ Summer. For further information, contact the Program Officer or Academic Associate for this curriculum.

Subspecialty
Completion of this curriculum qualifies a naval officer as a systems engineering sub-specialist, subspecialty code 5800. The curriculum sponsor is The Commander, Naval Sea Systems Command.

Typical Course of Study
Students have a wide set of options for their specialization tracks. Below is a typical course matrix for the ship systems track.

Refresher Quarter

Quarter 1		
OS3180	(3-2)	Probability and Statistics for Systems Engineering
SE3100	(3-2)	Fundamentals of Systems Engineering
CS2900	(4-2)	Introduction to Object Oriented Programming
NW320	(4-2)	Strategy and Policy
SE3810	(0-2)	Systems Engineering Seminar
Quarter 2		
SE3011	(3-0)	Engineering Economics and Cost Estimation
SE3302	(3-2)	System Suitability
SE3250	(3-2)	Capability Engineering
TS3001	(3-2)	Naval Architecture
SE3810	(0-2)	Systems Engineering Seminar
Quarter 3		
SE3303	(3-2)	Systems Assessment

SE3351	(3-2)	Human Systems Engineering
SE4352	(4-0)	Engineering Systems Analysis
SE4150	(3-2)	Systems Architecting and Design
SE3810	(0-2)	Systems Engineering Seminar

Quarter 4

SE4353	(3-2)	Systems Risk Engineering
SE4003	(3-2)	Computer and Software Systems Engineering
SI3400	(3-2)	Fundamentals of Eng. Project Management
Track elective		
SE3810	(0-2)	Systems Engineering Seminar

Quarter 5

SE4350	(4-0)	Logistics Systems Engineering
SE4151	(4-2)	Systems Integration and Development
Track Elective		
SE0811	(0-8)	Thesis
SE3810	(0-2)	Systems Engineering Seminar

Quarter 6

SE4354	(4-0)	Systems Test and Evaluation
Track Elective		
Track Elective		
SI0811	(0-8)	Systems Engineering Thesis
SE3810	(0-2)	Systems Engineering Seminar

Quarter 7

Track Elective		
Track Elective		
SE0811	(0-8)	Systems Engineering Thesis
SE3810	(0-2)	Systems Engineering Seminar

Educational Skill Requirements
Systems Engineering Curriculum 580
Subspecialty Code 5800P

Officers entering into the Systems Engineering curriculum will be offered the necessary preparatory level courses to enable them to satisfy the equivalent of a baccalaureate degree in Engineering. By the time they complete the curriculum, they shall meet, as a minimum, the requirements set forth by the Accreditation Board for Engineering and Technology (ABET). In the context of systems engineering, the term "systems" shall be used to include both systems and systems-of-systems (SoS). At the graduate level, the officer will acquire the competence to effectively contribute as a systems engineer to naval systems research, design, development, maintenance and acquisition. The officer will gain the ability to effectively integrate future technological, engineering, and acquisition approaches with existing practice through a combination of core systems engineering courses, specialization studies, and project/thesis research. An officer will meet the below-listed ESRs through the completion of a program of study determined by the officer, the curricular officer and the academic associate. Individual programs and how they support the officer's attainment of the ESRs will be specifically designed to meet the needs of the Navy and the officer's interests.

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7. [SYSTEM TEST & EVALUATION] Apply the core skills of system test and evaluation to include system effectiveness while being responsive to realistic military capability need and warfighting effectiveness, requirements, functions, and specifications. Evaluate systems and analyze test and evaluation aspects during the entire life-cycle using inferential statistics methods, including design of experiments (DOE) and analysis of variance (ANOVA). Apply fundamental verification and validation principles to systems development methods.

8. [HUMAN SYSTEMS INTEGRATION] Address human factors during requirements definition, as well as workload, safety, training, operability and ergonomics during design. Conduct functional analysis and allocation to human elements, performing cost-risk-effectiveness trade-offs among hardware, software, and human elements. Evaluate proposed designs for man-machine integration, human performance testing, and usability during development test and evaluation. Understand basic human biology as applied to human systems.

9. [PROJECT MANAGEMENT] Work as a team member or leader on a military systems engineering project. Demonstrate an understanding of project management principles. Demonstrate competence in the planning and management of complex projects. Understand the principles of and apply current industry approaches and technology to manage systems design, integration, test, and evaluation for large engineering projects.

10. [SPECIALIZATION] Demonstrate in-depth understanding of the principles, technologies, and systems used in at least one major specialty area. These areas can be specific warfare areas, such as combat systems, total ship systems, EW, IW, avionics, undersea warfare, or net-centric systems,, a single traditional engineering specialty, such as mechanical, electrical, software, aerospace engineering, or naval architecture, or specialized disciplines such as human factors, availability, or safety. Demonstrate in-depth understanding of the scientific and engineering principles of the respective specialty, such as sensors, weapons, C4I systems, information systems, ship structures, hydrodynamics, power systems, and reliability. Demonstrate broad understanding of systems context of the specialization. Apply that understanding to the design of system components, sub-systems, and interfaces in the holistic context of the engineering of systems.

11. [JOINT AND MARITIME STRATEGIC PLANNING] American and world military history and joint and maritime planning including the origins and evolution of national and allied strategy; current American and allied military strategies which address the entire spectrum of conflict; the U.S. maritime component of national military strategy; the organizational structure of the U.S. defense establishment; the role of the commanders of unified and specified commands in strategic planning, the process of strategic planning; joint and service doctrine, and the roles and missions of each in meeting national strategy.

12. [THESIS] Conduct independent analysis and research in the area of Systems Engineering, and show proficiency in presenting the results in writing and orally by means of a thesis and command-oriented briefing appropriate to this curriculum.

NAVAL
POSTGRADUATE
SCHOOL

Department of Systems Engineering
777 Dyer Road
Monterey, CA 93943

1 July 2008

Subject: Modification of the 311 Curriculum

Ms. Jeane Kays
Secretary, Academic Council
Naval Postgraduate School

1. Under paragraph 8.3 of the academic council policy manual, I am required to notify you of minor changes to departmental degree programs.

2. Upon approval of the course requests submitted in June to the AC, curriculum 311 will be revised for cohorts that commence fall quarter, AY09, to follow the matrix at enclosure one. This does not change the degree requirements for the degree, and is not considered a 'major change in emphasis.'

3. Appropriate catalog language is included in enclosure two.

4. I am the point of contact for this action.

David H. Olwell, Ph.D.
Chair

Enclosures (2)

Enclosure 1

Quarter		
1	SE3100 Fundamentals of SE 3 2	
2	SI3400 Eng Project Management 3 2	
3	SE3303 System Assessment 3 2	
4	SE3302 System Suitability 3 2	
5		
6		
7		
8		

Enclosure 2: Catalog Entry

Systems Engineering (DL) - Curriculum 311

Program Manager

Mark Rhoades, Lecturer
Bullard Hall, Room 201B
(831) 277-9153
mmhoades@nps.edu

Academic Associate

Cliff Whitcomb, Associate Professor
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(831) 656 -3834, DSN 756-3834
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Brief Overview

The Master of Science in Systems Engineering DL degree program is designed for Navy System Commands and DoD organizations involved in a wide range of systems engineering and integration challenges. These commands can partner with NPS to educate and train engineers with tools and technologies relevant to their work, resulting in employees with greater knowledge and expertise to enable them to better meet the needs of their customers.

DoD organizations or sponsors provide the students, and the Department of Systems Engineering provides the instruction, course materials, and hands-on experience. Courses are delivered at the students' local site using a combination of on-site instruction, video teleconferencing, and Web-enhanced on-line courses. The program can begin any academic quarter, in accordance with the sponsor's needs.

Students normally take two courses per quarter over a two-year period. There are nine core courses and a three course capstone project sequence in the 16-course program. The remaining four courses can be tailored to meet the sponsor's need. Students must participate in a capstone design project in lieu of writing a thesis.

Students receive an NPS degree, may receive NPS Systems Engineering certificates of accomplishment, and earn DAU equivalency certificates for all SPRDE Level III training requirements.

The program manager will help establish partnership arrangements with other organizations if desired. Additional information on the program can be found at www.nps.navy.mil/se/msse

Requirements for Entry

An entering student must possess a Bachelor of Science degree in an engineering discipline with at least a 2.2 undergraduate grade point average. Students must have completed ACQ101 and ACQ 102 if they wish to receive SPRDE credit.

Entry Dates

This is an eight-quarter curriculum that may start any quarter chosen by the sponsor.

Degree

Master of Science in Systems Engineering

To be considered for this degree, a student must enter the curriculum with an ABET accreditable engineering BS degree or establish equivalency with an ABET degree, and complete all the requirements of curriculum #311.

Master of Science in Engineering Science

Students who enter without an ABET accreditable engineering BS degree and cannot establish equivalency, and who complete all the requirements of curriculum #311, will earn a Master of Science in Engineering Science degree.

Typical Course of Study

The typical course of study for curriculum 311 involves a nine course core systems engineering sequence, a three-course project, and an agreed-upon emphasis or domain track. This track is selected by the sponsor, program manager, and academic associate.

Quarter 1

SE3100	(3-2)	Fundamentals of Systems Engineering
SE3011	(3-2)	Engineering Economics and Cost Estimation

Quarter 2

SI3400	(3-2)	Engineering Project Management
SE3250	(3-2)	Capability Engineering

Quarter 3

SE3303	(3-2)	System Assessment
SEXXXX		Domain elective

Quarter 4

SE3302	(3-2)	System Suitability
SEXXXX		Domain Elective

Quarter 5

SE4003	(3-1)	Software Systems Engineering
SEXXXX		Domain Elective

Quarter 6

SE4150	(3-2)	Systems Architecture and Design
SEXXXX		Domain Elective

Quarter 7

SI0810	(0-8)	Capstone Design Project
SE4151	(3-2)	Systems Integration and Development

Quarter 8

SI0810	(0-8)	Capstone Design Project
SI0810	(0-8)	Capstone Design Project

NAVAL POSTGRADUATE SCHOOL

Department of Systems Engineering
777 Dyer Road
Monterey, CA 93943

30 June 2008

Subject: Request to award the degree Master of Science in Engineering Systems

Memorandum from: Chair, SE department DH 6/30/08
Memorandum through: Dean, GSEAS SK
Associate Provost for Academic Affairs
Memorandum for: Chair, Curriculum, Certificate, and Degree Requirements Committee, NPS Academic Council

1. The Department of Systems Engineering intends to restrict the award of the MS in Systems Engineering to students who meet the standards of the Accreditation Board for Engineering and Technology (ABET), effective summer quarter 2008. The Department requests authority to award a new degree named the Master of Science in Engineering Systems to other students who complete the course of study in curricula 580 and 311 but who do not possess an ABET undergraduate engineering degree.

2. We propose the following catalog language and degree requirements:

   a. A candidate shall have earned the Bachelor of Science or Bachelor of Arts degree.
   b. The Master of Science in Engineering Systems requires a minimum of 48 quarter-hours of graduate level work.
   c. The candidate must take all courses in an approved study program, which must satisfy the following requirements: there must be a minimum of 36 quarter-hours of credits in 3000 and 4000 level courses, including a minimum of 16 quarter-hours at the 4000 level. The course work must include a four-course core consisting of one course each in systems engineering methods.
   d. The candidate must complete either a 12-hour equivalent team systems engineering project or an individual thesis.

3. This degree will be offered to both resident and non-resident students.

4. There is a negligible resource implication with this proposal that centers on the administrative costs to adjust NPS publications to reflect the new degree.

David H. Olwell
Chair

DRAFT – NOT FOR DISTRIBUTION

NAVPGSCOLINST XXXX
03
Date 200X

NAVPGSCOL INSTRUCTION XXXX

Subj: GUIDELINES FOR ESTABLISHING NEW PROGRAMS

Ref: (a) SECNAVINST 1524.2B of 27 Oct 05
(b) NAVPGSCOL Academic Council Policy Manual
(c) Navy Officer Manpower and Classification Instruction (NAVPERSINST 15839 Series, Vol I)
(d) NAVPGSCOLINST 3900.1C of 26 Apr 01 Subj: Administration and Management of Academic Sponsored Programs at the Naval Postgraduate School
(e) Western Association of Schools and Colleges (WASC) Substantive Change Manual

Encl: (1) Format for Internal NPS submission
(2) Issues for Consideration of a New Program
(3) WASC Substantive Change Review Process Checklist
(4) WASC Substantive Change Proposal Template

1. **Purpose.** To provide procedures for a rational and effective method of new program development, consideration and approval.

2. Discussion. The Naval Postgraduate School (NPS) provides relevant and unique graduate and other education al programs to meet general and specific needs of the Naval Services, and is agile and flexible in doing so. It responds to the challenges of Joint Vision 2010 and 2020 by aligning its education and supporting research programs with the three major goals of: 1) nationally recognized academic programs and research that support current and future operations of the Navy and Marine Corps, our sister services, and our allies; 2) focus on the integration of teaching and research in direct support of the four pillars of Joint Vision 2010 and 2020 and their enabling technologies in our Institutes; and 3) supporting continuous intellectual innovation and growth throughout a career through executive and continuing education programs. In providing the highest quality naval and defense related graduate education, NPS must balance quality and value to the Navy, cost and benefits, and access and availability for students. This instruction provides the mechanisms for ensuring that consistent and coordinated decisions are made concerning program development and resource allocation.

3. **Scope.** This instruction applies to degree and academic certificate programs, whether delivered via non-resident, Distance Learning (DL) or hybrid means. For purposes of

this instruction, the term program is defined as a set of related courses, often in a specialized field of study that leads to a degree or academic certificate in that field, and includes the term curriculum when a curriculum leads to a degree.

4. **Policy.** The program approval process is designed to encourage collegial discussion at all levels of the NPS, with full and open discussion among all relevant parties at the departmental, graduate school and institution levels. New program proposals will be consistent with the mission of the NPS, and not proposed if civilian universities (including such organizations as the Air Force Institute of Technology (AFIT)) offer programs of comparable cost, quality and focus, in accordance with reference (a).

5. **Procedures.**

a. Overview. The internal process usually begins at the faculty/departmental level, involves all relevant parties at the individual graduate school level, is presented to the Academic Council, the Provost's Council and culminates with the President. If the program will be a Navy program, the proposal will serve as the basis for the sponsor's request for approval of the subspecialty code and establishment in the graduate education quota plan in accordance with reference (c).

b. Submission to NPS Academic Council. Department submits application for a new program, with endorsement by the School Dean, to the Academic Council in accordance with reference (b), in the format of enclosure (1) and considering such issues as listed in enclosure (3). (Additional criteria are required in the request to offer a Ph.D. program.)

(1) The following types of new programs requests include:

(2) There is no requirement to submit requests for to the Academic Council.

c. Upon academic approval by the NPS Academic Council, the Department/School must request approval of the new program from the President, via the Provost's Council. While there is no set formula for approval or disapproval of programs, the decision will be based on findings that reflect a systematic, coherent, and long-term vision of the academic institution.

d. Once approved by the President, a determination must be made as to whether the new program is a substantive change in accordance with reference (e) and guided by enclosures (3) and (4) or not. The NPS WASC Accreditation Liaison Officer (ALO) can assist with the determination and submission of a substantive change. If the new program is a substantive change, enclosure (4) must be prepared and submitted to WASC. Even if the new program is not a substantive change, WASC must be notified in NPS' annual report of the minor change. **In no instance will a new, substantive program, either resident or DL, commence or accept students prior to WASC approval.**

e. If the approved program will be sponsored by an organization other than the Navy, refer to reference (d) for the management and administration of academic

sponsored programs.

f. If the approved program will be sponsored by a Navy organization, assist the sponsor with preparation of the recommendation to establish a subspecialty code in accordance with (c). Aside from billet information, most of the information prepared for internal NPS approval will be used in the recommendation to establish the subspecialty code.

6. **Responsibilities.**

a. Department Chairs are responsible for the proper preparation of any request to establish a new program.

b. Deans are responsible for ensuring their respective request is complete and endorsed.

c. The Academic Council is responsible for ensuring a proposed program meets appropriate academic criteria and degree requirements for the type of program being proposed prior to any recommendation of approval.

d. The Director of Programs will provide assistance as requested with respect to the Navy subspecialty code, Joint Professional Military Education, and other Navy personnel and education issues.

e. The Vice Provost for Academic Affairs will provide assistance as required.

f. The Accreditation Liaison Officer will provide assistance as required.

g. The Provost's Council will recommend approval/disapproval of the request for new programs to the President who is the final approval authority.

7. **Action.** All requests to establish new programs will be in accordance with the above procedures.

DANIEL OLIVER
President

Distribution:
NAVPGSCOLINST 5605.2S (List 1)

Detailed Business Case Analysis (BCA):

Establishment of
Curriculum/Program
At the Naval Postgraduate School

Prepared by: XXX Department, Naval Postgraduate School
Monterey, CA 93943

Naval Postgraduate School Points of Contact:
Chairman, ABC Department
chairman@nps.edu (831) 656-XXXX
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Appendices

A. References
B. Provisional Educational Skill Requirements (ESRs)
C. Additional Information on the Naval Postgraduate School's Direct Teach Cost Model (Used November & December 2004internally by NPS for relative comparison of various curricula)

List of Figures

References

A. Business Case Analysis Process; Naval Education and Training Command; December 2004
B. NAVY OFFICER OCCUPATIONAL CLASSIFICATION SYSTEM (NOOCS): OPNAVINST 1210.2B of 16 August 1993
C. OPNAVINST 1520.23B of 1 October 1991; Subj: GRADUATE EDUCATION
D. OPNAVINST 4540.210B of 3 September 1991; Subj: NAVAL POSTGRADUATE SCHOOL MISSIONS AND FUNCTIONS
E. OPNAVINST 1000.16J of 6 January 1998 with Change 1 of 17 June 2002; Subj: MANUAL OF NAVY TOTAL FORCE MANPOWER POLICIES AND PROCEDURES

ACADEMIC PROGRAM REVIEW PROCEDURES
NAVAL POSTGRADUATE SCHOOL

Updated: December 19, 2005

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1. Objectives

All academic departments and other entities that oversee degree programs at the Naval Postgraduate School shall conduct Academic Program Reviews (APR) every six (6) years. The purpose of a program review is to foster academic excellence, to improve quality of every department, and to provide guidance for administrative decisions in support of continual improvement. Each department will examine the state of their department and degree program(s) with a self-study and create a departmental strategic plan that will provide the foundation for further evaluation from an external review board. These boards will provide input as to the quality of the program, the progress made in the previous few years, and the appropriateness of directions outlined in the department's strategic plan. The objective of the review process is to inform the administration, the faculty, the Navy, Department of Defense, other sponsoring agencies, and public agencies of the following:

1. The overall quality and direction of the research, scholarship, and creative activity of the faculty, in comparison with departments at other nationally ranked research universities.

2. The overall quality and direction of the department's graduate programs, including curriculum, teaching, research, laboratories, and service activities. Reviews are forward looking. While assessment of a program's current status is important, priorities for continual improvement are of prime concern.

3. The advisability and efficacy of changes in the short-term and long-term resource allocations within the department or other academic unit under study. This should not be viewed by departments as an unrestrained request for resources. If additional resources are contemplated, the additional amounts and the specific benefits must be quantified.

4. The progress the department has made over the previous 6 years and provide feedback on the goals and implementation outlined in the strategic plan for the subsequent 6 years.

The APRs should emphasize the department's plans for improvement of instruction and scholarship, in the context of its current strengths and recent accomplishments. Reviews should also address any issues of departmental governance that bear upon the department's ability to conduct its core mission.

In addition to the APRs outlined in this document, NPS will continue to conduct Curricula Reviews with program sponsors on a biannual basis in accordance with Navy instructions (OPNVAVINST 1520.23 series). The primary functions of Curricula Reviews are to ensure the relevance of the academic program, update Educational Skill Requirements (ESRs), consider specific educational goals for students to support the subspecialty code requirements for billeting purposes, and to ensure the graduates satisfy the needs of the Navy and other Services. The APRs have a much broader purpose and focus on the academic and scholarly life of the department and less on the specific subject matter supplied in the various courses.

A successful program must be viewed as critically important to the Navy, Department of Defense or other sponsoring agency. Additionally, the programs will be a recognized leader among academic institutions, maintain currency in its field, and provide inquiry-based education.

2. Scope

All departments or academic units that own graduate degree programs will conduct an APR on a six (6) year cycle. These reviews will consist of a self-study, generation of a strategic plan, and an external program review. This external review will not occur in the same year as the Curriculum Review, which is done biannually. The department's self-study, the strategic plan, and the external review will be organized into three broad areas:

1. Faculty research, scholarship, and creative activity

2. Graduate programs

3. Administrative staffing, equipment, and space

A program review begins with the academic unit undertaking a comprehensive self-study (Appendix A) and creating a strategic planning document (Appendix B) that serve as the basis for self-assessment and for identifying future directions and opportunities. With the approval of the Provost, the timing and cycle of the review as well as the required documentation, such as the self study report, can be altered to better align with, departmental/specialized accreditation review(s), such as the Accreditation Board for Engineering and Technology (ABET). The self-study process is intended to assist the department faculty in establishing the state of the department and the strategic plan builds on this to outline the developmental priorities and identifying strategies for achieving the goal of academic excellence or eminence in the field.

The strategic plan should seek to bring about significant improvement in the relevant rankings or other comparisons factors. Department chairs/deans should identify institutions against which they plan to benchmark their quality, and delineate the sequence of steps the unit will use to attain its desired increase in reputation. The time horizon of the strategic plan will generally be five to seven years.

Both the self-study and strategic plan should be concise. Neither should exceed 20 pages, and data and descriptive material should be placed in appendices.

The next step in the review is the visit by an external review committee. The external reviewers will be asked to respond to a standard charge (Appendix C), which will be reviewed annually by the Provost. The external review committee shall prepare a closure report that will be submitted to the Provost, Dean and Department Chair within one month of the visit.

No later than three (3) months following the closure report, the academic unit under review will submit a follow-up report to the Dean and Academic Review Committee indicating how the unit has responded to the recommendations made in the closure report. Generally the departmental strategic plan should be modified to incorporate suggestions made by the external review board.

Where appropriate, the department's self-study and the external review should consider the potential for prospective graduate programs. If an academic unit administers an interdisciplinary program or teaches a significant number of service courses for other units, advice from all participating departments and divisions will be sought.

3. Conduct of Review; Roles and Responsibilities

The Provost is the Chair of Program Review Committee (PRC) consisting of the academic school deans, the Dean of Research, the Associate Provost for Academic Affairs, the Faculty Chairman, and two (2) at large tenured faculty members appointed by the Provost. The Provost is responsible for general oversight of the review process, approves the slate of external reviewers, extends requests to the external review committee members, chairs meetings of the PRC, and informs the NPS President of the results of each academic program review. The Associate Provost for Academic Affairs administers the program, including keeping track of the review cycle, facilitating communication among participants, and alerts a unit to be reviewed of its upcoming review at least one year preceding the review.

The divisional dean over the department under review is responsible for the day-to-day management of the review. This includes notifying the department, nominating and soliciting review committee members, and scheduling the external review committee meetings, transmitting the review report, and submitting comments.

The department chair, on behalf of the faculty, is responsible for preparing the self-study and strategic plan and responding to the closure report. The Office of Institutional Research will provide staff support for the review, as well as the data requested by the dean and the department chair.

4. External Review Committee

4.1 Configuration

The external review committee shall be comprised of least three distinguished scholars or experts in the relevant field of study, who are not closely affiliated with NPS. The members should have significant diversity in background. It is recommended that two members be from academia and one member be drawn from either DoD/government or the business/industry community.

1. Senior Faculty or Academic Administrator. Generally an eminent scholar or administrator at a well respected, graduate research university from a similar department or college as being reviewed.

2. Senior Navy, DoD, or Government Official. Generally this person should be at the Flag, General Officer, or SES level. This person cannot be the curriculum sponsor or from the same organization as the sponsor. It may be advantageous to have this member from a DoD university or college, or at least someone having significant experience at such an institution. Other possible candidates would be technical directors of labs, service research organizations, or senior DoD staff. This person could be from an intelligence agency, Department of State, Department of Homeland Security, or similar Government organizations. The person must have the credentials and experience to evaluate the academic programs.

3. Industrial or Business Executive. Personnel from non-profits or non-governmental organizations (NGOs) can also be considered. This should be a senior manager with familiarity with the technical or business issues related to the department being reviewed.

4.2 Appointment
The divisional dean may invite the department chair to propose candidates for the review team. The divisional dean shall recommend to the Provost a slate of at least six (6) candidates, having a minimum of two (2) in each category, perhaps with a preferred and an alternate, from which the Provost may choose. A brief biography of each candidate must be included. The Provost will select among the candidates or return the slate to the dean and chair for additional candidate(s).

4.3 Standard Charge
All academic department reviews shall respond to a standard charge (see Appendix C). At their discretion, the Provost and the dean may add to the charge to include specific areas of inquiry. The standard charge is intended to provide comparable assessment for all academic units.

5. Self-study

The unit under review will prepare a self-study typically following the outline in Appendix B. The self-study comprises a narrative description of the department's scholarly and creative direction and graduate program, followed by tabular material provided by the department, the school, the Registrar and the Office of Institutional Research. These appendices shall include, among other things, pending proposals for new degree programs, the previous external review report, closure report, and department follow-up report. For academic units that are accredited by specialized agencies, the most recent documents regarding that accreditation should also be included as appendices to the self-study.

6. Departmental Strategic Plan

Following the self study, every academic unit will draft a strategic plan that describes the future directions and new policies the unit will follow over the subsequent six-year period. Appendix C. describes the elements that the plan should contain. The department chair is responsible for the plan, but it should be a document that reflects a consensus view of the department. The narrative description should document the department's strengths, shortcomings, and perceived opportunities for growth or improvement. This plan will be distributed along with the self study to the review board. The plan should be amended based on feedback from the external review committee.

7. Campus Visit

The Provost will extend the requests for membership on external review committees. The Associate Provost for Academic Affairs shall coordinate with external review committees, the school dean, and department chair for scheduling the campus visit, including all meetings. The external review team shall meet jointly with the dean and the Provost in an entrance interview prior to meeting with members of the department. If practicable, this meeting should be held the evening prior to the formal departmental meeting. Following the entrance interview, the review committee shall meet, at a minimum, with the following representatives, in no particular order:

1. Department chair

2. Department faculty (individuals or groups as appropriate)

3. Department Instruction Committee (if any)
4. Department Research Committee (if any)
5. Students in the department
6. Chairs of departments served by the unit (where relevant)
7. Senior department staff representative

A single exit interview shall be scheduled, with the Provost and the PRC. It is usually good practice to set aside at least an hour and a half on each day of the visit for the team to prepare the draft report.

8. Review Committee Report

The dean shall ask the review committee to submit a report within one (1) month of its visit. The report, based upon the self-study and the interviews, should address the issues described in the standard charge**.**

9. Action on the Report

9.1 Reviewers' Report
The review committee's report shall be submitted to the divisional dean. The dean is responsible for immediately distributing copies to the department chair and the Provost.

9.2 Department's Response
The department shall submit to the dean a written response to the review report within one (1) month. The chair's report should represent a consensus of the department. All tenure track faculty within a department have the right to supply, individually or in groups, additional concurring or dissenting opinions to the chair's report.

9.3 Dean's Response
Within one (1) month of receiving the department response, the divisional dean shall prepare and submit the divisional response, along with the departmental response, to the Provost and PRC.

9.4 Closure Meeting
The Associate Provost for Academic Affairs' office is responsible for scheduling the closure meeting of the PRC upon receipt of the departmental and divisional responses. The closure meeting will ordinarily include the department chair, in addition to the PRC.

The closure meeting will provide an opportunity for a candid discussion of the results of the external review. The meeting agenda shall address the three key areas: (1) Faculty research, scholarship, and creative activity; (2) graduate program; and (3) administrative staffing, equipment, and space. Specifically, the following matters shall be addressed:

1. Factual matters that are in dispute

2. Perspective on priorities as viewed by each agency

3. Prospects for achieving the review recommendations

9.5 Closure Report
The conclusions reached in the course of the discussion shall be summarized in a closure report approved by the PRC and signed by the Provost within one month of the meeting. The closure report shall include a list of questions or action items addressing any outstanding concerns raised in the review.

The Provost shall transmit the closure report to the President and the relevant units. The department chair shall make the report available to all department faculty members.

10. Implementation and Review Follow-up Report

The divisional dean shall implement or otherwise address recommended actions and monitor conditions placed by the administration on the department. Twelve (12) months subsequent to the closure report, the dean shall submit a departmental follow-up report addressing the specific questions appended to the closure report. The follow-up report is submitted to the Provost with a copy to the Associate Provost for Academic Affairs.

11. **Schedule for Program Reviews**

The review closure report will stipulate when the next review will occur. Three years after their establishment, new degree programs will be asked to provide interim self-assessments which subsequently will be incorporated into their administering department's review schedule. The Associate Provost for Academic Affairs' office will transmit an updated list of the department review schedule every fall quarter. Suggestions for procedural changes that improve the overall usefulness of reviews, or that reduce workload without compromising value, may be submitted by the deans to the Provost at any time. Subsequent changes to review procedures, approved by the PRC, will be announced in the annual fall-quarter schedule transmittal.

In isolated cases where there is a justifiable need to defer, accelerate, or otherwise reschedule an external review, the department chair will make a written request to the divisional dean that sets out the justification for deferment or acceleration. Requests for postponement or acceleration may also originate with the divisional dean. The divisional dean will forward the request in writing, together with his or her independent opinion and recommendation, to the Provost. The Provost will consider such requests on their merits, consult with the PRC, take into account the institutional need to maintain the regularity and timeliness of the review process, and will make the final determination regarding whether and how the review will be rescheduled.

APPENDIX A. DEPARTMENT SELF-STUDY

The department shall provide a narrative self-study, generally not to exceed 20 pages, followed by appendices with tabular material. The narrative and the appendices shall be organized by:

1. Faculty research, scholarship, creative activity
2. Graduate program
3. Administrative staffing, equipment, and space

1. RESEARCH AND SCHOLARSHIP

Please describe the research and scholarship accomplishments of the department over the past five (5) years including sponsored research and publications record of all faculty members and students. The specific intellectual strengths of the department, in relation to nationally ranked public and private research universities, should be clearly identified.

2. GRADUATE PROGRAM

Curriculum and degree programs

Please describe all graduate programs offered by the department. The core courses and all available tracks within the program should be delineated.

Examinations

Briefly describe the philosophy and structure of any qualifying, candidacy, and/or comprehensive examination used by the department.

Graduate Students

Please address the background, number, and level of preparation of the graduate-student cohort to pursue a graduate degree within the department. State any steps that are being taken to improve the level of student preparation.

3. ADMINISTRATIVE STAFFING, EQUIPMENT, AND SPACE

Please address the adequacy of administrative support both at the department and NPS wide level, including staffing, IT, equipment, and space.

SELF-STUDY APPENDICES

The self-study will include a table of contents including appendices. Appendices will be grouped to provide separate faculty and student profiles.

Appendix I – Overall Faculty Profile

The department will provide for each of the past five years, where applicable:

1. For each tenured faculty member, a biography-bibliography, including employment, education, professional competence and activity, and published writings and creative activities. Information on teaching, university seminars, public seminars, etc., may be omitted.

2. Total departmental extramural research and education funding awarded (public and private) by year.

3. List of external seminar and colloquium speakers by year.

4. History of department chair appointments (at least since the previous review) and plans for succession.

5. Department course-load policy

6. Faculty recruitment plan (intellectual areas, level of appointment, schedule)

7. External review report from previous review

8. Campus closure report from previous review

9. Department follow-up report from previous review

The Office of Institutional Research will provide for each of the past five years, where applicable:

1. NRC ranking of department in comparison with peer institutions.

2. Tenured-faculty roster and age, gender, and ethnicity distribution

3. Average faculty payroll history by rank

4. Student/faculty ratio history

5. Tenured-faculty course load history

Appendix II – Overall Student Profile

The department will provide:

1. Catalog copy

2. Course syllabi file (A file shall be maintained in the department and made available to

external reviewers or the administration, if requested)

3. Graduate profile (five-year history for each graduate):
    a. Thesis title
    b. Principal adviser
    c. Year of degree award
    d. Job or billet placement

The Office of Institutional Research will provide for each of the past five years, if applicable:

1. Most recent NRC ranking of graduate program, in comparison with peer institutions

2. Number of degrees granted by degree name

3. Graduation rates

4. Results of student surveys for students seeking department degrees

5. Average class size

6. Distribution of types of undergraduate degrees obtained

The Office of Institutional Research will also provide boiler-plate institutional data, as appropriate.

APPENDIX B. GUIDELINES FOR DEPARTMETNAL STRATEGIC PLANS

A departmental strategic plan is intended to provide a road map that is approved by the department faculty, which serves to guide decisions in hiring and resource allocation. A six (6) year time horizon will generally be used, since it coincides with the review cycle, but a department can take a longer view if justified. The plan should generally be short and concise, perhaps 10 pages. The plan should contain:

1. Summary of recommendations

2. State of the department, including strengths, weaknesses and an evaluation of the potential for new educational or research programs.

3. Projection of the number of students and anticipated growth in reimbursable funding.

4. Number and type of faculty that will need to be hired over the six years.

5. Number and type of staff that will be needed along with any changes in organization, training, and compensation.

6. New curricula or degree programs. The need for such programs and a short description are required.

7. New or changing tracks within existing degree programs.

8. Changes in facility requirements.

9. New business practices.

10. Strategic partnerships. State the organizations with which the department plans to form alliances and the nature of the interaction(s).

The plan should have a zero top line growth in budget for the baseline plan. New programs that require additional resources can be outlined. However, the resource requirements in terms of new faculty, departmental staff, other support required outside of the department, and additional office and laboratory space requirements must be clearly stated. These new programs should be itemized and the additional cost and benefits quantified.

APPENDIX C. SAMPLE TRANSMITTAL LETTER AND STANDARD CHARGE

SAMPLE TRANSMITTAL LETTER

Dear Professor Smith:

Thank you very much for agreeing to review the Physics Department at the Naval Postgraduate School in Monterey, California. The department oversees the following graduate programs: M.S. and PhD in Physics.

We request that you address the areas listed in the enclosed charge. To inform your review, we also enclose the department's self-study, its recent academic planning documents, previous review reports, and other information that may be helpful to you. If you have any questions, please contact me at telephone number or e-mail address.

We appreciate the time and effort that it takes to serve on such a review panel, and we are very grateful to you for agreeing to join us. The importance of the external review process to the NPS administration and Faculty Council cannot be overestimated, and we will take your report very seriously. Since time is of the essence, we request that we receive your final report within four weeks of your visit to the campus. Logistics for this committee and your visit will be arranged by name and contact info.

With best regards,

Provost

Enclosures:
Standard Charge
Supplemental letters
Department Self-study

Cc:
Department Chair
Dean
Program Review Committee Members
Director, Office of Institutional Research

STANDARD CHARGE TO EXTERNAL REVIEW COMMITTEE

Based upon the department's previous external review, its self-study, and interviews with faculty, students, staff, and the administration, please evaluate the following elements of the department:

1. The overall quality and direction of the research, scholarship, and creative activity of the faculty, in comparison with nationally ranked public and private research universities of comparable size.

2. The overall quality and direction of its graduate programs, including curriculum, teaching, and co-curricular activities.

3. The appropriateness of the level of resource allocation to matters of administrative staffing, equipment, and space.

Program reviews should emphasize the department's plans for growth and improvement of instruction and research, in the context of its current strengths, weaknesses, opportunities, challenges, and recent accomplishments. Program reviews should also address any issues of departmental governance that inhibit the conduct of collegial discourse.

I. Department Faculty and Scholarly Direction

1. Please evaluate the overall quality of the research, scholarship, and creative activity of the department faculty in relation to both the department's scholarly mission and nationally ranked public and private research universities of comparable size. Describe faculty collaborative efforts, awards, and success in obtaining external funding. Include a one-page curriculum vitae for each faculty member of the department.

2. With respect to faculty renewal and growth, in both the national and international context, are the proposed intellectual directions appropriate and well thought out?

3. Please evaluate the degree and nature of the department's structured exchanges with external scholars via colloquia and seminar series and visiting-scholar programs.

4. Is the overall level of extramural support appropriate for a department of this size and mission?

5. Identify measures used to evaluate the instructional effectiveness of faculty, including exit and alumni surveys, and describe instructional resources, including any incentive structure used to encourage faculty attention to instruction. What is the faculty teaching load overall and for each professorial level?

6. Please comment on the quality and effectiveness of departmental governance.

II. Graduate Program

1. Please evaluate the depth, breadth, and structural coherence of the graduate curriculum, particularly in comparison with similar programs at comparable institutions.

2. Please evaluate the quality of the instruction in the graduate curriculum.

3. Evaluate the appropriateness and quality of the departmental doctoral procedures and their implementation (e.g., qualifying exam, advancement to candidacy, and dissertation defense) appropriate?

4. Evaluate the quality of the learning experience, retention rates, time-to-degree, placement, and morale of the graduate students, as well as any plans for improvement.

5. Describe admission procedures and standards, and identify any competition for graduate students with other institutions.

6. If the department plans to increase the size of the graduate program, are the plans realistic? Is the average size of the program limited by financial support, number of qualified applicants, availability of faculty resources for thesis supervision, staff, or other constraints?

7. Evaluate the availability and quality of resources for student development, including faculty mentoring, career preparation, teaching- assistant training, and student assessment.

III. Administrative Staffing, Equipment, and Space

Please evaluate the adequacy of the following:

1. Administrative and technical staffing, including staff morale.

2. Department resources for seminars, recruiting, and materials and supplies.

3. Administrative and instructional equipment.

4. Office, research, and administrative space.

IV. Other

Please address the specific issues raised in the attached letters from the dean and the Provost. Also, please comment on any additional items that you feel are relevant to the research, academic, and service mission of the department.

Survey Questions

You have been selected to participate in a survey of Naval Postgraduate School (NPS) alumni. Answering these questions will provide you the opportunity to evaluate and comment on the educational processes you experienced at NPS now that you are out in the field.

The results of the survey will be used by the NPS leadership to improve NPS. This is your opportunity to provide NPS with frank feedback on what worked well and what did not.

No tangible compensation will be given for participation in the survey. If you agree to participate, you are free to withdraw at any time without prejudice. Upon completion of the research, a copy of the final report will be available from Dr. Fran Horvath, Director of Institutional Planning and Communications. Your participation in this survey is voluntary, although your input is extremely valuable for the improvement of NPS.

Please note that all survey records and data will be kept strictly confidential. Your participation in the survey and your responses to the survey will not be disclosed outside of the research team. Survey results will only be reported in the aggregate so that individual responses cannot be determined. Upon completion of the survey, all records identifying your participation in the survey will be destroyed.

If you have any questions or comments regarding this survey, please contact Dr. Fran Horvath, Director of Institutional Planning and Communications at 831-656-2228 or rfhorvat@nps.edu.

1. Statement of Consent. I have read the above information. I agree to participate in NPS ALumni Survey.

- ◯ YES
- ◯ NO

Please note: throughout the survey, an asterisk (*) in front of the question indicates a mandatory question. All mandatory questions must be answered to submit the survey correctly. Please answer all questions as completely as possible. The scroll bar at the top keeps you updated on how much of the survey you've completed.

Military Questions

* 2. While enrolled at NPS what was your branch of service?

- ◯ U.S. Air Force
- ◯ U.S. Army
- ◯ U.S. Coast Guard
- ◯ U.S. Marine Corps
- ◯ U.S. Navy
- ◯ Other Non-Military Service
- ◯ Non-U.S. Service

* 3. What is your current status?

- ◯ Active Duty Military
- ◯ Retired Military
- ◯ Civilian employed by Federal Government
- ◯ Civilian employed elsewhere
- ◯ Other (please specify)

MILITARY SERVICE

MILITARY SERVICE

* 4. What is your current rank or grade?

- ◯ 06
- ◯ 05
- ◯ 04
- ◯ 03
- ◯ 02
- ◯ 01
- ◯ Other (please specify)

* 5. How many years have you been an officer?

- ☐ 20 or more
- ☐ 11 to 19
- ☐ 10 or fewer

RETIRED OFFICER

RETIRED OFFICER

6. What was your highest rank or grade?

- ◯ 06
- ◯ 05
- ◯ 04
- ◯ 03
- ◯ 02
- ◯ 01

7. How many years were you an officer?

- ◯ 10 or fewer
- ◯ 11 to 19
- ◯ 20 or more

Survey

* 8. At what college or university did you receive your bachelor's degree? (If more than one, please indicate them all.)

* 9. Did you have a post-baccalaureate degree before enrolling at NPS?

- ◯ Yes
- ◯ No

* 10. As a student at NPS, were you in-residence or distance learning?

- ◯ Resident only
- ◯ Distance Learning only
- ◯ Both
- ◯ Other (please specify)

11. For how many months were you enrolled as a student at NPS? (Respond for highest NPS degree)

	1-Certificate	2-Bachelor	3-Master	4-Engineer	5-PhD
18 or fewer	◯	◯	◯	◯	◯
19-24	◯	◯	◯	◯	◯
25 or more	◯	◯	◯	◯	◯

* 12. What was your primary curriculum as a student at NPS?

* 13. What is the highest degree that you received from NPS?

- ◯ Certificate
- ◯ Bachelor
- ◯ Engineer
- ◯ Master
- ◯ PhD
- ◯ No Degree
- ◯ Other (please specify)

* 14. In what field was your highest NPS degree? (If other, please specify in lower block)

* 15. In what year did you receive that degree?

* 16. What was your average grade as an UNDERGRADUATE?

* 17. What was your average grade at NPS?

* 18. Was it relatively difficult or relatively easy for you to transition SOCIALLY from military or other government duty to student life at NPS?

- ◯ Relatively difficult
- ◯ Relatively easy

* 19. Was it relatively difficult or relatively easy for you to transition ACADEMICALLY from military or other government duty to student life at NPS?

- ◯ Relatively difficult
- ◯ Relatively easy

* 20. Did the amount of your NPS course work seem generally appropriate to the requirements of your degree(s) or certificate(s)?

- ◯ Yes
- ◯ No

21. Please skip if not military. If military, to what extend did you find your course work at NPS relevant to your military career?

◯ Low relevance ◯ Moderate relevance ◯ High relevance

* 22. Did you have a satisfactory relationship with your NPS curricular/program officer or officers?

◯ Yes

◯ No (Please comment)

* 23. How would you generally rate faculty relationships with students at NPS?

◯ Cool ◯ Indifferent ◯ Warm

* 24. While a student at NPS, approximately how many hours in a typical week of about 100 active hours did you spend on each of the following? (Please respond with one answer for each activity)

	10 or less	11-20	21-30	31-40	41 or more
Class attendance	◯	◯	◯	◯	◯
Homework	◯	◯	◯	◯	◯
Research	◯	◯	◯	◯	◯
Community service	◯	◯	◯	◯	◯
Outside employment	◯	◯	◯	◯	◯
Family or other personal	◯	◯	◯	◯	◯

* 25. What best describes the FREQUENCY with which you used the following NPS facilities or services? (Please respond with one answer for each service)

	At least once a day	At least once a week	At least once a month	At least once a quarter	Never	Other
Library	◯	◯	◯	◯	◯	◯
Computer Labs	◯	◯	◯	◯	◯	◯
Bookstore	◯	◯	◯	◯	◯	◯
Registration	◯	◯	◯	◯	◯	◯
Academic counseling	◯	◯	◯	◯	◯	◯
Laboratories	◯	◯	◯	◯	◯	◯

* 26. How would you generally rate the QUALITY of the following NPS services or facilities? (Please respond with one answer for each service)

	Less than adequate	Adequate	More than adequate
Library	◯	◯	◯
Computer services	◯	◯	◯
Computer access	◯	◯	◯
Bookstore	◯	◯	◯
Registration	◯	◯	◯
Academic counseling	◯	◯	◯
Laboratories	◯	◯	◯

* 27. Generally rate the following at NPS (Please respond with one answer for each):

	Less than adequate	Adequate	More than adequate
Overall quality of instruction	◯	◯	◯
Overall quality of faculty	◯	◯	◯
Amount of contact with faculty	◯	◯	◯
Currency of course content	◯	◯	◯
Relevance of education to national security and/or defense	◯	◯	◯
Overall experience	◯	◯	◯

* 28. How would you rate the advising you received for your thesis, dissertation, or terminal-project at NPS?

◯ Poor

◯ Fair

◯ Good

◯ Excellent

◯ Did not seek advisement

* 29. How would you rate the overall relevance of your thesis, dissertation, or terminal-project to your career after departing NPS?

◯ Low relevance ◯ Moderate relevance ◯ High relevance

30. If a recipient of an NPS doctorate, how helpful were your advisors in preparing you for successive academic hurdles on the way to your degree?

◯ Less than helpful ◯ Helpful ◯ More than helpful

* 31. Did you attend any workshops to help you write your thesis or dissertation?

◯ Yes

◯ No

* 32. Indicate the "importance" to your career of the following abilities:

	Low importance	Moderate importance	High importance
Decicison-making	◯	◯	◯
Analytical skills	◯	◯	◯
Leadership	◯	◯	◯
Teamwork	◯	◯	◯
Writing	◯	◯	◯
Research	◯	◯	◯
Ethics	◯	◯	◯

* 33. Indicate the extent to which your experience at NPS has enhanced the following abilities:

	Low Enhancement	Moderate Enhancement	High Enhancement
Decicison-making	◯	◯	◯
Analytical skills	◯	◯	◯
Leadership	◯	◯	◯
Teamwork	◯	◯	◯
Writing	◯	◯	◯
Research	◯	◯	◯
Ethics	◯	◯	◯

* 34. Would you recommend attendance at NPS to any other service members or Department of Defense employees?

◯ Yes

◯ No

* 35. What one thing did you value most about NPS?

* 36. What one thing did you value least about NPS?

37. What changes would you recommend at NPS?

* 38. Have you served in a position which was, or is, appropriate to your NPS certificate or degree?

◯ Yes

◯ No

39. If military, to what extent have you found your NPS education useful in any of your subsequent OPERATIONAL assignments?

◯ Less than useful ◯ Useful ◯ More than useful

40. If military, which one of your NPS courses, if any, have you found most useful in your OPERATIONAL assignments after NPS?

41. If you are a civilian now, to what extent have you found your NPS education to be useful in your current employment?

- ◯ Less than useful
- ◯ Useful
- ◯ More than useful

42. Is it true that your education in GSBPP provided advanced knowledge so that you are/were confident that you understand/understood the capabilities and limitations of current/future technologies for your career?

- ◯ clearly true
- ◯ mostly true
- ◯ mostly false
- ◯ clearly false
- ◯ no opinion/not observed

43. Is it true that your education in GSBPP provided advanced knowledge so that you are/were confident in your ability to apply emerging and advanced knowledge to meet on-the-job challenges?

- ◯ clearly true
- ◯ mostly true
- ◯ mostly false
- ◯ clearly false
- ◯ no opinion/not observed

44. Is it true that your education in GSBPP provided advanced knowledge so that you are/were confident in your ability to anticipate, respond and lead in future complex, rapidly changing environments?

- ◯ clearly true
- ◯ mostly true
- ◯ mostly false
- ◯ clearly false
- ◯ no opinion/not observed

45. Is it true that your education in GSBPP provided advanced knowledge so that you are/were confident in your ability to represent the needs and interests of your service both within your service, as well as to other services, constituencies and communities (including OSD, Joint Staff and industry)?

- ◯ clearly true
- ◯ mostly true
- ◯ mostly false
- ◯ clearly false
- ◯ no opinion/not observed

THANK YOU!

Thank you for your responses. Your efforts will assist NPS in evaluating its programs for future military and defense personnel.

A summary of results, when completed, will be placed on the NPS website (www.nps.edu).

Please check out the new website designed just for you as an Alumnus of NPS. Catch up with old friends through the onine community, view the most recent videos, find yourself in one of the "historical photos", plus much more. (www.nps.edu/alumni)

Course No.		**AY:**	
Segment		**QTR:**	
Instructor Name			

***Please type Course No, Segment & Instructor Name in above space.**
***If more than one instructor please submit a separate SOF for each.**
***To enter SOF response type an "X" under the appropriate column.**
***SOFs from DL students are due NLT than week 2 of the next quarter.**

	Strongly Agree	Agree	No Strong Opinion	Disagree	Strongly Disagree	No comment
	5	**4**	**3**	**2**	**1**	**0**
1. The course was well organized.						
2. Time in class was spent effectively.						
3. The instructor seemed to know when students didn't understand the material.						
4. Difficult concepts were made understandable.						
5. I had confidence in the instructor's knowledge of the subject						
6. I felt free to ask questions.						
7. The instructor was prepared for class.						
8. The instructor's objectives for the course have been made clear.						
9. The instructor made this course a worthwhile learning experience.						
10. The instructor stimulated my interest in the subject area.						
11. The instructor cared about student progress and did his share in helping us to learn.						

PLEASE USE THE FOLLOWING SCALE FOR THE NEXT FIVE ITEMS:

5. Outstanding (top 10%) 3. About Average (Middle 40%) 1. Poor (lowest 10%)
4. Excellent (top 30%) 2. Fair (lowest 30%) 0. Not Applicable

	O	E	A	F	P	NA
	5	**4**	**3**	**2**	**1**	**0**
12. Overall, I would rate this instructor						
13. Overall, I would rate this course						
14. Overall, I would rate the textbook(s)						
15. Overall, I would rate the quality of exams						
16. Overall, I would rate the laboratories						

FOR THE STUDENT: THIS IS IMPORTANT DATA.

AFTER ALL GRADES HAVE BEEN TURNED IN TO THE REGISTRAR, THE COMMENTS AND A STATISTICAL SUMMARY OF THE INFORMATION FROM THESE FORMS WILL BE RETURNED TO THE INSTRUCTOR FOR COURSE EVALUATION AND TEACHING IMPROVMENT PURPOSES. THE STATISTICAL SUMMARY WILL ALSO BE USED BY THE ADMINSTRATION FOR EVALUATION OF TEACHING EFFECTIVENESS.

DATA OBTAINED UNDER AUTHORITY OF 5 USC 301.

*** * * PLEASE USE SPACE ON PAGE 2 FOR COMMENTS. * * ***

COMMENTS: These comments will be available only to the instructor.

GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

MBA / MSM Core Curriculum Survey

Below are the GSBPP Core Curriculum Survey Questions. All surveys are created and administered in Zoomerang, at the completion the core courses within the MBA/MSM program, typically the 4th quarter. All surveys are anonymous and confidential.

1. Please indicate your Service:

2. Please indicate your curriculum:

3. Please indicate your rank:

4. Please enter your approximate QPR (also known as your Grade Point Average):

5. How would you describe your overall level of satisfaction with your FM or Defense Systems Analysis program at NPS? How would you describe your overall level of satisfaction with your FM or Defense Systems Analysis program at NPS?

6. Ratings of Individual Courses

This part asks you to rate each of the MBA core courses along each of three dimensions:

- Value of the course in your future career
- Degree of Defense relevant content in the course
- Overall satisfaction with the course

Each of these is discussed a bit more here:

A. Value in your Future Career:

We intend the education in the MBA core to have value to you in both your military and, perhaps later, civilian career, both by providing specific knowledge and skills and also developing analytical and critical thinking abilities. How do you perceive each course in terms of its value in your future career? The scale will be:

"I perceive this course as having…"

4 = High value in my future career
3 = Moderate value in my future career
2 = Little value in my future career
1 = No value in my future career

Course Number	Course Title	VALUE
GB3010	Managing for Organizational Effectiveness	
GB3012	Communication for Managers	
GB3013	Problem Analysis and Ethical Dilemmas	
GB3020	Fundamentals of Information Technology	
GB3040	Managerial Statistics	
GB3042	Operations Management	
GB3050	Financial Reporting and Analysis	
GB3051	Cost Management	
GB3070	Economics of the Global Defense Environment	
GB4014	Strategic Management	
GB4043	Business Modeling and Analysis	
GB4052	Managerial Finance*	
GB4053	Defense Budget and Financial Management Policy	
GB4071	Economic Analysis and Defense Resource Allocation	
GB3031	Acquisition and Program Management**	
GBxxxx	Core Elective***	
NW3230	Strategy and Policy: The American Experience****	

B. **Defense Relevant Content of Individual Courses**:

It is our intent that the "Defense-Focused MBA" lives up to its name. It should provide a graduate level education that is unique and of particular relevance to individuals within the Defense community. Clearly, the Specialization part of the MBA program is designed with this intent.
The MBA Core courses are also designed to contribute to the Defense relevance of the program, although different courses may contribute to different degrees.

This asks you to score the specific courses in the MBA Core in terms of the degree to which each course was Defense-focused and/or contained Defense-specific content. The scale will be:

"I would assess this course as having...."

4 = High Defense focus or Defense content
3 = Moderate Defense focus or Defense content
2 = Little Defense focus or Defense content
1 = No Defense focus or Defense content

Course Number	Course Title	DEFENSE RELEVANCE
GB3010	Managing for Organizational Effectiveness	
GB3012	Communication for Managers	
GB3013	Problem Analysis and Ethical Dilemmas	
GB3020	Fundamentals of Information Technology	
GB3040	Managerial Statistics	
GB3042	Operations Management	
GB3050	Financial Reporting and Analysis	
GB3051	Cost Management	
GB3070	Economics of the Global Defense Environment	
GB4014	Strategic Management	
GB4043	Business Modeling and Analysis	
GB4052	Managerial Finance*	
GB4053	Defense Budget and Financial Management Policy	
GB4071	Economic Analysis and Defense Resource Allocation	
GB3031	Acquisition and Program Management**	
GBxxxx	Core Elective***	
NW3230	Strategy and Policy: The American Experience****	

C. Overall Satisfaction with individual courses:

On the SOFs that you have filled out at the end of each quarter, one question asked to rate "the course". We would like to get your impression again now, having completed all of the courses within the MBA Core. The scale will be:

"Overall, I would rate this course...."

4 = Outstanding
3 = Very Good
2 = Fair
1 = Poor

Course Number	Course Title	SATISFACTION
GB3010	Managing for Organizational Effectiveness	
GB3012	Communication for Managers	
GB3013	Problem Analysis and Ethical Dilemmas	
GB3020	Fundamentals of Information Technology	
GB3040	Managerial Statistics	
GB3042	Operations Management	
GB3050	Financial Reporting and Analysis	
GB3051	Cost Management	
GB3070	Economics of the Global Defense Environment	
GB4014	Strategic Management	
GB4043	Business Modeling and Analysis	
GB4052	Managerial Finance*	
GB4053	Defense Budget and Financial Management Policy	
GB4071	Economic Analysis and Defense Resource Allocation	
GB3031	Acquisition and Program Management**	
GBxxxx	Core Elective***	
NW3230	Strategy and Policy: The American Experience****	

Additional Questions:

7. Identify three courses that you were MOST SATISFIED with, and briefly explain why:

8. Identify three courses that you were MOST DISSATISFIED with, and briefly explain why:

9. In the following space please make any comments you wish concerning the Curriculum. Do not feel constrained, but in thinking about comments you may make, you might consider the following general question: "What changes to the curriculum at NPS do you believe might have made your experience here more valuable to you in your subsequent career?"

10. For USN: Did you complete JPME? If not, why?

11. For USMC: Did you complete Command & Staff? If not, why?

BENCHMARK INITIATIVE AY08-09

COMMUNICATION & FRAMEWORK

MESSAGE TO SCHOOL (GSEAS)

From: Moses, Orrin (Doug) (CIV)
Sent: Thursday, October 16, 2008 1:52 PM
To: Sritharan, Sivaguru (Sri) (CIV); Luscombe, James (CIV); Paduan, Jeffrey (CIV); Durkee, Philip (Phil) (CIV); Millsaps, Knox (CIV); Panholzer, Rudolf (Rudy) (CIV); Borges, Carlos (CIV); Knorr, Jeffrey (Jeff) (CIV); Olwell, David (Dave) (CIV); Katz, Scott (CAPT)
Cc: Moses, Orrin (Doug) (CIV); Rodgers, Ali (CIV); DiFranco, Michael (Mike) Contractor, GDIT; Pasadilla, Josephine (Jhoie) (CIV)
Subject: FW: BENCHMARK Projects - GSEAS

Hi Sri,

This follows up on the Benchmark Project initiative we circulated a couple of weeks ago (email below) to arrange a meeting to take the next step related to a Benchmark Project in GSEAS. There has been lots of good accreditation/WASC/assessment/ABET email communication recently, all related.

Under this Benchmark initiative, we're trying to make progress on three related things:

1. Document current practices: Need to identify the existing assessment-related activities that are going on currently in the Schools/Departments, collecting examples of guidelines, instruments, surveys, etc currently used. The need/goal for WASC is to assemble a comprehensive portfolio of the practices across NPS.
2. Start a next step: Work with the Schools/Departments to have them design projects that will advance assessment practice in their School. Lots of good things could happen here and obviously what best and most beneficial to the individual School/Dept, will depend on what's already in place and what they'll want to do. I don't want to pre-determine what Schools should do, but there are "best practices" already happening on campus and extending some of those practices more widely could be a useful effort. Resources are always tight, but these initiatives in the Schools shouldn't have to be taken out of hide, so some support should be available.
3. Educational Effectiveness Task Force (EETF): NPS needs to put together an EETF for WASC and for coordinating EE/Assessment efforts on campus. The going-in notion is we need 1 rep from each School (perhaps 2 from a big School). This EETF will have the lead, over the next two years, for taking NPS through the EE phase of the accreditation process.

Can I set up a meeting with you (and the GSEAS chairs?)? Purpose would be for me to explain more where we're headed with this initiative and see how best to coordinate with GSEAS efforts.

Thanks
DougM

MESSAGE TO CAMPUS

From: Moses, Orrin (Doug) (CIV)
Sent: Sunday, September 28, 2008 7:34 PM
To: Moses, Orrin (Doug) (CIV); Beck, Robert (Bob) (CIV); Boger, Dan (CIV); Purdue, Peter (CIV); Sritharan, Sivaguru (Sri) (CIV); Wirtz, James (CIV); Batteen, Mary (CIV); Boger, Dan (CIV); Borges, Carlos (CIV); Denning, Peter (CIV); Durkee, Philip (Phil) (CIV); Eagle, James (Jim) (CIV); Knorr, Jeffrey

(Jeff) (CIV); Luscombe, James (CIV); McCormick, Gordon (CIV); Millsaps, Knox (CIV); Olwell, David (Dave) (CIV); Panholzer, Rudolf (Rudy) (CIV); Trinkunas, Harold (CIV); Dell, Robert (Rob) (CIV); Adams, Christopher (CIV); Blankenship, Mary (CDR); Chakwin, Mark (COL); Hernandez, Alejandro (Andy) (COL); Hobbs, Kathryn (CAPT); Huber, Mark (CAPT); Rea, Theresa (Terry) (CAPT); Shewchuk, William (Bill) (CIV); Katz, Scott (CAPT); Franck, Raymond (Chip) (CIV); Gates, William (Bill) (CIV); Eitelberg, Mark (CIV); Jones, Lawrence (Larry) (CIV); Snider, Keith (CIV); Kang, Keebom (CIV); Mehay, Stephen (CIV); Suchan, James (CIV); Paduan, Jeffrey (CIV); Housel, Thomas (CIV)
Cc: Oliver, Daniel (VADM); Ferrari, Leonard (CIV); Cermak, Christine (CIV); Little, Kevin (CIV); Howard, Gilbert (Gil) (CIV); Smarsh, David (Dave) (Col.); Jordanek, Paula (CIV); Kuska, Danielle (CIV); Rodgers, Ali (CIV); Andersen, Per (Mike) (CIV); Mastre, Thomas (Tom) Contractor, MPSC; Cain, Katherine (Kathie) (CIV); Baity, Deborah (Debbie) (CIV); Dolk, Daniel (Dan) (CIV); Fouts, Douglas (CIV); Horvath, R (Fran) (CIV); Larraza, Andres (CIV); Malik, Sarita (CPT); Moran, Daniel (CIV); Mutty, John (CIV); Richmond, Alan Contractor, Mancon; Uhlinger, Eleanor (CIV)
Subject: BENCHMARK Projects

Deans, Chairs,

This is to re-engage with you on the subject of Benchmark Projects. The name, Benchmark Projects, is newly-coined so perhaps unfamiliar. But the idea is one that has been discussed and previewed in recent months in the Provost Council and other campus meetings (most often using the label Educational Effectiveness projects).

Reprinted at the bottom is an excerpt from the WASC CPR Report that provides some broader background, but the Cliff Notes summary is this:

- **Educational Effectiveness**: The fundamental thing that WASC accreditation is about is Educational Effectiveness. Is NPS effective in providing education consistent with its mission? More to the point, do we have institutional systems and processes in place to provide the evidence to conclude that we are effective or provide the basis for improving?
- **Integrating Improvement**: "Integrating a Campus-Wide Program of Improvement" toward Educational Effectiveness is one of the three themes selected by NPS during the current WASC reaccreditation process. Integrating, coordinating and enhancing the educational assessment practices of the university is the core of this theme.
- **Where do we stand?**: Through a number of avenues, AY08 has been a year of documenting where NPS stands with respect to educational assessment practices (there's more on this in the excerpt below). Oversimplifying, it's a good news, bad news story. Good news: There's wide-spread use of educational assessment techniques and practices in NPS' Schools and Departments, much that's excellent, particularly in those parts of the campus that are subject to separate accreditation processes for their discipline. Bad news: There's wide difference in practice -- range, depth, type, effort, attention – across the Schools and Departments, with some lack of coordination. Few of our efforts focus directly on assessing student learning. And we're not as strong or systematic as we could be in documenting what we do, what we learn from it, and how we improve as a result.
- **Where we're headed**: The picture we need to present to WASC, and the reality we need to achieve, is a university that studies itself – in a systematic and coordinated manner – concerning how it does education and what our students learn. And improves itself when the need or opportunity arises.
- **In AY09**: The approach adopted for AY09 is the initiative of Benchmark Projects. Academic Affairs will work with each School/Department to design (and resource) projects directed toward advancing educational assessment practices and tailored to the needs and benefit of the individual School/Department. Again, more on this is in the excerpt below.

What's next: We'll try to set up separate meetings with each Dean, with Chairs, to discuss further and start planning a Benchmark effort appropriate for, and desired by, the School.

Thanks

DougM

Douglas Moses
Vice Provost,
Academic Affairs
x3218

WASC CPR Report Excerpt*: Towards Enhanced Educational Effectiveness*

Our WASC proposal theme calls for Integrating a Campus-wide Program of Improvement, directed centrally toward the enhancement of educational effectiveness at the university. This challenge to ourselves has motivated our attention to the wide range of academic systems, processes and practices - both in place and potential - that we have within our control to improve the educational programs at NPS.

NPS has initiated a number of steps directed toward advancing and coordinating academic assessment at the university.

Learning Assessments Task Force: As an initial step, a Learning Assessments Task Force (LATF) was established in March 2007 to provide an initial review of academic assessment practices across the university. Reporting out in November 2007, the LATF addressed four broad questions with respect to our educational processes:

- How do we know we are teaching the right material?
- How do we know we are teaching it well?
- How do we know our students are learning it?
- Are our feedback mechanisms adequate and do they work?

The LATF provided an initial picture of the range, variety and scope of NPS's assessment practices.

Ad Hoc Educational Effectiveness Group: In February 2008, NPS assembled an Educational Effectiveness group to develop further the university's approach to enhancing its educational assessment systems. The group identified additional steps forward for the university, with the first step being a more comprehensive inventory of NPS's current academic assessment systems and practices. An effort related to this followed with an Academic Policies Survey conducted in May 2008. Survey findings document academic practices across the NPS schools and departments related to faculty policies, program review and learning assessment.

Broad findings following from the efforts of the LATF, the EE Group and the Academic Policies survey would characterize NPS's academic assessments program as follows:

- Breadth: There is wide-spread use of assessment techniques and practices across all schools and academic departments in the university.
- Variety: There is similarity across the schools and academic departments in the sources of assessment information (from students, alumni, program sponsors, employers, faculty), but wide variety in individual assessment practices (wide variety in the breadth and depth of the effort, the processes and instruments employed, and the utilization of assessment information).
- Indirect Measures: With respect to student learning assessment, current practices (with some notable exceptions) rely heavily on indirect rather direct measures of learning outcomes.
- Excellence: There are strong areas of excellence in assessment, most notably in those department in the university subject to discipline-specific accreditation (ABET, AACSB, NASPAA).
- Distributed: While there is wide-spread practice of assessment across the university, many aspects of the assessment practices are distributed and idiosyncratic, rather than more centrally coordinated and integrated.
- Follow-up: Follow-on improvement activities that are to result from assessing educational effectiveness tend to be unsystematic and not well-documented.

Initiatives for Academic Year 2009: Benchmark Projects: Starting with an understanding of the existing foundation of assessment processes at NPS, the university has initiated a program, titled "Benchmark Projects" for the coming academic year. Since a wide variety of assessment practices have developed at NPS -- motivated by, and tailored to, the needs of the separate schools and departments -- the Benchmark Projects will attempt to build on the particular strengths of the individual schools. The approach NPS has adopted is one of "centralized responsibility to

assure that effective decentralized assessment practices occur". Benchmark Projects are to be conducted as a joint effort of NPS Academic Affairs with each of the NPS graduate schools (or departments).

University objectives of the Benchmark Projects include:

- Extension of assessment best practices more widely across campus
- Progress toward additional direct assessments of student learning
- Systematize feedback and improvement activities from assessment evidence

Each school will be able to identify its particular strengths and weaknesses with respect assessment practices and educational improvement feedback processes, and design an effort to advance. Each school will be able to identify where and how it most wishes to move forward with its assessment activities, to its greatest benefit.

ACADEMIC PRACTICES SURVEY (5/08)
(Framework for Educational Effectiveness)

Deans, Chairs,

WASC Accreditation: As you know NPS is engaged in the WASC re-accreditation process, which will be ongoing through 2010. Two major phases of the WASC process are the Capacity and Preparatory Review (CPR) and the Educational Effectiveness Review (EER). Each review requires a self-study of NPS, broadly documenting how NPS operates and how effective education is achieved at NPS. The core objective of the two reviews is to show that…

- **Capacity Review (CPR)**: The institution functions with clear purposes, high levels of institutional integrity, fiscal stability, and organizational structures and processes to fulfill its purposes.

- **Effectiveness Review (ERR)**: The institution evidences clear and appropriate educational objectives and design at the institutional and program levels, and employs processes of review that assure the delivery of programs and learner accomplishments at a level of performance appropriate for the degree of certificate awarded

The CPR is about showing capability -- showing that NPS has the organizational structures, policies and processes in place to be able to provide quality academic programs consistent with its mission. The EER is about showing outcomes -- showing that NPS does achieve the quality academic programs it proclaims and that NPS systematically reviews and improves itself toward that end.

Purpose of this Survey: In support of the CPR, the purpose of this survey is begin to document the special academic polices, processes and practices that may exist within each of NPS's schools and academic departments. The survey asks for input from each department concerning practices in three broad academic areas:

- **Faculty Development**: What processes do you have in place designed to support and review faculty achievement?
- **Education Program Review**: What processes do you have in place designed to assure the quality and effectiveness of education programs?
- **Student Learning**: What processes do you have in place designed to document and improve learning achieved by students?

SURVEY QUESTIONS:

Faculty Development:

1. Faculty Orientation: Does your department have an orientation program, formal or informal, for newly hired faculty? What steps are taken to assist new faculty toward success upon arrival at NPS?

2. Faculty Mentoring: Is there a formal or informal program of faculty mentoring within your department? Please describe.

3. Faculty Review: Beyond the NPS institutional Promotion and Tenure (P&T) process, does your department have any systematic processes for the review and evaluation of faculty accomplishments? (e.g., Such processes might be related to teaching performance, research accomplishments, reappointment decisions, annual paystep actions, etc.) Please describe.

4. Faculty Activities: All NPS faculty complete annual work plans, outlining planned activities for an upcoming year, and Faculty Activity Reports (FARs) summarizing accomplishments for the previous year. Beyond these two mechanisms, are there are additional systematic processes by which your department tracks faculty accomplishments? Please describe.

5. Faculty Development: Please mention any other policies or processes, not mentioned above, that are practices in your department for supporting and assessing the success of your faculty.

Education Program Review:

1. Curriculum Reviews: NPS has a long-established process of formal curriculum reviews with sponsors, which nominally occurs biannually. Does this process cover all of the degrees, curricula or programs in your department? How often, and by what means, are your curricula reviewed (formally or informally) in consultation with curriculum sponsors or stakeholders?

2. Academic Reviews: NPS has instituted a program of "Academic Program Review" (APR), the purpose of which is to support and facilitate external "peer" review of NPS degree programs by qualified academics. This APR program is not yet wide-spread across campus and so has touched few departments. Beyond APRs, does your department engage in any process, formal or informal, by which academics external to your department have provided assessments or critiques of your programs? External observers [e.g. visiting committees]?

3. Internal Reviews: Do you also have periodic or ad hoc procedures for reviewing and adjusting the contents of your curricula internally, e.g. during annual course planning? If so please describe.

4. New Programs and Courses: How does your department develop new curricula? New courses? In particular, does your department have an acknowledged curriculum committee (or analogous group) whose purpose includes the review and/or initiation of new curricula?

5. Program Quality Data: Apart from SOFs, does your department regularly collect information (from students, alumni, faculty, sponsors, visitors, etc.) for the purpose of monitoring program quality? If so, please describe. How is this information used to validate or improve current programs?

6. Program Accreditation: Some individual academic units and degree programs at NPS have separate accreditations by ABET, NASPAA or AACSB. Those three are know and need not be repeated here. Beyond that, are there individual academic or professional accreditations or certifications that are available to academic programs within your department? Please identify the potential accreditation or certification and indicate its applicability to your program(s).

7. Program Ratings: Program ratings exist in various forms. There are program or school ratings that exist in the popular press (e.g., US News). Some professional societies assess and rate programs in their discipline. On occasion academic research studies conduct assessments or rating of schools or programs. Do you know of external assessments or ratings that are applicable to your department or programs? Please mention.

Student Learning:

1. Learning Outcomes: Apart from the ESRs negotiated with your curriculum sponsors, does your department have written learning outcomes for its degree programs? If so, where are they located? Are your programs designed to satisfy the requirements of external professional licensing or certification organizations? If so, please describe.

2. Outcomes Assessment: Does your department have written procedures for determining if students have achieved the learning outcomes described in your answer to question 1? If so, where are they located? If these procedures are not written but there is a common practice, please describe.

3. Teaching Effectiveness: The NPS SOF process provides one indicator of teaching effectiveness. Beyond the SOFs, does your department engage in any systematic practices designed to appraise and/or improve teaching? (Examples might include classroom visits, review of course syllabi, peer review of teaching by colleagues, student surveys, etc.). Please describe.

4. Student Feedback: Please describe formal or informal mechanisms within your department designed to capture student feedback concerning their experience in their graduate program. (Examples might include student interviews either during the program or upon graduation, periodic student surveys, meetings with academic associates or program officers, etc.)

5. Course Journals: A "Course Journal" refers to an organized collection of course materials (e.g., course outline, syllabus, schedule, list of assignments) assembled at the completion of a course that provides a record of the course as taught. Submission of Course Journals by instructors and maintenance of the collection of Course Journals by the department was once common practice at NPS. Are Course Journals, or other similar sets of course records, submitted and maintained in your department, and used for assessment.

6. Thesis Assessment: How is the quality of theses or capstone projects ensured? Does your department have a systematic process that evaluates the quality and competencies demonstrated in theses or capstones? If there are written procedures, where are they located? If there is a common practice, please describe.

7. Distance Learning Assessment: Is the process of evaluating student learning different for resident versus distance programs? If so, please describe how.

Educational Effectiveness
FY '09
Rodgers 091208

Benchmark Projects:

Building a culture for continuous improvement and academic excellence is central to supporting the academic mission of the Naval Postgraduate School. In this process, NPS must systematically engage in comprehensive self-study and reflection about teaching, learning and assessment that lead to ongoing and formative improvements in academic programs, instruction and the assessment of student learning. This process requires a commitment to cooperation, flexibility, peer review, transparency, and responsiveness to address the emerging and strategic needs of the DoD, sponsors and the military.

The WASC accreditation process provides a meaningful context for self-study and to lay a foundation for ongoing professional development and continuous improvement. A byproduct of this process will lead to the implementation of innovative programs and projects that establish a baseline from which continuous improvement can be benchmarked and shared. Within schools, benchmark projects may be designed for diagnostic, prescriptive, formative or summative purposes. Benchmark projects will be faculty led and determined by peer consensus to be of sufficient rigor and merit to:

1. Fully investigate the research questions associated with the project
2. Measure the effectiveness of existing or newly developed educational programs.
3. Evaluate the alignment of programs with institutional goals
4. Implement and assess programs that contribute to continuous improvement of teaching, earning, and assessment
5. Data collection to assess and document growth, anticipate change and to validate student improvement.
6. Result in findings or products that can be adapted for campus wide and or distributed educational uses.

During FY'09 Academic Affairs will sponsor faculty led teams, within each school to collect and interpret relevant data and provide leadership for the design and implementation of benchmark projects and programs.

Phase One
Convene a team to define current practices, collect and interpret data

1. What are the indicators that will confirm or question the quality of education within specific degree and certificate programs?
2. How is educational effectiveness defined and documented in your school or program(s)?
    - Sponsors
    - Programs
    - Faculty
    - Students
    - List the "value adds" that strengthen the effectiveness of programs, faculty, and students? How were these identified and monitored?

3. What is the role of assessment in improving instruction and informing department and institutional decision-making?

4. What processes, measures, and feedback systems are in place to improve teaching and learning?

5. Define the major strengths of your school or program(s) and if/how these strengths are documented.

    - Give examples of indirect and direct measures.

6. Define weaknesses and areas for improvement and how these areas were identified.
    - Do you have a formal/informal plan for improvement?
    - Describe if/how (frequently) these issues are being monitored and the type of feedback that will validate improvement.

Phase Two: Using the results obtained in the phase one review process, design (obtain approval) to implement a benchmark project that is:

- Developed as a diagnostic or prescriptive treatment to improve current programs and enhance teaching, learning and multi factored assessment of student achievement, or
- Designed to evaluate (formative or summative) the alignment of teaching, learning, and assessments, or
- Define and assess qualitative/quantitative differences associated the use of instructional technologies for distance learning and evaluate their impact on teaching, learning and student achievement.

Phase Three: Disseminate results in faculty forums and seminars and in publications posted on the Academic Affairs website. Select and convene a new team to collect data and develop and implement benchmark program during FY'10.

REPORT OF THE AD HOC FACULTY

WORKLOAD COMMITTEE

7 May 2002

_____
Terry McNelley, Chair

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Thomas Bruneau

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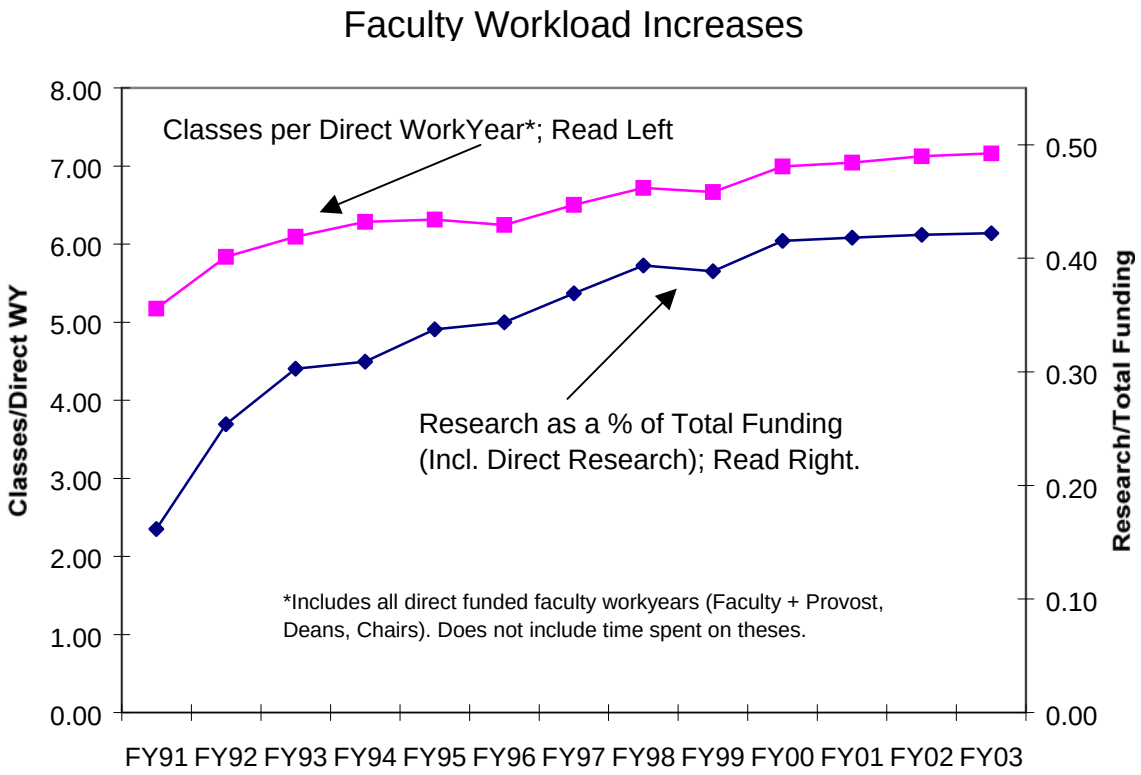
Report of the Ad-Hoc Committee on Faculty Workload

Introduction

The NPS has a unique educational mission as the Navy's Corporate University. In fulfilling this mission the School's tenure track faculty members engage in professional activities that span the areas of instruction, research and service, and they are evaluated for professional advancement based on their contributions in all of these areas. Thus, NPS faculty members routinely function in much the same manner as they would in any of the Nation's civilian research universities or in other graduate-level Federal educational institutions. In addition, NPS faculty members must develop and maintain a thorough understanding of national defense in order to be able to contribute effectively to fulfillment of the School's mission.

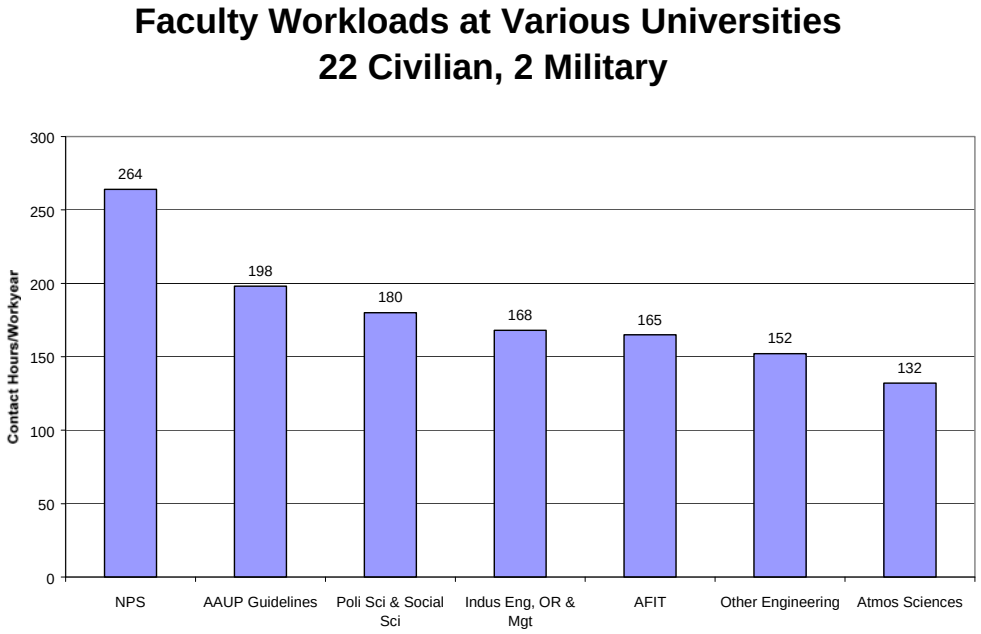
The decade-long decline in funding for NPS has made it impossible to support the faculty in meeting the requirements in all of these areas. Currently, only two activities of non-administrative tenure-track faculty members are explicitly recognized in the School's allocation of direct teaching budget to the departments: (1) course sections taught, and (2) thesis students advised. Furthermore, the compensation provided for these two activities has declined as the School's budget has eroded. Between FY91 and FY01the number of class sections taught for each twelve-month work year of faculty labor increased from about 5.2 to about 7.2 (see the graph below). While some might wish to interpret this as a reflection of increased efficiency, in reality it represents a *de facto* 40% cut in the compensation to a faculty member for teaching a course section.



A further effect of the decline in direct funds has been an increasing pressure to obtain reimbursable research funds and an increasing reliance on these funds to cover tenure-track faculty salary during the 10-month academic year as well as during the two-month intercessional period. This is also documented in the graph: the proportion of tenure-track faculty labor charged against research accounts more than doubled over this same time interval and reached 41% in FY01 – most of this in the form of external reimbursable research funds. While the effects of the declining budget have been largely negative, it must be recognized that the current budget allocation model has also had beneficial side effects. The emphasis on reimbursable research funding has resulted in a great expansion of entrepreneurial activity and a strong focus on sponsored research by the faculty. On the other side of the coin there has been an institution-wide reduction in emphasis on classroom teaching, and on course and curriculum development.

Request for Additional Funding

Beginning in FY03 additional funding will enable the School to restore support for a wider range of requirements that the tenure-track faculty are expected to meet. The request for this additional funding was based on a comparison of NPS teaching loads, measured in contact hours, with teaching loads at 22 civilian research universities as well as at two graduate-level military educational institutions (as shown in the bar graph below). The comparison showed that a tenure-track faculty member at NPS would be expected to teach six courses, equivalent to 264 contact hours, in order to receive full compensation from the School for the 10-month academic year. Teaching loads were lower than this at all of the civilian universities as well as at the other military institutions in the comparison, and generally corresponded to four (or fewer) courses in order for a



faculty member to receive full compensation for an academic year. For the most part, these lower teaching loads reflect institutional support for research activities of the tenure-track faculty that are conducted during the academic year.

While non-administrative tenure-track faculty members at NPS are guaranteed compensation only for the 10-month academic year a large majority is paid for a full 12-month work year by a combination of institutional (Direct) funds and reimbursable research (RR) funds. Direct funds are internally subdivided into Direct Teaching (DT) and Direct Research (DR, currently distributed as NPS Institutionally Funded Research (NIFR) funds); both direct labor and RR labor generate paid leave and holiday (LH) funds through labor acceleration. The following table shows that, on the average, four months (33%) of non-administrative, tenure-track faculty labor was charged against reimbursable accounts during FY01 (see the total for Departments under the RR column). Typically, such faculty members also receive an allocation of one month (0.08 of a work year) under Direct Research and so the proportion of total labor that is charged against research accounts comes out to 41%.

The typical non-administrative tenure-track faculty member currently fills the 10-month academic year with six months of teaching, one month of DR, two months of RR, and one month of paid leave and holidays. This faculty member also funds the two-month intercessional period with RR. For such a faculty member to be completely support by NPS direct funds during the 10-month academic year, NPS must buy back two months of RR while keeping teaching loads level and maintaining DR support. This will move the institution toward a workload model that agrees more closely with workload models in research universities. The amount of funding required for this purpose was determined to be $5.2M and this amount has been included in the School's FY03 budget.

TENURE TRACK FACULTY LABOR IN DAYS, FY01

						FRACTION CHARGED TO:		
DEPT	DT	DR	RR	LH	TOTAL	DT+DR	RR	LH
CS	1801.00	282.06	618.56	510.88	3212.50	0.67	0.23	0.10
GP	763.50	25.75	677.25	148.50	1615.00	0.52	0.46	0.02
IS	548.81	213.06	480.88	247.00	1489.75	0.44	0.39	0.17
AA	1514.13	322.00	480.88	413.50	3137.01	0.56	0.33	0.11
EC	2916.13	390.00	1736.06	796.56	5838.75	0.58	0.34	0.08
MA	2591.31	158.00	474.06	550.63	3774.00	0.80	0.15	0.05
ME	1962.19	182.13	980.44	508.25	3633.01	0.63	0.31	0.06
MR	718.19	164.69	1051.13	405.00	2339.01	0.37	0.54	0.09
OC	1074.94	182.88	833.81	326.38	2418.01	0.51	0.40	0.09
OR	2147.81	281.50	1719.25	796.44	4945.00	0.52	0.41	0.07
PH	1981.63	349.13	1119.88	449.38	3900.02	0.57	0.32	0.11
SM	3736.13	181.88	1866.25	869.00	6653.26	0.65	0.32	0.03
NS	2277.06	321.75	747.94	661.25	4008.00	0.68	0.22	0.10
TOTAL	24032.83	3054.83	13192.89	6682.77	46963.32	**0.60**	**0.33**	**0.07**
ADMIN	2730.69	81.00	269.76	485.56	3567.01	0.89	0.09	0.02
TOTAL	26763.52	3135.83	13462.65	7168.33	50530.33	0.62	0.31	0.07

This new funding brings with it an immediate obligation to clarify the NPS workload model and the expectations that apply to the tenure-track faculty regarding their professional activities. This new funding also provides a unique, longer-term opportunity to rethink how NPS should determine, schedule and compensate the annual workload of the tenure-track faculty.

Current Teaching Data

In the request for additional funding it was assumed that the overall teaching load at NPS would remain level. Data for four consecutive quarters (FY00 Quarter 3 through FY01 Quarter 2) are summarized in the following table.

Teaching Data (FY00 Quarter 3 through FY01 Quarter2)

Courses Taught			Who Taught Them		
Class Section Size	No. Sections	Cumulative Total	Faculty Category	Number of Sections	% of Total
>29	67	67	Non TT	288	23
25-29	91	158	TT (Tenured)	569	46
20-24	152	310	TT (Not Tenured)	135	11
15-19	267	577	Contractor	12	1
10-14	321	898	Military Faculty	156	13
9	89	987	Other	87	7
8	77	1064			
7	72	1136	Total	1287	100
6	59	1195			
5	52	1247	Tenure-Track Faculty		
4	34	1281	Total/Non-Admin		Sect./AY
3	31	1312	208/181	704	3.9
2	32	1344			(non-admin)

For this time period 181 non-administrative tenure track faculty members averaged teaching 3.9 sections per year. On this basis, the $5.2M funding increment could be viewed as providing two months of institutional (Direct) salary support offsetting RR salary charges *but only if non-administrative tenure-track faculty members continue to teach at about the current level*. Underlying this discussion is the question: what are the activities that the NPS should compensate its tenure-track faculty to perform; and, what are the obligations of the individuals who receive such compensation?

Faculty Activities

The full range of activities and responsibilities of a faculty member can neither be defined simply nor summarized easily. Instructional activities include obligations above and beyond regular classroom duties and include, but are not limited to, academic advising and counseling, the supervision of master's and doctoral students, direction of individual study programs, student group projects, and curriculum development. Research is a fundamental obligation of the tenure-track faculty in a research university and may include activities as diverse as investigation leading to the discovery of new phenomena, the application of new methodologies to existing problems or the transmission of knowledge. Research encompasses efforts that are reimbursable activities funded by an external sponsor; mechanisms for cost sharing of these activities must be included in any workload model. It must also be kept in mind that research is more than just reimbursable research; these activities are *not* one and the same. In a vibrant research university environment instruction and research activities necessarily overlap and blend into one another. In addition, faculty members have many service obligations including

internal support to the institution and external activities in support of the Navy, the DoD or other public entities.

Workload Committee Recommendations

The Workload Committee recommends that the common areas of faculty activity outlined below be adopted as applicable across the NPS campus. Specific measures of these activities and of output will differ by academic department, discipline and school. Therefore, each individual department must define specific requirements and the regulation of workload will be the responsibility of the appropriate department chair and dean. It will be especially important to inform new faculty of discipline-specific workload requirements at the time of hiring into the department or school.

The Workload Committee further recommends that participation by tenure-track faculty members in any or all of these activity areas will qualify for compensation during the 10-month academic year from Direct labor. The extent of participation in these areas will vary widely among individuals. However, the Schools and Departments should adhere closely to the following categories in delineating specific requirements and regulations for faculty activities:

- Instruction
  - Teaching
    - Resident courses (lecture, seminar and laboratory)
    - Non-resident courses via DL (VTC, WBL, etc.)
    - Non-resident courses offered off campus (on ships, to reserve units, etc.)
    - Directed study
  - Continuing Education
    - Refresher courses
    - Executive education, short courses
  - Advising
    - Theses and dissertations
    - Non-thesis projects
  - Instructional Development
    - Curriculum development
    - Course development
  - Faculty Development
    - Gain new expertise
    - Familiarization with new contexts (e.g., work in other DoD activities)
- Research
  - Research Initiation
    - Scholarly development or reorientation
    - Developing sponsorship
    - Proposal preparation and submission
  - Research Administration
    - Recruiting and supervision of research personnel

Facility acquisition and management
Financial management of research programs

Conduct of Research
Theory, concept, methodology and model development
Design and conduct of experiments and field research
Data collection and analysis
Modeling, simulation and application

Dissemination of Research
Publication (e.g., journals, books, technical reports, etc.)
Conference presentations
Sponsor reports

Service

Internal service
To Departments / Schools (Chair, Associate Chairs, Associate Dean, Academic Associate, committees, etc.)
To NPS (Councils, Executive Board, ad-hoc committees, special projects, promotion of NPS)

External service
To the Navy, DoD, or US Government (Service on review boards, panels, etc.; consulting support; organizing of meetings)
To the profession (Paper, proposal review; participation in review panels; editorship of journals; conference organization; leadership in academic societies)

Within these areas the wide variety of faculty activities necessary for effective functioning of the NPS makes it necessary to include qualitative as well as quantitative measures of faculty workload. Also, metrics of faculty workload may include factors in addition to credit hours of teaching, such as section size, distance learning delivery, or project courses. Each department will define workload metrics to accompany its requirements and regulations, and the administration of the faculty workload will be the responsibility of the appropriate department chair and dean.

The Workload Committee also recommends the following goals and steps to achieve them in establishing a general workload model applicable to the non-administrative tenure-track faculty:

Goals for the Faculty Workload Model

1. All non-administrative tenure-track faculty members to be fully funded for the 10-month academic year (including one month of paid leave and holidays).

Then, during each 10-month academic year, non-administrative tenure-track faculty members will accomplish, on average:

2. the equivalent of two quarters (six months) of instructional activities, to include teaching that is nominally equivalent to four 4-credit courses and supervision of theses
3. the equivalent of one quarter (three months) of research
4. service obligations to the institution, the Navy/DoD, and their profession.

The intent in establishing these goals is to provide academic units with direct funds at least sufficient to support tenure-track faculty for 10 months per academic year. The committee recognizes that a comprehensive model for the resourcing of academic units from NPS institutional funds will need to incorporate factors beyond the number of tenure-track faculty, including consideration of factors such as non-tenure track faculty, the nature and scope of instructional programs and faculty administrative positions. Heads of academic units would then be responsible for the allocation of these direct funds to support the unit's required instructional, institutionally supported research, and service activities. Under this procedure, an academic unit's following year's direct budget would not be determined solely by the current year's DT execution. This represents a departure from current NPS practice to procedures that are closer to those of civilian research universities. The committee envisions that eventually, dedicated cost sharing programs such as NIFR will not be required. Instead, three months of institutional research support (in addition to six months of support for instructional activities) will incorporate cost sharing as an activity appropriate for NPS funding and which will be managed mainly at the academic unit level.

As of this writing it is not known whether the $5.2M increment in the FY03 budget is sufficient to fully fund the recommended faculty workload model. It appears to the Committee that current funds will not be sufficient without significant course consolidation and 'right sizing' among the departments. As the NPS moves toward the recommended model great care must be taken to insure that all required coursework continues to be provided to the students.

Funding beyond the current $5.2M may be required to hire instructors when some tenure-track faculty members reduce currently high teaching loads toward a load that is more nearly equivalent to four 4-credit courses envisioned in the model. Also, the recommended model assumes that current NIFR funding plus the $5.2M increment will provide the necessary three months of support for each non-administrative tenure-track faculty member. This is probably not the case and suggests that full implementation of the recommended model will require additional funding.

<u>How Do We Get There? Recommendations for FY03</u>

1. For FY03 budgeting, distribute sufficient DT to each academic unit to support all required teaching, administration and thesis supervision. This is intended to ensure that all academic units have sufficient budget to maintain current (FY02) program levels. The tenure-track faculty in each academic unit will accomplish, on the average, teaching that is nominally equivalent to four 4-credit

classes and thesis supervision for each 10 months of tenure track faculty labor.

2. For each non-administrative tenure-track faculty member expected to have the 44-day intercessional period fully funded, provide an additional one-month of institutional funding.
3. Distribute the $5.2M increment to academic units, in proportion to the number of tenure track faculty members in each unit, for the purpose of funding two months, on the average, of faculty labor. These funds represent further institutional support for the instruction, research and service activities that tenure-track faculty members are obligated to provide.
4. For academic units in which the nominal four 4-credit course load represents a reduction in teaching load for some faculty and results in unstaffed courses, authorize and approve hiring.

<u>How Do We Get There? Recommendations for FY03 and beyond.</u>

5. Academic units will review programs with a view toward consolidating courses and improving program efficiency.
6. In conjunction with the academic units of the School the administration will review the number of tenure-track faculty positions assigned to each unit. Considerations for this will include such factors as;
    a) current and projected numbers of students
    b) scope of the unit's academic program as defined by program sponsors
    c) recognition of differences in cost to maintain high-quality programs in the different disciplines represented across the NPS campus
    d) recognition of different kinds of instructional programs (e.g., VTE, web-based)
    e) recognition of strategic growth areas
    f) composition of academic units' faculty (e.g., tenture-track, non-tenure-track, administrative)
    g) NPS recognition of research as an integral part of a tenure-track faculty member's activities eligible for institutional salary support.
7. Budget allocations for support of tenure-track faculty members will include:
    a) institutional support for research;
    b) institutional cost sharing of sponsored research.

NAVAL
POSTGRADUATE
SCHOOL

FY2009 ACADEMIC OPERATIONS & BUDGET

May 15, 2008

Preliminary!

The Nation's Premier Defense Research University

Monterey, California
WWW.NPS.EDU

9 Month Model

World Peace … or Ho Hum?

9MM = Rorschach Test

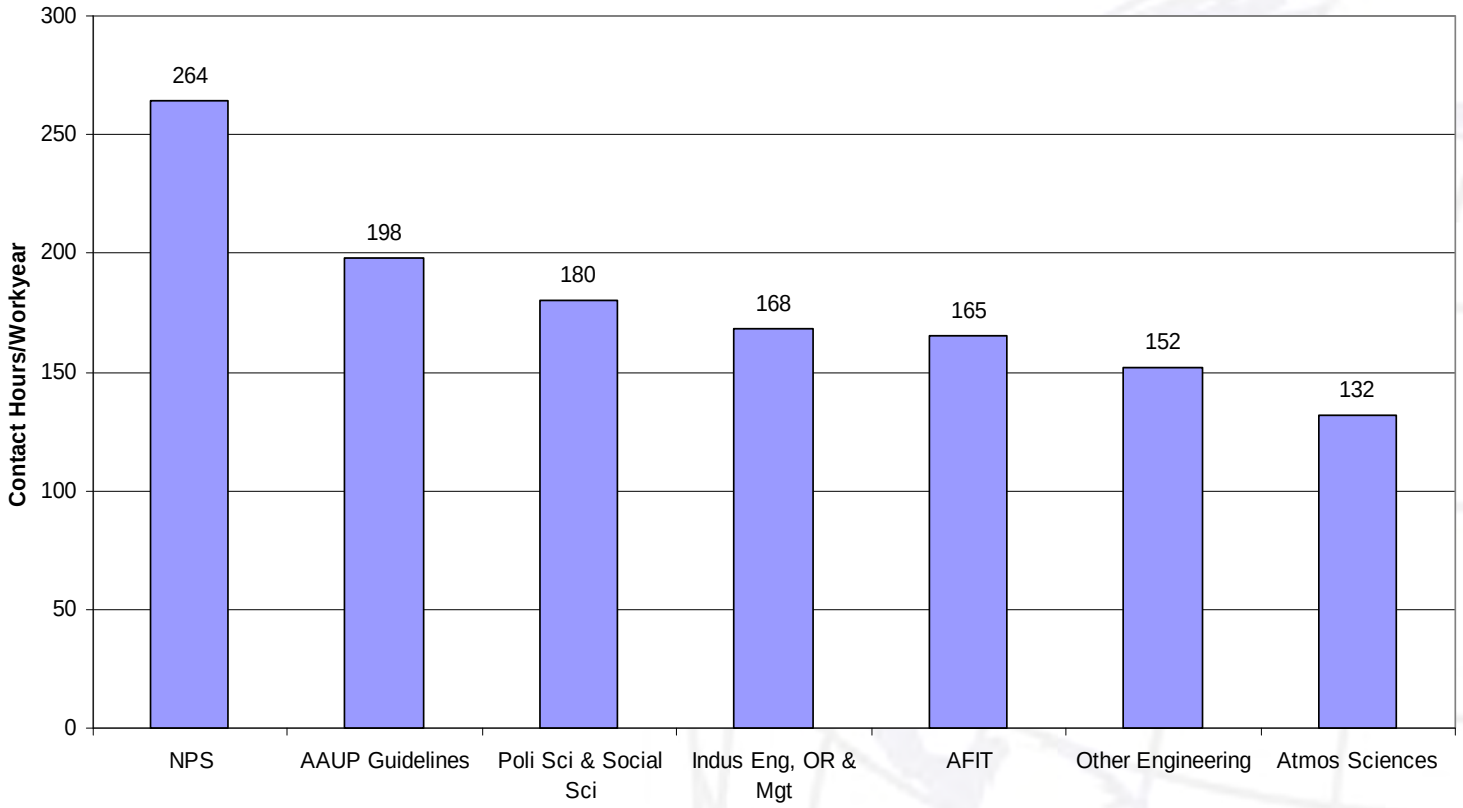
The “9MM” has become so laden with people’s aspirations, agendas, concerns and fears…

Leap of Faith

Just do it!

Faculty Workload

Faculty Workloads at Various Universities
22 Civilian, 2 Military



Faculty Workload Committees

- *McNelley Committee – 2002*
  - *$5M Workload Fund*
  - *"8 Month Model" instituted*
  - *Gradual slippage*
- *Purdue Committee – 2006*
- *Filizetti Committee – 2007*
- *Moses Committee – 2008*
- *~F6 Committee – 2008*

Why Bother?

MOTIVATIONS FOR 9MM

- **Strategic Plan:**
  - **Research University**
  - **Faculty Workload Picture → Like other Univs.**
- **Quality of Faculty Life:**
  - **Opportunity for Scholarship**
  - **Recruiting & Retention**
- **Culture Change:**
  - **Commitment & Service to the Academy**
  - **Reverse the billable hours mindset**

What is "It"?

BASIC CORE ISSUES: Workload & Funding

- Individual TT Faculty Workload Model
- Funding Mechanism to Schools/Depts.

EXTENSION ISSUES: Academic Operations

- Curriculum Restructuring / Rightsizing / Efficiency
- Faculty Rightsizing / Planning / Mix
- Instruction Funding Domain
- Dean/Chair/Department/Faculty Management
- Labor Accounting System
- Scheduling / Length of Quarter
- DL Operations / Administration / Tuition Model
- Financing NPS Academic Programs

TT Faculty Workload: Nominal 9 Month Work Activities

Instruction Oriented:

- Course Teaching: 4 sections
- Thesis / Project Advising
- Course Maintenance & Development

Research Oriented:

- Research (DFR)
- Thesis / Project Advising

Service Oriented:

- Faculty Administrative roles (Assoc Chairs, Acad Assoc.)
- Service (member of NPS & NPS faculty community)
- Special Projects (ad hoc)

(9 Months sorta = 2 "Teaching" Qtrs + 1 "Research" qtr)

9MM Funding Objectives

- More mission funds in total into schools & departments than currently

- More mission funds to TT faculty for non-teach activities (e.g., research)

9MM Funding Mechanism

Faculty labor in Schools & Depts. will be resourced for 2 Elements:

1. TT Faculty Time (Academic Year):

- Concept: f (TT faculty)
- Method: 3 qtr funding per each TT faculty / 4 sections taught

2. Remaining Instruction:

- Concept: f (uncovered for-credit teaching requirements)
- Method: 1 qtr faculty labor funding per 2 sections of "instructional requirements"

3. Academic Operations Support

- Components: Administration, Staff, Non-Labor
- Concept???: f (Level of academic operations; # Faculty FTEs)
- Method: # Faculty FTEs = (DFR Qtrs + Inst Qtrs)/4 →TBD

Devil in the Details: "Instructional Requirement"

How do we carry out Instruction? Some Variables and Sensitivities:

Sections of small class-size:

- **~15% of resident sections are <= 7 students → Cost $3.7M**

Constraint on resident instruction

- **5% change in # sections taught → $1.2M**

MilFac teaching contribution

- **Increase from 2 → 4 sections → $1.4M**

NTT teaching contribution

- **Increase from 8 → 9 sections → $1M**

TT teaching contribution

- **Increase from 4 → 4.4 sections → $1.8M**

TT Faculty Workload: Chair's Management

Flexibility: Funding to Deans/Chairs with some discretion / flexibility / Obligation to manage across departments, while being faithful to the 9MM workload guidelines

Annual Faculty Work Plans: Annual work plans for all TT faculty are essential to implementation of the 9MM.

Deviations from the Average: The department chair, with individual faculty, may agree to assign a faculty member more or less than 4 sections depending on department needs and faculty member strengths, but subject to the department's direct budget constraint.

Example deviations:

- More teaching: Assigned where teaching is a faculty member's preference or research productivity is slight.
- More teaching: Because of Dept needs to cover courses. This is greatly discouraged. Chairs should seek other-than-TT means of staffing courses.
- Less teaching: Where an acceptable teaching "buyout" is arranged (via RR).
- Less teaching: Non-teach time funded in recognition of, or support of, exceptional research productivity
- 10 Month "Contract": Nominal 10 months of direct funding / 5 section teach load

TT Faculty Workload: 9-Month Model vs 10-Month "Contract"

9MM speaks to institutional funding of TTs from Mez to Schools/Depts

- 9 months of compensation funds per TT, with assumed 4 section teach load
- Individual TT faculty work profiles may vary from the assumed average

- 10-Month "contract" refers to a specific work/pay profile implied by NPS when hiring
  - Individual TT may chose to be funded from institutional funds for 10 months.
  - Assumed average teaching load would be 5 sections

How Much $$?

Necessary adjustment from the current DT resourcing model = ?

How Much $$?

Necessary adjustment from the current DT resourcing model = $5.5M

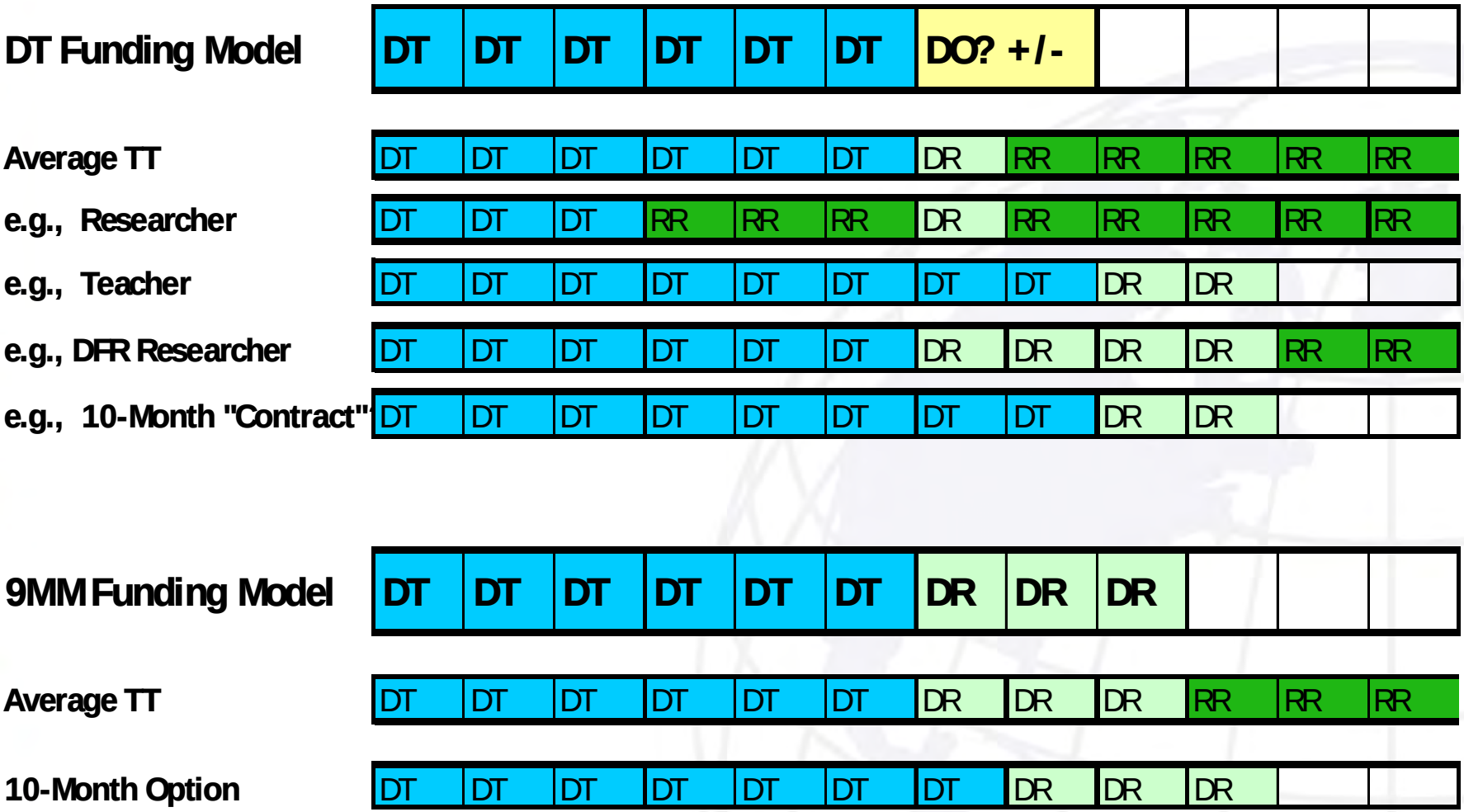
Sources ?

- **Less mission funds spent on overhead?**
  - **e.g.: Replaced by Indirect = guess $2M**
- **Recovery from FY07 mission cut?**
  - **e.g.: -6M →-2M = + $4M**
- **Growth of Reimbursables?**
  - **e.g.: $10M x 25% indirect → $2.5M**
- **Reduce Reserves?**
  - **e.g.: → $1M**
- **etc.**

Backup

Odds & Ends

TT Faculty Workload:
TT Faculty Work & Funding Profiles



Basic Funding Structure → To Schools

Schools (Depts.) will be resourced for 3 Elements: (version 1)

1. **DFR** (Direct-funded research):
   - Concept: f (TT faculty)
   - Method: 1 qtr faculty labor funding per each TT faculty

2. **Instruction**:
   - Concept: f (for-credit teaching requirements)
   - Method: 1 qtr faculty labor funding per "2 sections" of approved instructional requirements

3. **Academic Operations Support**
   - Components: Administration, Staff, Non-Labor
   - Concept???: f (Level of academic operations; # Faculty FTEs)
   - Method: # Faculty FTEs = (DFR Qtrs + Inst Qtrs)/4 →TBD

Basic Funding Structure: DFR

1. **DFR** (Direct-funded research):
   - Concept: f (TT faculty)
   - Method: 1 qtr faculty labor funding per each TT faculty

- **Simple count of # TT faculty in school/dept**
- **Includes chairs in count**
- **Includes new TT hires in count**
- **Includes planned RIP (Add 1 extra qtr per TT during first two years)**

Basic Funding Structure: Instruction

2. Instruction:

- Concept: f (for-credit teaching requirements)
- Method: 1 qtr faculty labor funding per “2 sections” of approved instructional requirements

Three basic issues:

- Process: How to determine requirements
- Measure: Metric for measure of requirements
- Domain: Are Resident Instruction / Designated Mission Instruction / Reimbursable Instruction included “in the model”?

What will happen to Reimbursables?

Multiple Scenarios:

- **Falling Reimbursables:**
  - **More TT time directly funded → Less need for RR for salary → Fewer RR projects → Falling RR $s**
- **Constant Reimbursables:**
  - **More TT time directly funded → Less need for RR for salary → Redirect RR funds raised to support PhDs or others → Sponsor funds received maintained.**
- **Growth in number of**
  - **→ increased reimbursables → increased indirect → free up mission $s**
- **Etc. Etc.**

Instruction: What Domain?

	ACTIVITIES			
FUNDING	Instruction For-Credit	Research	Instruction Not-for-credit	Other Activities
General Mission	Resident	Work Load		
Designated Mission				
Reimbursable				

	Instruction For-Credit	Research	Instruction Not-for-credit	Other Activities
General Mission	Resident	DFR		
Designated Mission	**?** EMBA, OCL			
Reimbursable	**??** MSPM, AAP			

Instruction Domain:
Only Including DT / Resident Teaching

Caution: Data one year old. Use only as example

			mult factor						cng to 08		9 mo	cost per sect					
			0.9			4.0					142500	20000					
		EST !	USE		TCH			TO PAY	ACTUAL	FY07	FY08 TT	OTHER		This is FY07 data			
	SECT	SECT	SECT	TT	TT	SECT		OTHER	OTHER	FTE TT	COST	SECT	9MM	All FAC DT	FY07	Previous	COST
	FOR 07	FOR 08	FOR 08	APR07	IN 08	ER TT)		SECT'S	FOR 07	APR07	APPROX	COST	TOTAL	not H	H	TOTAL	INCR
NS	184.5	197.5	177.8	24.0	23.0	92.0		85.8	110.5	21.3	3420000	1715000	5135000	2836044	377400	3213444	1921556
CS	148.0	154.5	139.1	24.0	23.0	92.0		47.1	80.9	20.9	3420000	941000	4361000	3089581	421800	3511381	849619
DA	72.0	86.0	77.4	13.0	12.0	48.0		29.4	30.0	12.9	1852500	588000	2440500	1586461	199800	1786261	654239
IS	57.5	63.0	56.7	11.0	10.0	40.0		16.7	27.2	9.3	1567500	334000	1901500	1458113	244200	1702313	199187
OR	99.5	100.5	90.5	20.0	19.0	76.0		14.5	43.0	21.6	2850000	289000	3139000	2304947	377400	2682347	456653
EC	113.0	116.0	104.4	22.0	21.0	84.0		20.4	21.0	21.7	3135000	408000	3543000	2645527	444000	3089527	453473
MA	84.0	84.0	75.6	15.0	14.0	56.0		19.6	25.0	14.3	2137500	392000	2529500	1365436	266400	1631836	897664
ME	80.0	80.0	72.0	16.0	15.0	60.0		12.0	32.5	14.0	2280000	240000	2520000	1883735	310800	2194535	325465
MR	32.5	35.5	32.0	7.0	6.0	24.0		8.0	10.0	8.9	997500	159000	1156500	798726	155400	954126	202374
OC	36.5	40.5	36.5	9.0	8.0	32.0		4.5	6.0	9.0	1282500	89000	1371500	816859	177600	994459	377041
PH	86.0	105.0	94.5	14.0	13.0	52.0		42.5	26.8	12.8	1995000	850000	2845000	2040162	310800	2350962	494038
SE	33.0	30.0	27.0	7.0	6.0	24.0		3.0	25.0	4.0	997500	60000	1057500	1154807	66600	1221407	-163907
SP	8.0	11.0	9.9	1.0	0.0	0.0		9.9	5.0	1.0	142500	198000	340500	321748	22200	343948	-3448
													15363500				
GB	212.0	225.5	203.0	36.0	35.0	140.0		63.0	92.0	36.2	5130000	1259000	6389000	5268695	643800	5912495	476505
TOT	1246.5	1329.0	1196.1	219.0	205.0	820.0		376.1	534.9	207.9	3.1E+07	7522000	**38729500**	27570841	4018200	31589041	**7140459**
														add inflation to 07 data		700000	**6440459**

Instruction Domain: If Including "Designated Mission" Programs

"Designated Mission" Instruction Programs:

- Funded with mission funds, separately identified (POMed) from general mission
- Current programs include: EMBA (GSBPP), NUC (GSEAS), MSA (GSOIS)
- Get $$ by school

If included "in the model", this implies:

- Designated funds are merged into general NPS mission pool
- Corresponding teaching requirement are merged into the school/dept's total requirements
- Funds for faculty instruction compensation for the program flow to schools/depts in accordance with the standard workload model (e.g., 2 sections = 1 qtr)---see if this is affordable??
- As with resident instruction under the standard model, academic associate & program manager compensation is not separate, is included as work accomplished under the standard workload model
- Program specific non-faculty costs (i.e., staff, travel, optar, etc.) are planned and negotiated with the school/dept.

Instruction Domain: If Including "Reimbursable" Programs

"Reimbursable Education" Programs:

- Funded outside of mission funds, by sponsors' funds, separately identified
- Current programs include: GSBPP (MSPM, MSCM, AAP, AMDLP), GSEAS (xxxxxxxxxx?
- Get $$ by school

If included "in the model", this *could* imply:

- NPS uses consistent pricing structure for RE programs: "Tuition" model
- Price is expressed on a per student, per course (or per credit hr?) basis
- Price consists of two components: Tuition (standard across NPS) and Fees (may be program-specific)
- Tuition component is designed to cover 1) all faculty labor and 2) indirect costs
- Fees component is designed to cover program-specific non-faculty direct costs (e.g., program staff, travel, optar)

- Tuition funds are collected into a tuition pool and merged into general NPS mission pool
- Corresponding teaching requirement are merged into the school/dept's total requirements
- Funds for faculty instruction compensation for the program flow to schools/depts in accordance with the standard workload model (e.g., 2 sections = 1 qtr)---see if this is affordable?? Tuition will need to be too high?
- As with resident instruction under the standard model, academic associate & program manager compensation is not separate, but is included as work accomplished under the standard workload model
- Fees component (for program-specific, non-faculty costs) are managed by the school/dept./program

Executive Summary

Significant changes for FY09

- **9MM**
- **Direct-Funded Research**
- **Pre-planned instruction programs**
- **Reduced resident instruction**
- **All “for-credit” instruction treated similarly**
- **Increased Dean responsibility**
- **New instruction program review**
- **Managed faculty size and composition**
- **Etc.**

Instruction: Determining Requirements

Three Step Process

Past Requirements

- Determine actual instruction provided during most recent year
- Assumes a random walk. Serves as starting reference

Forecast Requirements

- Schools/Depts complete a qtr-by-qtr FY09 course plan
- Schools/Depts identify/justify any changes from the past: Increase in students? New curriculum was approved?
- Requirements adjusted for defendable changes

Reduced Requirements

- NPS will set level of resident teaching requirements it will fund in FY09
- Requirements are expected to be funded at a level that will result in an average 5% (?) reduction in resident instruction from FY08
- Deans/Schools have responsibility and discretion to achieve reduced goal

Instruction: Measuring Requirements

Multiple metrics available

- Each to be incorporated (or not) into a measure of requirements
- Each reflects a different aspect of the amount of instruction "work"
- Each causes positive and negative incentives
- Each is biased for or against particular departments

Possible metrics:

- Number of Students on board (AOB)
- Number of sections
- Course credit hours
- Class size
- Student credit hours
- Others…
- Exclusions: e.g., don't count 1-credit courses; don't count sections below 10 students

Principle past metric(s):

- ECH: Equivalent Credit Hours
- ECH = f (# sections, # credit hrs per section, # students in section, # theses)
- (For DL: Various = f (course, # credits, #contact hrs, premium markup))

Assumed 9MM metric(?):

- # sections

Instruction: Managing Requirements

Responsibility to Deans. Schools determine how.

Approaches:

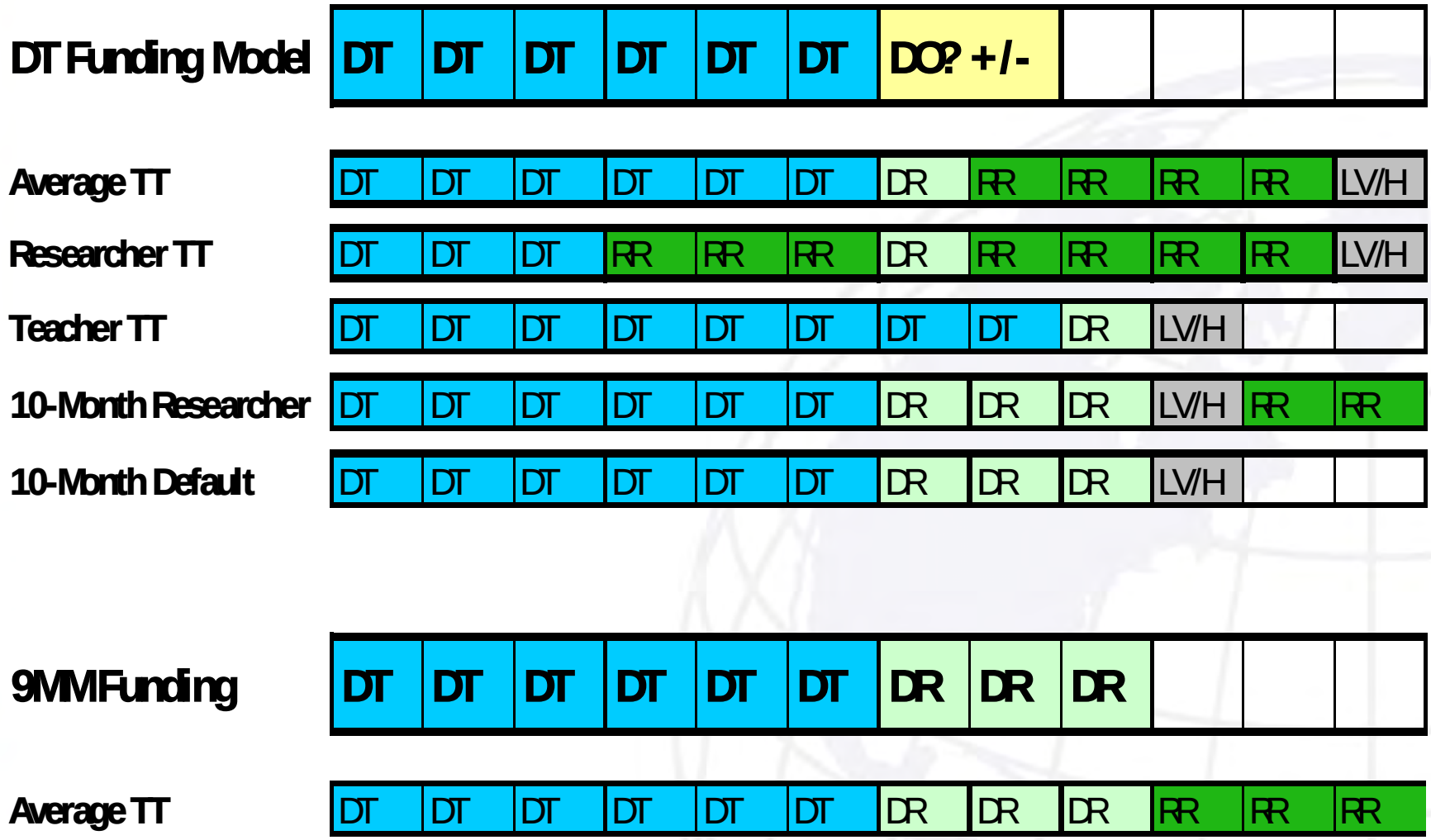
- Reduce courses in matrix
- Reduce electives delivered
- Reduce number of tracks
- Increase section size, class size
- Reduce student credit load
- Reduce number of starts per year
- Redesign matrices to combine small student groups
- Etc.

Competing Objectives:

- Reduce resident instruction by 5% (?)
- Guideline: Maximum required students credit hours in qtr of 18 credits
- Meet minimum requirements to satisfy degree, sponsor and accreditation standards

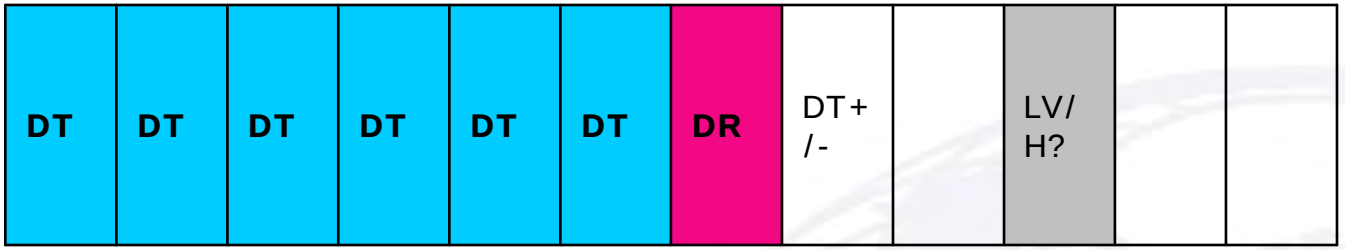
Academic Affairs / Academic Planning / Director of Programs assist as requested

TT Faculty Workload:
TT Faculty Work & Funding Profiles

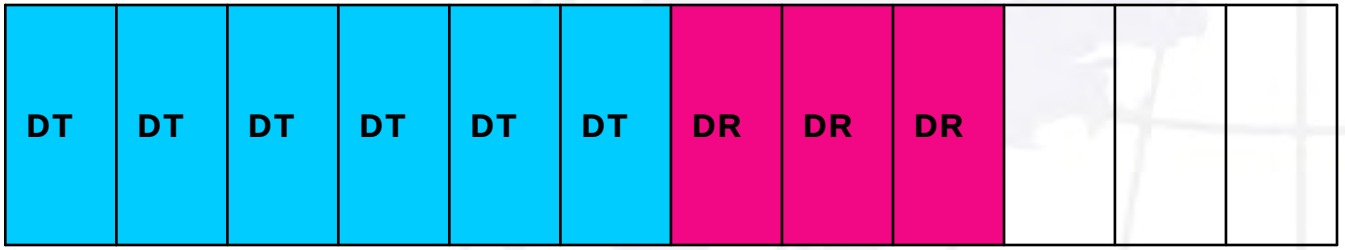


To the Schools/Departments:
Nominal Funding Profile

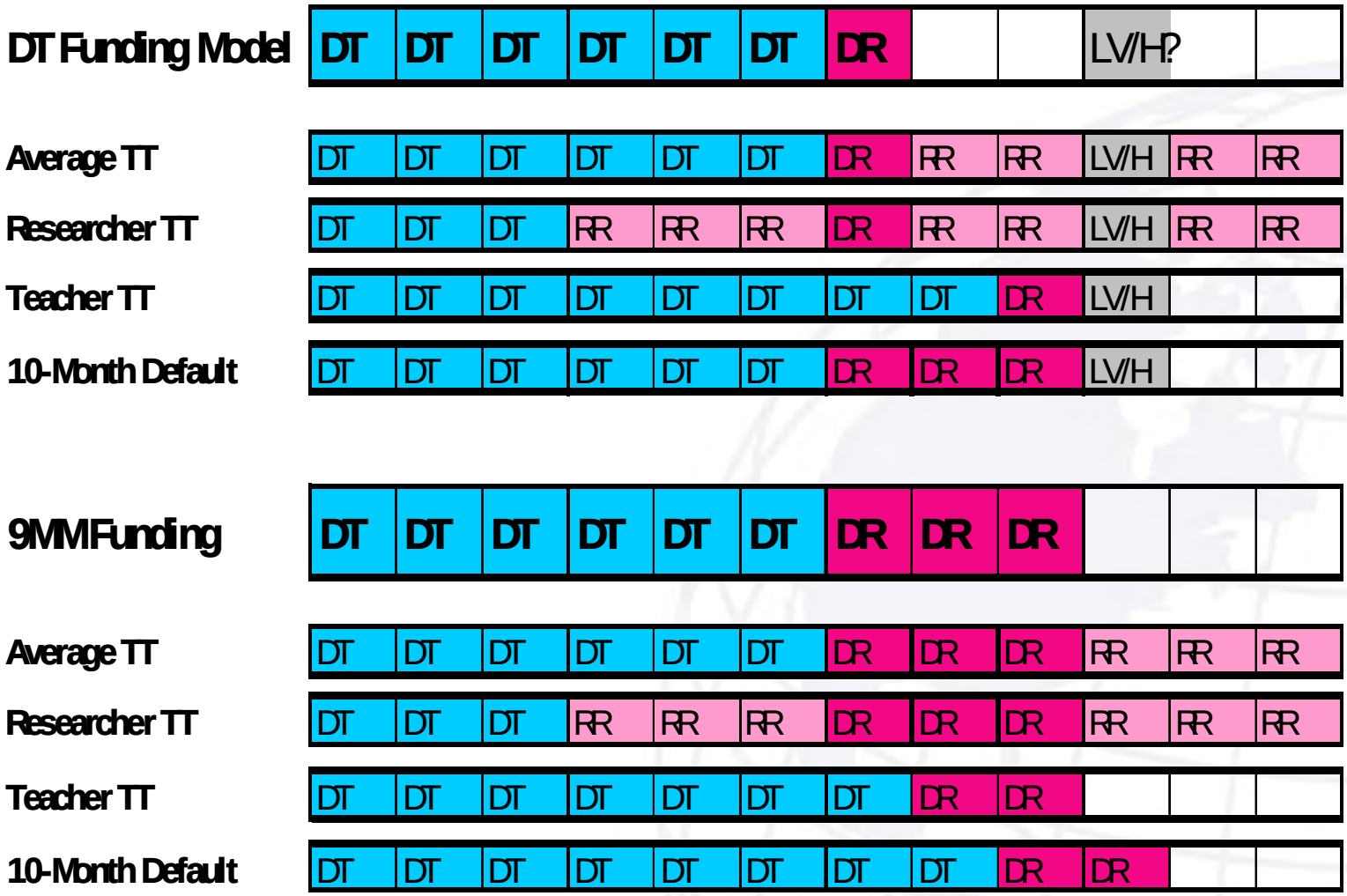
Current DT Funding Model



9MM Funding



At the Department:
TT Faculty Work & Funding Profiles



Course Development Plan

The following table defines important considerations to assist you in planning and developing your course. Complete your plan in three stages as you clarify your thinking throughout the ITL course. Included in each stage of the course development planning cycle are specific questions that you must answer in detail. The different segments reinforce learner outcomes, course content, interactions, learning activities, assessment strategies, and guide your through an integrated process to analyze, design, develop, implement, and evaluate new or re-purposed course content.

Directions for creating your course development plan:

1. Conceptualization and Analysis:

This stage carefully considers the big picture and assists with organizing and prioritizing complex content. Create a Word document and develop answers for each of the questions in as much detail as possible.

Bring a print copy of your CD Plan, completed through the Conceptualization and Analysis stage, to the first seminar on Friday, 3 October.

2. Context for Instruction:

Continue building the Word document you initiated during the Conceptualization and Analysis stage. Consider the following elements as you examine the context for instruction and how technology can enhance the delivery of your course to achieve course outcomes.

- Your responses to the previous questions,
- A descriptive profile of your current and potential students,
- ITL online module topics on critical thinking and the ADDIE instructional design process,
- ITL seminar discussions to date.

Responses in this section should logically connect with the previous questions and align your learning outcomes, course content, assessment strategy, and the sequence of instruction as a preliminary step for writing your course syllabus.

Post your updated CD Plan as an attachment to your first Blog entry in the ITL course site by 10 October. Specific instructions for creating your Blog are included in the ITL Phase I Assignments Description.

3. Course Development Schedule:

This stage of the planning process requires important task identification at the course and individual module levels. Considering the ITL online module content, seminar discussions, and your consultation with the instructional design staff, create a schedule to accomplish the tasks defined in this section. Review the entire course development plan to ensure that there is alignment of learner outcomes with the content, instructional processes, and assessment strategy.

Post your final Course Development Plan as attachment to your Blog in the ITL course site by 5 December. Specific instructions are included in the ITL Phase III Assignments Description.

Faculty Developer:
Course Title:
Course ID Number:
Date when course will be taught:

stages of course development planning

Conceptualization & Analysis	Context for Instruction	Course Development Schedule
• Define the fundamental learning goals, basic concepts, and key questions that this subject matter/discipline seeks to answer. • How do you develop and cultivate expert reasoning and thinking within the subject matter of your course? • What information and knowledge is most relevant to this course within the context of its certificate or degree program? • How do you integrate opposing and discrepant points of view with respect to this content to establish relevance for your students? • What are the relevant areas of investigation and study that provide compelling opportunity for applied learning and research in this course?	• Define in detail the key elements that determine the context for course development that guide your decisions for delivery format • Target Audience • Course Learning Goal • Learner Outcomes • Course Format • Instructional strategies (discussion, lecture, group work, problem-based learning, self-directed learning contracts, other) • Plan for balanced learner interactions (learner to instructor, learner to content, learner to learner) • Identify source content, materials, media, and technology to achieve learner outcomes.	• Select materials to enhance balanced learner interactions • Copyright permission needs • Interactive media elements • Technology tools for synchronous and/or asynchronous delivery • Assessments • Create a table to identify tasks, resources needed, and a timeline including milestones

Interactive Teaching and Learning (ITL)

Course Map

Fall 2009 AY

Phase I: Duration: 22 September – 17 October

- Pre-ITL preparations and planning to include an individual consultation with ITL facilitator, orientation activities in Blackboard (Bb) from student perspective, and initial preparation of your individual Course Development (CD) Plan for the course you will work on during ITL
- Overview of Teaching and Learning to include online readings and participation in discussions and activities through the ITL Blackboard course site and in seminar sessions
- Course Analysis and Design steps of the ADDIE instructional design process to include drafting your distributed learning course syllabus, consultations with colleagues in your discipline, and contributions to a personal reflection blog in the ITL Blackboard course site

course activities summary

Attend Seminar Sessions	Read Online Segments	Complete Applied Learning Activities	
Seminar 1: • CD Plan Activity • Review Bb ITL structure • Learner-centered instruction *Friday, 3 October, 0830-1030* *KN 151* **Seminar 2:** • Critical thinking framework • ADDIE instructional design model • Principles of Good Teaching Practice *Friday, 10 October, 0830-1030* *KN 151* **Web Conference:** • Elluminate tools • Techniques for synchronous sessions • Benefits & challenges to Web conferencing *Monday, 17 October, 1200-1330* *Online*	1.1 Overview of Teaching and Learning 1.2 Tools for Course Planning 1.3 Analysis – The First Step 2.1 Design – Building a course framework 2.2 Developing a Module	**Pre-course preparation (9/22 – 10/2):** • Individual consultation with course facilitator..... • Complete Bb Orientation tutorial activities..... • Create Course Development Plan (stage 1)..... **Milestone 1* • Participate in seminar and online discussions..... • Read Module 1 & 2 online segments..... • Refine learner-centered course goal and outcomes..... • Shop for ideas with colleagues..... • Begin Personal Reflection Blog and post Course Development Plan (stage 2)..... • Develop a syllabus inclusive of critical thinking framework and recommended components..... **Milestone 2* *Meeting a milestone means you have attended scheduled sessions, participated in online activities, and completed learning activities.	**Complete by:** Appointment 10/1 10/2 10/3-17 10/8 10/8 10/9-14 10/10 10/17

Phase II: Duration: 20 October – 14 November

- Development stage of the ADDIE instructional design process to create a learning module as a template for other modules in your course
- Instructional Methods and Learning Activities to include principles of good teaching practice, assessment approaches, interaction among students with you, the course content, and other learners
- Research and discovery of instructional media to include in your content, consultation with instructional designers in OCL, and development of a storyboard for media production

course activities summary

Attend Seminar Sessions	Read Online Segments	Complete Applied Learning Activities	Complete by:
Seminar 3: • Panel presentation and discussion with other NPS instructors *Friday, 24 October, 0830-1130* *KN 151* **Blackboard Workshop 1 (choice)** *Wednesday, 29 October, 1300-1500* *KN 151* *Tuesday, 4 November, 1200-1400* *KN 154* **Blackboard Workshop 2 (choice)** *Friday, 31 October, 1300-1500* *KN 151* *Thursday, 6 November, 1200-1400* *KN 154* **Seminar 4:** • Media design & examples • Blackboard course architecture & examples *Friday, 7 November, 0830-1030* *KN 151*	3.1 Assessments 3.2 Interaction 3.3 Media Selection 3.3 Group Work	• Participate in seminar and online discussions..... • Read Module 3 online segments..... • Select and complete two assignments from a menu of optional activities designed to assist you in developing your course..... • Research media choices, meet with instructional designer, plan media development project..... • Continue Personal Reflection Blog..... • Prepare a module including student learning objectives, content, interaction plan, and assessment strategy..... **Milestone 3* Select from available dates to attend Blackboard Workshops 1 and 2..... *Meeting a milestone means you have attended scheduled sessions, participated in online activities, and completed learning activities.	10/20-11/14 10/22 10/29 11/10-14 10/20-11/14 11/14 10/29-11/6

Phase III: Duration: 17 November – 12 December

- Blackboard construction to include creating your course site, uploading materials, selecting tools and features, and inviting participants to review your site and materials
- Implementation stage of the ADDIE instructional process to include Learner and Faculty Support considerations, accessibility issues, creating welcome messages and announcements for students, and NPS library and technology support
- Course Management including copyright considerations and processes, evaluation and feedback, scenarios to plan for and manage student issues in distributed settings
- Sharing your results in a peer review process online and through presentations at the culminating seminar session

course activities summary

Attend Seminar Sessions	Read Online Segments	Complete Applied Learning Activities	
Web conference: • Group breakout activity *Monday, 1 December 1200-1330* **Seminar 5:** • Individual 5-8 minute presentations *Friday, 12 December 0830-1230* *KN 151*	**Blackboard Construction Zone: (11/17 – 11/21)** • Create Blackboard course site • Design course architecture • Upload course materials • Enroll group members 4.1 Faculty & Learner Support 4.2 Accessibility Issues 4.3 Implementation Plan 5.1 Course Management 5.2 Copyright 5.3 Evaluation	• Participate in seminars and online discussions..... • Read Modules 4 & 5 online segments..... • Create learner support communications and protocols..... • Post completed Course Development Plan (stage 3)..... • Complete Time on Task Analysis..... • Analyze and provide specific feedback and qualitative suggestions to improve the course site, syllabus, and module of 2 group member's through the application of alignment rubrics, criterion for interaction, and elements of course development and critical thinking..... • Complete Personal Reflection Blog.....	**Complete by:** 11/17-12/12 11/26 12/5 12/5 12/9 11/24-12/5 12/19

Syllabus
Interactive Teaching & Learning (ITL)
Office of Continuous Learning (OCL)

This **syllabus** is your course guide. It contains:

Course Facilitators

Ali Rodgers, Manager
Faculty Development Programs
Email: arodgers@nps.edu
Telephone: 831.656-7696

Maureen Bowman, Instructional Designer
E-mail: msbowman@nps.edu
Telephone: 541.942-7424

The NPS Office of Continuous Learning (OCL) instructional design and multimedia production team also facilitate your course development efforts. Information about the OCL team is located in the Staff Information area of the ITL online course site, http://nps.blackboard.com (login & password required and course site becomes available prior to course start date).

Course Description

This course prepares you to develop and teach a distributed learning (online) course, and/or to enhance classroom-based instruction through the application of principles of teaching and learning and the use of technology tools. This is a hybrid course featuring seminar sessions, and asynchronous and synchronous technology-enabled components. You create the syllabus and a module or unit of learning for a specific course you teach, using either new materials or adapting current materials for technology-enabled delivery.

Learning Outcomes

Upon successful completion of this course, you will be able to:

1. Design a course framework that incorporates elements and standards of critical thought, teaching and learning principles of good practice, and processes in instructional design as demonstrated in ITL.
2. Apply a systematic instructional design process to create course content including a syllabus and one learning module.
3. Develop interactive and learner-centered approaches to meet course outcomes and module objectives.
4. Use a variety of NPS instructional management and learning support technology tools for delivery of course materials and learning activities.
5. Develop a strategy to enhance instructional effectiveness through learner support strategies.
6. Apply guidelines for copyright permission and intellectual property to your course content.
7. Conduct an analysis to assess the instructional value and time-on-task from the student and instructor perspectives for the unit of learning (module) developed during ITL.

Course Format

This distributed learning course is divided into three phases that integrate five content modules and relevant applied learning activities. The first phase includes pre-course consultation and planning activities, an overview of teaching and learning, and a systematic process for course conceptualization and course design. The second phase applies principles and instructional methods of teaching and learning to the development of a learning module. During seminars and individual consultation, important criteria for media selection and course architecture are considered within the context of course and module development plans. The third phase builds the course site in the Blackboard learning support system, and focuses on important course management and support tools for both the learner and the instructor. Each phase incorporates four instructional elements:

- **Classroom seminar and Web conferencing sessions** (7) where you discuss teaching and learning concepts and strategies, and work collaboratively with other NPS faculty course participants.
- **Online content modules** (5) that include reading, collaboration with colleagues in discussion forums, and applied learning activities to develop materials for your course with review and feedback from peers and the ITL facilitators.
- **Individual consultations** with the ITL facilitators and OCL instructional designers to discuss your teaching and learning plans and to formulate ideas for integrating media into your course.
- **Technology** tutorials and workshop sessions for the NPS Blackboard learning support system and the Elluminate Web conferencing application.

To be successful course participants must be able to devote six to eight hours weekly to this course **and** be available to attend all the seminar sessions. Dates for seminar sessions, topic descriptions for the module segments, and applied learning activities are summarized on the *ITL Course Map,* and the Blackboard course site provides detailed instructions for all course activities. Time required for ITL is generally **6-8 hours per**

week, in *addition* to time required to attend the seminar and Web conference sessions and to complete technology tools requirements. Study and time to complete applied learning activities may vary depending on the course materials you already have created and your comfort in the technology-enabled environment.

Three "milestones" are identified in the course schedule. Meeting the milestones means you have participated in seminars and online activities, and submitted assignments to date*. Completion of requirements at the milestones helps you stay on track and helps us jointly insure your successful completion of ITL. This is a "student-centered" and group-paced course that requires your timely participation, peer interaction and feedback.

*This course builds upon previous learning activities and interactions; failure to achieve scheduled milestones may result in being dropped from ITL.

We learn from each other in this model, it's not just an "info download!"

Technical Prerequisites and Requirements

Intermediate level of experience using a computer, defined as the ability to:

- Organize and manage files and folders in your operating system;
- Receive and submit electronic course materials;
- Effectively use (create, format, edit, save, and distribute documents) word processing and presentation programs, typically using MS Word and PowerPoint or compatible formats;
- Send and receive e-mail (including attachments); and,
- Navigate, search, and download and execute files from the Internet.

Recommended technical specifications: You will be able to access the course materials in the ITL Blackboard course site using your campus or home computer as long as you are able to connect to the Internet. Once registration is confirmed and you receive a "getting started" e-mail message, log in to Blackboard at http://nps.blackboard.com.

It is recommended that you have a PC with a minimum of 512 Megabytes of system memory (RAM) and a current operating system version. We also recommend using the most current version of your preferred Web browser to access the online portions of the course delivered through the Blackboard learning support system. The Mac platform is compliant with the Blackboard learning system and Elluminate Live application. The Elluminate Live Web conferencing application is a real-time virtual classroom environment and requires Java 1.5. To test your system, visit the "Getting Started with Elluminate at NPS" site (http://www.nps.edu/Technology/Elluminate/GettingStarted.html).

Some materials are provided in Adobe portable document format (PDF) and require you to have the free "Acrobat Reader 7.0" on your computer. Interactive components in the online modules require the current Flash player. Both plug-ins are available for free at the Adobe Download site (http://www.adobe.com/downloads/index.html).

If you have software issues or need instruction to meet the prerequisite technical experience, contact Information Technology & Academic Computing Support (ITACS) Technology Assistance Center (TAC) for assistance.

Blended Learning Participation Criteria

Participation is a critical part of a dynamic and interactive learning experience. In addition to attending and engaging in activities during the seminar sessions, you are expected to engage with the online content and participate in asynchronous and synchronous discussions. We recommend logging on to the Blackboard course site at least 3 of 5 days each week. This strategy of frequent participation is found to be most effective in improving retention and completion rates in technology-enabled courses. It assists students in time management, providing a structure and incentive to remain "connected" to the class.

Evaluation

The evaluation scheme of this course emphasizes self-assessment to a supplied criteria and adherence to specified due dates. Additional feedback from peers and course instructors also provide important perspective and insight for consideration in the course development process.

At the conclusion of each phase you are asked to complete a *self-assessment checklist* that reflects on your meeting the learning objectives and completion of the activities, and allocates scores. Rating totals are verified and used for certification of your successful completion of course requirements. Successful completion (85% minimum, or 425 points) is the basis for receiving the ITL Certificate of Completion **and** workload reimbursement from the OCL.

As a part of the self-assessments for each phase, you will conduct a participation self-assessment for the seminar and online discussion activities based on the following criteria:

Seminars and online discussion forum activities are each worth 5 points. Considering the criteria below, assess how effectively you integrated ITL course content and personal experiences in posts and discussions. Award yourself 1 point for each of the following criteria that is evidenced in your work.

1. **Completeness:** Did you accurately and clearly address the essence of the topic or discussion question?
2. **Evidence of insight and reflection**: Did your comment/answer add a new insight or something useful to the discussion and relate to experiences that illuminate additional aspects of the topic. Don't be afraid to state dilemmas or areas that you are leaving open to further exploration -- that indicates an open mind. We will be learning about tools and knowledge in the context of larger values, and your experiences and opinions are vital. Everyone in this class is called upon to be a student AND a teacher, a leader and an enthusiastic part of a learning community.

3. **Supporting examples**: Are your comments supported by, and connected to, examples and/or references in the module materials, articles, other research, or your experience? The more you can make connections between resources and your experience and opinion, the more transformational your learning becomes.

Feedback & Interaction: Award yourself up to 2 points per seminar session or discussion question for contributions you make that comment on other participants' responses, such as answers to a question, or remarks on a point raised.

Grading: There are 500 possible points. The evaluation is divided up as follows:
Applied Learning Exercises
60 Points – Course development plan (completed in 3 stages)
50 Points – Syllabus development
50 Points – Module development
40 Points – Media selection project
30 Points – Learner support instruments development
40 Points – Blackboard course site construction
40 Points – Selection of two learning strategies to design
310 Points Total

Interactive Learning Exercises
75 Points – Blackboard course site, Syllabus, and module peer review
35 Points – Seminar participation and attendance (7)
30 Points – Online participation in asynchronous discussions (6)
140 Points Total

Personal Reflection Exercises
20 Points – ITL Course personal reflection blog (minimum of 4 entries)
30 Points – Time on task analysis and personal reflection about the content and the implications for the teacher and the student
50 Points Total

Late Policy

Applied learning activities in ITL include specific due dates to facilitate the pacing and interaction in the course. Your attention to the dates contributes to an effective learning community and insures that you and your colleagues are able to help one another build and improve your interactive learning course materials and techniques. Unless pre-approved, assignments that are not submitted by the requested dates do not receive credit.

As described in the Course Format section, **three "milestones" are identified in the course schedule.** Meeting the milestones means you have participated in seminars and online activities, and turned in assignments to date. Completion of activities at each milestone is required to continue to the next phase of the ITL course.

Compass:

New Faculty Seminar Series

Fall Quarter 2008

All seminars are scheduled in **Knox Library**
Conference Room 263 from **1500 - 1630***

October 7	**Happy Hour** *Welcome and Command Briefing*
October 14	**Benchmarks** *Faculty Advancement at NPS*
October 21	**Hello Mr. Chips** *Excellence in Teaching*
October 28	**We're Here to Help (Part 1)** *Academic Processes*
November 4	**We're Here to Help (Part 2)** *Instructional Resources and Support*
November 18	**Improving the Breed** *Learning and Assessment*
December 2	**Stars & Bars** *Military Culture and Academics*
December 9	**Publish or Perish** *Developing Sponsored Research*

*** No seminars 11/11 and 11/25**

Sponsored by: Office of the Vice Provost for Academic Affairs

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Appendix A

AD-HOC COMMITTEE ON ADMINISTRATIVE AFFAIRS
COMMITTEE CHARTER

Dear Colleagues:

During the interview process for Provost, many faculty members suggested that the first order of priority for the incoming Provost would be an examination and possible restructuring of centralized administrative support. Several faculty were present at several of these discussions. Given our current budget situation, I have decided to form an Ad Hoc Committee on Administrative Affairs to review and make suggestions on the central administrative support functions. I would recommend that the committee meet once or twice to review the current status and that we then convene a retreat, in the very near future, to develop a plan and any modifications to the current administrative support structure. I would like to attend the first meeting of the committee for a few minutes and then attend the retreat.

The Committee Membership:

Dr. Julie Filizetti, Associate Provost for Academic Affairs, Chair
Dean Ord, SIGS
Dean Purdue, GSOIS
Dean Beck, GSBPP
Dean Kays, GSEAS
George Conner, Strategic Planning
Dr. Dan Boger, Chair IS, (Chair Provost Search Committee)
Dr. Tom Housel, (Faculty Representative)
Dr. Christine M. Cermak, Executive Director, Information Resources and CIO, *ex officio*

An incomplete list of issues, in no particular order:

- What are the critical admin functions?
- Is there functional duplication?
- Is there a better way to organize administrative functions and reporting structures?
- Are there individuals within schools who also support central admin functions?
- Are faculty utilized effectively in service functions?
- Where is there dysfunction in the administrative support organization?
- What other issues should the committee tackle related to admin support?

I do not expect the group to examine the internal structure of major support organizations. At this point in time, I am primarily interested in examining the central admin support organization for effectiveness and duplication. Please feel free to call me at any time to discuss the role of this important committee. Let me know the data you need from the Provost Office. I could have added several other individuals to this

committee but I want to keep the group as small as possible but still able to cover most aspects of central admin. If there is someone who needs to be added please let me know ASAP. Thanks for your support and willingness to work with me on this important issue.

Best regards,

Leonard Ferrari, PhD
Acting Provost
Associate Provost/Dean of Research
Naval Postgraduate School

Administrative Affairs Implementation Task Force
Report to the Provost, November 2006

Introduction

The Provost's *Ad Hoc* Committee on Administrative Affairs completed its work in September 2006 (http://intranet.nps.navy.mil/Code01/Default.htm). Once the report was completed, Provost Ferrari established an Administrative Affairs Implementation Task Force to provide guidance on implementation of the Committee's report recommendations. The composition of the Task Force included:

Dr. Dan Boger, Interim Dean of Research
Dr. Christine Cermak, Executive Director of Information Resources and CIO
Dr. Tom Housel, Professor, Information Sciences
Dr. Gil Howard, Director, Academic Planning

The Task Force was convened and met seven times over a six week period, and met with the Provost several times.

In what follows, the recommendations from the Provost's *Ad Hoc* Committee on Administrative Affairs are listed in numerical order in bold, *verbatim* from the report itself. It should be noted that report recommendations 6 and 7 were consolidated into one recommendation, Number 6. The Implementation Task Force proposed implementation actions follow each numbered recommendation.

To briefly summarize, the Provost's *Ad Hoc* Committee on Administrative Affairs Report provided an outline of six general categories of proposed change for NPS:

1. The need for an academic strategic vision of NPS.
2. A redefinition of meetings and decision-making at NPS
3. A clear definition of organizational structure, management principles and practices – including a streamlined academic organizational structure.
4. The development of a formal Communications Plan for NPS.
5. Review of finance and administration functions required to support the academic mission.
6. Development of organizational charts, positions descriptions, and resource assessments for all areas reporting to the Provost.

The original report suggested timelines for each of the recommendations. The work of the Implementation Task Force is responsive to each of the recommendations although modifications to certain timelines were necessary – those are noted below.

Recommendations

1. **Develop and articulate an academic strategic vision for NPS. Develop a long-range plan to achieve the vision. Establish a multi-level task team to develop the strategy that can then be reviewed by the Provost Council. Due by 15 January.**

   Suggestions for membership (and chair):
   Chris Olsen, Faculty Council
   Phil Durkee, Meteorology
   Vali Nasr, National Security Affairs
   Jim Eagle, Operations Research
   Douglas Fouts, Associate Dean of Research
   Frank Barrett, Graduate School of Business and Public Policy
   Tom Housel, Information Sciences and proposed chair of the Committee

   Please see Appendix A for Draft charge to Strategic Vision Committee. The timeline for completion of the work of the Committee is adjusted to March 2007, since the Committee has not yet been established.

2. **Re-define the role and membership of the Executive Council. Map the decision-making process at NPS so that a more thorough review can be made. Formalize the role of the Provost Council. Define the role of the Faculty Council in the decision-making process. Due by 15 December**.

   Five major groups are recommended to sustain an academic governance structure with effective and efficient consultation and decision-making:

   - Administrative Staff – The AS is advisory to the president and provost on all enterprise-level plans and policies, and provides a monthly venue for information appropriate for executive leadership.
     Composition includes the president, provost, comptroller, executive director of base operations & services, campus planning and development services, chief of staff, CIO, and chair of the faculty council.
   - Provost Council (PC) – advisory to the provost on all plans and policies having to do with the academic mission, and provides weekly venue for status updates, consultation, and decision-making.
     Composition includes the provost, deans, associate provost for academic affairs, director of academic planning, director of library resources, CIO, special assistant to the provost.
   - Administrative Assembly (AA) – President and provost's quarterly meeting with deans and directors of major administrative areas. Presentations of major projects and initiatives for information to the administrative leadership of the institution. Venue for consultation and comment on issues to be considered for decision by the president and provost.

Composition includes the provost, chief of staff, deans, chair of Faculty Council, associate provost for academic affairs, director of academic planning, CIO, director of library resources, director of institutional research, public works officer, dean of students; human resources director, director of sponsored programs, special assistant to the provost, comptroller, command evaluation, and executive director of base operations & services, campus planning and development services.

- Deans and chairs – Provost's monthly meeting with deans and chairs to provide status updates on matters of institutional priority, an opportunity for consultation on academic and administrative matters.
- Faculty Council (FC) – Primary locus of faculty governance, the FC is the body where all issues pertaining to faculty work are reviewed. Its mission:

> The object of the faculty organization is to promote understanding and communication between members of the faculty and members of the administrative staff, to advance the quality of the school programs, to protect and promote the professional stature of the members, and to assist the administration in accomplishing the goals of the Naval Postgraduate School. The Faculty Council is advisory to the NPS administration, and all major policies of the institutions should be reviewed by the Faculty Council. Where possible, all major committees of the institution should include Faculty Council representation.

Please see Appendix B for the proposed Executive Governance chart. Once changes are made, this is responsive to Recommendation 2.

3. **Define the end-state for management of NPS. This may include organizational structures, the principles for organizations discussed above and outcome measures. Establish roles and responsibilities, procedures and processes to clarify, guide and enable the organizational structures. Develop a transition plan for getting to that end-state. Establish a Task Team to develop and bring forward the plan. Task Team should report out by 15 December.**

Please note that further detail regarding end-state management for NPS is provided in Recommendation 6.

Organizational Principles

NPS should be guided by general principles of administration structure and process.

1. NPS should focus on improving support of the core NPS mission: graduate education and research.

2. NPS business practices should be characterized by efforts to increase efficiency, reduce redundancies, to improve communication, and responsiveness with customers.
3. NPS administrative processes should have customer service as a demonstrable priority.
4. Internal NPS organization, policies, processes and programs must be rationalized in terms of their effective and efficient support of NPS mission requirements. Feedback as to the effectiveness of policies processes and programs should be routine.
5. NPS business practices should maximize accountability at the appropriate level within the organization.
6. NPS should ensure sustainability of improvement measures.
7. NPS must be professional in our hiring, management, development and transition practices.
    a. Position descriptions must be developed.
    b. Positions should be advertised and competed in open searches whenever practical.
    c. Performance measures must be developed and implemented.
    d. Performance should be formally assessed and feedback clearly communicated.
8. NPS should use standards of professionalism to guide administrative/business processes (responsible and responsive management, communication, accountability, professional development and training, customer service, efficiency, measurement of appropriate performance indicators, and external review).
9. Faculty should have a defined role in the governance of NPS.

Organizational Structure

NPS is a relatively small organization. Its administrative structure should be straightforward and parsimonious. The University of California campuses, while significantly larger in budget and population, provide a useful organizational model and one that is used here for NPS consideration:

The president and provost are the executive leadership of the institution, responsible for the plans, policies, and operations of NPS.

The president, consistent with roles seen at other research universities, focuses on external responsibilities of budget and policy advocacy, alumni relations, liaison with the NPS Foundation, Department of Navy, Department of Defense, and other federal agency leadership. The president is the official representative of the institution with state and local government leaders, as well as higher education presidents, chancellors, and professional associations throughout the region and nationally.

The provost has responsibility for the overall management of the academic enterprise of the institution. As the chief academic officer, the provost focuses responsibility of the operations of the institution in support of the academic mission, as well as plans

and policies relevant to graduate education and research. The provost has direct responsibility for academic schools, departments, centers, and institutes, planning, finance, academic and administrative services. The provost also assists the president in matters of external communications and advocacy.

The president and provost appear in the same box on the NPS organizational chart, with everyone reporting through the provost to the president. This ensures two things: (1) a clear message about the alignment of NPS activities in direct support of the core mission of graduate education and research, and (2) an unmistakable executive leadership team, the president position directed outwardly at the external relations of the institution, and the provost directed internally to the academic enterprise.

There are a number of positions that require direct access to the president, by Navy or DoD direction, for specific reasons (e.g. CIO for network security issues). These positions can continue that access through dotted line relationships to the President, as appropriate.

Please see Appendices C and D for current and proposed organizational charts. Once changes are made and organizational principles are adopted and institutionalized by NPS leadership, action for Recommendation 3 is complete.

4. **Appoint a Communications Task Team to develop a strategic communications plan and to develop the appropriate organization and reporting structure. Assess the current organizational assets to determine capability to achieve the goals to support the mission. Task Team should report out by November 15.**

   Associate Provost Julie Filizetti distributed the draft NPS Communications Plan for comment on September 12, 2006. The draft Plan, while still under the comment and revision period, provides a valuable starting point for moving to renewed institutional attention to this area as strategic to NPS' core mission. Together with the Provost's decision to reorganize Institutional Advancement under the Executive Director of Information Resources and CIO, these actions are responsive to Recommendation #4 concerning the Communications Task Team. It is essential that a thorough assessment of resources be conducted to ensure successful plan implementation.

5. **Assign a Task Team to consider the functions of Finance and Administration required to support the academic mission. This might incorporate some functions currently being performed within Academic Planning, Strategic Planning, HR, and Comptroller and in other areas at NPS. Once the function is better defined, and in accordance with the management plan, consider the best reporting structure. Task Team should report out by November 15**.

   Provost Ferrari will work this year with the Provost's Council to revise the budgeting process. He plans to work closely with the Director of Academic Planning, Dr. Gil

Howard, Associate Provost for Academic Affairs, Dr. Julie Filizetti, and Director of Sponsored Programs, Ms. Danielle Kuska on matters having to do with budgeting, expenditures, and administrative services. Provost Ferrari would like to revise the budgeting process first, and then move to a consolidation of budgeting/planning/expenditure tracking/administrative services in stages. A proposed position description is provided as Appendix E.

6. **Develop position descriptions for all key positions by 15 December**.
   a. **For those individuals assigned to new program development, assign specific performance metrics and/or require that after some specified period of time, some percentage of their salary will be obtained from reimbursable research or education. Many currently have projects that support some or most of their salary.**
   b. **Charge the managers of all key organizations, including the schools and the departments, to identify how their mission, goals, resources and organizations support the NPS mission by 15 December. They should critically assess what level of resources are required using benchmarks from other relevant organizations as well as NPS information. They should also develop appropriate performance metrics and ways in which these findings can be routinely reported to the university community.**
   c. **Formalize the role of the NPS leadership in discussions and prioritization of activities and resources.**

      Regarding Recommendation 6a -- Provost Ferrari will have individual meetings with the individuals assigned to new program development and with their supervisors to discuss performance expectations and resourcing.

      Regarding Recommendation 6b -- please see Appendix F for draft memorandum from Provost to Deans, Associate Provost for Academic Affairs, Special Assistant to the Provost, Director of Academic Planning, Executive Director of Information Resources and CIO, Director of Library Resources.

      Regarding Recommendation 6c – it is recommended that a two staged planning and accountability process is implemented. Each of the Provost's direct reports should provide an annual plan for the year, including budget, goals, and expected outcomes. The plan should e reviewed and endorsed by the Provost. At the end of each year, an annual report should be provided, outlining performance, support of NPS mission, progress metrics, use of resources, etc.

Conclusion

During the course of the Task Force's work, the Provost has taken a number of steps to streamline the academic organization, revamp the budgeting process, and improve communications. We commend these efforts and urge continued energy in implementing the remaining steps. The sooner the Academic Strategic Vision Committee is charged and begins its work, the sooner the campus will have a clear blueprint for improvement of

our academic programs. The sooner we ask our administrators for organizational charts, position descriptions, and resource justifications, the sooner we can report accountability to the campus community. The sooner we begin implementation of the Communications Plan, the sooner we will see improvement in both our internal and external communications programs.

As was the case with the original two reports, sustainability and visibility are the linchpins for continued progress. Once these report recommendations are implemented, we suggest continued engagement with the campus community through the Business Practices Implementation Task Force. This group can provide ongoing leadership for addressing campus concerns, suggestions for enhancement, and facilitating regular campus conversations about improving the level of support for NPS' core mission of graduate education and research.

Appendix A

DRAFT charge to Strategic Vision Committee

November 13, 2006

FROM: Leonard Ferrari, Provost
TO: Frank Barrett, Graduate School of Business and Public Policy
Phil Durkee, Meteorology
Vali Nasr, National Security Affairs
Jim Eagle, Operations Research
Douglas Fouts, Associate Dean of Research
Tom Housel, Information Sciences and proposed chair of the Committee
Chris Olsen, Faculty Council
SUBJECT: Strategic Vision Committee

The Provost's Ad Hoc Committee on Administrative Affairs recently submitted its final report to me. The report is posted on the intranet site, http://www.nps.navy.mil/strat/Index.htm .
The first recommendation of the report urges establishment of a committee to develop and articulate a strategic vision for the university. I heartily endorse this recommendation and would like to ask you to serve on this important committee. We currently have a strategic plan, and this can serve as a basis for the Committee's work. A View to the Future (enclosed) has served us well since its development in 2001, however it is time to formally review and update the document. The plan provides a general outline of our aspirations, and principles for implementation. However, it is time to take a fresh look at its currency and relevance to where we are today as an institution. The Strategic Vision Committee's work will provide the academic priorities and longer term academic vision in support of the NPS/BOA strategic planning process.

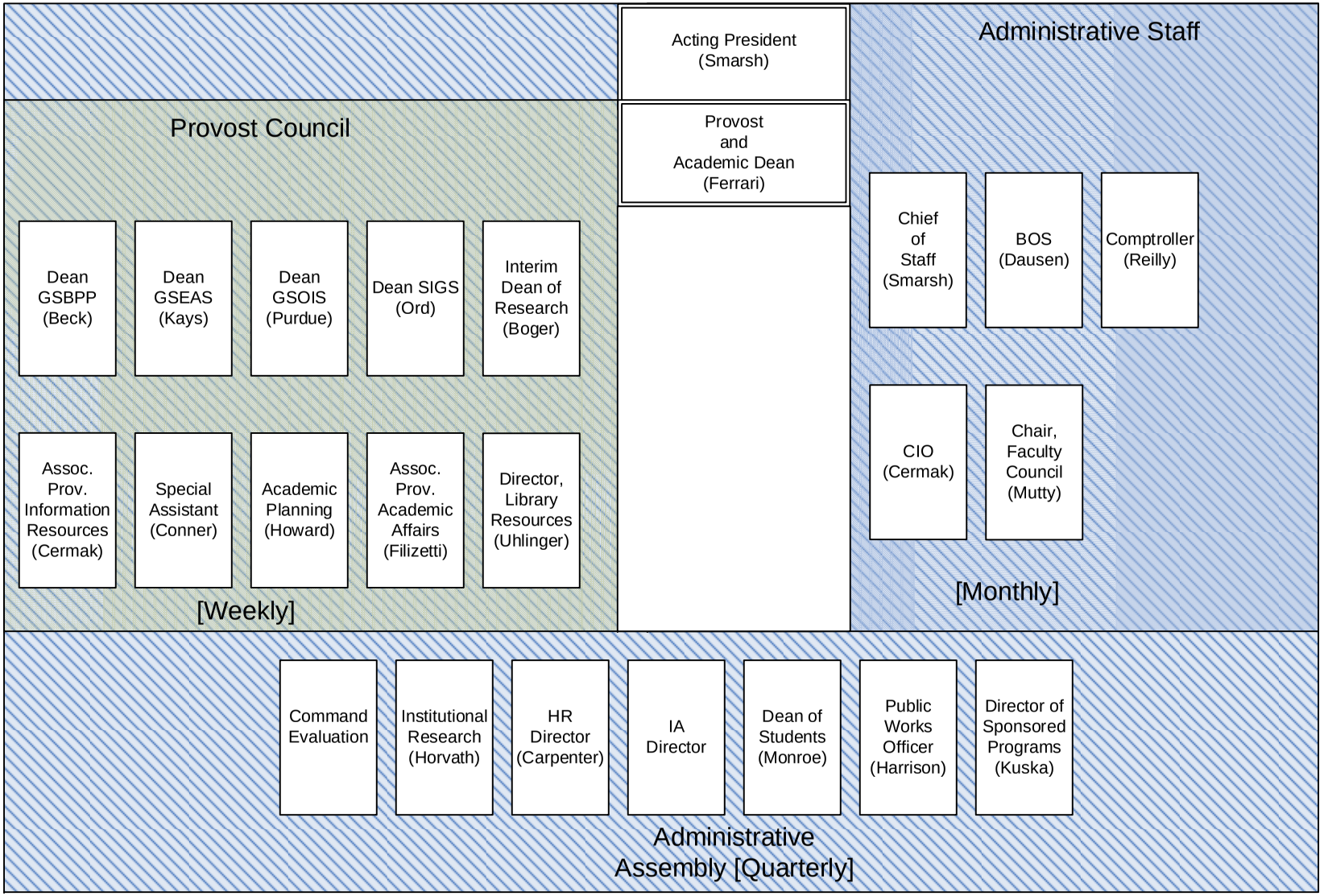
Specifically, I would ask you to consider the development of an academic vision for the institution – framing the process with the assumption of NPS as a research university. Our external research program has increased more than 400 percent in the past five years and has become a hallmark of our contributions to the Navy and the nation. It is time that we recognize this important dimension to our mission.

Our academic vision should include goals, priorities, and recommendations for strategic investments in order to ensure continuing improvement of academic quality. A more explicit relationship with actual resource planning and allocation decisions should be included. I would appreciate your tackling this thorny issue and finding a way of linking planning with resources without being too restrictive or weakening our ability to respond to emerging requirements and opportunities.

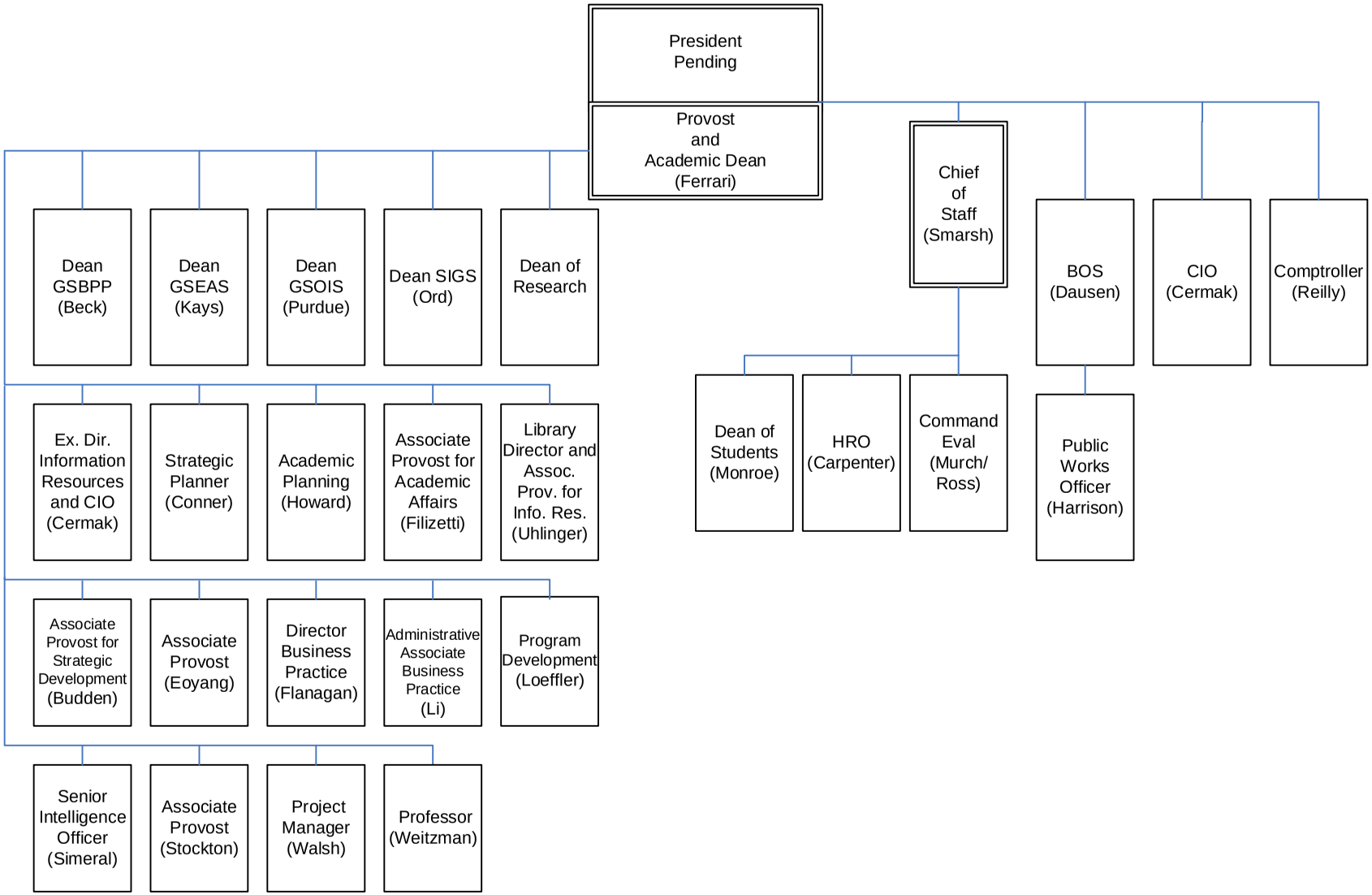
Finally, I would ask that the committee include some recommendations about comparisons with peer and reference group institutions, in order that we might be able to develop operational metrics with which we can compare NPS with other research universities. This will provide us with an ongoing context within which we can assess our progress.

I will convene the first meeting of the committee in the next week or two so that we can discuss any questions that you may have about the process. Consistent with the Committee on Administrative Affairs report recommendation, I would like to have the academic strategic vision developed by the end of March 2007. Thank you and I look forward to our first meeting.

Appendix B: Executive Governance Chart

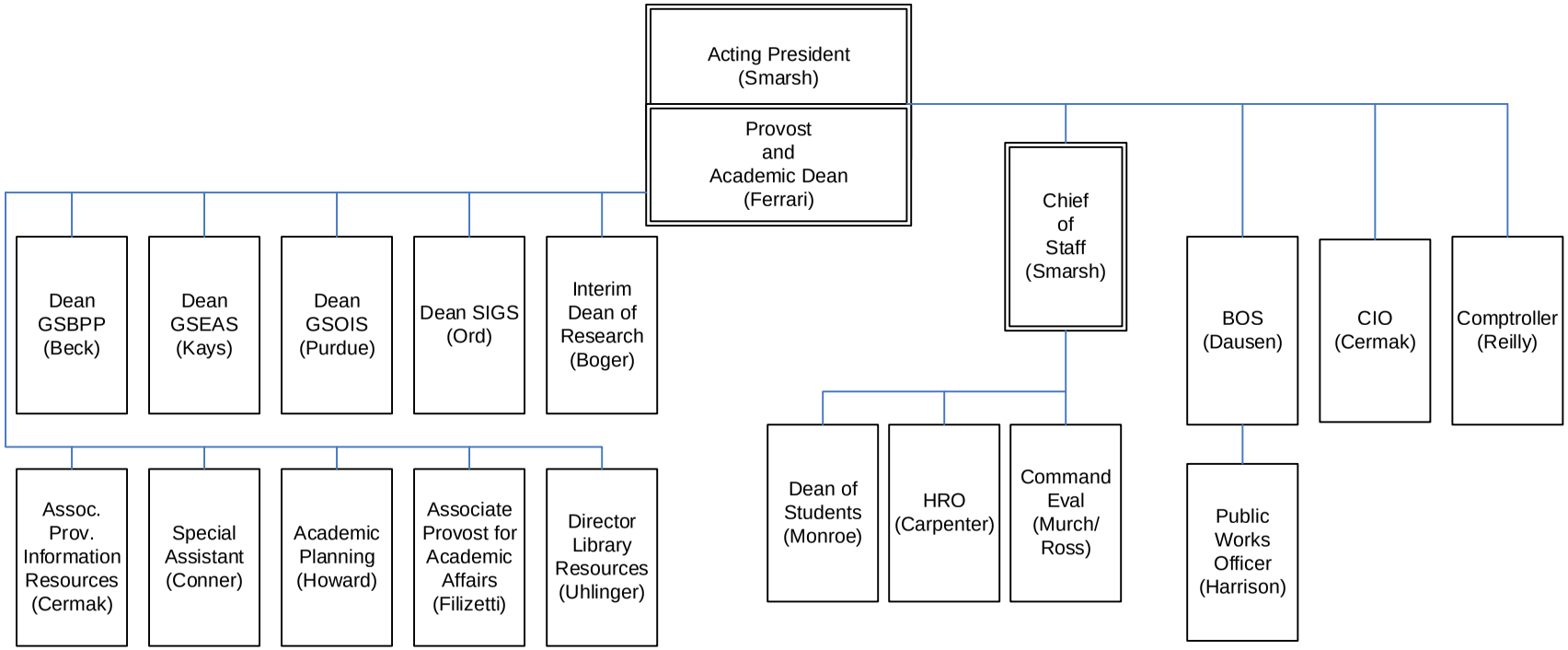


Appendix C: July 2006 Organizational Chart



Appendix D: Proposed Organizational Chart

Naval Postgraduate School
Executive Level
11/7/2006



Appendix E

Naval Postgraduate School
Monterey, California

Associate Provost for Finance and Administration
Position Description

Associate Provost for Finance and Administration: The Naval Postgraduate School seeks an Associate Provost for Finance and Administration to provide dynamic leadership for the financial and administrative areas of the university. As the chief academic financial officer, directs and oversees the institution's business and other support functions, to include Budget Office, Business Policies, Faculty Personnel, Comptroller's Office and other treasury functions (Payroll, General Accounting, Contracts and Grants, Cashiering, etc), Purchasing. Ensures that business transactions and policies and procedures meet the University's short- and long-term goals and objectives. Responsibilities of this position include development and oversight of financial data systems, and reporting tools for effective analysis; and coordination of internal/external information reporting. The scope of this position also includes development of close working relationships with the academic and administrative areas of the institution, including providing management information to ensure budget transparency and accountability.

Duties and responsibilities:

1. Oversees the budgeting, finance, and administrative service areas.
2. Interacts with the university community and NPS stakeholders regarding institutional financial plans and policies.
3. Participates with the Provost and other senior officers in institutional planning, policy development, and priority-setting.
4. Ensures compliance with all regulatory and funding agencies and the rules of accrediting bodies by continually monitoring operations, programs, and physical properties; initiates changes where required.
5. Through the Provost, works with the Board of Advisors on financial issues of the institution.
6. Reviews and analyzes major contractual obligations of the institution.
7. Develops and carries out the mission statement of the business and finance division; formulates goals and objectives for the division in accordance with the goals of the university.
8. Provides leadership and direction to the units which report to and/or are a part of the division.
9. Other job-related duties as assigned.
10. Developing fiducially responsible budgetary models and procedures to empower achievement of the goals of academic and administrative units.

11. Working with faculty and staff in a transparent and open manner.
12. Cultivating an environment of committed, top-quality service to meet student, faculty and staff expectations and to achieve NPS goals.

Knowledge, skills, and abilities required:

- Knowledge of the goals, objectives, structure and operations of a research university.
- Ability to establish, direct, and integrate the business, finance, and human resources operations and programs of a research university.
- Ability to foster a cooperative work environment.
- Knowledge and understanding of the mission, goals, organization, and operational/financial infrastructure of a research university.
- Knowledge of human resources concepts, practices, policies, and procedures.
- Knowledge of institutional policies and procedures, regulations and bylaws, and the legal environment within which they operate.
- Skill in examining and re-engineering operations and procedures, formulating policy, and developing and implementing new strategies and procedures.
- Knowledge of accreditation and certification requirements and standards.
- Strategic planning skills.
- Strong interpersonal and communication skills and the ability to work effectively with a wide range of constituencies in a diverse community.
- Ability to analyze and solve problems.
- Ability to review and assess the operational and financial viability of new and existing contractual arrangements and grant proposals.
- Knowledge of the structure, operations and requirements of federal financial regulatory and funding agencies.
- Ability to develop, plan, and implement short- and long-range goals.
- Employee development and performance management skills.
- Knowledge of investment strategies and techniques.

Education and experience: An advanced degree in a relevant field (e.g. MBA) and five years of experience (preferably in higher education) in administrative positions of substantial responsibility in resource management: personnel, budget, finance, and administrative services. Knowledge of Department of Defense contracting, budgeting, financial operations, personnel, accounting helpful. Experience in development, and implementation of administrative systems desired. Leadership skills and strong presentation and communication skills are a must. Strong statistical and analytical skills and knowledge of continuous improvement processes are essential.

Type of Appointment:
The Associate Provost for Finance and Administration reports directly to the Provost.

Salary:
Salary commensurate with education and experience. Excellent health and retirement benefits.

The Naval Postgraduate School: NPS is a graduate and research-intensive university offering Masters and Ph.D. degrees in the sciences, business, engineering, and international studies. Students include Department of Defense employees and military officers from the U.S. and 56 foreign countries. NPS is located on the Monterey Peninsula, about 120 miles south of San Francisco. Further information about NPS can be found on the school's Web page: http://www.nps.edu .

Applicants should submit a letter of interest, current resume/ vita and complete contact information for three references by mail to Erin M. Elizondo, Office of the Provost, Naval Postgraduate School, 1 University Circle, Monterey, CA, 93943, emelizon@nps.edu

The Naval Postgraduate School is an Equal Opportunity Employer. U.S. Citizenship is required.

Appendix F

DRAFT

FROM: Provost Leonard Ferrari
TO: Deans, Associate Provost for Academic Affairs, Special Assistant to the Provost, Director of Academic Planning, Executive Director of Information Resources and CIO, Director of Library Resources
SUBJECT: Organizational Clarity

One of the recommendations in the Administrative Affairs Report of last month had to do with the lack of perceived clarity in our organizational structure. To address this concern, the Administrative Affairs Implementation Task Force has recommended that the institution develop and/or update current organizational charts and position descriptions for the major academic and administrative areas of NPS. As leaders of one or more of these areas, please provide a current organizational chart for the area(s) within your purview. In addition, please provide a position description for your position as well as for each of your direct reports, including contractors.

Since we need to have some common elements in our position descriptions, I am providing the template below for your consideration. The "organization and management principles" are an amalgamation of recommended principles by both the Business Practices and Administrative Affairs Committees. Feel free to modify it, as appropriate, but please use as many of the elements below as possible. Please send your submission by December 10 to Dr. Fran Horvath, Director of the Office of Institutional Research, who will compile and summarize the institution-wide information for your final review before posting.

In addition, please prepare a description of how the goals, resources, and operations of your area (s) support the NPS mission. Please provide a critical assessment of what level of resources is required, using benchmarks from other relevant organizations. Include definition of appropriate performance metrics and ways in which these findings can be routinely reported to the university community. Please send me your reports by January 10.

Thank you.

Position Description Template

Position title. Brief description of duties and responsibilities.

Organization and management principles:

1. Provides leadership and direction to the units which report to and/or are a part of the division.
2. Responsible for aligning divisional goals and objectives with those of the larger institutional mission of education and research.
3. Development of plans and policies within the division consistent with NPS plans and policies.
4. Development of performance indicators that describe the division's operations and progress. To the extent possible, research university comparison groups should be used to provide reference and context. Periodic reporting to the campus community on the division's contributions to supporting the institutional mission.
5. Managing business practices that maximize accountability at the appropriate level within the organization. Demonstrating commitment to continuous improvement practices. Rationalizing policies, processes and programs in terms of their effective and efficient support of NPS mission requirements. Feedback as to the effectiveness of policies, process, and programs should be routine.
6. Responsibility for professionalism in hiring, management, development and transition practices:
    a. position descriptions must be developed.
    b. positions should be advertised and competed in open searches whenever practical.
    c. performance measures must be developed and implemented.
    d. performance should be formally assessed and feedback clearly communicated.
7. Communications. Communicating regularly within the division as well as across the institution about plans, current events, etc. Enlisting consultation with major constituent and stakeholder groups on a regular basis. Supporting NPS-wide communication efforts.
8. Working with faculty and staff in a transparent, open, and collegial manner.
9. Cultivating an environment of committed, top-quality service to meet student, faculty and staff expectations and to achieve NPS goals.

Knowledge and skills required: brief description of knowledge, skills and abilities required

Education and experience: description of educational background, degree level, certification, etc. and professional experience (years of experience, levels of experience, range of experience, etc.).

Type of appointment: Faculty, staff, contract -- reporting to which position.

Salary: GS level or commensurate with education and experience.

18 September 2006

AD-HOC COMMITTEE ON ADMINISTRATIVE AFFAIRS
REPORT TO THE PROVOST

BACKGROUND

Provost Leonard Ferrari established two committees in July 2006 to advise him regarding the improvement of administrative structure and processes at the Naval Postgraduate School (NPS). The Provost's Ad Hoc Committee on Administrative Affairs was established to advise the Provost on matters of administrative structure of NPS. The second committee, the Provost's Ad Hoc Committee on Business Practices, was established to provide recommendations regarding the improvement of business practices at NPS. A copy of the charge to the Administrative Affairs Committee is provided in Appendix A, together with a list of Committee members.

During the NPS Provost Search process, the Provost heard the campus community voice concerns about a number of issues relating to administrative structure and processes. Specifically, questions were often raised about the number of administrative positions at NPS and how they are created and filled. Concerns were also voiced about the resource allocation process - how priorities are set, how allocation final decisions are made, etc. In addition, members of the NPS community raised questions about the complexity of business practices at NPS and the need to improve customer service.

The Naval Postgraduate School has changed significantly over the past five years. The institution established four academic schools and three major research institutes. The external research program has increased more than 400 percent. Our direct support from the Navy has also increased and will continue to do so in the next two years. Fewer than 50 percent of the residential students are Navy, and there are more than 800 students enrolled in graduate certificate and degree programs. NPS teaches thousands of U.S and international students in its short courses. NPS supports many sponsors of research and education programs not only in the Navy and Department of Defense, but in all military branches and many federal agencies. Many base support functions are now performed by the Commander Naval Region Southwest. Despite this tremendous growth and significant change, little attention has been paid to our business processes and the support organization to ensure that it remains properly sized and aligned with the change in mission and focus. The Committee questioned whether we have created expectations that exceed what can be delivered.

Additionally, it is apparent that we may not have communicated well enough about the changes that have been made in the organization to adopt to this rapid growth. Thus, the Committee believes that it is both important and appropriate that NPS now turn our attention to ensuring that the administrative organization is sized properly to meet the mission needs of the school. The organization and our business processes need to be streamlined, effective, and efficient to support the academic mission.

COMMITTEE CHARTER

In accordance with our charter (Appendix A) the Committee considered the following questions.

a. What are the critical admin functions?
b. Is there functional duplication?
c. Is there a better way to organize administrative functions and reporting structures?
d. Are there individuals within schools who also support central admin functions?
e. Are faculty utilized effectively in service functions
f. Where is there dysfunction in the administrative support organization
g. What other issues should the committee tackle related to admin support?

The Committee focused its attention on questions a. and c. above. This report makes specific findings and recommendations in these two areas. A set of principles for a properly functioning organization as well as recommendations about how best to address the other questions within a specified timeline are proposed.

The Committee first examined the people and organizations that reported directly to the Provost as of 30 June 2006 with a view towards streamlining the organization, creating a more effective structure, and reducing cost. From there, based on the existing organizational chart and knowledge of the academic mission, the Committee identified the critical administrative functions that are required to most effectively and efficiently support the efforts of the four schools to accomplish the NPS mission. In cases where there appeared to be duplication or overlap of function in positions that directly report to the Provost, we recommended alignment of like functions. This will permit follow on review to determine if some activities can be consolidated and eliminated. The Committee was not able in the time frame allowed to do an in-depth review of the organizational structures and on-going activities of the people in them within the functional areas or within the Schools. The Committee believes that its recommendations for aligning people with the key functions will allow these organizations to find cost savings and/or more effective operations. The Committee recommends that those organizations be charged with identifying how their mission, goals, resources and organizations are aligned with and support the NPS mission. The Committee also recommends that those organizations critically asses the level of resources required and the skills of the people that they currently have to meet the requirements. An action plan to resolve any issues can then be reviewed with the Deans and Provost. This assessment should include using benchmarks from other relevant organizations, the development of appropriate performance metrics and ways in which these findings can be routinely reported to the Provost, Deans and the broader university community.

The Committee also considered the decision-making process at NPS and makes recommendations for better alignment, structure and processes related to decision-making. This included redefining the purpose and membership of the Executive Council and formalizing the Provost Council.

The Committee supports a resource allocation and budgeting process aligned with the NPS strategic plan. The Committee considers a total review of the operational budgeting process as a very high priority. The ability of NPS to maintain meaningful financial management, live within budgets, establish resource allocations in the best interest of the University, provide management tools at the Department chair and Dean levels, and establish credibility with the faculty is dependent on making these improvements as soon as practical.

The following are the findings and recommendations of the Committee for the Provost's consideration.

FINDINGS

- Despite the tremendous growth identified above, little has been done to significantly transform the organizational processes, structures, roles and responsibilities and alignment to respond to the growth in mission. It is time to ensure that all services and organizations are properly aligned and resourced to provide effective, efficient support to the four schools and the NPS mission. Services and functions that are duplicative, redundant or not aligned with the NPS mission must be eliminated.
- We have not always invested in the development of the people and skills to perform or support the NPS mission. In general, we acknowledge that we have good people who are trying to do the right thing, but the "system" does not always allow them to be successful. A proper review of the skills and talents that each person has to achieve their goals needs to be done and a development program established.
- Communication is critical, particularly in times of growth and change. Some of the perception about growth in the administrative functions and organizations may be attributed to a lack of understanding and effective communication. External communication is vital to the various audiences that NPS must work with and depends on continued support for the university. Internal communications is vital to enabling change to take place in a positive way. In addition, good communications will help the Provost achieve the overall goals of NPS, create a since of pride and camaraderie among all the employees of NPS, and encourage employees to participate in the continual improvement process.
- The following are the major functions that are essential to the accomplishment of the NPS mission.
    - School Deans
    - Research Dean
    - Academic Affairs
    - Finance and Administration (Academics)
        - May include some facilities coordination functions
        - Academic business processes
        - Should have oversight of all sources of funding
        - Human Resources (was viewed as critical however it may be best aligned with Finance and Administration due to the Region/HRO organization at NPS)
    - Strategic Planning
    - Information Resources

    - Library
    - Communications
- There are a number of people charged with working across schools to develop new research and education programs, either for a customer group (e.g., HLD/S) and/or a focus area (e.g., Intel, HLS/D) and/or a geographic region (e.g., Washington DC area). These people report to Deans, Associate Provosts, and the Provost. Many have this tasking as a type of collateral duty in addition to their role in teaching, research or service.
- The existing decision-making structure, consisting primarily of the Executive Council, does not lend itself to the appropriate discussion of important initiatives and strategic direction for the academic mission. The membership, structure and purpose of the committee must be updated and documented.
- The role of the Faculty in decision-making is not clearly defined or understood.
- We found that while we all understand principles of good organizational design and functioning, we do not always practice them due to extenuating circumstances.

PRINCIPLES FOR GOOD MANAGEMENT AT NPS

The Committee developed principles for good organizational design and management that it believes must be adhered to at NPS provided in Appendix B. The Committee acknowledges that these should be inherently obvious. However, as they are not always routinely and consistently followed at NPS, the Committee wants to emphasize their importance. The Committee's recommendations are consistent with these principles, and the members of the Committee are committed to following them within their own organizations.

RECOMMENDATIONS

These recommendations are made in priority order and are generally sequential. Although work may be done on them simultaneously, many require one or more of the preceding recommendations to be completed before they can be done.

- Develop and articulate an academic strategic vision for NPS. Develop a long-range plan to achieve the vision. Establish a multi-level task team to develop the strategy that can then be reviewed by the Provost Council. Due by 15 January.
- Re-define the role and membership of the Executive Council. Map the decision-making process at NPS so that a more thorough review can be made. Formalize the role of the Provost Council. Define the role of the Faculty Council in the decision-making process. Due by 15 December.
- Define the end-state for management of NPS. This may include organizational structures, the principles for organizations discussed above and outcome measures. Establish roles and responsibilities, procedures and processes to clarify, guide and enable the organizational structures. Develop a transition plan for getting to that end-state. Establish a Task Team to develop and bring forward the plan. Task Team should report out by 15 December.
- Appoint a Communications Task Team to develop a strategic communications plan and to develop the appropriate organization and reporting structure. Assess the current organizational assets to determine capability to achieve the goals to support the mission. Task Team should report out by November 15.

- Assign a Task Team to consider the functions of Finance and Administration required to support the academic mission. This might incorporate some functions currently being performed within Academic Planning, Strategic Planning, HR, and Comptroller and in other areas at NPS. Once the function is better defined, and in accordance with the management plan, consider the best reporting structure. Task Team should report out by November 15.
- Develop position descriptions for all key positions by 15 December.
    - For those individuals assigned to new program development, assign specific performance metrics and/or require that after some specified period of time, some percentage of their salary will be obtained from reimbursable research or education. Many currently have projects that support some or most of their salary.
- Charge the managers of all key organizations, including the schools and the departments, to identify how their mission, goals, resources and organizations support the NPS mission by 15 December. They should critically assess what level of resources are required using benchmarks from other relevant organizations as well as NPS information. They should also develop appropriate performance metrics and ways in which these findings can be routinely reported to the university community. Formalize the role of the NPS leadership in discussions and prioritization of activities and resources.

CONCLUSION

As a result of the recommended realignments and elimination of duplication, the Committee estimates that approximately ten positions could be eliminated immediately from the Provost's staff resulting in a potential savings of more than $1 million per year. This reduction in overhead in the Provost's staff will provide the impetus for other support function leadership to reduce duplication or unnecessary positions within their areas.

The Committee believes that if NPS leadership accepts these recommendations and acts on them in the suggested timeframe, then NPS will be better able to function and to respond to the growth and change that is sure to continue. The Committee recognizes that it has been a considerable time since a thorough review has been done like the one we are proposing. There is no intent on the part of the Committee to suggest anyone has done anything wrong. As mentioned in the opening of this report, a very large amount of change at NPS has taken place. This review is timely and welcomed for everyone to make NPS a better place to work for all. The Committee also understands that this is a lot of work that will take institutional support and commitment. The Committee fully supports the Provost as he makes these changes and looks forward to taking the next steps.

Appendix A

AD-HOC COMMITTEE ON ADMINISTRATIVE AFFAIRS
COMMITTEE CHARTER

Dear Colleagues:

During the interview process for Provost, many faculty members suggested that the first order of priority for the incoming Provost would be an examination and possible restructuring of centralized administrative support. Several faculty were present at several of these discussions. Given our current budget situation, I have decided to form an Ad Hoc Committee on Administrative Affairs to review and make suggestions on the central administrative support functions. I would recommend that the committee meet once or twice to review the current status and that we then convene a retreat, in the very near future, to develop a plan and any modifications to the current administrative support structure. I would like to attend the first meeting of the committee for a few minutes and then attend the retreat.

The Committee Membership:

Dr. Julie Filizetti, Associate Provost for Academic Affairs, Chair
Dean Ord, SIGS
Dean Purdue, GSOIS
Dean Beck, GSBPP
Dean Kays, GSEAS
George Conner, Strategic Planning
Dr. Dan Boger, Chair IS, (Chair Provost Search Committee)
Dr. Tom Housel, (Faculty Representative)
Dr. Christine M. Cermak, Executive Director, Information Resources and CIO, *ex officio*

An incomplete list of issues, in no particular order:

- What are the critical admin functions?
- Is there functional duplication?
- Is there a better way to organize administrative functions and reporting structures?
- Are there individuals within schools who also support central admin functions?
- Are faculty utilized effectively in service functions?
- Where is there dysfunction in the administrative support organization?
- What other issues should the committee tackle related to admin support?

I do not expect the group to examine the internal structure of major support organizations. At this point in time, I am primarily interested in examining the central admin support organization for effectiveness and duplication. Please feel free to call me at any time to discuss the role of this important committee. Let me know the data you need from the Provost Office. I could have added several other individuals to this

committee but I want to keep the group as small as possible but still able to cover most aspects of central admin. If there is someone who needs to be added please let me know ASAP. Thanks for your support and willingness to work with me on this important issue.

Best regards,

Leonard Ferrari, PhD
Acting Provost
Associate Provost/Dean of Research
Naval Postgraduate School

Appendix B

AD-HOC COMMITTEE ON ADMINISTRATIVE AFFAIRS
PRINCIPLES FOR GOOD MANAGEMENT AT NPS

Developed by the Provost Committee on Administrative Affairs
September 2006

- Internal NPS organization, policies, processes and programs must be rationalized in terms of their effective and efficient support of NPS mission requirements. Feedback as to the effectiveness of policies, processes and programs should be routine.
- Policies/services must be aligned with NPS mission needs.
- People deserve to have only one boss and to be accountable for their responsibilities.
- Span of control at every level must be manageable.
- Organizations should be designed to be effective and efficient.
- Faculty should have a clear role in the governance of NPS.
- NPS must be professional in our hiring, management, development and transition practices.
    - Position descriptions must be developed.
    - Positions should be advertised and competed in open searches whenever practical.
    - Performance measures must be developed and implemented.
    - Performance should be formally assessed and feedback clearly communicated.
- NPS must be committed to professional practices at all levels in the organization: effective communications, planning, accountability, customer service, continuous improvement and recognition.

Office of the Provost

Code 01	Provost	Provost Leonard Ferrari	656-2371/2	He-M12
	Support	Sharee Kelso	656-2371/2	
Code 011	Academic Planning	Professor Gil Howard	656-2616	He-M5A
	Support	Rumi Escobido	656-2616	
	Support		656-3411	
Code 01C	Academic Affairs	Associate Provost Doug Moses	656-3218	Ro-100
	Support	Jhoie M. Pasadilla	656-3946/3566	

- **Provost's Bio** (PDF)
- Provost Ferrari's speech at the Martin Luther King Day breakfast, Jan 16. 2007 (PDF)
- Higher Education and Research Cluster Leadership Summit (PDF)
- Educating the Total Force Education & Research Initiatives (PPT)

Monthly Newsletters (PDF)

- July 2007, Volume 2, Issue 7
- June 2007, Volume 2, Issue 6
- May 2007, Volume 2, Issue 5
- April 2007, Volume 2, Issue 4
- March 2007, Volume 2, Issue 3
- February 2007, Volume 2, Issue 2

PROFESSIONAL ORGS

CLUBS

VOLUNTEER

- January 2007, Volume 2, Issue 1
- December 2006, Volume 1, Issue 1

Related Resources and Information

- NPS Organizational Chart (PDF)
- Executive Meeting Structure (PDF)
- Marto Powers II Committee
- Powers Report (PDF)
- The BoozAllen Report (10 May 00)
- The State of Faculty Report (19 Oct 00)
- Pinkbook (PDF)

The Provost's Ad Hoc Administrative Affairs Committee

- Admin Affairs Implementation Task Force, Report to the Provost, November 2006 (DOC)
- Ad Hoc Admin Affairs Committee Recommendations, 18 September (DOC)
- Admin Affairs Committee Report Committee Charter, 18 September - Appendix A (DOC)
- Admin Affairs Committee Report Principles for Good Mgmt NPS, 18 SEP 06 - Appendix B (DOC)

The Provost's Ad Hoc Business Practices Committee

- Business Practices Letter to Provost (PDF)
- Business Practices Report - FINAL (PDF)
- Business Practices - Appendix A (PDF)
- Business Practices - Appendix B (PDF)

The Provost's Business Processes Implementation Task Force

- Business Processes Implementation Task Force - Report to NPS Leadership November 2007
- Business Processes 180 Day Update (PDF)

- Institutional Advancement Advisory Committee Charter - Spring 2007 (PDF)
- Web Advisory Committee Charter - Spring 2007 (PDF)
- Ad Hoc Committee on Procurement Charter - Spring 2007 (PDF)
- Procurement Oversight Board Charter Memo - Spring 2007 (PDF)
- Business Practices Website (Draft)
- Business Process Implementation Task Force Progress Report All Hands Staff November 2006 (PPT)
- Business Process Update as of 30 November 2006 (PDF)
- Business Process Update as of 15 February 2007 (PDF)
- Business Processes Implementation Task Force Projects 06 APR 07 (XLS)
- Business Process Update as of September 2007 (DOC)

NPS Financial Information

- NPS Fact Book (PDF)
- Indirect Cost Recovery Summary
- FY07 Budget Letter
- Types of Sponsored Programs
- Sponsors
- Funding Profile by Department
- 2006 Financial Information (PPT)

Send comments or suggestions for the Business Processes Implementation Task force to busproc@nps.edu.

April 8, 2008

TO: Strategic Planning Council

FROM: Christine M. Cermak

SUBJECT: LMI Organizational Structure Analysis Report

Enclosed please find LMI's final report on the Organizational Structure Analysis for NPS. As you know, President Oliver and Provost Ferrari have asked that we move ahead with implementation of the report's recommendations.

A brief description of the consulting engagement and subsequent report will be posted on the intranet with a link to the report and organizational chart under Administration.

A modified version of administrative meetings follows:

President's Senior Staff – This is a weekly meeting chaired by the President, consisting of the administrative decision-making body for the institution: President, Executive Vice President and Provost, Vice Provost for Academic Affairs, Vice President and Dean for Research, Dean of Students, Vice President for Finance and Administration, Senior Military Assistant, Vice President for information Resources and CIO, Director of Human Resources.

President's Advisory Committee – existing Cabinet Lunch (currently on Thursdays) will be renamed and serve as the President's Advisory Committee. The Dean of Students will be added to the group and the Committee will continue to meet at lunch on Thursdays.

Executive Council – the existing Executive Assembly will be renamed the Executive Council and will meet monthly. Meeting summaries will be posted on the intranet.

Provost's Council – This Council will meet weekly and is chaired by the Executive Vice President and Provost. This is the decision-making body for academic programs, plans and processes. Its membership includes the Deans, Vice Provost for Academic Affairs, University Librarian, Vice President and Dean for Research, Executive Associate to the Provost, Vice President Information Resources and CIO, and other administrators as appropriate. Meeting summaries will be posted on the intranet.

Resource Advisory Committee – This committee meets bi-monthly to provide the President and Executive Vice President and Provost updates on the financial status of the institution. Membership

also includes the VP and Dean for Research, Vice President for Finance and Administration, and Vice Provost for Academic Affairs.

A search for the Vice President for Finance and Administration will be conducted soon. Once that position is filled, a Business Services Task Force will be formed and will meet weekly to address issues of NPS business processes. The Vice President for Finance and Administration and the Senior Military Assistant/Chief of Staff will chair the committee. Membership will include Comptroller, Faculty Council representative, faculty representation from the major academic areas, contracting, purchasing, facilities, security, personnel, command evaluation, and other directors, as appropriate. Meeting summaries will be posted on the intranet.

If you have any questions, please let me know. Also, if you have any suggestions about how we might better communicate the changes to the campus, please let me know.

c: Fran Horvath, Director of Institutional Planning and Communications

ORGANIZATIONAL STRUCTURE ANALYSIS

NAVAL POSTGRADUATE SCHOOL

REPORT NA803T1

Larry Conner
Matt Henry
Angie Mizeur
Tom Triscari

DRAFT

LMI
GOVERNMENT CONSULTING

MARCH 2008

NOTICE:

THE VIEWS, OPINIONS, AND FINDINGS CONTAINED IN THIS REPORT ARE THOSE OF LMI AND SHOULD NOT BE CONSTRUED AS AN OFFICIAL AGENCY POSITION, POLICY, OR DECISION, UNLESS SO DESIGNATED BY OTHER OFFICIAL DOCUMENTATION.

Executive Summary

The Naval Postgraduate School (NPS) is a Department of Defense (DoD) graduate education institution operated by the Department of the Navy (DoN). The NPS's mission is to provide high-quality, relevant, and unique advanced education and research programs to military officers and defense civilians.

Unlike many government and defense organizations, NPS faces the dual challenge of operating as a military organization while supporting its mission as an educational and research institution. NPS has taken a very pro-active, consultative, approach to its challenges including completing an institutional strategic plan, *A New Vision for the Future*, which defines ambitious goals and clear metrics to measure progress. This strategic plan been endorsed by the Board of Advisors, the Chief of Naval Operations, and the Secretary of the Navy. NPS has conducted internal studies of their organization and formed an implementation task force to address a number of changes in both structure and executive level meetings on the campus.

NPS contracted with LMI to review the NPS organizational structure to determine the most efficient organization to support both the graduate education and research missions, while maintaining the statutory requirements of the DoN. The objective of the study was to determine if positions should be redesigned, realigned or renamed to more effectively conduct and describe the functions performed. Due to time and resources constraints, the LMI study was limited to focusing on the direct reports to the President and the Provost; conducting a thorough analysis of the organizational structure of the upper management of the Naval Postgraduate School; and, conducting interviews, reviewing current policies/directives, as necessary.

To assist NPS in meeting their challenges, LMI examined the strategic, business, and organizational challenges that face NPS. The study concluded NPS needs to ensure that its administrative governance structure is organizationally aligned to support its mission effectively, while at the same time meeting its DoN requirements.

We identified four major factors that impact NPS current operating environment:

1. NPS has recently reorganized from an advanced educational institution with one dean of academics to that of five deans who serve as both academic heads of schools and business managers. While the deans play an important role at NPS as leaders of the academic mission, the management structure is relatively new and NPS is still adjusting to this change in organizational alignment and responsibilities.

2. NPS is undergoing significant growth, particularly in the area of research and sponsored programs. While academics can play a vital entrepreneur role in developing new research, there is always the potential to bring in large research projects with little administrative oversight, thus resulting in an NPS infrastructure that cannot easily keep up with the new demands.

3. NPS has dual culture as it is comprised of a primarily civilian academic staff with the primary mission of educating Military Officers, and at the same time, it is a Department of the Navy military organization. This can lead to tension between those at NPS who relate more to the military mission side and those who relate more to the civilian academic side. This is exacerbated by faculty and research staff who may not understand government rules and business environment.

4. The Office of the President of NPS has undergone significant change in roles, responsibilities, personalities, and the position of the President changing from being an active duty Admiral to a retired Admiral. All these changes have resulted in an Air Force Colonel being the ranking military officer at NPS, highlighting the need to ensure that the President's role and those in the Office of the President are clearly defined.

Based on the results of our study, and building upon the excellent prior work of the internal review team and broad consensus on the vision of the strategic plan, we concluded that NPS should reorganize and clearly define the responsibilities of some senior administrative positions, and those reporting directly to the Office of the President, in order to enable it to achieve the organizational effectiveness and efficiency envisioned by the strategic plan.

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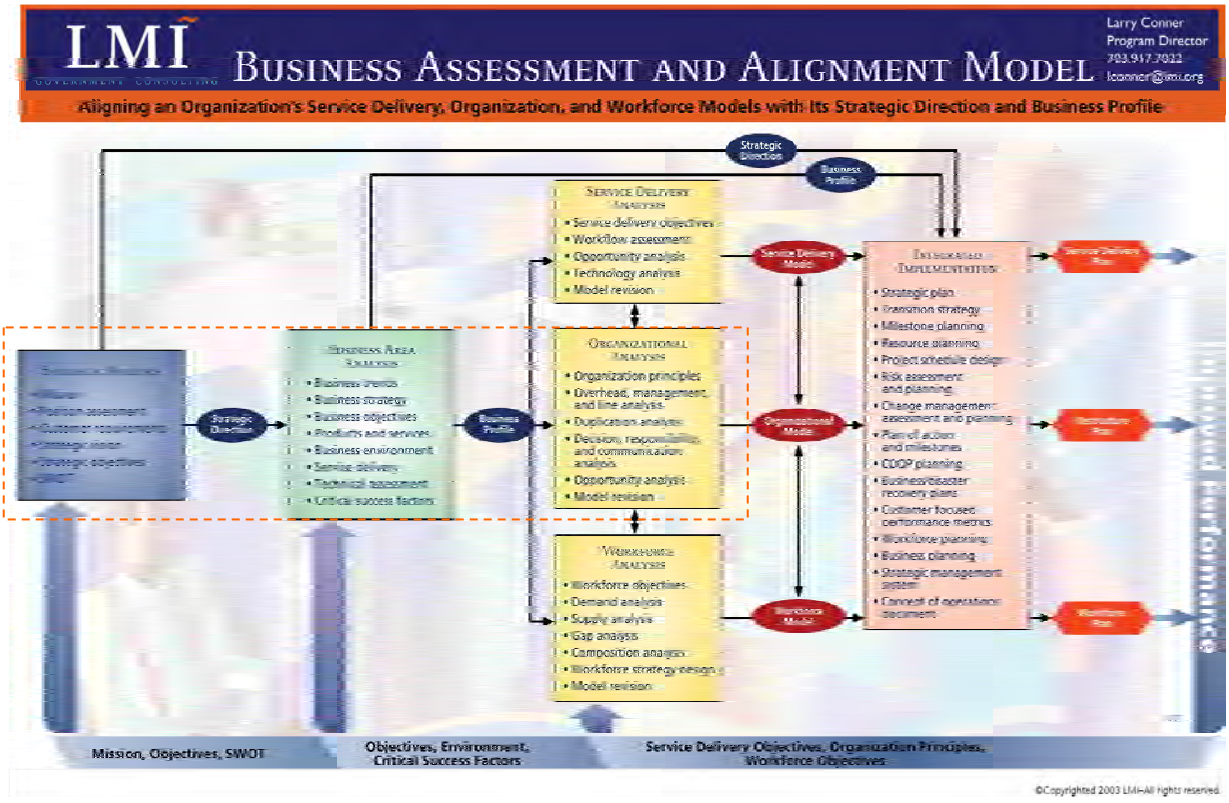
Figure

Chapter 1
Analytical Approach

BUSINESS ASSESSMENT AND ALIGNMENT MODEL

LMI used elements of the Business Assessment and Alignment Model (BAAM) to assess the organizational effectiveness of Naval Postgraduate School (NPS) shown in Figure 1-1. BAAM is a systematic and integrated approach to assessing the effectiveness and efficiency of organizational structures. By following the steps in the BAAM—analyzing strategy, business areas, and organizational structure—we gathered information for addressing NPS's need to improve its organizational structure. These steps further ensure that the recommended strategies are based on the strategic direction and business profile of the organization.

Figure 1-1. Business Assessment and Alignment Model



We integrated the BAAM framework into a tailored approach to analyzing the NPS structure, which we describe in the following subsections.

Strategic Analysis

In any organizational assessment, we need to understand where the organization is today and where it is going, its strengths and weaknesses, and the requirements of its customers. A strategic direction sets the starting point or baseline for the assessment and guards against achieving short-term objectives at the expense of long-term success. It also begins to build the baseline that guides the remaining BAAM assessments.

Our strategic assessment of NPS included understanding the current environment in which it operates, identifying significant changes in the past 3 to 5 years, understanding external constraints, and documenting its strategic direction.

Business Area Analysis

The BAAM provides an understanding how an organization functions as a business, particularly its essential business lines and its products and services. It also supports an understanding of the core and supporting business processes in the organization, relationships with other supported or supporting organizations, and functions performed. This description supports an outcome- or product-focused assessment and reveals key business factors that drive the nature and operations of the organization.

To determine how NPS functions as a business, we identified its primary functions and validated its essential business lines, products, and services. We also assessed whether NPS has the appropriate supporting business processes.

Organizational Analysis

The purpose of an organizational analysis is to identify and diagnose organizational problems (opportunities for improvement) and find methods to mitigate or eliminate them. Introduction of new technologies, changes in products and services, and business process initiatives are usually opportunities to streamline and improve the organizational model. The BAAM structure ensures that the analysis is business driven and fully integrated, and that all relevant aspects of the business are addressed.

At NPS, we focused on the organizational structure of its administration, particularly the roles and functions of the Office of the President and those that report directly to the Office. We also sought to determine if the structure effectively supports the required business processes.

METHODOLOGY

We began by conducting background research on NPS and other military and academic organizations. That research included an environmental scan of NPS as well as benchmarking similar organizations. We accessed several sources for information:

- NPS public website for processes, procedures, and history.
- Previous NPS studies that focused on the changes affecting its organization and how it could use those changes to NPS's advantage. In those studies, NPS identified key questions and potential suggestions on how it could be more successful in the future.
- Academic and government best practices. We analyzed the executive-level organizational structures and operational processes in other defense academic organizations, public universities, and Federal agencies.

Additionally, we conducted qualitative analyses using information gained from in-depth interviews with senior NPS leaders. These interviews focused on the strategy, business, and organizational aspects of NPS. (See Appendixes A and B for our interview schedule and questions.)

Analysis

This section presents the findings that emerged from our research and interviews. It addresses the topics of strategy, business, and organization from the perspective of the academic, administrative, and executive components in NPS.

Strategy

Although NPS is operating during a time of transition, it has a clear vision of how to move forward. The results below suggest that NPS has articulated a coherent and sound strategy for moving the organization forward in the right direction, and that it should continue to pursue that strategy.

Operating Environment

NPS provides unique, professional, military-relevant graduate education that meets the highest academic standard while also responding to the dynamic educational and research needs of the Department of Defense (DoD).

NPS provides education to a diverse student body. As of 2006, nearly 2000 students attend NPS in residence, and 850 additional students were enrolled in off-campus degree or certification programs. Approximately half of the students at NPS are Naval officers, and the rest of the student body is composed of officers

from the other branches of the military, civil employees of the United States federal, state and local government, as well as officers and civilian employees from over 20 other countries.

NPS fulfills its teaching and research needs through its graduate schools and research institutes. NPS consists of four graduate schools (International Graduate Studies, Business and Public Policy, Operational and Information Sciences, and Science and Engineering). The four research and education institutes at NPS are National Security Institute, Meyer Institute of Systems Engineering, Cebrowski Institute, and the Modeling Virtual Environments and Simulation Institute. NPS also has numerous additional education and research centers.

NPS faces the dual challenge of operating as a military organization while supporting its mission as an educational and research institution. As such, it works within two distinct cultures. NPS strives to be recognized not only as an academic leader among peers in the academic community, but also as a leader in the military educational community. Those we interviewed stated that the research at NPS is nationally recognized as high-quality by its academic peers. At the same time, some at NPS suggested that the Navy does not treat NPS like a flagship program, and expressed the desire to have a higher standing within the Navy, particularly as it relates to resource allocation. This has operational implications as well. On the one hand, NPS must follow the statutory obligations placed on it as a military institution. At the same time, it attempts to follow academic standards and processes typical to a high-level academic research institution. This is complicated by the fact that NPS is funded by the DoN to provide graduate education to Naval Officers, but it also receives tuition from the other uniformed services, DoD Civilians, and international countries as well as research funding from non-government agencies and organizations.

NPS has recently undergone significant changes, and is moving forward after a time of relative turbulence. The leadership of NPS has also undergone a significant shift. Historically, NPS was led by a Navy Admiral serving as it superintendent, who rotated after his or her term ended. NPS revised the leadership model, and now a civilian acts as President of NPS. This brought about several changes in the leadership at NPS:

- During the shift both the current Executive Vice President as well as the current Chief of Staff served as Acting President of NPS.
- The senior military official at NPS is no longer a Navy Admiral, but an Air Force Colonel on rotation to the NPS as part of a Memorandum of Understanding between the Navy and the Air Force.

Other near recent events at NPS contributed to the turbulence felt on campus. First, the leadership of all the graduate schools fell under one dean, but a recent shift assigned each school an academic dean as its head. Second, NPS continued growing its research portfolio, and is requiring more of the people and facilities

that support its research. Third, NPS had been reviewed for Base Realignment and Closure (BRAC), and the Memorandum of Understanding with the Air Force helped dispel the BRAC threat.

NPS Strategy Forward

The different groups of individuals that we interviewed had a unified view of the NPS strategy. Everyone agreed that the NPS Strategic Plan points in the right direction. Several suggested that the plan was an important step in unifying NPS to move forward, but NPS must focus on implementing the plan. Most suggested that the plan could be implemented by ensuring the proper resources are allocated to the strategic priorities and by linking the strategic plan to the operating plan and budget.

Business

The NPS staff clearly understands that its core business is academics, and that everything else at NPS exists to support this mission. The administrative and business processes that support the academic side of NPS, particularly the budget processes, are less understood. To be fully successful, NPS needs to define its business processes more clearly, particularly in terms of the budget and resource allocation processes.

Core Business

The core business of NPS is academics, which includes teaching and research. All of the other functions at NPS serve to support this mission. All individuals we interviewed clearly support this view.

Financial and Budgetary Process

The individuals we interviewed expressed concern about the apparent lack of clarity in the decision-making process in general, but in the resource allocation and budgetary processes in particular. Some suggested that transparent and simpler processes would lead others to perceive fairness in the decision-making process. Some even noted that there is no incentive to manage to a budget because a few individuals will reconcile all the budgetary issues. Finally, others commented on the problem with apparent “haves” and “have nots.”

Most agreed that financial and budgetary processes are an area for improvement, and suggested specific solutions. Some suggested that NPS should clearly define its program, planning, and budgeting system cycle. Others suggested programmatics should precede the budget, and a few even suggested that NPS needs a financial model for academic activities, which includes nine months of funded teaching. Some stated the deans do not appear to be involved in some decision

making and business processes. A few indicated the deans should be empowered for business and financial management.

Other Internal Process Issues

During the interviews, some individuals noted other elements of business processes as areas of concern, but not to the same extent as the budget process. For example, a few commented that the confusion about the processes could be because NPS does not have set processes despite being nearly 100 years old. Some stated NPS needs internal processes to control, manage, and obtain support for administrative support functions. This might be attributed to the two distinct cultures that exist at NPS, which places tension between the academic business processes and the required military/government business processes. A few commented that NPS lacks a centralized policy on distance learning.

Resources

The individuals interviewed suggested that NPS does not have enough resources to enable success, though some explicitly stated that resources are not a problem. Some mentioned the difficulty in attracting high-quality, mid-level managers to NPS, while others suggested that the administrative staff is not customer focused. Others expressed frustration with the culture of the Comptroller's office, stating that it seems the rules and procedures change frequently.

Organization

The interviewees expressed a desire for NPS to have an organizational structure that accounts for its business processes, with clearly defined roles and responsibilities. To be successful, NPS must clearly define the senior administrative roles as well as those of the Office of the President.

Roles and responsibilities

Most of the individuals we interviewed agreed that there is confusion and lack of clarity about the roles and responsibilities of many NPS positions, especially those involved in the budgetary process. Most stated they would like to see an enduring organizational structure for NPS with clearly defined roles, though many in the academic side of NPS expressed concern about losing stature. Many stated that at times it is unclear who is in charge: "We in this room are all walking on each other's shoes." A few noted concern about the Chief of Staff in the academic decision-making structure; they want that position to be responsible for handling "military issues." Some stated explicitly that there should be a military leader for military matters.

Chapter 2
Alternatives

The primary findings that emerged from our interviews of NPS personnel was that NPS needs greater clarity in its financial and budget processes, and NPS should clarify the roles of senior administrative leaders and relationship to the Office of the President. In this chapter, we present several alternatives for redressing these issues. The first set of alternatives addresses the macro-level issues surrounding the senior administrative organization of NPS, and clarifies roles in that organizational structure. The second set of alternatives focuses on the Office of the President: it addresses the need to clarify roles in that office.

Before examining the alternatives, we briefly review the role of the deans at NPS. The core mission of NPS is academics, and all other functions serve to support that mission. As such, the administrative organizational alternatives leave the academic side of NPS largely untouched. In all of the organizational alternatives that we describe, the deans continue to serve in their crucial roles. As academic leaders of their assigned schools, the deans ensure the success of NPS. As such, their roles and responsibilities continue to impact and direct the core mission of NPS.

Within each of the alternatives described in this chapter, the deans have the following specific responsibilities as has been codified in a memorandum from the Provost dated January 29, 2008:

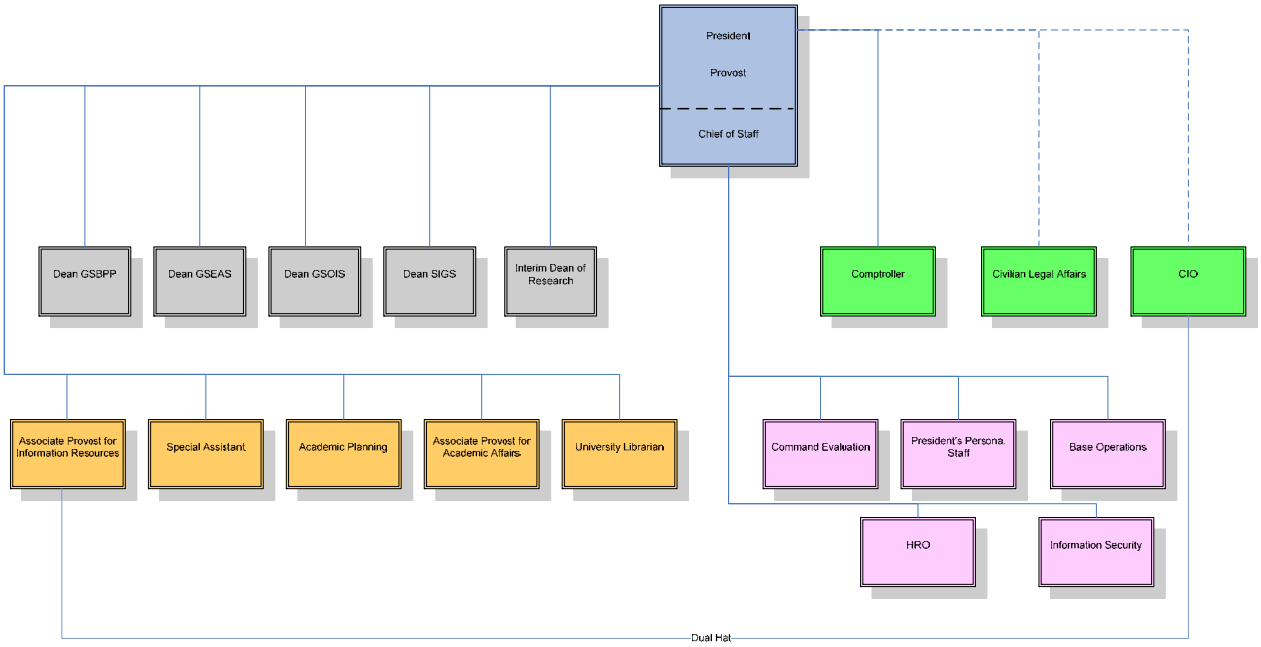
- Leadership
- Accreditation
- Budget
- Supervise and counsel
- Policy
- Liaison
- Personnel actions: hiring and promotion
- Development of curricula and programs
- Staff and faculty development
- Communication

- Meetings
- Office duties
- Other duties as assigned.

For further elaboration of the role of the deans, please see Appendix D.

ADMINISTRATIVE ORGANIZATION ALTERNATIVES

Alternative 1: As-Is



This alternative is NPS's current organizational structure. It is the baseline for assessing alternatives for improving the administrative functions at NPS.

ROLES AND RESPONSIBILITIES

In this alternative, the current roles and responsibilities at NPS are as they exist today.

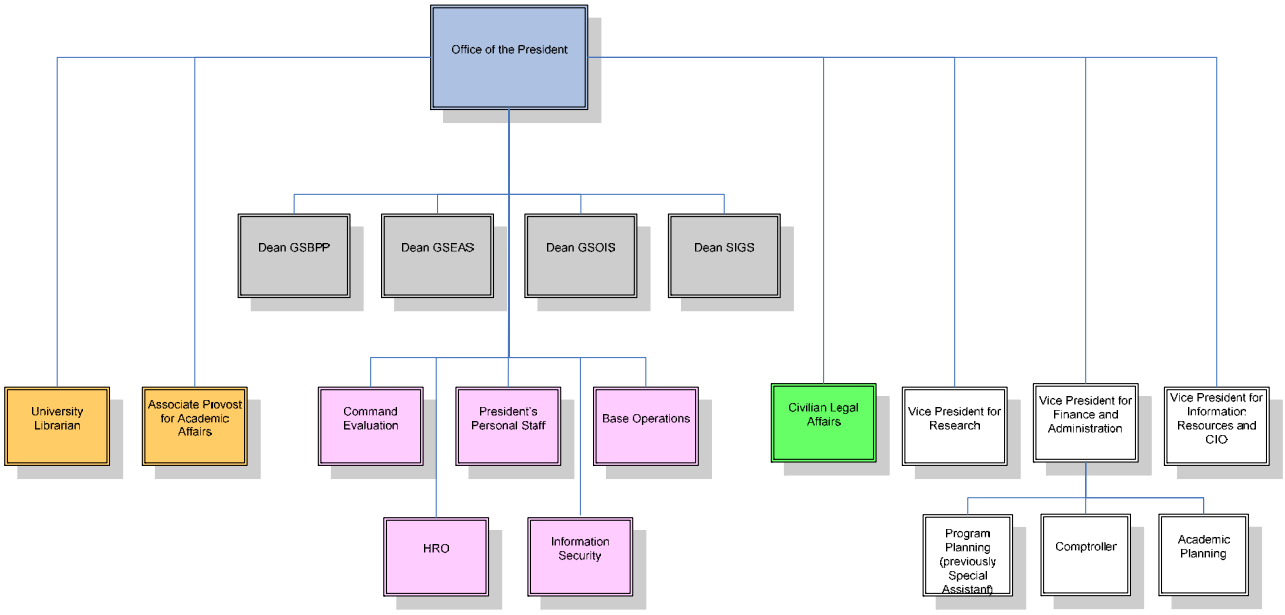
BENEFITS OF AS-IS

- No change in roles and responsibilities
- Little cultural adjustment required
- Maintains organizational stability.

CHALLENGES TO AS-IS

- Does not address perceived lack of clarity in roles and responsibilities
- Does not solidify the dual military and academic nature of NPS
- Does not address the current financial business processes.

Alternative 2: Vice President for Finance and Administration



This alternative is designed to clarify and strengthen the financial management roles and responsibilities at NPS by creating the position of Vice President for Finance and Administration. This alternative also creates a new title of Vice President for Information Resources and Chief Information Officer (CIO) as well as a Vice President for Research. It maintains the dual nature of the CIO and Associate Provost for Information Resources, but combines both duties into one title and in one location on the organizational chart, providing a simpler organizational representation of the position. In this alternative, the Vice Presidents are clearly the administrative support to the academic mission of NPS, and the deans are the leaders of that academic mission.

ROLES AND RESPONSIBILITIES

Vice President for Finance and Administration

The Vice President for Finance and Administration articulates the strategic resource direction at NPS and serves as the focal point for the financial and administrative functions at NPS. The Vice President for Finance and Administration ensures that NPS's financial decisions, business transactions and policies, and

procedures are transparent, and meet NPS's strategic goals. This person also serves as the chief financial officer for NPS, overseeing all business and supporting functions, including development of strategic resourcing plans. Those responsibilities include budget submissions, business policies, and purchasing. The Vice President for Finance and Administration also directs the business administration of NPS, overseeing the budget execution in the Comptroller's Office, Purchasing, and other treasury functions (such as Payroll, General Accounting, and Contracts and Grants). This person also works closely with the academic side and others in administrative roles at NPS. The Vice President for Finance and Administration reports to the Office of the President.

Vice President for Information Resources and CIO

The Vice President for Information Resources and CIO has a dual role at NPS: overseeing all information technology and communications services and instructional technology at NPS, and all voice, video, and data communication infrastructure and services for resident and non-resident instruction. As Vice President for Information Resources, this person oversees institutional research and institutional advancement at NPS, including alumni affairs, media relations, publications, marketing, and community relations. This person also directs the institutional research program with a central data collection and analysis function role for NPS, including responsibility for accreditation. The Vice President for Information Resources and CIO coordinates the strategic information resources at NPS, including Information Technology and Communication Services, Instructional Technology, Institutional Research, and Institutional Advancement. The Vice President for Information Resources and CIO reports to the Office of the President.

Vice President for Research

The Vice President for Research promotes, supports, and facilitates the research mission of NPS. That responsibility includes oversight of the multidisciplinary NPS institutes sponsored programs, grants and contract administration, technology transfer, as well as cooperative relationships with industry, other higher education, and Government institutions. The Vice President for Research defines and communicates the NPS research vision, programs, and achievements to internal and external audiences at the local, regional, national, and international levels. The Vice President for Research is also responsible for the NPS-wide future research trajectory, including increasing external funding and leveraging current research capabilities. The Vice President for Research reports to the Office of the President.

Associate Provost for Academic Affairs

The Associate Provost for Academic Affairs assists the Provost in the oversight of the academic mission of NPS. This person helps the Provost oversee the schools, coordinate internal academic and support department budgets, prepare and

coordinate the academic budget requirements, and support budget issue papers. The Associate Provost for Academic Affairs focuses on the academic budget, helping the Provost manage the academic budget of all the schools, and provide budgetary oversight of the deans, as needed. This person works closely with the Vice President for Finance and Administration to ensure the Academic Budget is in line with NPS's financial strategic budget. The Associate Provost for Academic Affairs reports to the Office of the President. The Associate Provost for Academic Affairs also assists the Provost in matters of faculty hiring, curriculum development, program and curriculum reviews, academic support services, distributed education programs.

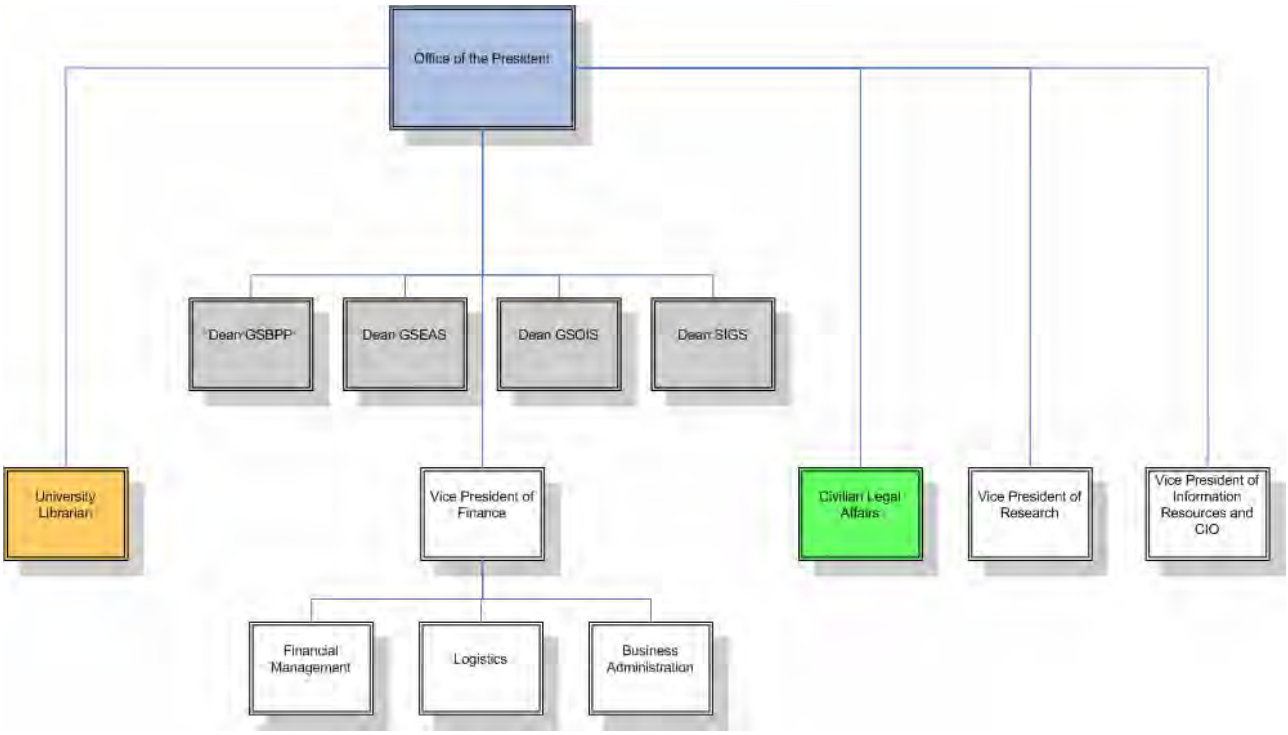
BENEFITS OF ALTERNATIVE 2

- Centralizes the financial business processes
- Establishes a clear line of authority on financial decisions
- Clarifies roles and responsibilities in financial decision making
- Increases efficiency and effectiveness
- Provides organizational checks and balances
- Builds upon a proposal made by the Government Accountability Office to create this position as a direct report to the executor.

CHALLENGES TO ALTERNATIVE 2

- Requires processes and cultural adjustments
- Requires resources to make the change.

Alternative 3: Vice President of Finance



This alternative creates a Vice President of Finance with a single financial voice for the organization. This person would be responsible for all financial, logistics, and business administration functions at NPS, which would clarify and strengthen those functions. The Vice President of Finance would report directly to the Office of the President.

ROLES AND RESPONSIBILITIES

Vice President for Information Resources and CIO

Same as in Alternative 2.

Vice President for Research

Same as in Alternative 2.

Vice President of Finance

The Vice President of Finance provides a strategic view of the financial matters at NPS and serves as the focal point for all financial, logistical, and administrative functions. This person is the chief financial, administrative, and logistics officer for NPS, and oversees NPS's financial management and resources, including budget submissions, activity-based cost analyses, payroll, budgeting, and accounting. The Vice President of Finance also manages logistics at NPS, including contracting, procurement, invoicing, unauthorized commitment management, and

property receipt, as well as serves as the Fleet Industrial Support Center (FISC) liaison. The Vice President for Finance oversees the business administration of NPS, including Internal Management Control, property management, conference coordination, labor force management, and the travel office. This person also ensures that NPS's business transactions, policies, and procedures meet its strategic goals, and assures budget transparency and accountability across NPS. The Vice President of Finance works closely with the academic and other administrative areas at NPS, and reports to the Office of the President.

BENEFITS OF ALTERNATIVE 3

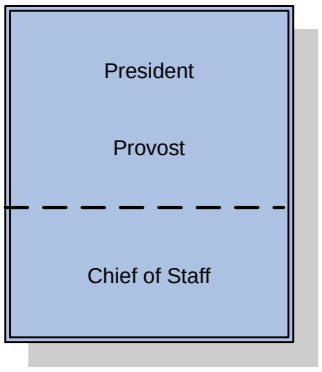
- This alternative has the same benefits as those of Alternative 2 with the additional functions of logistics and business administration
- Greater standardization opportunities than that of the Alternative 2.

CHALLENGES TO ALTERNATIVE 3

- Same as those of the Alternative 2 with the additional functions of logistics and business administration
- Greater cultural and institutional resistance than that of Alternative 2
- Fewer organizational checks and balances
- Larger and more diverse functional span of control.

OFFICE OF THE PRESIDENT ORGANIZATION ALTERNATIVES

Alternative 1: As-Is



This alternative retains the current organization of the Office of the President.

ROLES AND RESPONSIBILITIES

The roles and responsibilities for the Office of the President remain unchanged.

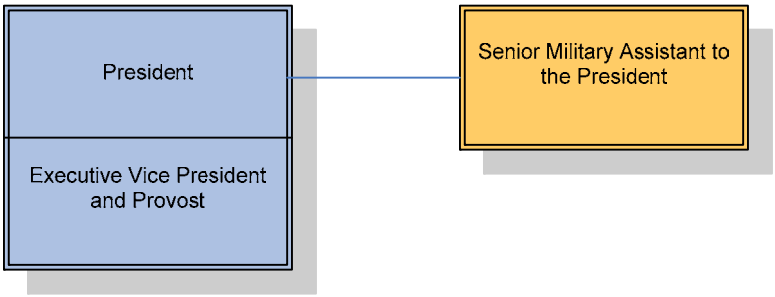
BENEFITS OF AS-IS

Provides a military presence in the Office of the President.

CHALLENGES TO AS-IS

- Retains current working relationships
- Fails to maximize experience or capabilities of senior military officer.

Alternative 2: Reduced Military Role



This alternative reduces the senior military person's role to that of advisor to the President of NPS. It also clarifies that the senior military person does not oversee academic, administrative, or support functions.

ROLES AND RESPONSIBILITIES

President

The President remains the executor of the school.

Executive Vice President and Provost

In keeping with best practices of other premier academic and research universities and to properly recognize that the Provost has both academic and business responsibilities for the School, the title Executive Vice President is more appropriate and descriptive title for this position. The Executive Vice President and Provost remains the academic head of the school and oversees all aspects of the academic operations. The Executive Vice President and Provost can speak on behalf of the President, reports to the President, and is located in the Office of the President.

Senior Military Assistant to the President

The Senior Military Assistant to the President is the Senior Military Officer on campus, and as such is NPS's leading military authority. This person advises the President on all military matters at NPS, providing counsel on policy and procedure requirements, budget preparation and submission, military disciplinary procedures, military curriculum requirements, and military protocol. The Senior Military Assistant to the President is involved with the academic and administrative functions at NPS only when advice is needed from a military perspective. The Senior Military Assistant to the President can speak on behalf of the President. This person reports directly to the President, but is not part of the Office of the President.

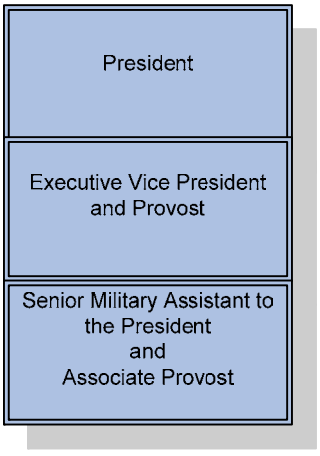
BENEFITS TO ALTERNATIVE 2

- Clear roles and responsibilities
- Senior military person advisor seen as having voice of the President.

CHALLENGES TO ALTERNATIVE 2

- Not consistent with the intent of Air Force and Navy memorandum of understanding
- Limits the voice of the customer to that of an advisor to the President
- Limits roles and responsibilities, and therefore assistance the senior military officer at NPS could provide to both the President and Provost.

Alternative 3: Integrated Military Role



The intent of this alternative is to integrate a senior military officer into the Office of the President in a supporting role to both the President and Provost.

ROLES AND RESPONSIBILITIES

President

The President remains the executor of the school.

Executive Vice President and Provost

The Executive Vice President and Provost remains the academic head of the school and oversees all aspects of the academic operations. The Executive Vice President and Provost can speak on behalf of the President, reports to the President, and is located in the Office of the President.

Senior Military Assistant to the President

The Senior Military Assistant to the President is the Senior Military Officer at NPS, and as such is the leading military authority on campus. This person advises the President on all military matters, and provides counsel on policy and procedure requirements, budget preparation and submission, military disciplinary procedures, military curriculum requirements, and military protocol. The Senior Military Assistant to the President is involved with the academic and administrative functions at NPS as coordinated by the Provost. The Senior Military Assistant to the President can speak on behalf of the President, reports directly to the President and the Provost, and is considered part of the Office of the President.

BENEFITS TO ALTERNATIVE 3

- Aligns with Defense and service models of ‘shared’ organizational leadership (military and civilian)
- Similar to structure at Naval War College, Naval Academy, and several state university models
- Leverages the necessity of a senior military person working for the President.

CHALLENGES TO ALTERNATIVE 3

- Cultural and organizational resistance to change
- Implementation challenges of shared leadership model.

Chapter 3
Recommendation and Conclusions

In order to achieve the goals of the NPS Strategic Plan, implementation requires a talented, well-organized, and motivated administrative team. When assessing the effectiveness of organizational structure and its alignment with institutional goals, three factors are important to consider:

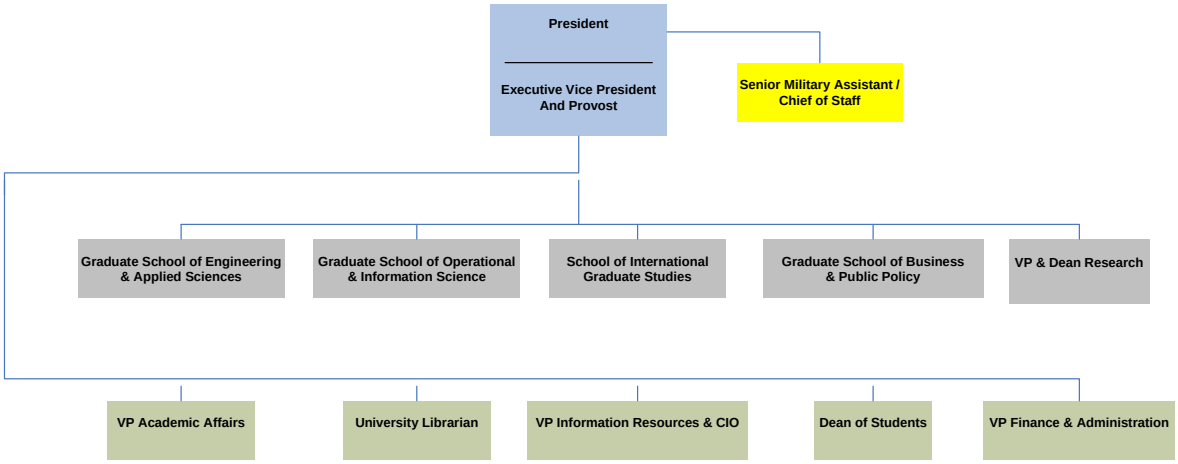
- Organizational structure that supports efficient and effective decision-making
- Clarity of roles and responsibilities
- Administrator quality (credentials and experience), morale and motivation, and appropriate alignment with function

The Naval Postgraduate School has a solid administrative leadership team. The President and Provost have impressive credentials and experience and have worked well together in completion of the strategic plan. The management team of deans, directors and associate provosts also works well to support the institution, but a few issues require attention:

1. Recruitment and retention of the most talented administrators should be a priority.
2. Roles and responsibilities are not always clear–particularly with regard to financial matters and with regard to the chief of staff's current portfolio.
3. Meeting structure is unclear with regard to purpose and where decisions are made.
4. Accountability should be uniformly demonstrated across administrative areas.
5. Given the amount of institutional changes over the past ten years, stability and sustainability should be priorities.

In the previous chapter, we examined several alternatives that NPS could adopt to clarify its processes, roles, and responsibilities. While the NPS leadership has articulated a clear strategic direction for the university, NPS faces some challenges to moving forward. Its business processes as well as individual roles and responsibilities are not clearly articulated or understood, particularly in the financial area. In order to enhance its effectiveness and efficiency, we offer the following recommendations to attaining clear lines of authority and responsibility in the Administrative Structure and Office of the President at the Naval Postgraduate School.

We recommend that NPS adopt the following model:



This alternative organizational structure has several benefits:

- Centralizes the financial business processes
- Establishes a clear line of authority on financial decisions
- Clarifies the roles and responsibilities both in financial decision making and in the Office of the President
- Increases effectiveness and efficiency
- Builds upon a proposal made by the Governmental Accountability Office to create a leadership position for Finance and Administration who reports directly to the executor.
- Allows the Senior Military Assistant to speak with the voice of the President

While this alternative addresses all the major areas we identified in our analysis, there are some potential enhancements that should be considered as the organization matures with time and cultural changes occur. Although not critical, we offer the following as potential incremental enhancements and points for reflection as NPS moves forward to the proposed organizational structure model.

- Change the title of the position of Vice President and Dean of Research to Vice President of Research. This would draw a clear line between this position and the academic deans, communicating the Vice President of Research as one of administrative supporting the Academic Deans, as do the Vice President for Information Resources and CIO and Vice President for Finance and Administration for example.

- Change the title of Vice President for Academic Affairs to Associate Provost for Academic Affairs. This could help clarify that the position works directly in the academic arena of NPS and not in an outside supporting role. It could also help clarify that this person serves to assist the Provost.

- Change the title of the Senior Military Assistant/Chief of Staff to Senior Military Assistant and reassign administrative responsibilities to the new Vice President for Finance and Administration. Separating these functions under two separate positions would more clearly distinguish the financial and administrative duties from the military duties. It would also communicate the military role more clearly, and allow the Senior Military Assistant to focus entirely on the wide-ranging military issues at NPS.

The proposed roles, responsibilities and position descriptions for the recommended alternative are provided in Appendix E.

Though it is beyond the scope of this report, we recognize that, as with any change in organizational structure, NPS should adjust its meeting structure as needed to reflect its new organizational structure. This meeting structure should be streamlined, and could be divided into two main groups: Executive Level Meetings and Management Meetings. A potential detailed meetings structure for consideration is provided in Appendix F.

In summary, we believe these recommendations will position the NPS to: achieve the goals of the NPS Strategic Plan; improve efficient and effective decision-making; clarity roles and responsibilities; and, improve the administrative support of the organization to enable NPS to become the flagship advanced educational institution its leaders think it has the potential to become.

Appendix A
Schedule for Management Consultants Visit

ORGANIZATIONAL STRUCTURE ASSESSMENT

February 27, 2008

DAY 1:

8:00-8:45am	Meet with President and Provost
8:45-9:00am	Break
9:00-10:45am	Meet with Associate Provosts and Academic Deans
	Robert Beck, Dean of the Graduate School of Business and Public Policy
	Dr. Dan Boger, Interim Dean of Research
	Dr. James Kays, Dean of Graduate School of Engineering and Applied Sciences
	Dr. James Wirtz, Dean of School of International Graduate Studies
	Dr. Peter Purdue, Dean of Graduate School of Operations and Information Sciences
	Dr. Christine Cermak, Associate Provost for Information Re sources/CIO
	Dr. Douglas Moses, Associate Provost for Academic Affairs
10:45-11:00am	Break
11:00-11:45am	Meet with Financial Managers
	Dr. G. T. Howard, Academic Budgeting
	Mr. Kevin Little, Comptroller

	Ms. Danielle Kuska, Director of Research and Sponsored Pro grams
	Dr. Douglas Moses, Associate Provost for Academic Affairs
12:00-1:00pm	Lunch with Provost and Managers of Academic Support Areas
1:00-1:45pm	Meet with Chief of Staff (COL David Smarsh); Ms. Paula Jordanek, Executive Associate to the Provost; and, Kathryn Hobbs, Dean of Students
2:00-3:00pm	Follow-up meeting with President
3:00-4:00pm	Follow-up meeting with Provost

February 28, 2008

DAY 2:

8:00-9:00am	Exit meeting with President and Provost

Appendix B
Interview Questions

ACADEMIC INTERVIEWS:

General

1. What is your desired outcome of this study?

Strategic

1. Does the NPS strategic plan provide a clear view to the future? Why/why not?

2. Does NPS strike the right balance between academic, research, and administrative functions to ensure it is heading in the right direction?

Business

1. Are there functions/services you are performing that you should not be? Conversely, are there others you should be performing but are not?

2. Do you have the appropriate resources to do your job?

3. Do you get the support you need to fulfill your strategic objectives and goals?

4. What role (if any) do you play in the executive decision making process? Is it the right role?

5. What one thing would you change at NPS?

Organizational

1. What are the major academic roles and functions in NPS?

2. What is working well at NPS in terms of processes, organization structure, communication, and decision-making? What is not working well?

ADMINISTRATIVE QUESTIONS

General

1. What is your desired outcome of this study?

Strategic

1. Does the NPS strategic plan provide a clear view to the future? Why/why not?
2. Does NPS strike the right balance between academic, research, and administrative functions to ensure it is heading in the right direction?

Business

1. Are there functions/services you are performing that you should not be? Conversely, are there others you should be performing but are not?
2. Do you have the appropriate resources to do your job?
3. Do you get the support you need to fulfill your strategic objectives and goals?
4. What role (if any) do you play in the executive decision making process? Is it the right role?
5. What one thing would you change at NPS?

Organizational

1. What are the major administrative roles and functions in NPS?
2. What is working well at NPS in terms of processes, organization structure, communication, and decision-making? What is not working well?

EXECUTIVE INTERVIEW QUESTIONS

General

1. What is your desired outcome of this study?

Strategic

1. Does the NPS strategic plan provide a clear view to the future? Why/why not?

Business

1. Are there functions/services you are performing that you should not be? Conversely, are there others you should be performing but are not?
2. Do you have the appropriate resources to do your job?
3. How are resources allocated across NPS?
4. How are decisions made at NPS?

Organizational

1. Does NPS strike the right balance between academic, research, and administrative functions to ensure it is heading in the right direction?

What is working well at NPS in terms of processes, organization structure, communication, and decision-making? What is not working well?

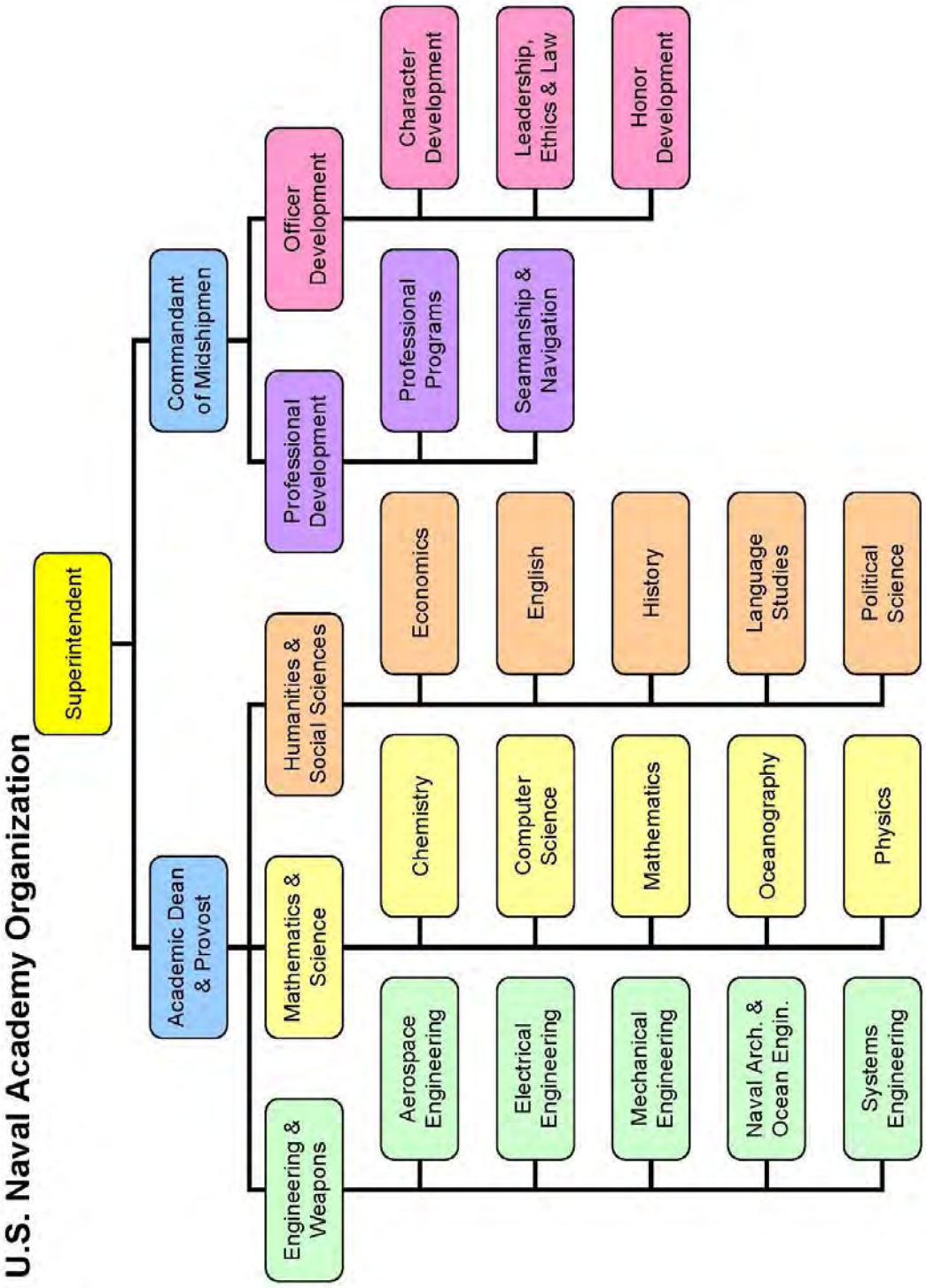
Appendix C
Benchmark Organizations

As part of our over-all methodology, we routinely try to identify and analyze organizations that are performing the same or similar type work as the organization we are studying. We use these benchmark organizations to help add both quantitative and qualitative judgments about an organization's effectiveness, provide alternative organizations options, and contrast the organization to other institutions with similar missions.

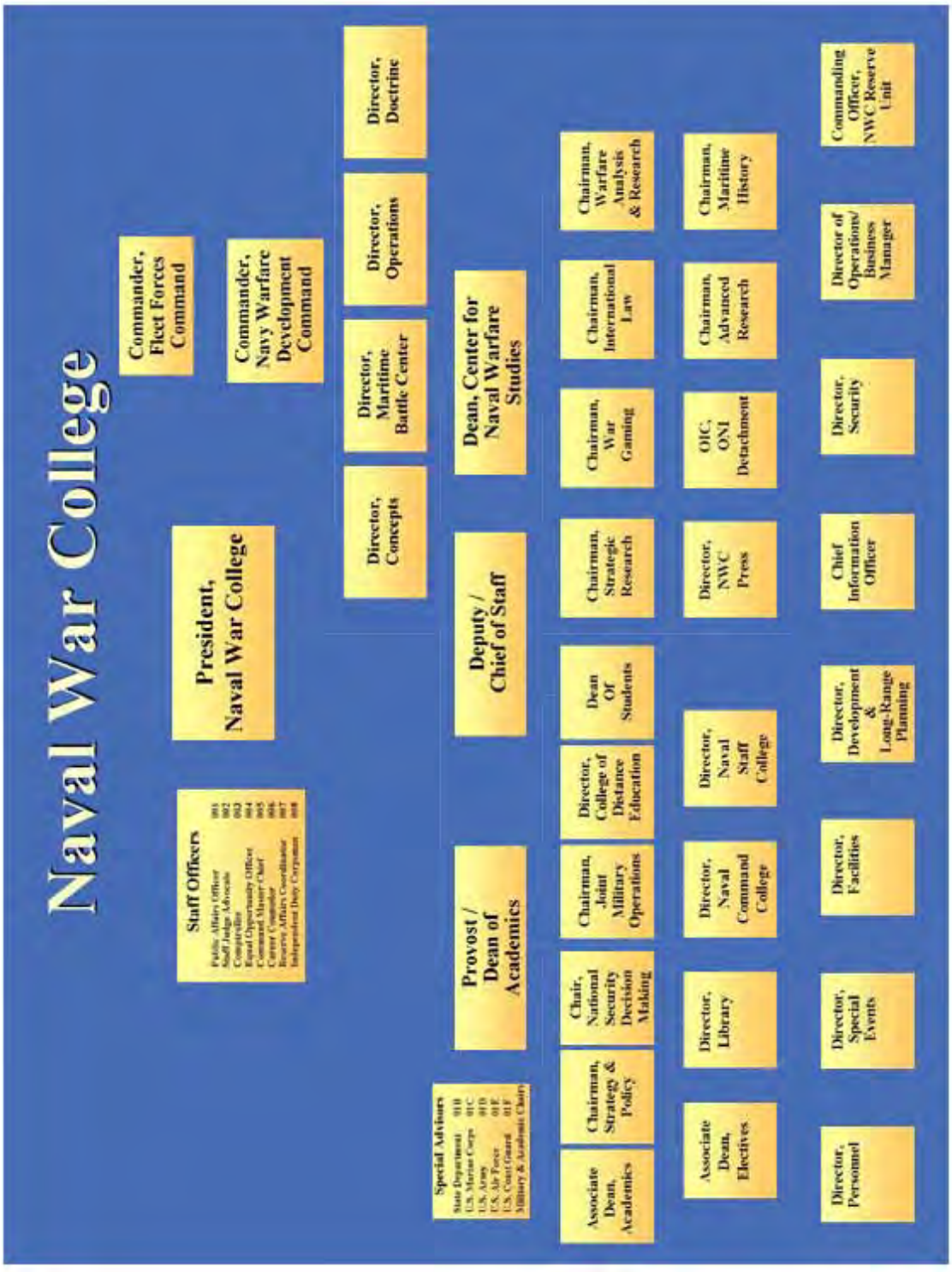
We used the following mix of military, private, public, and both research and education institutions as benchmarks in our analysis of NPS, copies of their organizational charts are provided in the order shown:

- United States Naval Academy
- Naval War College
- Air Force Institute of Technology
- University of California Santa Cruz
- University of California, Irvine
- University of California, Los Angeles
- University of California, Riverside
- University of California, Davis
- Rensselaer Polytechnic Institute
- George Mason University
- Virginia Polytechnic Institute and State University

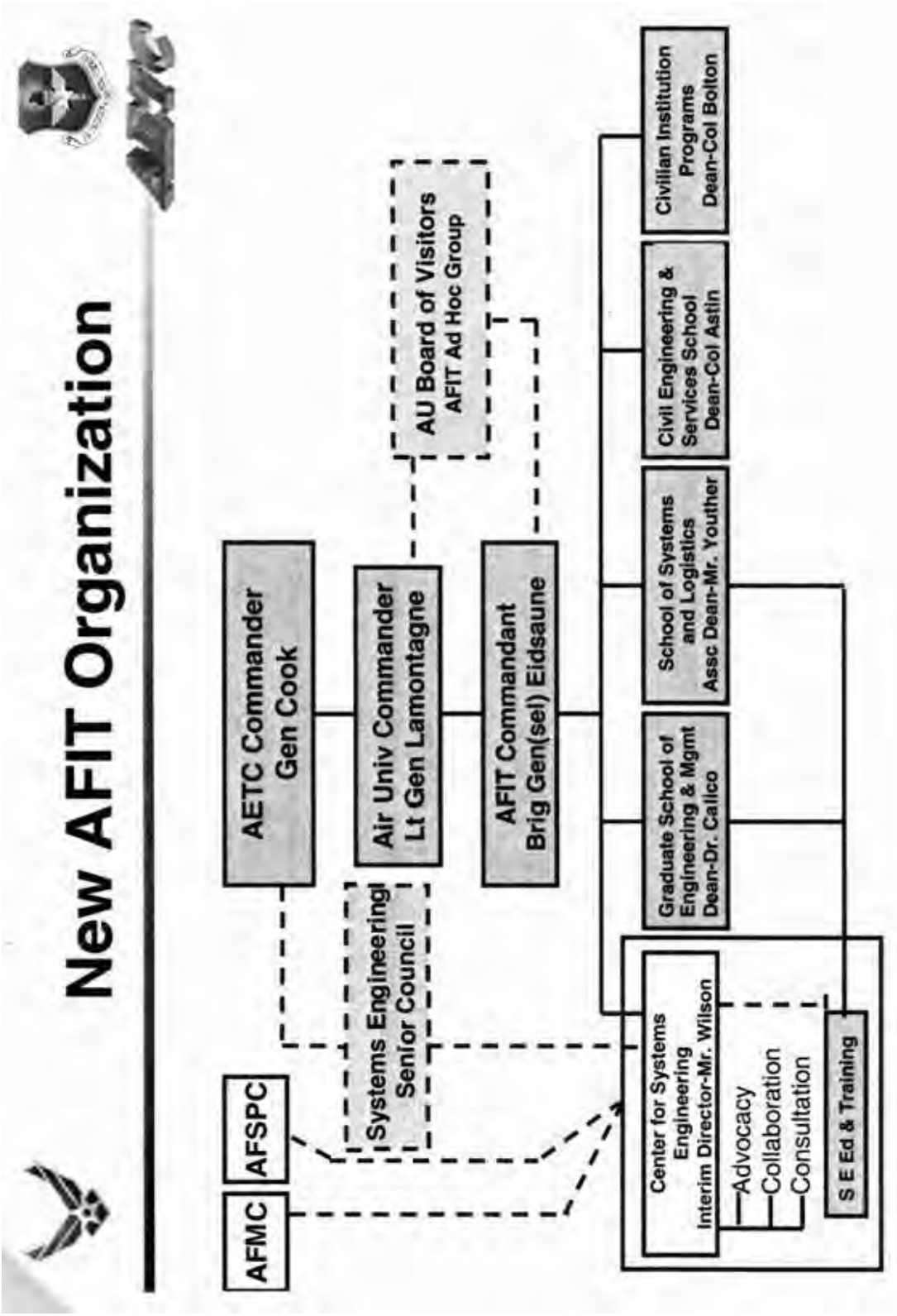
United States Naval Academy–Academic Dean & Provost; and, Commandant of Midshipmen report to Superintendent.



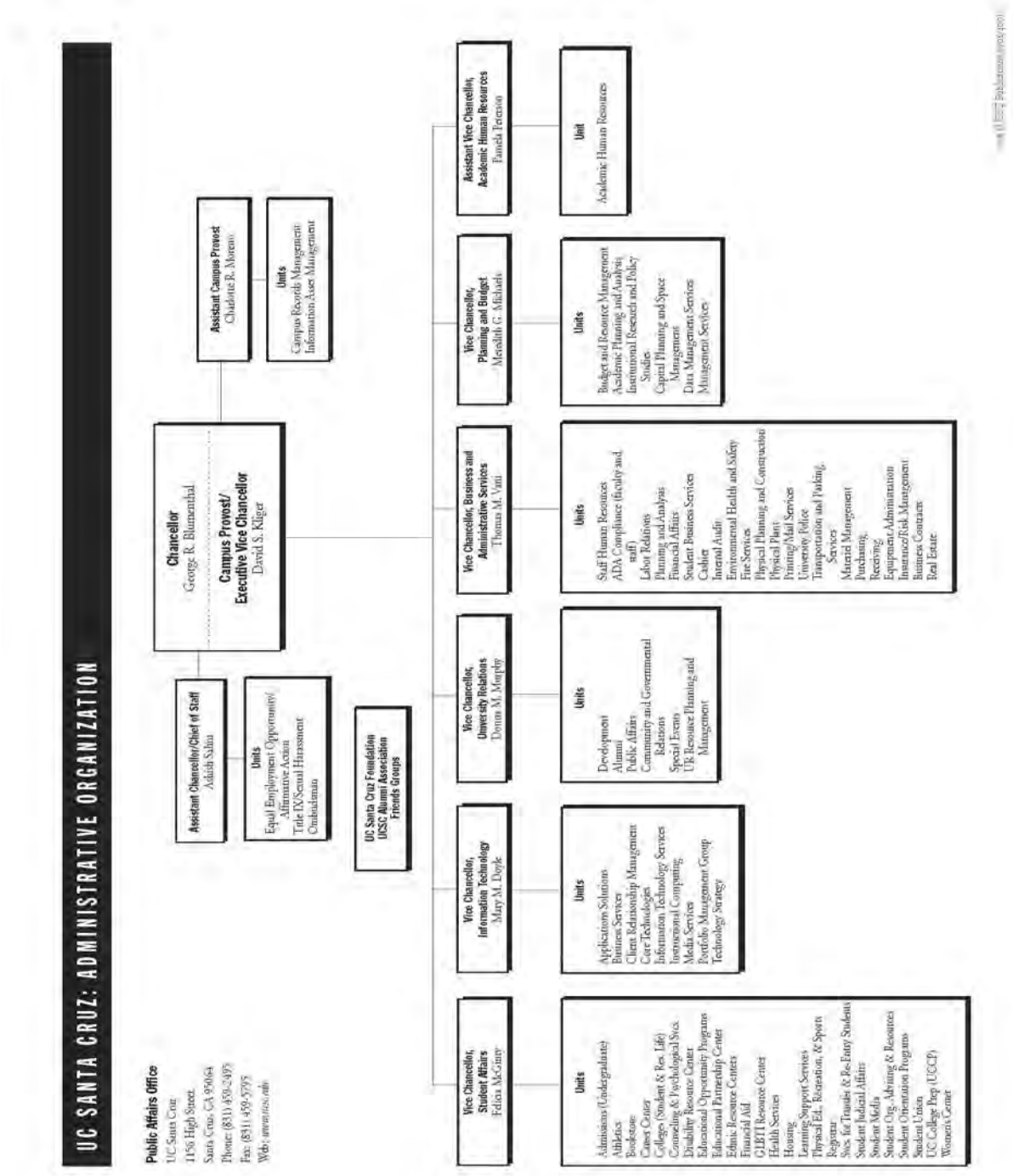
Naval War College–Deputy/Chief of Staff, Provost/Dean of Academics, and Dean, Center for Naval Warfare Studies; and, staff officer and special advisors report to President.



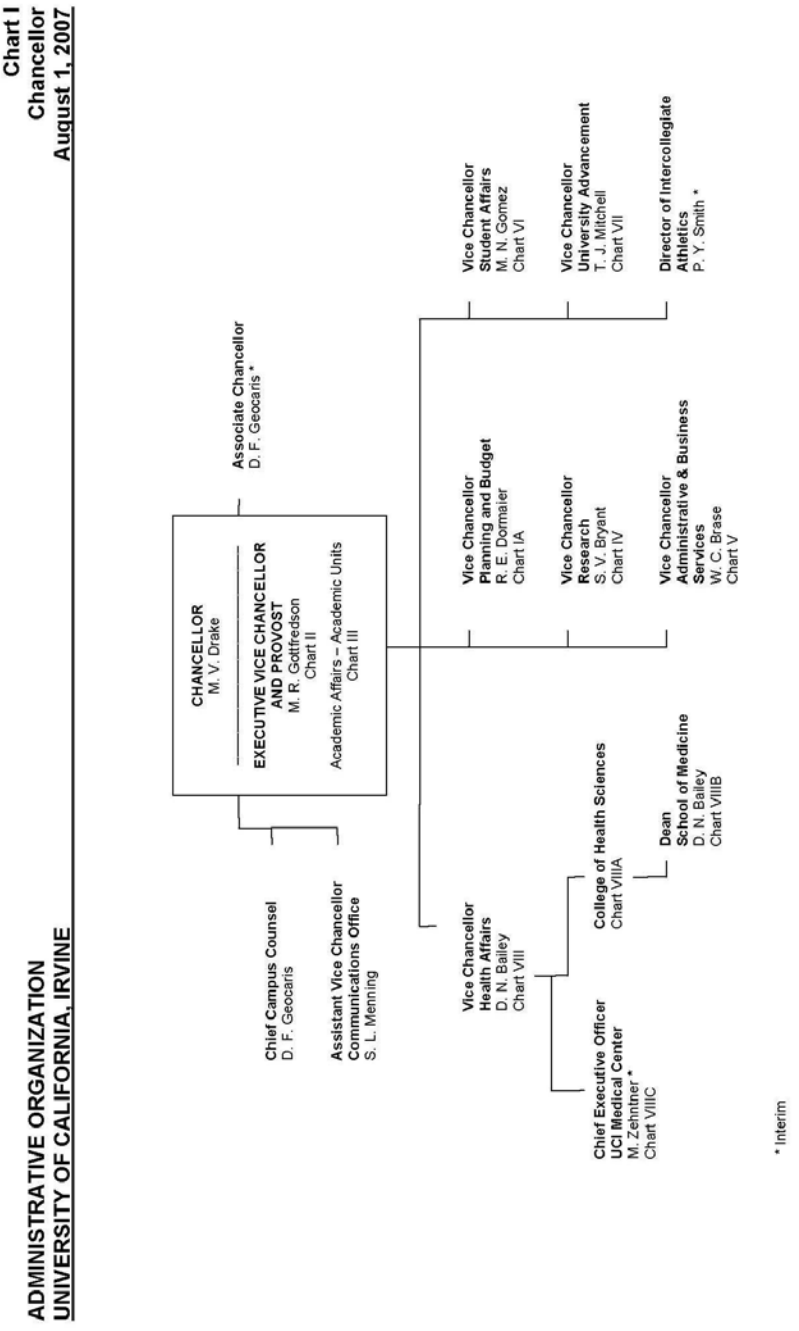
Air Force Institute of Technology–Deans, Associate Deans, and Center Directors report to AFIT Commandant.



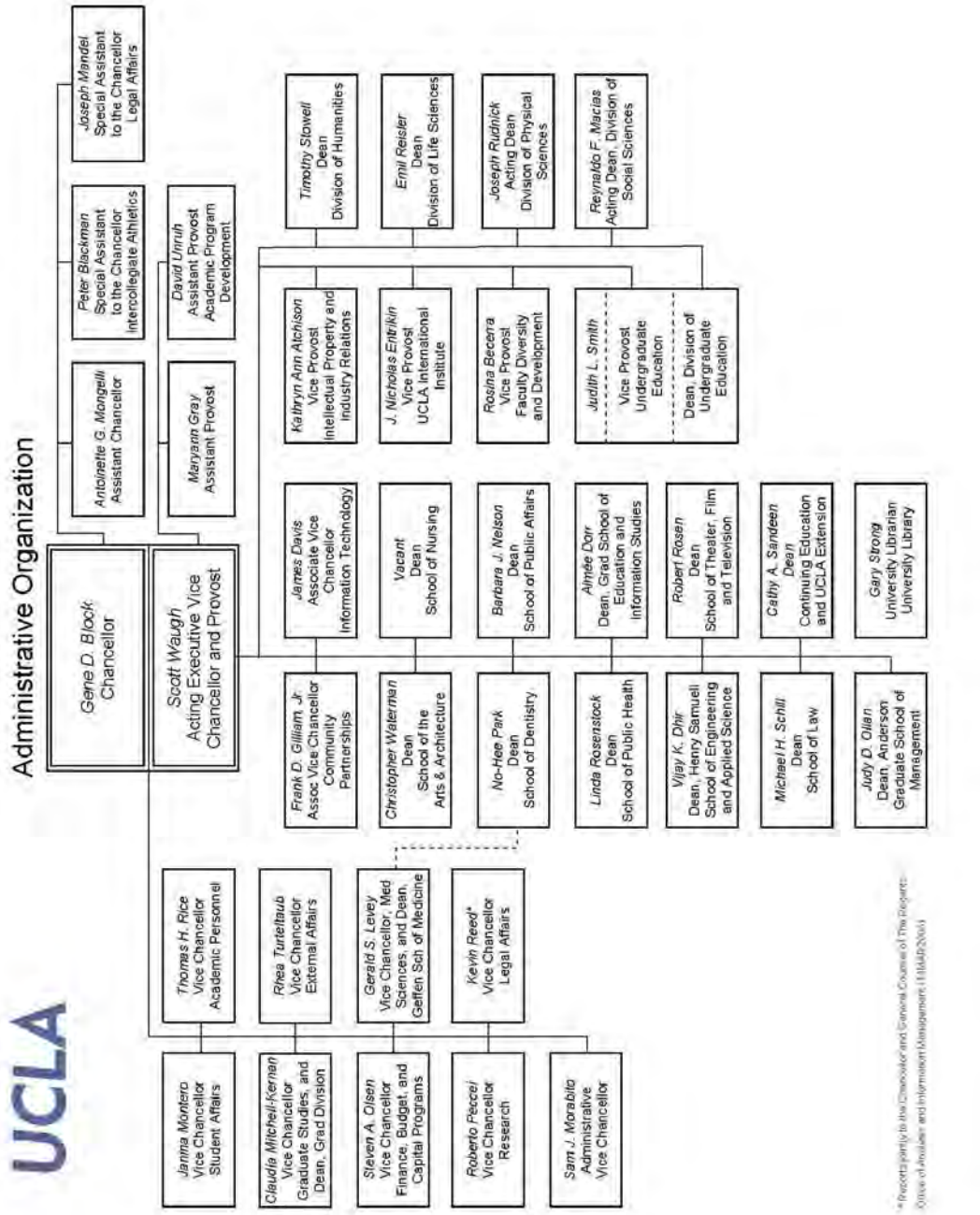
University of California Santa Cruz: Administrative Organization–Vice Chancellors report to Chancellor and Assistant Chancellor/Chief of Staff report to Chancellor.



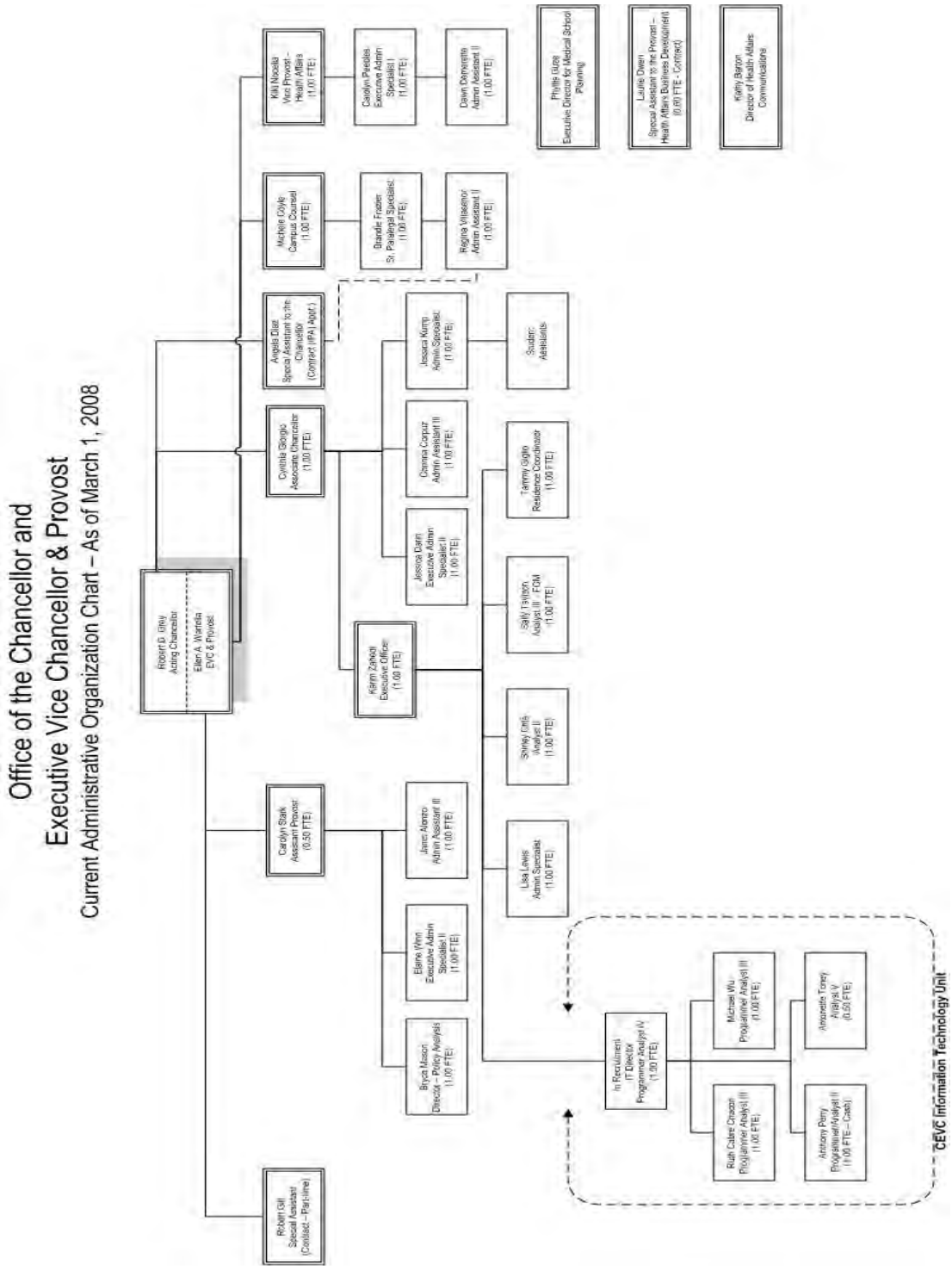
University of California, Irvine: Administrative Organization–Vice Chancellors report to Executive Vice Chancellor and Provost.



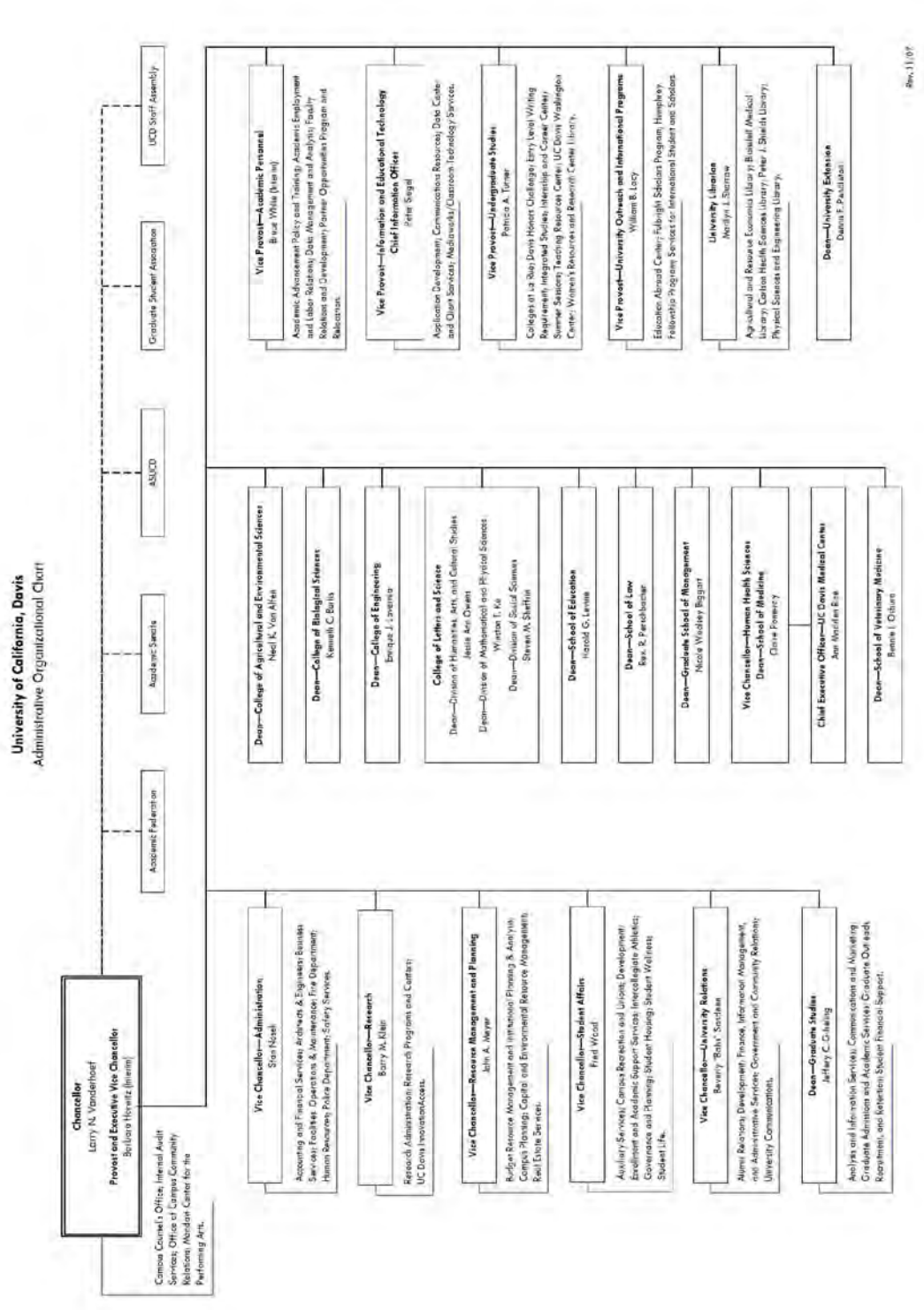
University of California, Los Angeles: Administrative Organization–Associate Vice Chancellors, Deans, Assistant Provosts, and Executive Deans to Executive Vice Chancellor and Provost.



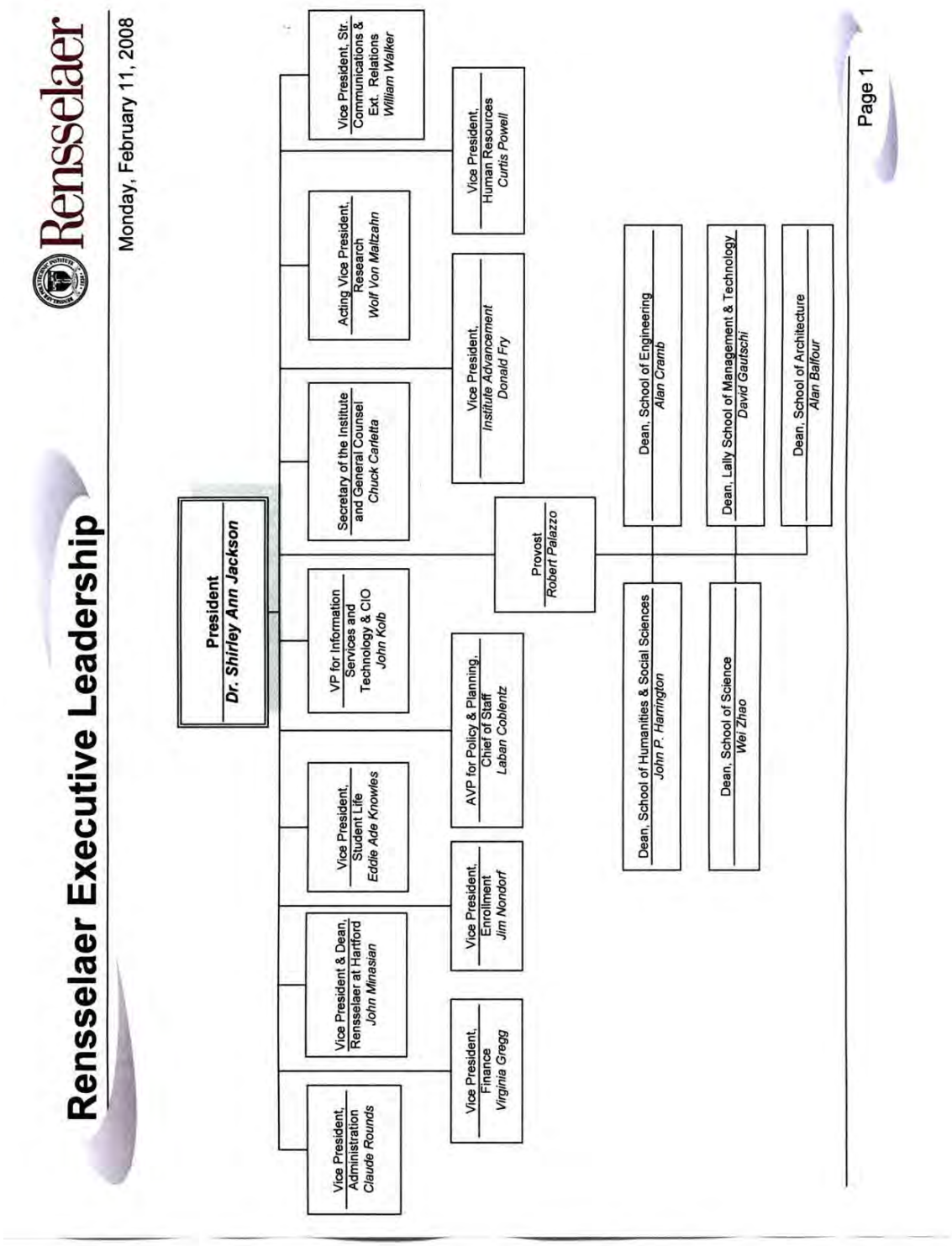
University of California, Riverside–Vice Chancellors, Vice Provost and Dean's report to Executive Vice Chancellor & Provost.



University of California, Davis–Vice Chancellors, Vice Provost and Dean's report to Provost and Executive Vice Chancellor President.



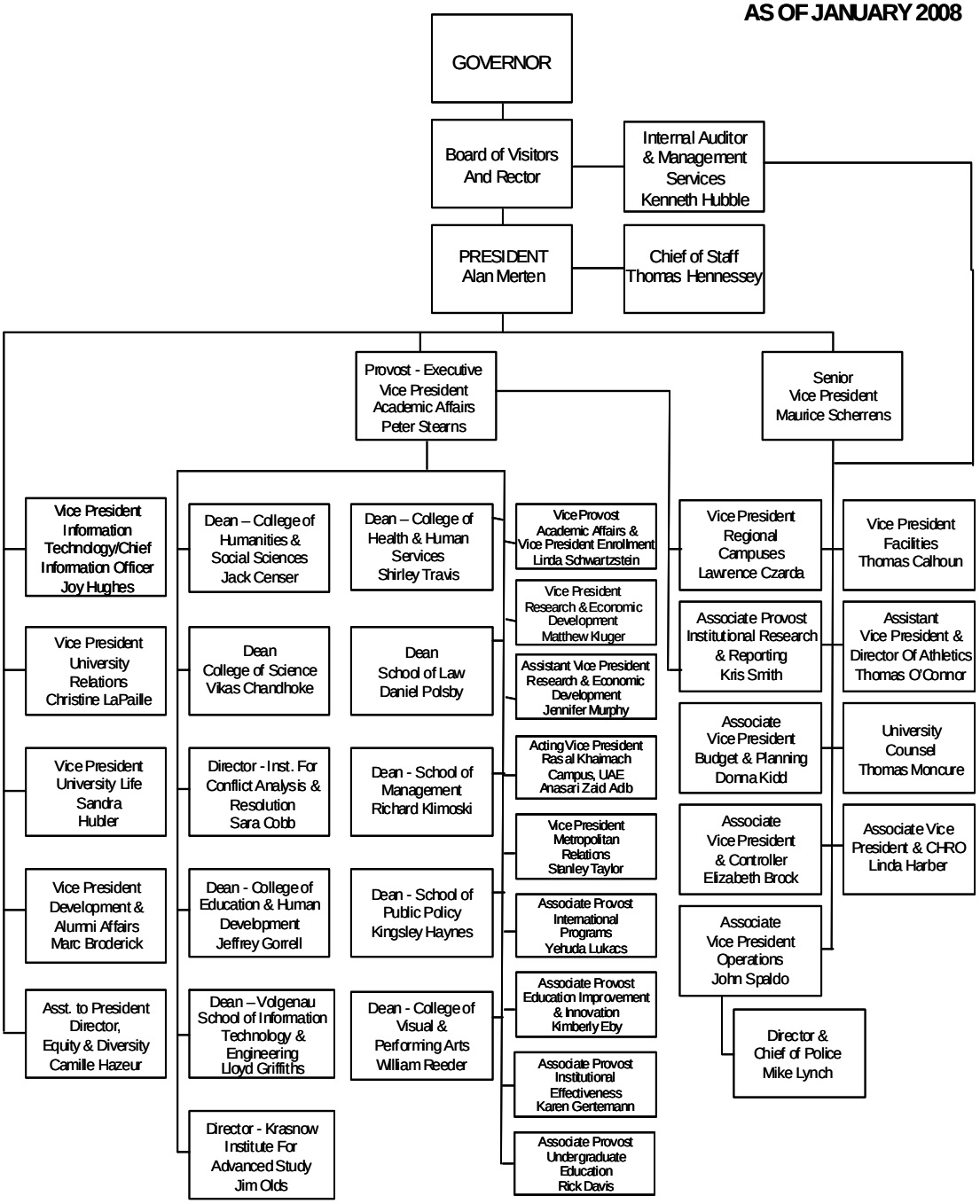
Rensselaer Polytechnic Institute–Deans report to Provost; Vice Presidents, Vice Presidents & Deans, Chief of Staff Provost report to President.



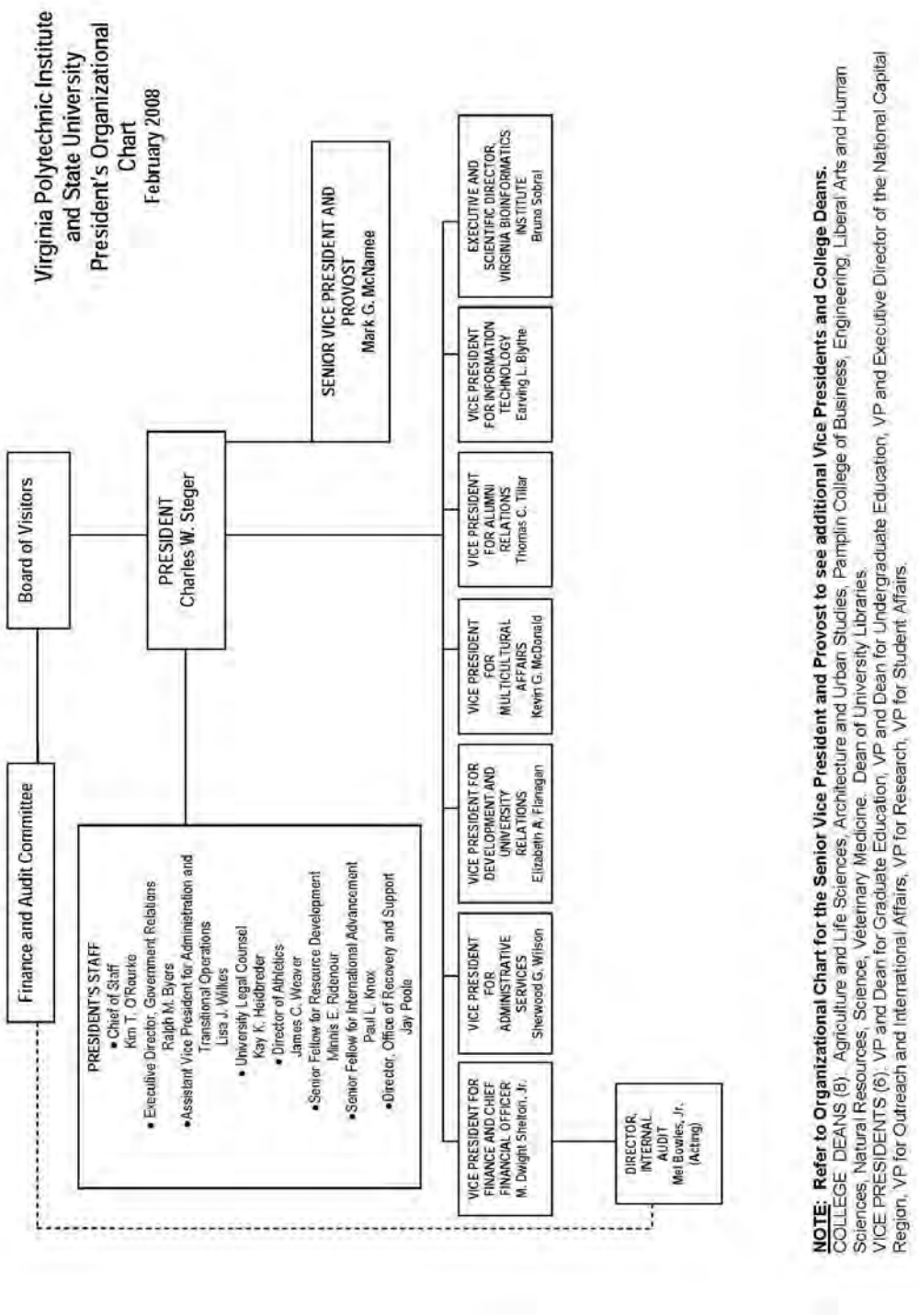
George Mason University–Vice Provosts and Deans report to Provost/Executive Vice President and Vice Presidents report to Senior Vice President. Senior VP, Provost; and, Chief of Staff report to President.

ADMINISTRATION

ADMINISTRATION ORGANIZATIONAL CHART
AS OF JANUARY 2008



Virginia Polytechnic Institute and State University– President's staff, selected Vice Presidents, including CFO, CIO, and Administration, along with Senior Vice President and Provost report to the President. Deans, Vice President for Research and other selected VPs and Assistant Provosts report to Senior Vice President and Provost.



NOTE: Refer to Organizational Chart for the Senior Vice President and Provost to see additional Vice Presidents and College Deans.
COLLEGE DEANS (8): Agriculture and Life Sciences, Architecture and Urban Studies, Pamplin College of Business, Engineering, Liberal Arts and Human Sciences, Natural Resources, Science, Veterinary Medicine. Dean of University Libraries.
VICE PRESIDENTS (6): VP and Dean for Graduate Education, VP and Dean for Undergraduate Education, VP and Executive Director of the National Capital Region, VP for Outreach and International Affairs, VP for Research, VP for Student Affairs

Appendix D
School Deans' Authorities and Responsibilities

29 January 08
Code 01

MEMORANDUM

To: NPS Faculty and Staff
From: Provost

Subj: School Deans' Authorities and Responsibilities

Encl: (1) Authorities and Responsibilities

1. The School Deans are senior executives of the Naval Postgraduate School and report to the Office of the President under the supervision of the Provost. They review and approve all matters that affect their Schools and programs.

2. The School Deans are active members of the Naval Postgraduate School Executive Team and address campus-wide issues, concerns, and planning to promote and sustain an environment of academic excellence and relevance. Therefore, they are delegated the authority to execute the responsibilities as specified in the attached enclosure.

3. Enclosed are the specific Authorities and Responsibilities of the Deans:

    a. Leadership
    b. Accreditation
    c. Budget
    d. Supervise / Counsel
    e. Policy
    f. Liaison
    g. Personnel Actions Hiring / Promotion
    h. Development of Curricula / Programs
    i. Staff / Faculty Development
    j. Communication
    k. Meetings
    l. Deans Office Duties
    m. Other Duties Assigned.

4. This directive is effective immediately.

Leonard A. Ferrari
Provost and Vice President

Enclosure 1: Authorities and Responsibilities

1. Leadership

a. Provide leadership, management, and development for their appointed School.*
b. Provide vision; ethical leadership; and advocacy in academic affairs, research, scholarly activities, and curricular matters in the School and for NPS, including development of innovative and interdisciplinary programs.
c. Lead the faculty in developing and updating an academic and strategic plan for the School within the larger framework of NPS strategic planning.

2. Accreditation

a. Formulate and implement academic policies and programs consistent with accreditation standards.

3. Budget

a. Work with the Provost to prepare and submit an annual budget for the School and to administer optimum expenditure of funds in accordance with NPS's planning, programming, budgeting and execution system.
b. Exercise leadership in NPS and School budget preparation, funding priorities, budget execution; and resource development and allocation.
c. Manage all resources assigned, including budgets, people, and physical facilities.

4. Supervise / Counsel

a. Supervise and evaluate all "Direct Reports."
b. Provide leadership in staff and faculty development.

5. Policy

a. Interpret policy, adjudicate appeals and exceptions, ensure that the academic unit's policies and practices are consistent with those of the NPS, and articulate NPS policy and procedures to members of the School.
b. Participate in NPS policy development.
c. Develop and monitor implementation of the NPS Strategic Plan in consultation with faculty and staff.

* Unless otherwise noted, a Dean's authorities and responsibilities are within his/her School.

6. Liaison

a. Provide liaison in education and administrative affairs with appropriate agencies, activities, and societies.
b. Advise the NPS President and Vice President / Provost on all matters affecting the NPS.
c. Enhance ties with DON/DOD/DOS/DHS and other government agencies, industry, peer institutions, professional organizations, and local civilian communities to stimulate support for NPS.

7. Awards

a. Act as the approving official for all awards within their Schools with authority to approve cash awards up to $5,000.[†]
b. Act as the approving authority within their Schools for time-off awards not to exceed 80 hours. The total amount of time-off that may be granted to any one individual in any one leave-year is 80 hours.[‡]

8. Personnel Actions Hiring / Promotion

a. Recommend individuals to the Provost for appointment/reappointment to the faculty, after receiving the recommendation of the Department Chairs.[§]
b. Oversee all hiring, performance, disciplinary actions, and EEO matters.
c. Make recommendations on personnel actions as appropriate.
d. Exercise responsibility for all personnel matters involving academic and non-academic employees including recruiting, appointment, reappointment, termination and dismissal; faculty evaluation, tenure promotion and merit.
e. Recommend individual faculty to the Provost for promotion, tenure, merit pay raises, awards and commendations where such a recommendation has been made by the Department Chair.
f. Participate fully as a voting member in the NPS-wide Promotion and Tenure process.
g. Fully support the NPS Equal Employment Opportunity (EEO) policy and programs.

9. Development of Curricula / Programs

a. Oversee the Department Chairs in planning, conducting and administering educational programs.
b. Provide leadership for departmental program reviews.

[†] Requires change to NAVPGSCOLINST Instruction 12000.1, 12 April 99.
[‡] NAVPGSCOLINST Instruction 12000.1, 12 April 99.
[§] In this document, Department "Chair" includes Group Chair, Area Chair, and Director.

c. Support the development of research plans and programs.
d. Recommend to the Provost new curricula and modifications to existing curricula.
e. Review and approve all reimbursable funding proposals for the School.
f. Manage all aspects of the academic programs and facilities.

10. Staff/Faculty Development

a. In coordination with the Associate Provost for Academic Affairs, administer programs for faculty orientation, development, and mentoring.
b. Promote high performance standards of the faculty.
c. Support Chairs in developing and implementing personal development programs for staff members.
d. Is an ex-officio attendee of all faculty meetings, participate in such meetings as desired.

11. Communication

a. As a NPS advocate, communicate effectively with various constituencies within the university, local, state and federal communities.
b. Promote effective communication among students, faculty and chairpersons within the School.

12. Meetings

a. Serve as an active member of the NPS Executive Team to address campus-wide issues, concerns, and planning.
b. Serve as a member of the Academic Policy and Planning Committee, the Executive Assembly and other boards and committees as assigned.

13. Deans Office Duties

a. Administer a complex organization within the environment of the Department of Defense.
b. Organize and manage the operations of the Office of the Dean.
c. Coordinate the use of facilities assigned to the School.

14. Other Duties as Assigned

a. Perform additional authorities and responsibilities as assigned by the NPS President and Vice President / Provost.

Appendix E
Roles and Responsibilities

PROPOSED STRUCTURE

We propose a structure that consists of small, easily convened, senior leadership team that is focused on a university-wide agenda in support of the President and Provost, and on implementing all the provisions of NPS's Strategic Plan.

NPS Leadership team

The proposed NPS leadership team consists of the following positions.

President

The President provides the executive leadership of NPS.

Executive Vice President and Provost

The Executive Vice President and Provost provide the academic leadership of the university. The Executive Vice President and Provost is the chief executive officer in the absence of the President.

Vice President for Finance and Administration

The Vice President for Finance and Administration is responsible for the human and financial resource management as well as oversight of the following business services that support NPS's core processes:

- Comptroller
- Human resources
- Finance and accounting
- Payroll
- Budgeting
- Resource planning and programming
- E-commerce
- Travel
- Command evaluation
- Procurement.

Vice President for Research

The Vice President for Research is responsible for the NPS research enterprise (advocacy and liaison for funding organizations and agencies) and associated business services: Sponsored programs, Strategic and Interdisciplinary initiatives, Technology transfer, Regulatory affairs (oversight of all policies and procedures required by funding agencies), Research administration, and Institutes Contracting.

Vice President for Academic Affairs

The Vice President for Academic Affairs has oversight of the following academic administration, programs, and services:

- Academic budget
- Continuing education and distance learning
- International programs
- Academic programs
- Admissions
- Registrar
- Enrollment management
- Academic council
- Student services.

Vice President for Information Resources and CIO

The Vice President for Information Resources and CIO is responsible for information resources (institutional research and institutional advancement); institutional research (planning, accreditation, internal and external requests for information, and institution-wide surveys); information technology and communications (voice, video, data, network operations, administrative and academic computing services); educational technology (audio-visual, videoconferencing, classroom technology); and institutional advancement (alumni relations, media relations, publications, photography/videography, marketing, and conference coordination).

POSITION DESCRIPTIONS

Vice President for Research

The Vice President for Research shares with the Executive Vice President and Provost oversight of the academic and research enterprise. The Vice President for Research also promotes, supports, and facilitates NPS's research mission and the infrastructure required of a top research institution. As a key member of the NPS leadership, the Vice President reports directly to the Executive Vice President and

Provost and represents the university at the campus, local, state, national, and international levels.

Roles and responsibilities. The Vice President for Research is responsible for all matters related to the research mission of NPS, including oversight of the multidisciplinary NPS institutes, sponsored programs, grants and contract administration, technology transfer, and cooperative relationships with industry, other higher education and Government institutions. The Vice President is also responsible for the NPS research agenda, and defines and communicates NPS's research vision, programs, achievements, and aspiration to internal constituencies and external audiences at the local, regional, and national levels. The Vice President for Research further assists the President in matters of external communications and advocacy.

Education and experience. The Vice President for Research should have a Ph.D.; 5 to 10 years of experience in academic leadership positions; a scholarly and teaching record appropriate for a position as a full professor at a research university; and experience with development and oversight of academic programs, financial management, administrative support areas, and planning.

Reporting. The Vice President for Research reports directly to the Office of the President.

Vice President for Academic Affairs

The Vice President for Academic Affairs shares with the Executive Vice President and Provost responsibility for oversight of the academic enterprise. The Vice President for Academic Affairs promotes, supports, and facilitates NPS's academic mission and the infrastructure required of a top research institution. As a key member of NPS's leadership, the Vice President reports directly to the Executive Vice President and Provost and represents the university at the campus, local, state, national, and international levels.

Roles and responsibilities. The Vice President for Academic Affairs is responsible for all matters related to NPS's academic mission, including oversight of the schools; coordination of internal academic and support department budgets; preparation and helping coordinate the academic budget requirements and supporting issue papers; faculty hiring; curriculum development; program and curriculum reviews; academic support services; distributed education programs; and director of programs, dean of students, admissions, registrar. The Vice President for Academic Affairs is responsible for NPS's academic programs that are central to building academic quality and advances NPS as a major research university. The Vice President defines and communicates NPS's academic vision, programs, achievements, and aspirations to internal constituencies and external audiences at the local, regional, and national levels. The Vice President for Academic Affairs also assists the President and Provost in matters of external communications and advocacy.

Education and experience. The Vice President for Academic Affairs should have a Ph.D.; 5 to 10 years of experience in academic leadership positions; a scholarly and teaching record appropriate for a position as a full professor at a research university; and experience with development and oversight of academic programs, financial management, administrative support areas, and planning.

Reporting. The Vice President for Academic Affairs reports directly to the Office of the President and works in direct support of the Provost.

VICE PRESIDENT FOR FINANCE AND ADMINISTRATION

The Vice President for Finance and Administration serves as the chief financial officer and directs and oversees NPS's business and other support functions, including budget submissions, business policies, faculty personnel, Comptroller's Office and other treasury functions. The Vice President further ensures that business transactions, policies, and procedures meet NPS's short- and long-term goals and objectives; and develops close working relationships with NPS's academic and administrative areas

Duties and responsibilities. The Vice President for Finance and Administration oversees budget submissions, finance, and administrative service areas; interacts with the NPS community and NPS stakeholders regarding institutional financial plans, strategic plan and policies. The Vice President further participates with the President, Executive Vice President and Provost, and other senior officers in institutional planning, policy development, and priority setting; ensures compliance with all regulatory and funding agencies and the rules of accrediting bodies by continually monitoring operations, programs, and physical properties; and initiates changes, where required. Through the President and Executive Vice President and Provost, the Vice President for Finance and Administration works with the Board of Advisors on NPS's financial issues; reviews and analyzes major contractual obligations; develops and executes the mission statement of the business and finance division; formulates goals and objectives for the division in accordance with NPS's goals; provides leadership and direction to the units that report to or are a part of the division; and performs other job-related duties, as assigned. The Vice President also develops fiducially responsible budgetary models and procedures to empower achievement of the goals of academic and administrative units; works with faculty and staff in a transparent and open manner; and cultivates an environment of committed, top-quality service to meet student, faculty, and staff expectations, and to achieve NPS goals.

Education and experience. The Vice President for Finance and Administration should have an advanced degree in a relevant field (such as an MBA) and 5 years of experience (preferably in higher education) in administrative positions of substantial responsibility in resource management: personnel, budget, finance, and administrative services. The Vice President should also be knowledgeable of DoD contracting, budgeting, financial, personnel, and accounting practices; experienced in development and implementation of administrative systems; strong

leadership, presentation, and communication skills; and demonstrated statistical and analytical skills, and knowledge of continuous improvement processes.
Reporting. The Vice President for Finance and Administration reports directly to the Office of the President.

Vice President for Information Resources and Chief Information Officer

The Vice President for Information Resources and CIO oversees all information technology and communication services, instructional technology, institutional research, and institutional advancement at NPS. As CIO, the Vice President oversees all voice, video and data communications infrastructure and services, and technology for resident and non-resident instruction. The Vice President for Information Resources and CIO oversees institutional advancement, which includes alumni affairs, media relations, publications, marketing, and community relations. This position also establishes close working relationships with NPS's academic and administrative areas to fully serve the academic mission.

Roles and responsibilities. The Vice President for Information Resources and CIO is responsible for the coordination of strategic information resources at NPS: Information Technology and Communication Services, instructional technology, institutional research, and institutional advancement.

Education and experience. The Vice President for Information Resources and CIO should have a Ph.D. in a relevant field (such as information technology); 5 to 10 years of experience in overseeing information technology, communication services (voice, video and data), instructional technology, institutional research, and institutional advancement; and strong analytical skills, experience with continuous improvement processes, and effective communications ability.

Reporting. The Vice President, Information Resources and CIO reports directly to the Office of the President.

Appendix F
NPS Meeting Structure

NPS MEETING STRUCTURE

Management meetings should be consultative, representative of the major areas on campus, and report to the President's Senior Staff officers for recommended actions, as appropriate.

Executive level meetings should be few in number, although the President and Executive Vice President and Provost may elect to attend other meetings, as invited or appropriate to agendas.

Management meetings should be consultative, representative of the major areas on campus, and report to the President's Senior Staff officers for recommended actions, as appropriate.

Executive Meetings

President's Senior Staff–This is a weekly meeting chaired by the President, consisting of the administrative decision-making body for the institution. It is comprised of the following members**:** President, Executive Vice President and Provost, Vice President for Academic Affairs, Vice President and Dean for Research, Dean of Students, Vice President for Finance and Administration, Senior Military Assistant/Chief of Staff, Vice President for Information Resources and CIO

President's Advisory Committee–This senior forum includes the Executive Vice President and Provost, Senior Military Assistant/Chief of Staff, the academic deans, Dean of Students, and the Vice President and Dean for Research. This information-sharing forum advises the President and Provost and meets as called by the President.

Executive Council–The President chairs the Executive Council in monthly meetings. It is an opportunity for the executive leadership at NPS to communicate with membership. Special agenda items can be presented by others, as requested by the President/Provost. The membership includes the President's Senior Staff, Deans, University Librarian, Base Director, Faculty Council representative, Senior Military Assistant/Chief of Staff, others as appropriate. Meeting summaries will be posted on the intranet.

Provost's Council–This Council meets weekly and is chaired by the Executive Vice President and Provost. This is the decision-making body for academic

programs, plans, processes. Its membership includes the Deans, Associate Provosts, University Librarian, VP and Dean for Research, VP Information Resources and CIO, VP Academic Affairs, Director of Programs, and other administrators as appropriate. Meeting summaries are posted on the intranet.

Resource Advisory Committee–This committee meets bi-monthly to provide the President and Executive Vice President and Provost updates on the financial status of the institution. In addition to NPS leadership, membership includes the VP and Dean for Research, VP for Finance and Administration and VP for Academic Affairs.

Management Meetings

Business Services Committee–This committee meets weekly and is chaired by the VP for Finance and Administration. Its membership includes the comptroller, Faculty Council representative, faculty representation from the major academic areas, contracting, purchasing, facilities, security, personnel, command evaluation, other directors as appropriate. Meeting summaries are posted on the intranet.

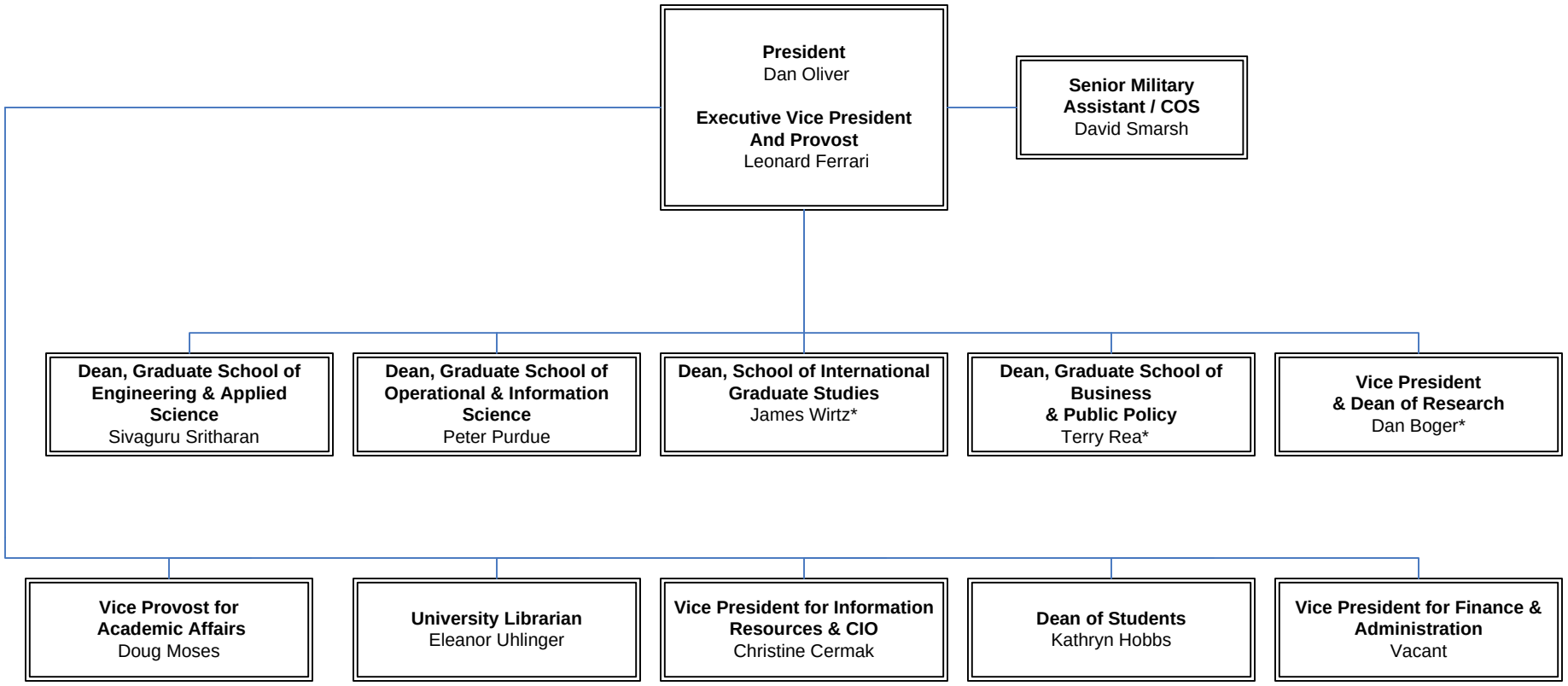
Research Advisory Board–The Board meets monthly and is chaired by the VP and Dean for Research. Membership includes faculty representation from all major academic areas. Meeting summaries are posted on the intranet.

Academic Council–The council meets monthly and is chaired by the VP Academic Affairs. Membership includes faculty representation from all major academic areas. Meeting summaries are posted on the intranet.

IT Task Force–This task force meets bi-monthly and chaired by the VP Information Resources and CIO. Membership includes representation from all major academic areas, comptroller, research, distributed learning, and other areas as appropriate. Meeting summaries are posted on the intranet.

Institutional Advancement Advisory Committee–This committee is chaired by the Director of Institutional Planning and Communications. Membership includes representation from all major academic areas and other areas, as appropriate. Meeting summaries are posted on the intranet.

Naval Postgraduate School



* Interim

Office of Institutional Research
4-02-08

Appendix A

Provost's *Ad Hoc* Committee on Business Practices

Charge to the Committee and Committee Membership

Dear Colleagues

As you are all aware, NPS has been having some difficulties in the area of "business practices." This is an area of considerable concern for the faculty and staff at NPS. It was mentioned often while I was being interviewed for the Provost position this year. I would like to have a small Ad Hoc Committee for Business Activities examine major business processes and our business organizational structure to determine where we can make improvements. The faculty complain about delays, complex processes and the staff are often overworked and under great stress. I suggest that the committee meet once or twice to discuss the issues and that we then convene a retreat, in the very near future, to develop a plan and any modifications to the current administrative support structure. I would like to meet with you for a few minutes at the first meeting and would attend the retreat.

The Committee Membership:

Dr. Christine Cermak, Chair, Executive Director, Information Resources and CIO
Ms. Laura Cole, Strategic Planning
Dr. Rudy Darken, Director, MOVES Institute
Mr. Pat Flanagan, Graduate School of Business and Public Policy
Mr. Scott Jasper, Chief Operating Officer, CCMR
Ms. Danielle Kuska, Director Sponsored Programs
Ms. Sue Netzorg, Administrative Officer, Graduate School of Engineering and Applied Sciences
Ms. Megan Reilly, Comptroller
Dr. Clyde Scandrett, Chair, Mathematics Department (representative to Faculty Council)
Dr. Tim Stanton, Professor, Oceanography Department
Dr. Harold Trinkunas, Associate Professor, National Security Affairs
Ms. Eleanor Uhlinger, Associate Provost and Director, DKL
Dr. Cris White, Human Systems

An incomplete list of issues, in no particular order:

- What are the primary business functions/

- Are we efficiently organized?
- Are there duplications of functions?
- Are we properly staffed?
- Are government regulations and processes appropriate for a research university?
- Do we need exemptions to certain processes?
- What is the status of contracting?
- How can we improve contracting further?
- What is the status of purchasing?
- How do we improve purchasing?
- What do we mean by a business office?
- How does a business office interact with the Comptroller and Sponsored Programs?
- What is a preferred organizational structure?

Please feel free to call me at any time to discuss the role of this important committee. Let me know the data you need from the Provost Office. I could have added several other individuals to this committee but I want to keep the group as small as possible but still able to cover most aspects of central admin. If there is someone who needs to be added please let me know ASAP. Thanks for your support and willingness to work with me on this important issue.

Best regards,

Leonard Ferrari, PhD
Associate Provost/Dean of Research
Naval Postgraduate School
220 Halligan hall
Monterey, CA, 93943

August 30, 2006

Dr. Leonard Ferrari
Acting Provost
Naval Postgraduate School
1 University Circle
Monterey, California 93943

Dear Dr. Ferrari:

Enclosed is the final report of the Provost's *Ad Hoc* Committee on Business Practices. If we could summarize our efforts into one sentence it would be that our report is focused on the need to rededicate the efforts of our institution in support of our core mission of graduate education and research. Everything flows from that over-arching proposition.

The report is divided into 7 general areas: Background, Method, Principles to frame the Committee's work, General campus climate issues, Recommendations, Other relevant issues, and Conclusions. The "campus climate issues" section identifies work atmosphere issues that are important in setting the context for our recommendations. In the "principles" section, we report business practice principles that we agreed should frame our Committee's work, but are also useful for adoption by all of the service organizations within NPS. The enclosed report also identifies 15 recommendations that are clearly responsive to the concerns you heard raised by faculty and staff during the Provost search process. Some of the recommendations may appear less impactful than others, but taken as a whole, the list represents a body of recommendations that provides an ambitious and meaningful agenda for change at NPS.

We have provided general estimates of implementation costs, but we urge that more detailed estimates should be developed soon. A small group of individuals experienced in this area can provide these estimates quickly. This will ensure that the individuals and offices tasked with implementation of recommendations have the requisite resources to be successful.

The Committee recognizes that the real challenge will be oversight of the implementation of each of these recommendations, reporting regular progress to the university community, celebrating achievements, and underscoring why these efforts are important to our overall mission. We have provided as much flexibility as possible in terms of your prerogative of how you will charge some of these tasks or perhaps modify the existing organization to best mobilize effort to accomplish this work.

We believe that NPS is at an important decision point and we would like to underscore the importance of (1) the sustainability of any changes that are made, and (2) the visibility that these changes are given by the administration. To the second, point, it may be appropriate to have a standing committee oversee the business practice improvement process or perhaps an *ad hoc* committee should be appointed to periodically assess progress. In either case, results should be reported to the university community.

Thank you for the opportunity to participate in this important process and we stand ready to support your leadership in implementing the recommendations of our report.

Sincerely,

Provost's *Ad Hoc* Committe on Business Practices

Dr. Christine Cermak, Chair (Executive Director of Information Resources/CIO)
Ms. Laura Cole, Deputy to the Strategic Planner
Dr. Rudy Darken, Director, MOVES Institute
Mr. Pat Flannagan, GSBPP
Mr. Scott Jasper, Chief Operating Officer, CCMR
Ms. Danielle Kuska, Director, Sponsored Programs
Ms. Sue Netzorg, Administrative Officer, GSEAS
Ms. Megan Reilly, Comptroller
Dr. Clyde Scandrett, Chair, Mathematics Department (and representative to Faculty Council)
Dr. Tim Stanton, Professor, Oceanography
Dr. Harold Trinkunas, Associate Professor, SIGS
Ms. Eleanor Uhlinger, Associate Provost for Library and Information Resources
Dr. Chris White, Human Performance Center

C: Ms. Kathleen Cain, Deputy Director of Sponsored Programs
Mr. Sean Harrigan, Administrative Officer, MOVES Institute

Provost's *Ad Hoc* Committee on Business Practices

Improvement of Business Practices at NPS
August 30, 2006

Background

Provost Leonard Ferrari established two committees in July 2006 to advise him regarding the improvement of administrative structure and processes at the Naval Postgraduate School (NPS). The first committee, the Provost's *Ad Hoc* Committee on Administrative Affairs, was established to advise the Provost on matters of administrative structure and the resource allocation process. The second committee, the Provost's *Ad Hoc* Committee on Business Practices, was established to provide recommendations regarding the improvement of business practices at NPS. A copy of the charge to the Business Practices Committee is provided in Appendix A, together with a list of Committee members. It should be noted that Ms. Kathie Cain (Associate Director, Sponsored Programs) and Mr. Sean Harrigan (Administrative Officer, MOVES Institute) also participated in Committee meetings, and provided valuable contributions to the work of the Committee.

The first committee continues to meet at the time of the writing of this report. However, information regarding the work of that group was shared to inform the work of the Business Practices Committee.

Method

The Business Practices Committee met twice – once on July 28 to review the charge, and develop an action plan. The second meeting was an all-day retreat on August 16.

The Committee requested feedback from faculty and staff through a variety of different methods. First, the Committee members themselves were asked to query their colleagues in their respective departments. Second, the Chair sent emails to deans, chairs, and directors, requesting their comments and recommendations. Finally, the recent SWOT (Strengths, Weakness, Opportunities, and Threats) survey results were reviewed by the Committee. The SWOT survey was undertaken to assist in the development of the institutional proposal to WASC, the regional accrediting body. Student input was not formally requested since students regularly are surveyed about their experiences at NPS and the results are published by the Office of Institutional Research.

Principles to frame the Committee's work

The Committee decided at its first meeting that its work should be guided by general principles of administrative structure and process. Those principles were further refined

at the second meeting, and the Committee urges that these be adopted by the entire institution:

1. NPS should focus on improving support of the core NPS mission: graduate education and research.

2. NPS business practices should be characterized by efforts to increase efficiency, reduce redundancies, to improve communication, and responsiveness with customers.

3. NPS administrative processes should have customer service as a demonstrable priority.

4. NPS business practices should maximize accountability at the appropriate level within the organization.

5. NPS should ensure sustainability of improvement measures.

6. NPS should use standards of professionalism to guide administrative/business processes (responsible and responsive management, communication, accountability, professional development and training, customer service, efficiency, measurement of appropriate performance indicators, and external review).

General campus climate issues

As the Committee began its discussions, it was clear that there were a number of climate issues that needed to be described in order for the group's recommendations to be understood. Listed below are the climate issues discussed by the Committee as most relevant:

- After various efficiency exercises, BRAC processes, increases in requirements, flat budgets effectively creating reductions in operating capabilities, audits, etc., the overall climate at NPS is one often marked by discouragement with what are sometimes viewed as redundant and difficult bureaucratic processes.

- There is a general feeling, held by many on campus that NPS has established Committees like this in the past, and no sustainable actions were taken. Minimal organizational learning has taken place that is supported. As new programs, processes, and general improvements have arisen, socialization efforts have waned or were lacking. This has contributed to frustration among personnel –and perceptions of duplication of efforts, trial-and-error processes, delayed outcomes, and increasing roadblocks.

- Administrative processes and practices are not clearly aligned with support of NPS' core mission of graduate education and research.

- The regionalization of key support areas has created a perception that campus authority to assign priorities and allocate resources to these areas has been undermined. It is generally believed that support for certain service areas is less than it was when the offices reported to the NPS leadership.

- A number of key NPS practices could be automated if the managers of the business processes worked with IT to do so.

- For a number of individual business offices, customer service needs improvement.

- Positions have been added to administrative areas without campus community understanding about purpose, cost-benefit.

- Resource allocation decisions are made without communication of a clear link with institutional goals and priorities.

Recommendations

Many recommendations to improve NPS business practices were received from the campus community. They were thoughtful, carefully considered, and represented a sincere effort to provide useful input to the Committee's work. A summary of those recommendations is included in Appendix B. The Committee recommends that the Provost consider those recommendations as part of a longer term agenda to improve business practices at NPS.

The Committee decided to provide a shorter list to the Provost in order to convey a sense of urgency about priorities and short-term actions necessary to improve campus processes now. After considering the overall campus climate, it is important to implement changes that are doable in the near term and address those issues that our faculty and staff have raised as the thorniest and most frustrating impediments to effective processes. Some of these issues may appear less visible than others, but taken as a whole, they represent a body of recommendations that will substantially improve the quality of work life at NPS:

1. **Provide better system for tracking budgeting and expenditures.**
    a. Integrate DORS-DMAS systems to provide one page snapshot of reimbursable budget-expenditure data. Include reconciliation within one month. Project lead: Danielle Kuska. Project timeline: 90 days
    b. Input job orders into ETAC for timekeeping information incorporation for CCMR. Project lead: Megan Reilly. Project timeline: 6-18 months.
    c. Input job orders into DTS. Project lead: Megan Reilly. Project timeline: 90 days.
    d. Integrate labor planning into DMAS (reimbursable and direct). Project lead: Academic Planning. Project timeline: 6-18 months.
    e. Complete integration of DORS and DMAS into one system providing one-page snapshot of all budget-expenditure data (reimbursable, indirect, and direct). Project lead: Danielle Kuska and Megan Reilly. Project timeline: 12 months.

2. **Reduce requirements for budget page modifications (requiring less paperwork for Principal Investigators).** Project lead: Danielle Kuska. Project timeline: 90 days.
3. **Principal Investigator indirect rollover for continuing project accounts – portion of indirect allowed to rollover to include those projects that are executed in multiple years.** Project lead: Danielle Kuska and Megan Reilly: Project timeline: 90 days. In addition, the team will explore indirect rollover for single year projects since A21 permits rollover of these funds for civilian universities. The team will explore a waiver to use A21 as a guide rather than DoD FMAR and will report findings to the Provost.
4. **Travel voucher review and approval will be moved to Travel Office (if selected departments wish to keep this responsibility, they can do so).** Lead: Megan Reilly. Project timeline: 90 days
5. **Improve effort reporting to "after-the-fact" reporting to eliminate the need for "supplementals" – paperwork that burden faculty and staff members' time.** Project lead: Megan Reilly and Danielle Kuska. Project timeline: 90 days
6. **Development of Standard Operating Procedures (SOPs), flow charts, and timelines for ITOs (Invitational Travel Orders), Honoraria, Purchasing, 1610s (manual travel orders for government-employee civilians), MIPRs (Military Interdepartmental Purchase Request), Contracts, Conference Planning, Hiring and Personnel Actions, Individual Force Protection Plans.** The development of a type of job aid, (e.g. cheat sheets) that describes who to go to for specific inquiries, should supplement the SOPs. Project lead: Danielle Kuska and Megan Reilly (and others, as appropriate). Project timelines: 90 days for all but Purchasing and Contracting. Latter to be 6-12 months and Project Lead to be determined by Provost.
7. **Establishing a formal orientation program and expanding funding for staff training.**
    a. Development of quarterly formal orientation program for new faculty and staff. This should include a meeting session, a campus tour, introductions to relevant offices, written materials describing major business practices, guides to relevant websites that must be kept current, contact information, etc. Project lead: Associate Provost for Academic Affairs. Project timeline: 90 days.
    b. Doubling of institutional budget for staff training from $50,000 to $100,000 annually. Project lead: Provost and President. Project timeline: 90 days.
    c. Encourage cross-training of staff in critical service areas to ensure coverage when staff members are on leave. Encourage mentorship of staff, were possible. Project lead: Provost and President. Project timeline: immediate and ongoing.
8. **Improve contracting process**
    a. Formally request permanent assignment of FISC staff to NPS. Project lead: Provost and President. Project timeline: 90 days.

b. Fill 2 vacant contracting positions. Project lead: Danielle Kuska. Project timeline: 90 days.
c. Begin formal tracking of contracting data (volume, how long it takes, customer satisfaction). Project lead: To be determined by Provost. Project timeline: 90 days.
d. Move focus of contracting service at NPS from rule-enforcement orientation to advising-orientation. Help faculty accomplish what needs to be done in a helpful, customer-service manner. Implement customer satisfaction surveys to measure progress. Project lead: To be determined by Provost. Project timeline: 90 days and ongoing.

9. Improve purchasing process. Because of the decentralized nature of this process, it is recommended that coordination of purchasing processes be formalized by the appointment of a person with the following responsibilities:

a. Training and subsequent socialization of any changes in relevant policies or procedures,
b. Developing the appropriate SOPs,
c. Establishing performance metrics,
d. Holding regular meetings with purchasing staff to ensure questions are answered and they have the information they need to do a good job.
e. Developing customer feedback mechanisms.
f. Exploring a mechanism for more efficient management of cell phone procurement and billing.
g. Reporting to the academic departments/institutes/schools regarding purchasing processes (volume, how long it takes, how well the customer is served, etc.) Project lead: Provost. Project timeline: 90 days.

10. Strengthen NPS commitment to customer service.

a. Demonstrate leadership commitment to this as a priority (Project lead: Provost. Project timeline: 90 days and ongoing).
    i. Incorporate into speeches, meeting agendas, and annual report to the community (State of the University address).
    ii. Commit funds for customer service training.
    iii. Set expectations for business units to provide annual accountability reporting, performance measures, customer satisfaction surveys.
    iv. Business process managers should take responsibility for accountability and customer service within their organizations – these managerial responsibilities should be included in performance reviews.
    v. Implement periodic external reviews of business units to ensure outside assessment of current operations and to ensure access to new ideas and methods by other universities known for good practices in the relevant administrative areas.

11. Demonstrate management information transparency.

a. Show financial information transparency on a regular basis by providing budget/expenditure data, and information about the resource allocation (including indirect funds) and planning processes to the campus

community via website. Project lead: Megan Reilly, Gil Howard, Danielle Kuska. Project timeline: 90 days.

b. Show hiring transparency by having a standard process for all hires for significant areas of responsibility including: justification for the position, position description, open search and interview process, search committee, and public communication of search results. Project lead: Provost and President. Project timeline: immediate and ongoing.

12. Improve campus communications. Project lead: Provost. Project timeline: 90 days and ongoing.

a. Post announcement of committees on the intranet. Include committee charge and membership and any reports that result from the groups' work.
b. Post announcement of major new appointments, administrative areas.
c. Develop an NPS organizational chart.
d. Dissemination of job aids throughout the community (SOPs, flow charts of business processes, who to go to for assistance, etc.).
e. Adopt a protocol for meetings that includes posting of agendas and meeting summaries.
f. Charge Institutional Advancement with the development of a Communications Plan which includes performance metrics.
g. Help support service staff develop an understanding of the importance of NPS mission of graduate education and research.
h. All administrative areas should have easy to navigate and understand websites with relevant information (new directions, implementation plans, business process descriptions, SOPs, flow charts, appropriate statistics and other performance metrics, etc.).
i. Enhance efforts to communicate legal obligations to monitor and authorize check expenditures on reimbursable accounts.
j. Give visibility to how support service areas help to make NPS successful.

13. Automate processes, where cost-benefit indicates.

a. Web-accessible standard forms and procedures for all comptroller, travel, purchasing and contract processes. Research Office does an excellent job on this for research proposal pages – this should be used as best practice for other offices. Comptroller or contracting staff could rapidly propagate new procedures and ensure they get the right paperwork the first time.
b. Use digital signatures for review/approvals where possible to reduce the time it takes to complete a business process (e.g. research proposals).
c. Automated feedback from key business processes such as comptroller, contracts, purchasing, etc. so staff know where paperwork is in the process (received, reviewed, rejected, accepted, paid, etc.). Development of service level agreements with customers so that expectations are clearly defined about what information is required and how long processes can be expected to take. What factors accelerate processing, what factors constitute obstacles, etc. Project lead: Megan Reilly, Danielle Kuska. Project timeline: 6-12 months.

14. **Explore possibility of reversing regionalization for NPS in order to improve responsiveness to campus priorities.** Project lead: Provost and President. Project timeline: 90 days.
15. **Explore flagship status within the Department of Navy.** Many of the regulatory issues NPS faces are a direct result of the "round peg in the square hole" syndrome. As a research university, we are often a special case or extraordinary application of a general Navy rule. As a result, much time is spent documenting the extent of our distinctive situation or purpose, and requesting a special consideration of NPS circumstances. This takes inordinate time on both sides and results in little or no value added. If there is a way to request a special charter status with the Department of Navy, this should be pursued with the understanding that appropriate accountability will continue to be in place. Project lead: Provost and President. Project timeline: 90 days.

Other relevant issues

Improvement of management practices. Many of the above recommendations speak to the need for the improvement of overall management practices at NPS. Standards of professionalism should guide administrative/business processes. Responsible and responsive management includes:

- regular communications with NPS leadership and customers,
- accountability for the expenditure of funds and looking for ways to improve efficiency and effectiveness of services provided,
- use of business process data to evaluate the management of business processes. Results should be incorporated into regular performance evaluations.
- establishing appropriate performance indicators to monitor progress,
- providing for professional development and training of staff,
- demonstrating a commitment to customer service by having a customer advisory group, asking customers for their opinions about the quality of service provided, etc.
- having an external review process.

Need for project planning to ensure sustainability. Often the Committee heard discouragement about the number of initiatives begun at NPS, but not sustained. New projects are often undertaken without a project plan and clear definition of resources required, roles and responsibilities. Often life cycle maintenance, licensing, subscription and other costs are not considered. Also long term support of the project is not considered sufficiently so it is "add-on" to already full staff workloads. NPS should adopt project planning as a requirement for new projects. This will ensure resource requirements are planned more carefully. As a result, projects and initiatives have a greater probability of being sustained over the longer term. Regular progress reporting is part of effective project planning and execution and this will also ensure appropriate momentum is maintained to completion of the project.

As a whole, the outcome or improvements we are suggesting represent a substantial change from current practice. We must supplement our efforts with the incorporation of best practices for change management.

Costs. All of the above recommendations do not have associated costs specified, however there are three general categories of expenditures recommended:

- $50K for training
- Salary support for one purchasing coordinator (this may be mitigated by asking one of the senior purchasing agents to take on additional responsibilities for coordination)
- Contracting support for specific systems projects: integration of financial systems, digital signature processing, and web development.

Costs for contracting systems support can be estimated more specifically in the individual project plans. Most involve short-term funding for specific programming efforts.

Benefits. The benefits of implementing the above 15 recommendations will have both qualitative and quantitative elements. The Committee recommends describing the "as is" state before beginning work on improvements in order to clearly document the institutional benefits. It will be important to publicize the implementation of the recommendations, giving visibility and support to the effort, and celebrating the accomplishments. This process will provide evidence to the community that NPS is able to respond to concerns of its constituents in constructive and effective ways and is engaged in a process of continuous improvement.

Conclusions

Most of the recommendations in this report have been voiced many times over in past years, and, for various reasons, were not implemented or, in some cases, not completed or sustained. It is important that this time leadership visibility be given to these efforts as well as concomitant resources. Periodic progress reporting to NPS faculty, students, and staff would also be helpful in enlisting community support for implementation efforts.

The Committee appreciates the opportunity to provide input to improving business practices at NPS, and stands ready to assist those tasked with implementation in any way that would be useful.

Appendix A

Provost's *Ad Hoc* Committee on Business Practices

Charge to the Committee and Committee Membership

Dear Colleagues

As you are all aware, NPS has been having some difficulties in the area of "business practices." This is an area of considerable concern for the faculty and staff at NPS. It was mentioned often while I was being interviewed for the Provost position this year. I would like to have a small Ad Hoc Committee for Business Activities examine major business processes and our business organizational structure to determine where we can make improvements. The faculty complain about delays, complex processes and the staff are often overworked and under great stress. I suggest that the committee meet once or twice to discuss the issues and that we then convene a retreat, in the very near future, to develop a plan and any modifications to the current administrative support structure. I would like to meet with you for a few minutes at the first meeting and would attend the retreat.

The Committee Membership:

Dr. Christine Cermak, Chair, Executive Director, Information Resources and CIO
Ms. Laura Cole, Strategic Planning
Dr. Rudy Darken, Director, MOVES Institute
Mr. Pat Flanagan, Graduate School of Business and Public Policy
Mr. Scott Jasper, Chief Operating Officer, CCMR
Ms. Danielle Kuska, Director Sponsored Programs
Ms. Sue Netzorg, Administrative Officer, Graduate School of Engineering and Applied Sciences
Ms. Megan Reilly, Comptroller
Dr. Clyde Scandrett, Chair, Mathematics Department (representative to Faculty Council)
Dr. Tim Stanton, Professor, Oceanography Department
Dr. Harold Trinkunas, Associate Professor, National Security Affairs
Ms. Eleanor Uhlinger, Associate Provost and Director, DKL
Dr. Cris White, Human Systems

An incomplete list of issues, in no particular order:

- What are the primary business functions/

- Are we efficiently organized?
- Are there duplications of functions?
- Are we properly staffed?
- Are government regulations and processes appropriate for a research university?
- Do we need exemptions to certain processes?
- What is the status of contracting?
- How can we improve contracting further?
- What is the status of purchasing?
- How do we improve purchasing?
- What do we mean by a business office?
- How does a business office interact with the Comptroller and Sponsored Programs?
- What is a preferred organizational structure?

Please feel free to call me at any time to discuss the role of this important committee. Let me know the data you need from the Provost Office. I could have added several other individuals to this committee but I want to keep the group as small as possible but still able to cover most aspects of central admin. If there is someone who needs to be added please let me know ASAP. Thanks for your support and willingness to work with me on this important issue.

Best regards,

Leonard Ferrari, PhD
Associate Provost/Dean of Research
Naval Postgraduate School
220 Halligan hall
Monterey, CA, 93943

Appendix B

Business Practice Recommendations

(August 15, 2006 – recommendations provided by numerous NPS offices and individuals)

1. General climate issues:
   a. After various efficiency exercises, BRAC processes, increases in requirements, flat budgets effectively creating reductions in operating capabilities, audits, etc., the general climate is one often marked by discouragement with what are sometimes viewed as redundant and difficult bureaucratic processes.
   b. It is unclear whether regionalization has benefited the campus and there are a number of examples where it may have undermined the integrity of the campus.
   c. There is a general feeling, held by many on campus, that NPS has had Committees like this in the past, and no actions were taken.
   d. A number of key NPS practices could be automated if the managers of the business processes worked with IT to do so.
   e. NPS should refocus its administrative efforts more directly in support of its core mission of graduate education and research.
   f. For a number of individual business offices, customer service needs improvement.
   g. Positions have been added to administrative areas without campus community understanding about purpose, cost-benefit.

2. Communications
   a. Short Term
      i. More visibility of the resource allocation process; how decisions are made, priorities are set; what revenues are received by the university, how funds are expended.
      ii. Faculty and Staff Newsletter – both print and electronic versions to include campus events and happenings (like construction), new personnel, staff announcements, celebrate achievements, etc.
      iii. Agendas and meeting summaries to be shared, as appropriate
      iv. Who owns communication? Currently, seems unclear. The COS owns bulk email and must approve all messages. Institutional Advancement has another role in communication. The Provost disseminates academic messages. Pat Paulson has an email group. Etc, etc… Bottom line: Communication is fragmented and reaches some of the people some of the time.

v. Communicate the fact of this committee, invite comments/suggestions. Communicate final report of the committee, when endorsed by the Provost.
vi. Communicate the results of the first committee (Provost's *Ad Hoc* Committee on Administrative Affairs) – again, when endorsed by the Provost.

Immediate consideration: Do we need a formal communications plan? Should someone be assigned to develop the plan – with an advisory committee? In this day of instant electronic communication that there could a focal point for the dissemination of information?

b. Long Term
   i. Develop complete communications strategy for both on and off campus – determine exactly what forms of communication will be developed and on what time frame and to what audience
   ii. Include an Annual Report (General), Annual Report (Research)
   iii. Change the Quarterly Report to perhaps a monthly version that highlights a different area each time – no more than two sides of a page
   iv. Update Intranet more frequently
   v. Have an online calendar of events as opposed to emails listing events
   vi. Reduce the number of all-hands emails distributed, if possible
   vii. Establish a quarterly NPS magazine that can be distributed locally, to alumni, etc.
   viii. Identify method of getting documents published more efficiently (cost and time) than through the DAPS process – move on to campus if necessary
   ix. Provide responsibility and resources to IA to coordinate all materials going off campus
   x. Revise web site (both intra and inter) for improving format and content – acquire content management system to assist with automatically updating content

3. Business Process
   a. Short Term
      i. Publicize the results of this Committee's work and the work of the Provost's *Ad Hoc* Committee on Administrative Affairs.
      ii. Correct the check-in process for faculty and staff – more uniform; change the name of the office conducting the check in (is Student Services the appropriate location?)
      iii. Provost to instruct all schools that faculty must have appointment letter through Gil Howard's office

iv. Definition of pilferable property needs to be modified to avoid onerous cost of oversight and administration.
v. Provost to instruct Registrar to permit only those vetted by Gil Howard to teach classes
vi. Automation of time and attendance/leave, etc.
vii. Move accountability for research grant/contract purchases from the Research Office to the PI.
viii. Keep contracting for research principal investigators with the Research Office – move all other contracting to another office.
ix. Travel, leave forms, others?
x. Identify data fields in Python where integrity would be upgraded by requiring student input (e.g. thesis topic and title) and where integrity would be upgraded by not permitting input (rank, title)
xi. Let individual departments post occasional visitor cones in local parking lots (discontinue the Herrmann hall oversight office)
xii. Role of attorneys in CRADA development, other advisory roles
xiii. Need for a digital signature accepted for all NPS forms, especially those that involve the comptroller since they require multiple signatures. Our AOs and PIs are frequently on travel so it would be helpful to the staff if this part of the business process could be conducted electronically and remotely.

b. Longer Term
i. Administration should do what it can to streamline business processes, reduce administrative costs, and improve customer service.
ii. Require each administrative level to produce correct org chart (by position not person)
iii. Require each administrative level to provide up-to-date position descriptions
iv. Require each administrative level to create written and electronic documentation of business processes conducted by each position
v. Investigate possibility of streamlining/expediting contracting process
vi. Train travel staff thoroughly and return all travel paperwork to that office
vii. Scheduling process requires attention -- some changes in the works (rewriting of instruction and request for POM or other funding to address long-range solution).
viii. New projects are often undertaken without a project plan and clear definition if resources required, roles and responsibilities. Often life cycle maintenance, licensing, subscription and other costs are not considered. Also long term support of the project is not considered so it is “add-on” to already full staff workloads. NPS should adopt project planning as a requirement for new projects.

ix. Explore redundancy in certain support areas – e.g. support for DL programs (technical, marketing, etc.). Encourage departments to have a menu of services with pricing so actual costs can be determined and planned.
x. Require cost-benefit analyses as part of project plans to identify where the project fits into the NPS Strategic Plan and if added costs are worth it.
xi. Web-based database of all NPS DL and resident courses.
xii. Implement "lead" admin officers all over NPS. They would be the group to get briefed on new procedures, policies.
xiii. Web-accessible standard forms and procedures for all comptroller, travel, and contract offices. SOWs, honoraria, ITOs, -- all examples of practices that have high do-over rates. Research Office does great job on this for research proposal pages – should be used as best practice for other offices. Comptroller or contracts office could rapidly propagate new procedures and ensure they get the right paperwork the first time.
xiv. Improved feedback, perhaps automated; from key business processes such as comptroller, contracts, etc. so staff can know where paperwork is in the process (received, reviewed, rejected, accepted, paid, etc.). DTS does a pretty good job of this.
xv. Sustain the highest level of NPS contracting expertise in the 09 research office. Formally establish a 09 Contracts office based on demonstrated knowledge and past performance in facilitating solutions to never ending FISC SD generated dilemmas in contract types, funding allocation methods and approval procedures.
xvi. Expand 09 contract staff to handle the high volume of NPS contracts and allow back-up when key personnel are absent. Establish a FISC SD contract detachment at NPS with Contracting Officer authority to enable the timelier processing of contract orders and modifications.
xvii. Move the SATO office back to NPS to allow for personal interactions and ticket issue. Connect SATO systems to DTS for processing of AO travel related messages and alerts.
xviii. Establish routine Check cashing capacity at NEX and create surge capacity for higher volume of funds for short course reimbursement.
xix. Establish centralized control for allocation of all large capacity conference rooms on campus, to include Spanagel 101A, Ingersol 122, ME Auditorium, Glasgow 102 and 109.
xx. Centralize purchasing authority and simplify procedures for Cell phone service
xxi. The funding logarithm does not reward faculty for resident teaching. Faculty find reimbursable funding to "buy themselves out" of resident teaching since it requires far more effort to prepare for and deliver resident teaching than the Academic Planning

compensation model provides in terms of faculty workload. The end result is fewer faculty who have incentive to teach resident students.

xxii. Schools/faculty should be incentivized to adopt a business model that supports interdisciplinary programs (research and education). Current budget model is broken since it requires faculty to find 50% of his/her salary at the beginning of the fiscal year. End result is loss of focus on core mission (excellence in teaching and research).

xxiii. Too many *ad hoc* policies and processes. Instructions should be updated and published – by an office that can respond to questions.

xxiv. Create performance metrics for each service organization on campus.

xxv. Establish a re-engineering process at NPS – purpose to streamline administrative burden on faculty, students, and staff.

4. Hiring/Orientation/Training for faculty/staff
    a. Short Term
        i. All hires for significant areas of responsibility should go through a process that includes: position description, open search an interview process, search committee, and public communication of search results.
        ii. Identify areas of training and orientation needed: how the federal government works – structure of GS system, etc; how the military works; basic info on what students, faculty, staff are here at NPS
        iii. There does not appear to be NPS commitment, managerially or monetarily, to staff training. Training and development of our own people is a lower priority than custodial requirements. Of particular concern as the new personnel system, NSPS, begin to be implemented.
        iv. Institutional budget under the Provost for training. Deans and Chairs, Institute Directors, etc. need to be helped to understand that commitment and have some level of accountability for ensuring that each and every staff member have training plans and a path for developing their job skills.
        v. Orientation program for faculty is needed.
        vi. Mentorship program to engage GS staff. Job shadowing for cross-functional departments.
        vii. Orientation program for staff is needed.

    b. Long Term
        i. Update the web based training now on the web

ii. Provide training for those not familiar with military and federal processes
iii. Each major administrative area should have ongoing training programs – at least on quarterly basis.
iv. Plan to change the culture at NPS. Develop techniques to get NPSers more involved with the institution, re-establish a team atmosphere on campus. Break down stovepipes and increase collaboration.

5. Funding/Budget/Resources
   a. Short Term
      i. Provide easier, single system for tracking expenditures
      ii. Require schools to be responsible for balanced budget
      iii. Create a proposed budget and disseminate on campus for review
      iv. Tie budget clearly to strategic goals – use new monies (POMs, etc) for projects which further the goals
      v. Explore possibility of doing away with requiring "budget pages."
      vi. Change business practices from a "policing" or "gatekeeping" approach to one driven by quality customer service.
      vii. The purchase card program. Who really owns it? The Comptroller has a position with responsibility for being the "Agency Purchase Card Coordinator." Is there an SOP (standard operating procedure) that is provided to all new purchase card holders? Training seems to be uneven for new purchase card holders. The Agency coordinator is knowledgeable but is that position also the "go-to" person?

         Immediate action to consider: Select an owner and provide funding to operate and staff the program. Establish that the purchase card program is a business function with operating procedures, orientation and training for users, and an owner who has responsibility would be something to consider.

      vi. We are told to bring in other revenue since Navy funding is decreasing (MIIS, CSUMB, etc.), yet when we do, there is no method to provide services and accept funds. There are even issues with whether or not it is legal to provide the services.

         Also need to coordinate efforts. One department might be forming a partnership with an organization or institution just to fnd out other NPS departments already have separate agreements.

         Suggestion: provide source of information that explains:
         - What we are allowed to do and what we are not allowed to do (e.g. defense contractors or faculty from CSUMB or MIIS requesting NPS courses)

- List of partnerships publicized on the web – one office to handle oversight
- Listing of the different types of agreements (CRADA, MOU, MOA, Educational Partnership Agreements, Technical Services Agreements, etc.) that explains which ones should be used for which circumstance.

Suggestion: process to accept funds from other institutions.

b. Longer term
   i. Seems that chronic end-of-year labor shortfall can be better managed. Shortages should be discovered earlier and dealt with prior to EOFY.
   ii. Explore a way to "roll-over" funding at the end of each fiscal year.
   iii. Explore "grant" authority for NPS. Will provide greater flexibility for receiving activity (partner university).
   iv. Create NPS Strategic Plan and ensure that department plans and actions fall within the NPS plan (accountability).
   v. Review current space allocation. Are there non-NPS groups occupying NPS space? If so, do they take priority over NPS needs?
   vi. Property management system needs improvement. Should have a process that includes: processing the order, tracking the order until it arrives, tracking the property over its lifetime and excessing it when no longer needed.
   vii. Explore use of temporary buildings.
   viii. Explore use of leasing buildings off-campus.
   ix. Provide near real time interfaces between disparate systems to enable accurate and timely allocation and tracking of expenditures
   x. Electronically connect DORS labor entries into ETAC for full use of JONs in timekeeping processing
   xi. Electronically connect DORS travel allocations into DTS for rapid use of JONs for booking
   xii. Improve DORS cycle time for Contract and Purchase order updates to depict true financial status
   xiii. Correct the long delay in DFAS payments of Honorariums that deny this payment method as an acceptable compensation option
   xiv. Many NPS research programs rely on "incremental funding" from multiple sources. Is it possible to collect these funds and voice the need to have multiple options on FISC contracts since full funding is not available to cover the annual costs?
   xv. Timekeeping – reduce labor required to track timekeeping. Planning PI labor for the year, for example.

6. Accountability, reporting, and responsiveness

a. All assistant provosts and executive directors should have a faculty advisory committee.
b. Information reporting should be done in a more efficient way. Data calls should be answered in a consistent way. NPS should have, as most universities do, a central coordinating point for most requests for information.
c. Create a new office of Administrative Services or Business Services.
d. Provide regular reporting of NPS financial information – revenues, expenditures.

Business Processes Implementation Task Force

- Julie Filizetti, Chair
- Terri Brutzman
- Christine Cermak
- Gil Howard
- Danielle Kuska
- Megan Reilly / Kevin Little

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Business Processes Implementation Task Force
Report to NPS Leadership
November 2007

The Nation's Premier Defense Research University

Monterey, California
WWW.NPS.EDU

Business Processes Implementation Task Force

- Julie Filizetti, Chair
- Terri Brutzman
- Christine Cermak
- Gil Howard
- Danielle Kuska
- Megan Reilly / Kevin Little

A Brief History

- Business Processes Implementation Task Force (BPITF)
  - Formed as a recommendation of the Business Processes Ad-Hoc Committee
  - Chartered by Provost in October 2006
  - Given a list of 16 recommendations to address
  - Has given 90 and 180 day updates to campus community

Purpose of Today's Meeting

- Describe successes
- Discuss challenges TF has had along the way
- Determine the way ahead
  - TF has a series of recommendations that include:
    - Moving responsibilities from TF to institutionalized structure
    - Pursuit of a few key initiatives that will set NPS on new course
      - But that require NPS Leadership support

Business Processes Focus Areas

- 16 Recommendations in 8 areas
  - Financial Systems and Processes (1, 2, 3, 4, 6, 12)
  - Travel Voucher Centralization (5)
  - Support for Business Processes – SOPs (7)
  - Staff Development (8)
  - Procurement and Contracting (9, 10)
  - Customer Service and Communication (7, 11,13,14)
  - Regionalization (15)
  - Flagship status for NPS (16)

Major Successes

- DORS-DMAS Integration
- PI Indirect rollover (limited)
- Focus on “flagship” status
- Staff Development Advisory Committee
  - Training Budget
- Contracting
  - IDIQ’s
  - FISC Relationship
  - Director of Grants and Contracts
- Travel Voucher Centralization
- SOP and Process Mapping
- Some enhancement of administrative pride
- Improved communication

Ongoing Challenges

- Lack of defined “ownership” of key activities and processes
  - Procurement
  - Staff Development
  - Systems
- Focus
  - Competing requirements that are not always consistent with management goals
    - Management Internal Control program and Business Processes
- Resources
  - Resource allocation
  - Sustained commitment to initiatives

Ongoing Challenges (continued)

- Skepticism regarding improvement
- Lack of “standardized” management practices across all activities, processes
  - Benchmarking data
- Change processes
  - Not well defined and communicated
  - Documentation
  - Adequate Training
  - Clear lines of authority and notification at proper levels
  - Examples:
    - Paris to CitiDirect
    - Travel Voucher Centralization
    - New and revised NPS instructions

Reasons for Optimism

- Strategic Plan
- Leadership stability (at the top)
- New NPS Decision Making Structure
  - Business Processes, Facilities and Infrastructure Committee
- Director of Financial Systems
- NPS Staff
  - They want improvement and are willing to work on it
- “Kuali”

KUALI Business Systems

- Designed for a university business model
- Able to interface with Government systems
- Modular design allows iterative implementation as well as a customized product.
- Cost – Palatable
  - Low membership fee
  - No license fee
  - Expenditures are for tangible assets

"NPS should take on the persona of a University in the way business is conducted, yet be able to interface with Navy processes."

General Recommendations

- Declare success of Business Processes Implementation TF effort
- Institutionalize changes and improvements
- Assign unfinished actions to key managers

Specific Recommendations

- Create a comprehensive picture of NPS systems
- Pursue Kuali as a framework for financial, student management, sponsored programs and other systems
  - Establish a Kuali Advisory Committee to keep this initiative on track
  - Establish and execute a project plan that includes resource commitments
- Staff Development Advisory Committee report to Associate Provost for Academic Affairs
  - Establish this as standing NPS committee
- SOP and Process Mapping Task Force
  - Co-chair appointment expires 31 Dec 2007
  - Will deliver a project plan and budget for creation of a web-based administrator's "how to" guide
  - Work is critical
  - Needs champion and continued funding
    - Web Advisory Committee will have some oversight
    - Associate Provost for Academic Affairs to continue until different ownership established

Specific Recommendations

- Require IPEDS submission
  - Key benchmarking data
    - Finance, Students, Faculty
    - IR can lead, others must provide information
- Investment in systems, databases, etc. should be properly staffed and approved by NPS decision making structure
  - ITACS involvement
  - Legal, PII aspects
  - Long-term staffing and resource commitments
  - All stakeholders participate
- Require external review of all administrative areas
  - Establish appropriate staffing levels (update of prior studies)
  - Benchmark with other universities

Detailed Success Stories

Financial Management Reporting Systems (DORS/DMAS)

- DORS – DMAS Integration
  - DORS/DMAS reports were deployed for sponsored projects in FY07
    - Provides PI/PM detailed information on individual transactions
    - Provides projected expenditures/projected balance
    - Current info is available to PI/PM on their desktop
- FY08 projected deployment for web-enabled DORS/DMAS reports:
  - Department Indirect (IXXSL accounts)
  - PI Indirect
    - Detailed reports on accrual
    - Detailed reports on expenditures
  - NIFR/RIP Accounts (B accounts)
  - Dynamic vs. Static Research/Sponsored Activity Reports with drill-down capability

PI/PM Indirect Rollover

- PI/PM indirect accounts now cross the fiscal year boundary
- Eligible indirect is "rolled" to the following fiscal year
- Allows PI/PM to more efficiently utilize indirect funding
- Improved detailed report provides:
  - Accrual to Date
  - Expenditures to Date
  - Balance to Date
  - Balance Available for Rollover
- Reports currently disseminated via email; migration to web-based on line report for FY08

Travel Voucher Approval Centralization

- Long History
  - Travel hotline email address established in FY05 for customer input on travel issues
  - Beta test of voucher processing on a specific department conducted in FY06 to assess impact of new approach
- FY07 - Selected departmental input and critique
  - Workload assessment conducted
  - SOPs developed for centralization desk
  - Centralized AO positions hired with travel expertise
- Current Status:
  - Processing vouchers for all Department Chairs except SIGS departments (requested to process their own)
  - Initial back log cleared and vouchers processed within 48 hours
  - Timely responses & performance measures are tracked

Business and Administrative Processes Website

- Single website cataloging all NPS business and administrative processes
  - Over 300 topics identified for inclusion
- Each site will include:
  - References (policy/instructions)
  - Definition of terms/acronyms
  - Explanation of "subject" being presented
  - SOP for processing
    - Flowchart of Process
  - Links to other related sites and/or forms
  - Organization responsible/technical point-of-contact
  - Date of last update
- Characteristics for each site
  - Prior knowledge will not be assumed
  - Consistency in presentation
  - Image (quality of design) and substance (quality of content) imperative
  - Google-like search engine
  - Quick links for lateral topics, i.e. organizational responsibility, forms, instructions

Administrative Website Advisory Committee

- Danielle Kuska, Chair
- Megan Heath
- Susan Hudson
- Christine Kays
- Kathi Noyes
- Nancy Weigle

Staff Development

- Doubled staff development budget from $50K to $100K
  - Professionalism Training for over 100 staff members and managers
  - Basic Appropriation Law training for 26 staff from around the campus
  - San Diego Purchase Card Conference attended by about 19 staff from around the campus
  - Seven Comptroller staff earned their Certified Defense Financial Manager (CDFM) credentials
- Formed Staff Development Advisory Committee
- Sustainability

Staff Development Advisory Committee

- Sue Dooley, Chair
- Toni Dickenson
- Mike DiFranco
- Jodie Dodge
- Megan Heath
- Robbie Johnson
- Pete Randazzo
- Ben Roberts
- Liza Rosa

Improving Campus Communications

- Monthly campus newspaper, *Update NPS*
- *In Review* magazine now issued quarterly with expanded distribution
- Letters from the President to the campus every other month
- Restructuring of meetings on campus -- with agendas and meeting summaries
- Posted to the Intranet:
  - Provost's monthly newsletter
  - NPS organizational chart
  - NPS Catalog and Academic Policy Manual and curriculum chart
  - Ad Hoc committee appointments, charges and progress reports
  - Financial information
  - WASC Steering Committee minutes and documents
  - Fact Book, In Review magazine, Command History
- Web Advisory Committee selected and charged with improving intranet and internet content and navigation
- Institutional Advancement Advisory Committee selected and charged with improving communications
- Comptroller Advisory Board of School Admin Officers

Web Advisory Committee

- Fran Horvath, Chair
- Doug Brinkley
- Terri Brutzman
- Andy Hernandez
- Daphne Kapolka
- Danielle Kuska
- Val Moulé
- Alan Pires
- Judit Sedillos

Institutional Advancement Advisory Committee

- Fran Horvath, Chair
- Tom Hazard
- Vicki Hoy
- Paula Jordanek
- Danielle Kuska
- Cynthia Irvine
- Jim Suchan
- Tim Stanton
- Merrill Ruck

Contracts and Grants

- Successes in making processes better and easier
  - Simplified documentation
  - Reduce time to award
- Three IDIQ contracts in place to support NPS requirements
  - Administrative and Instruction
  - Research
  - Information Technology
- Assistance Agreement (grants and cooperative agreements) authority now in place with FISC.
  - NPS has issued a Broad Agency Announcement
  - Appropriate mechanism for working with other universities, collaborating with NGOs when NPS is providing funding
- NPS website being updated with details

Procurement

- Ad Hoc Committee on Procurement
  - Define the current processes
  - Assess the effectiveness of current protocols in terms of how the customer is served
  - Evaluate accountability issues; how transactions get posted, the timing of postings, inventory control
  - Examine procurement training issues & how these can be improved to improve customer service
  - Examine procurement documents & how they are utilized, and by whom
  - Evaluate the use of a website to aide all who wish to make a purchase
  - Evaluate performance metrics that will be useful in measuring the effectiveness of procurement activities
- Procurement Oversight Board formed
  - Coordination with / between Ad Hoc committee, FISC & Internal program stakeholders

Ad-Hoc Committee on Procurement

- Jack Shishido, Chair
- LT Heath Alvarez
- Kathie Cain
- Ken Davidson
- Tracy Hammond
- Scott Jasper
- Kevin Little
- Sue Netzorg
- Sergio Obispo

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Web Content Management (WCM)

IA/ITACS Project Team

The Nation's Premier Defense Research University

Monterey, California
WWW.NPS.EDU

Web Content Management – Needs Assessment

NPS website needs to be

- **a key element of communication, information dissemination, and NPS knowledge creation**
- **a reflection of how we want to be perceived by our customers and others, both internally and externally**
- **capable of supporting our academic mission and business processes with integrated, user-centered, web-based applications**

Web Content Management - Background

- **FY04 - NPS website upgrade effort launched with the company 2020 LLC**
- **FY05 - Content Management System (CMS) committee selects vendor but funds not available for purchase**
- **FY05 - Manual CMS implemented and upper levels of NPS web migrated from www.nps.navy.mil to www.nps.edu**
- **FY06 – DKL and ITACS run pilot to demonstrate web redesign project and CMS capabilities**
- **FY06 – Several NPS organizations express interest in having their web sites managed by the CMS (WCM)**

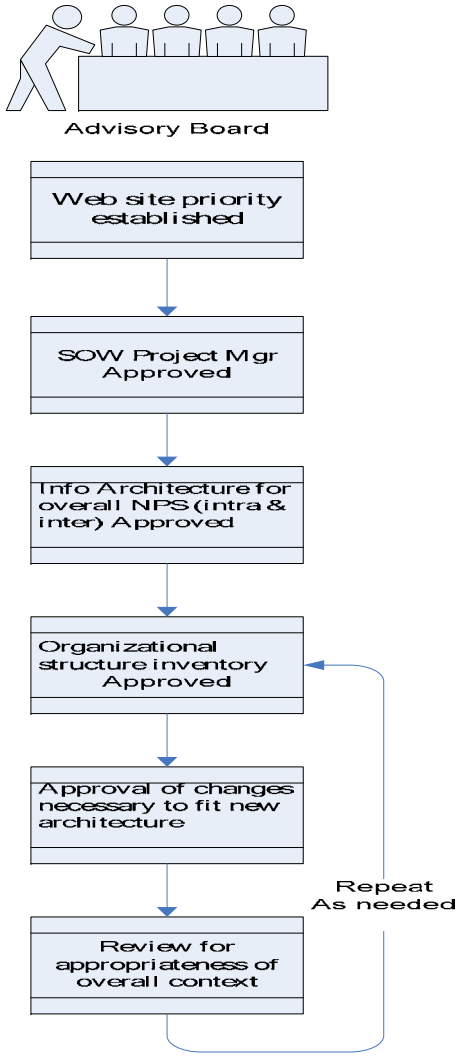
Web Content Management – Next Steps

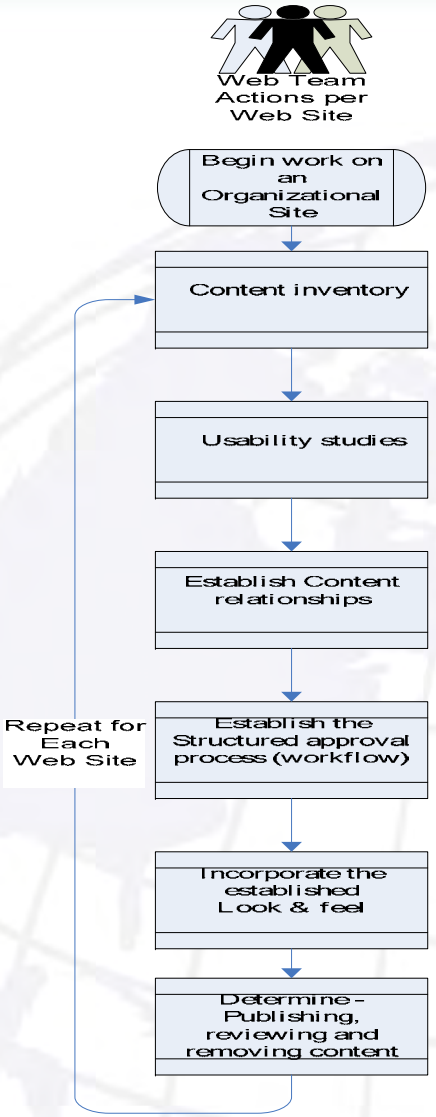
- **Objective: Migrate remainder of www.nps.edu web content into WCM and migrate intranet.nps.edu into WCM**

- **Advisory Committee Charge:**
  - **Develop and prioritize list of web sites to migrate to Web Content Management**
  - **Approve timeline and receive progress reports**
  - **Represent and give campus input on information architecture and appropriateness of content**
  - **Work with NPS organizations to integrate individual web domains into the www.nps.edu domain**
  - **Assist with identification of available technical support and content managers, content owners, and content authors**

- **Advisory Committee Membership: representatives from across the campus**

Web Content Management – Process





WCM – Cost Estimate

WCM (Web Content Management) Costs

	FY07	FY08**	FY09**
Rhythmyx Enterprise Edition (Upgrade)	$125,000.00	$0.00	$0.00
Support and Maintenance *	$25,000.00	$27,000.00	$27,000.00
Rhythmyx 6 Developer Training for 4 Developers	$18,000.00	$0.00	$0.00
Upgrade credit	($44,500.00)		
One-time only discount on license ***	($50,000.00)		
Rhythmyx Total	**$73,500.00**	**$27,000.00**	**$27,000.00**
Server Refresh for WCM Server	$0.00	$0.00	$9,800.00
Web Server Farm	$0.00	$32,000.00	
WCM Database SAN			$31,000.00
Hardware Total	**$0.00**	**$32,000.00**	**$40,800.00**
Web developer supplies (books, software, etc.)	**$5,000.00**		
Project Management (contract)	$30,000.00		
Web Manager (IA)		$120,000.00	$124,800.00
Content Manager (IA)		$100,000.00	$104,000.00
Labor Total	**$30,000.00**	**$220,000.00**	**$228,800.00**
Overall Total	**$108,500.00**	**$279,000.00**	**$296,600.00**

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NPS Enterprise Web Initiative

Story beneath the Story

Monterey, California
WWW.NPS.EDU

Enterprise Web

- What it is…
  - Publicly facing websites that market NPS
  - Internal websites that provide business services
- What it is not…
  - Web based applications
    - Python, Blackboard, Student Check-in,…etc
  - Faculty Research websites
  - Student web development sites

Project Goals

1. Identify and categorize web services
2. Consolidate web servers
3. Transition from Mil to ERN web sites
4. Implement enterprise-wide Web Content Management (WCM) system

1. Identify Web Services Goals

- Inventory and categorize web service types
  - Faculty
  - Student Development Server
  - NPS marketing (nps.edu)
    - 2,575 Web pages on www.nps.edu
    - 21 million hits last quarter
  - Internal (intranet.nps.edu)
    - 1,244 Web pages on intranet.nps.edu
    - 5 million hits last quarter

2. Web Servers Consolidation Goals

- Reduce NPS overhead for maintaining multiple servers
  - Increase management and control over cost of hardware and licensing
  - Decrease supporting staff hours
  - Decrease need for professional skill set at the departmental level

3. MIL to ERN Transition Goals

- Enables use of more flexible research and instructional tools
- Present NPS as an academic/research institution on the .edu domain
  - Leverage educational status of NPS
- Create consistency in presentation

4. WCM Implementation Goals

- Assess the state of the enterprise web
- Align websites with mission and goals of NPS
- Improve NPS marketing to prospective students, faculty and industry sponsors
- Assure that web content is relevant and timely
- Create a cohesive look and feel for both external and internal NPS websites
- Empower NPS content owners
- Gain increased efficiencies in ITACS

Previous (.mil) State

- Enterprise web undefined
- Publishing bottleneck
- Diffuse presentation, weak marketing
- Inefficient use of resources
- Regulatory noncompliance
- Increased organically grown sub-sites

Ideal State

- Purposeful alignment with Strategic Plan
- Clearly-defined business goals and boundaries for enterprise web
- Streamlined publishing of fresh content
- Consistent branding
- Leveraged enterprise resources
- Regulatory compliance

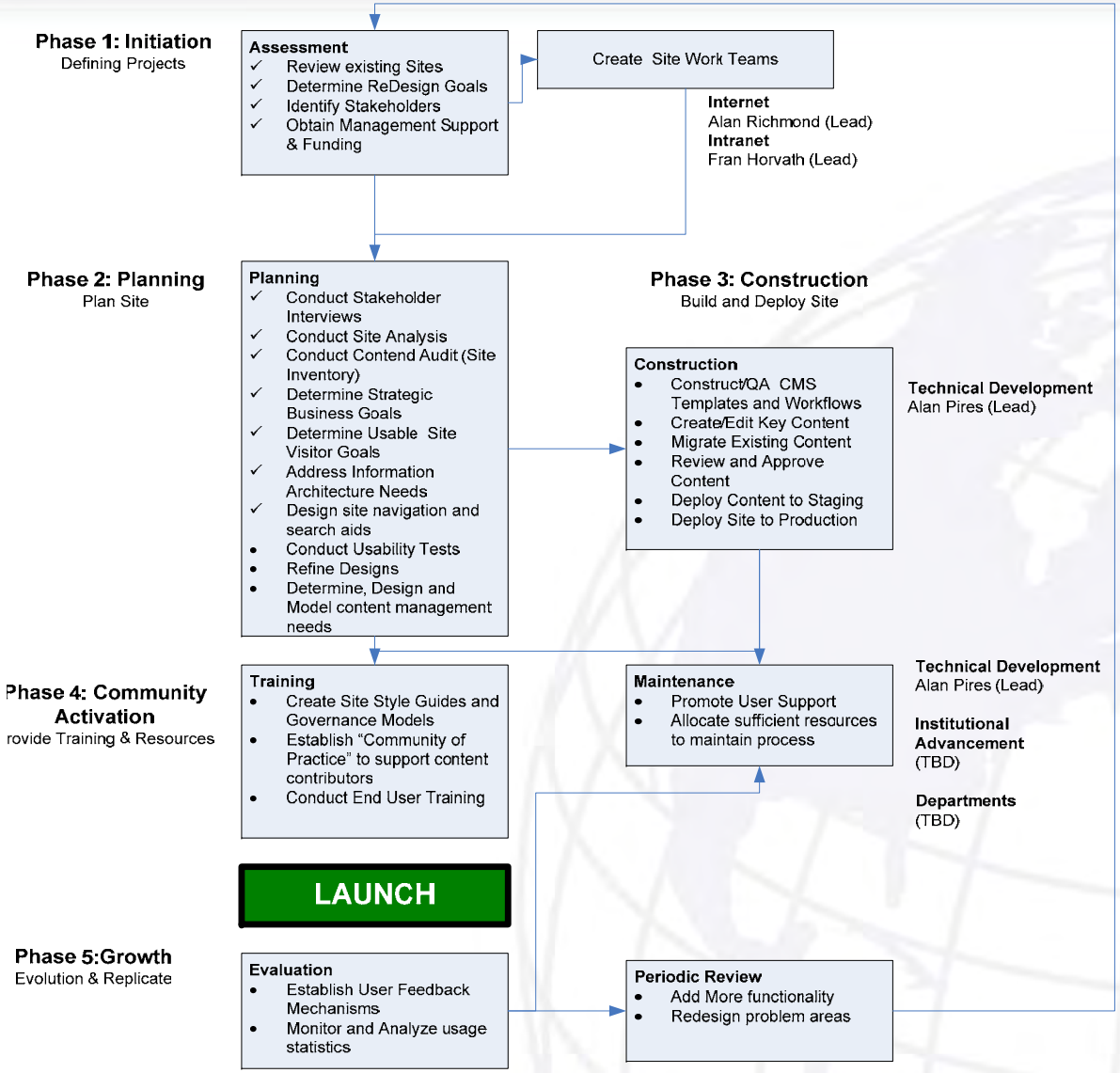
Current Accomplishments

- Completed MIL to ERN migration
- Completed WCM pilot (DKL)
- Completed inventory of web services
  - Consolidated sites
- Identified missing content
- Identified stakeholders
- Established business goals for internal and external websites
- Created functional, technical, compliance, and end user training
- Trained Web Operations staff for Web Content Management system
- Implemented Communities of Practice (Sharepoint)

Current Accomplishments (continued)

- Creating repeatable processes (currently being documented for widespread access)
  - Determined strategic goals of NPS internal/external websites including business goals, user goals
    - Defined external and internal appropriate content guidelines
    - Defined audiences and their information needs
  - Conducted full site analysis of currently existing sites
  - Conducted site audits and created content inventories of currently existing sites
  - Established process for implementing information architecture for campus websites
  - Established framework for usability testing
- Implementing style guide policies

Internet/Intranet Redesign Roadmap



Visible Results?

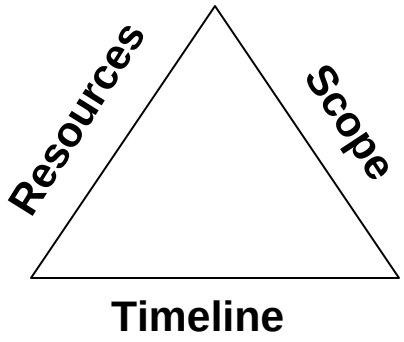
Challenges

- Unstable Staffing
  - Enterprise web initiative short two positions in Institutional Advancement
  - Lack of dedicated resources
- Communication
  - Managing expectations
  - Complexity
- Paradigm Shift
  - Content ownership
  - Lack of experience, vocabulary, common reference

Application of Lessons Learned

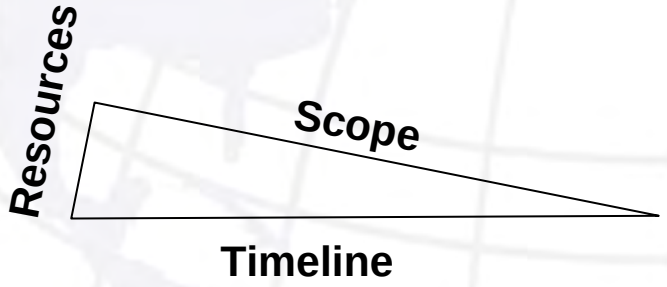
DKL Pilot Project

- Committed Resources
- 100% Dedication
- Committed Content Manager/Advisor (Judit)



Current Project

- Committed Resources
- 10% Dedication
- Unstaffed IA positions



Recommendations for WCM

- Option 1 – Hire new dedicated resources
- Option 2 – Reassign NPS resources to project
- Option 3 – Accept the glacial pace (chilling!)

Naval Postgraduate School
SOP and Process Mapping Group
Charter
Fall 2007

Purpose:
The Business Processes Implementation Task Force has identified customer service and communication and support for business processes as two focus areas to improve business practices at NPS. Therefore the next steps for the Task Force are to ensure that adequate SOPs, process maps and associated flow charts are developed. These documents will serve as the bulk of the content of the Administrative/Business Processes webpage. They will also identify areas in need of management controls in support of the Management Internal Control (MIC) program at NPS.

Scope:
The SOP and Process Mapping Group will take charge of the content development for the Administrative/Business Processes webpage. The Group will work with the process owners identified by the Business Processes Implementation Task Force, to establish NPS SOPs, process maps and flow charts for all relevant NPS administrative processes.

Once a significant portion of this content has been developed, the Group will work with the Web Advisory Group to organize and post the content in a way that will be accessible and meaningful to website users campus-wide. The Group will also seek assistance as needed from NPS experts in process improvement and Operations Risk Management (ORM) experts as well as from Command Evaluation to ensure that the processes are efficient and effective.

Membership:
Membership of the Group will include staff members who collectively are knowledgeable of NPS administrative operations and functional areas and adept at ORM.

Priorities:
The first priority of the Group will be to establish process maps and necessary flow charts for key administrative processes. These can also serve as a basis for MIC program review.

Responsibilities:
The Group will meet regularly as needed and will report monthly on its progress to the Business Processes Implementation Task Force. The Group will work with the NPS Web Advisory Group to ensure that the appropriate material is used to develop the Administrative/Business Processes Website. Line managers and process owners are responsible for providing support to the Committee.

Naval Postgraduate School
SOP and Processes Mapping
Membership*
Fall 2007

Members:

Kathie Cain, Chair
LT Jocelyn Porzel, Co-chair
Steve Baker
Laura Cole
Jack Shishido
PO1 Fines Stevenson
Bardomina Valle

Advisors:

Lynn Murch, Command Evaluation
Denise Ross, Command Evaluation
Kent Wall, ORM Specialist

*Other members may be added as required

SOP and Process Mapping Group
Final Report - Content Development for the Administrative Web Pages
12/21/07

Tasking (from the group's charter)

> The SOP and Process Mapping Group will take charge of the content development for the Administrative/Business Processes web page. The Group will work with the process owners identified by the Business Processes Implementation Task Force, to establish NPS SOPs, process maps and flow charts for all relevant NPS administrative processes.
>
> Once a significant portion of this content has been developed, the Group will work with the Web Advisory Group to organize and post the content in a way that will be accessible and meaningful to website users campus-wide. The Group will also seek assistance as needed from NPS experts in process improvement and Operations Risk Management (ORM) experts as well as from Command Evaluation to ensure that the processes are efficient and effective.

The group was given a draft list of topics to include in the website. The list was compiled during the spring and summer of 2007 by a group of administrative-support assistants (ASAs) chaired by Danielle Kuska. This initial list had approximately 340 lines, divided into ten categories, and is presented in Appendix A.

Overall description of the group's work

The group appreciated that the development of an administrative website is a large-scale and time-consuming effort, and devoted the fall quarter to formulating an overall project plan.

In initial meetings, the group gave priority to the three categories of greatest impact on everyday business or possible management-control issues: labor, procurement, and financial systems. A meeting was held with the administrative officers (AOs) of the schools, who concurred with these priorities.

The group reorganized as three subgroups, to flowchart the process (or systems), and identify existing materials to use as web content. The efforts of the subgroups are described later in this report.

One subgroup met with a few ASAs to review sample websites (developed by ITACS) and similar university websites. The ASAs' feedback has been incorporated into the findings and recommendations of this report and the sites reviewed are listed in Appendix B.

In its recommendations, the committee will suggest both general qualities and specific elements that the website should have as content development continues in the future. The design will be determined by ITACS; but it should contain a few basic elements recommended by the SOP and process-mapping group.

The next phase of the work should include prioritizing all topical areas on the master sheet (beyond the top three included in the first phase). Input from ASAs and AOs should be incorporated when the priorities are set.

Labor subgroup

The labor process was flowcharted, using "swim-lane" style, for that segment of the process visible to a department administrator (such as an ASA). The flowcharts are displayed in Appendix C.

The subgroup also made minor adjustments to the topics to be included on the administrative website. The changes were limited to the categories of personnel and labor/timekeeping.

The group incorporated some of the elements recommended above into a mock-website structure provided by ITACS, which is in Appendix D. The subcategories for labor and timekeeping are displayed on the mock site, as are links to related resources. No narratives, background, explanations, etc. are included in this sample site, since the process owners will be writing that material.

Financial systems subgroup

The subgroup created material that describes and depicts the various financial systems used in the basic business processes at NPS: labor and timekeeping, purchasing, travel, and contracting. Financial-reporting systems are also identified and explained.

The flow of data and business process for each function are laid out, from transaction initiation to upload into the official accounting system. Dataflow is presented in traditional flowchart format, while processes are displayed using swim lanes.

This material is in Appendix E.

Procurement subgroup

The Ad Hoc Committee on Procurement was chartered in the spring of 2007 to assess NPS' procurement process and make recommendations for change. This committee produced a number of flowcharts related to procurement and is shown in Appendix F.

The SOP and Process Mapping procurement subgroup is reviewing the existing flowcharts, and will make any needed changes.

Collaboration with the Web Content Management Project for the Intranet (Institutional Advancement) and ITACS Web Operations:

Process owners and SOP process-mapping-group members will work closely with both of these entities on this project. They will provide a common format, website design and technical expertise. They may be able to provide advice and tools for specific tasks within the project, such as content inventories and usability tests.

In order for Web operations to be properly staffed for the admin website project, the SOP and Process Mapping group should plan a schedule for the web development work, by section.

The Web Operations staff have prepared the following communication plan to be used when the website content project gets underway:

The SOP Process and Mapping Group will provide ITACS a projected project plan for the entire project. The project plan will include a detailed schedule with an estimated date each topic will be worked on.

At the start of each topic, the process owner will provide ITACS an individual project plan. The project plan will include dates in which ITACS will be expected to provide assistance for each process topic.

The following outlines the projected amount of time ITACS will need to complete each step identified in the SOP Process and Mapping Group project plan that ITACS is responsible for.

- Identify existing content for each topic.
  - ITACS will provide a list of established URLs in identified websites for each topic.
    - Projected Time Needed: 5 - 7 business days.
- ITACS places content into existing web infrastructure.

- Projected Time Needed: 7 – 21 business days.
  - Time required by ITACS needed to complete this step will vary from topic to topic depending on the amount of identified missing content or content reorganization needed.
  - ITACS will provide process owners and/or group with projected date of completion upon receiving requested work.

· Adjust site as needed after draft review by process owner and/or group.
- Projected Time Needed: 7 – 14 business days.

· Adjust site as needed after user testing.
- Projected Time Needed 7 -14 business days.

*Note: Projected time needed to complete each step may/may not be adjusted based on ITACS workload and amount or detail of work requested by group. ITACS will provide an estimated date of completion for each step identified above at the start of each step.

ITACS will work individually with each process owner; email correspondence and meeting schedules while working through each topic will be addressed to the personal NPS inbox for the ITACS employee. Initial emails should be addressed to webmaster@nps.edu prior to working with ITACS employee independently.

Upon completion of the entire project, any necessary changes to the site will be emailed to webmaster@nps.edu and carbon copy the ITACS employee the process owner worked individually with.

General comments/recommendations

1. If this effort is going to continue and be successful, the committee feels strongly that it must have public backing of senior leadership at NPS. The new Associate Provost for Academic Affairs has indicated his intention to assume ownership of the SOP and Process Mapping Group. That is important. Public support and backing from any other leadership entity (such as the recent, but now disbanded, Business Process Implementation Task Force) would be welcome.

2. Web content should be written with the assumption that the user has no knowledge of the subject matter. Information should be clear, logical, and sequential. Acronyms should be spelled out on initial use.

3. All contributors should use standardized formats to the extent possible, to create a consistent look and feel.

4. Process/function owners are the subject matter experts; they will be very involved with the development of content (facilitated by mapping-group members). After initial releases, owners will be responsible for updates to web material.

5. As appropriate, each support organization should include a listing of functional areas, relevant policy guidance and regulations, definitions or explanations, standard operating procedures, and step-by-step instructions on its website. Contact information (names, phones, office locations) should also be included.

6. Website sections should be released as they are finished.

7. The committee believes it would be a good idea to continue their work for another quarter. The additional time would be used to select a single topic area, and execute the steps in the proposed project plan to develop and release an admin website. The project plan could then be revised as needed, including lessons learned during the actual development of a site that will be used by NPS staff and faculty.

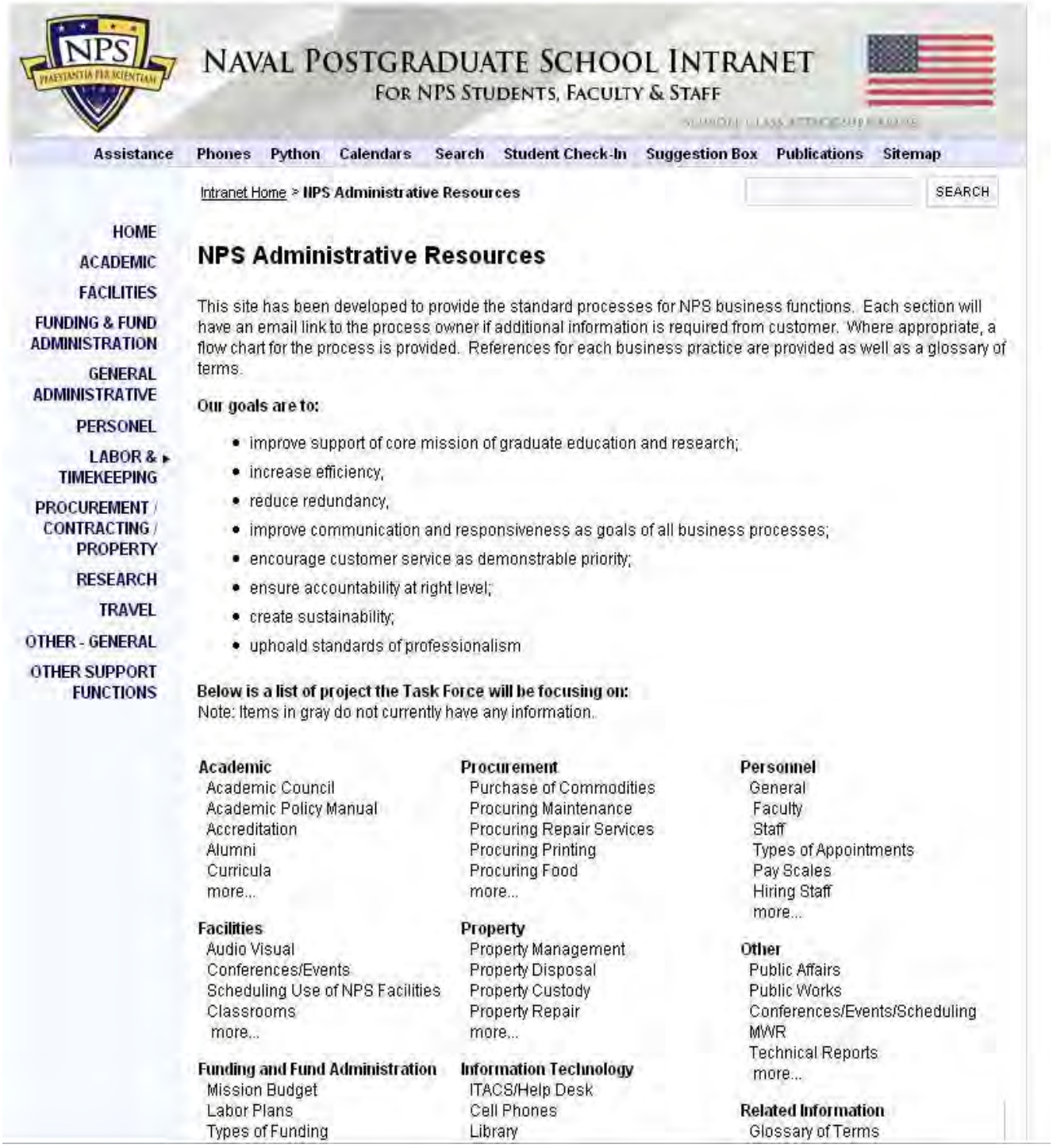
8. When it comes time to execute the project plan, hiring a professional project manager should be considered. Perhaps an NPS faculty member with relevant experience, or even an outside contractor could be retained. The committee feels that bringing in someone with the right skills and experience in project management would be critical to the success of the effort.

Website look and feel

The website should look professional, uncluttered, and direct, with helpful links such to policy guidance, 'who does what', process flowcharts, forms, sample documents, and other types of resource information.

Here are some sample web pages.

1. A sample web page for the home page of the administrative website:



NAVAL POSTGRADUATE SCHOOL INTRANET
FOR NPS STUDENTS, FACULTY & STAFF

Assistance Phones Python Calendars Search Student Check-In Suggestion Box Publications Sitemap

Intranet Home > NPS Administrative Resources

SEARCH

HOME
ACADEMIC
FACILITIES
FUNDING & FUND ADMINISTRATION
GENERAL ADMINISTRATIVE
PERSONEL
LABOR & TIMEKEEPING
PROCUREMENT / CONTRACTING / PROPERTY
RESEARCH
TRAVEL
OTHER - GENERAL
OTHER SUPPORT FUNCTIONS

NPS Administrative Resources

This site has been developed to provide the standard processes for NPS business functions. Each section will have an email link to the process owner if additional information is required from customer. Where appropriate, a flow chart for the process is provided. References for each business practice are provided as well as a glossary of terms.

Our goals are to:

- improve support of core mission of graduate education and research;
- increase efficiency;
- reduce redundancy;
- improve communication and responsiveness as goals of all business processes;
- encourage customer service as demonstrable priority;
- ensure accountability at right level;
- create sustainability;
- uphoald standards of professionalism

Below is a list of project the Task Force will be focusing on:
Note: Items in gray do not currently have any information.

Academic
Academic Council
Academic Policy Manual
Accreditation
Alumni
Curricula
more...

Facilities
Audio Visual
Conferences/Events
Scheduling Use of NPS Facilities
Classrooms
more...

Funding and Fund Administration
Mission Budget
Labor Plans
Types of Funding

Procurement
Purchase of Commodities
Procuring Maintenance
Procuring Repair Services
Procuring Printing
Procuring Food
more...

Property
Property Management
Property Disposal
Property Custody
Property Repair
more...

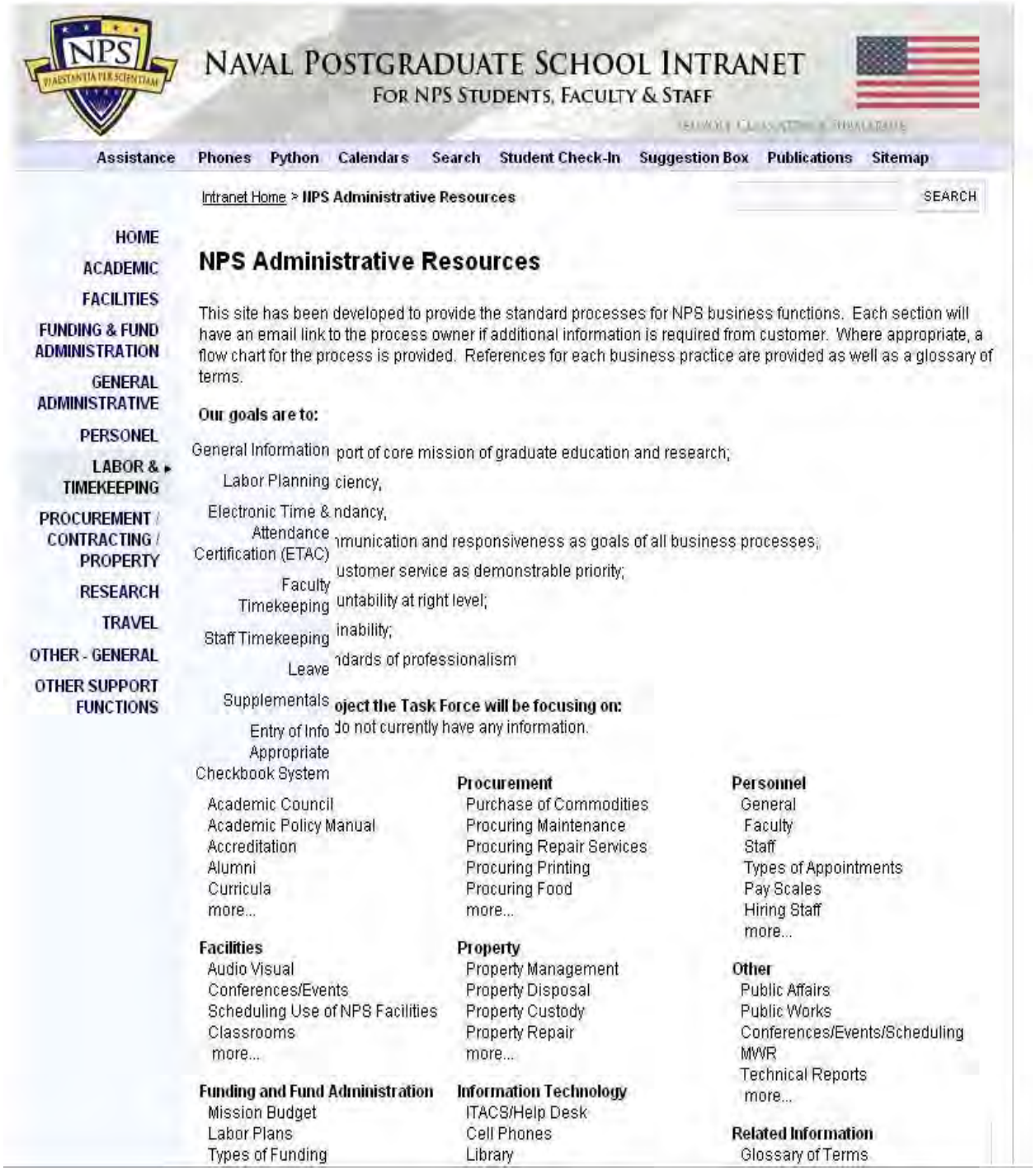
Information Technology
ITACS/Help Desk
Cell Phones
Library

Personnel
General
Faculty
Staff
Types of Appointments
Pay Scales
Hiring Staff
more...

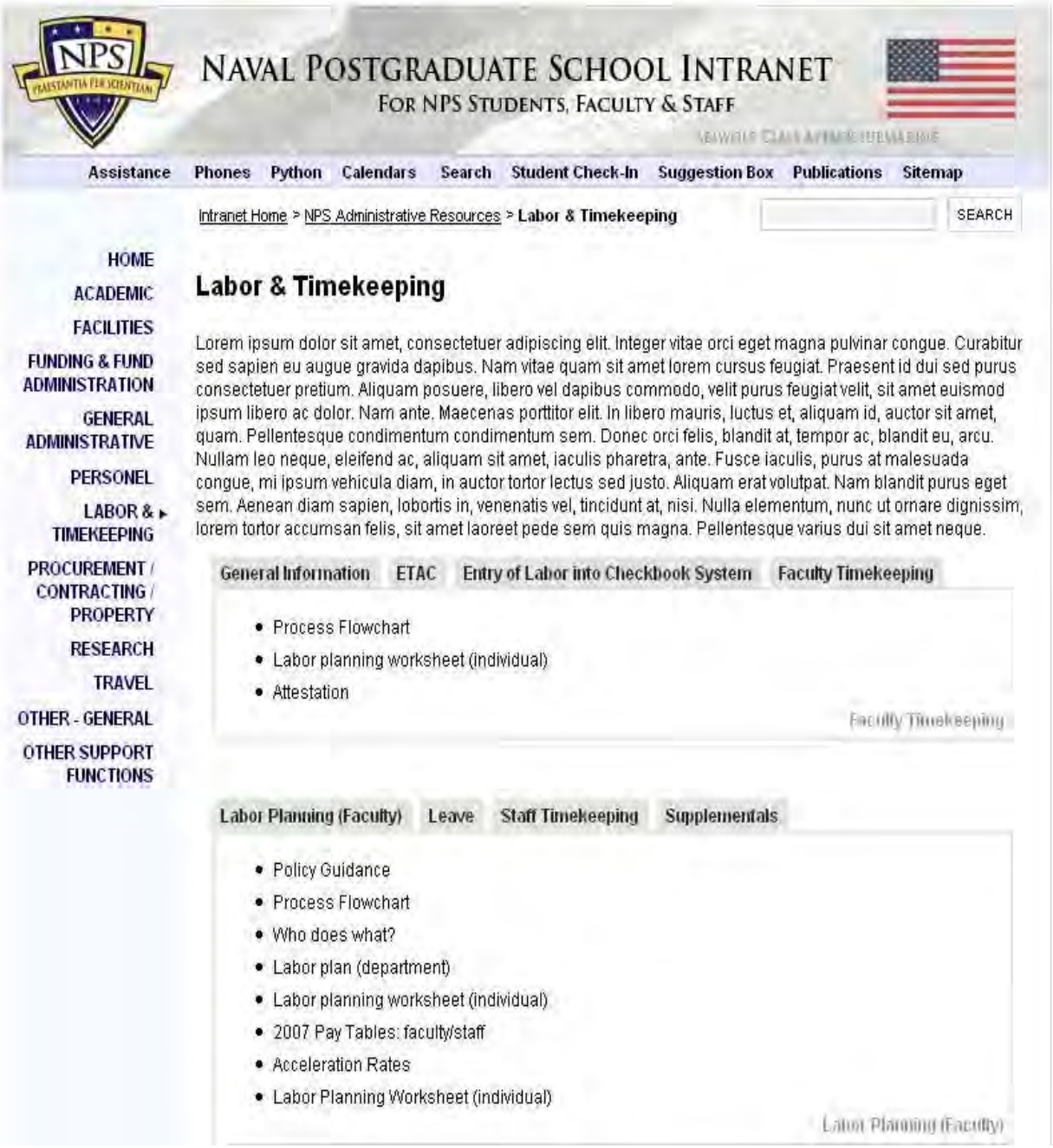
Other
Public Affairs
Public Works
Conferences/Events/Scheduling
MWR
Technical Reports
more...

Related Information
Glossary of Terms

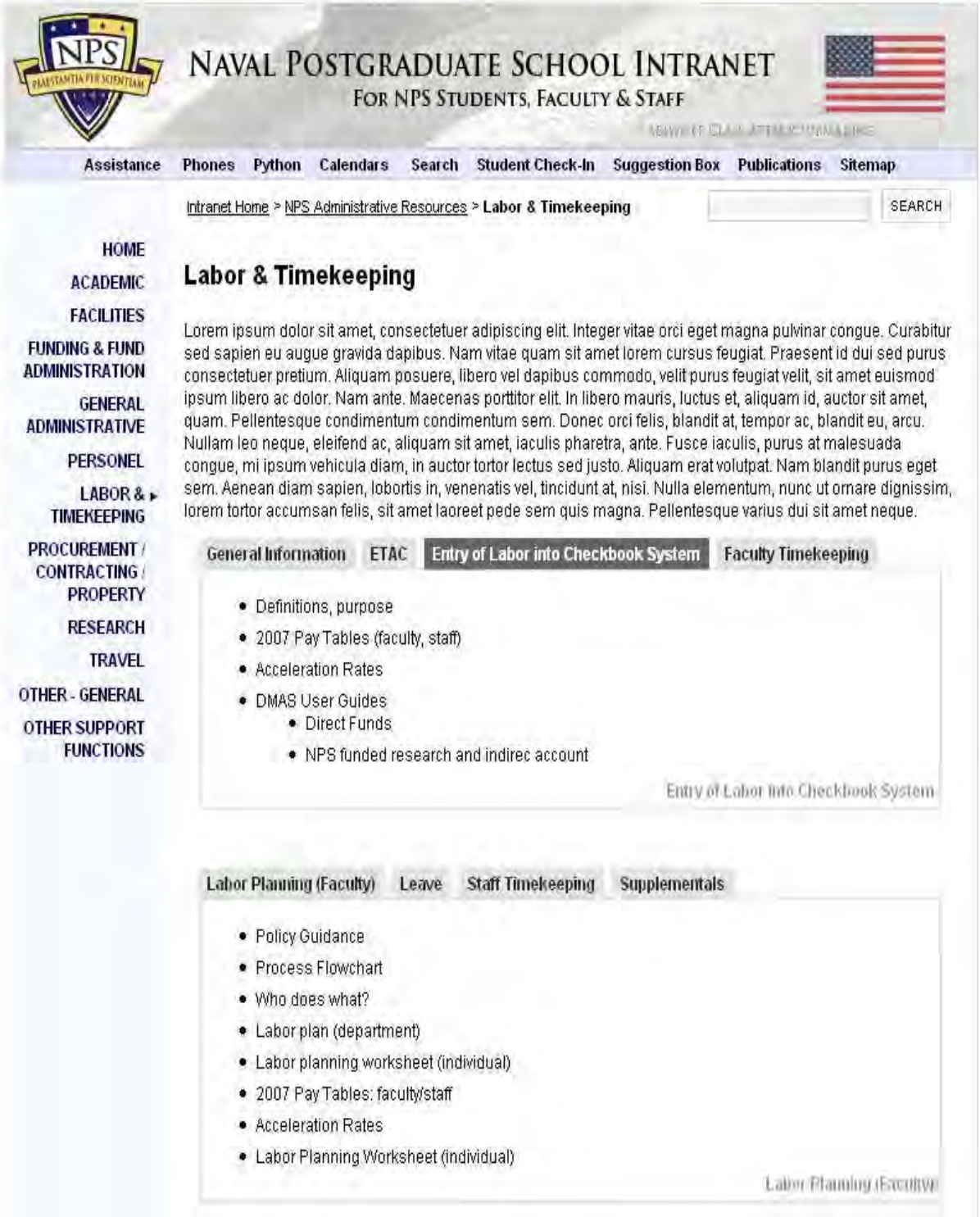
2. A sample web page for the home page of the administrative website, with the sub-categories for the Labor/Timekeeping displayed:



3. A sample web page for the home page of the Labor/Timekeeping page of the administrative website:



4. A sample web page for the home page of the Labor/Timekeeping page of the administrative website, with the links for the Entry of Labor into Checkbook System category:



Generally, text can be submitted to Web Operations in Word document format. During development, process owners and mapping-group members will communicate with web staff in cases where another format is preferred.

Project plan

As mentioned, the list of subject-matter areas to be included in the website is broken down into eleven areas. As each area is addressed (that is, content is identified, written, and organized), the following project plan should be followed. This work will be accomplished by process owners, assisted by group members and coordinating with ITACS web staff.

1. Within a general category, review topics and add or remove as needed. Group the topics logically for comprehension.
2. Create content for the opening page of the subject area. Provide policy guidance and regulations, descriptions, background information, introduction, and process or system flowcharts. Support organizations should include a section that defines who does what, along with contact information. The purpose of this page is to welcome the user and provide navigation to the information needed.
3. Organize the information in a simple, logical way with the user audience in mind. Include descriptions, explanations, step-by-step instructions, standard operating procedures (SOP), forms, and links to related topics and resources.
4. Identify existing content to be included in the organizational structure; review content and revise as needed.
5. For areas without existing content, create content to complete background, SOP, process flowcharts, etc.
6. Distribute draft site to users and incorporate feedback into site.
7. Release site to users and notify users of its availability. Provide tours of new sites at sessions open to all interested parties. Facilitate review of admin websites (and/or subsets) at appropriate training sessions offered by various entities at NPS.
8. After initial release of their own segments, process owners will assume ownership of their content. This includes updates and maintenance.

Please see the spreadsheet labeled Appendix A, which can be used to track project progress.

SOP and Process Mapping Group
Final Report - Content Development for the Administrative Web Pages
List of Appendices
12/21/07

Appendix A: Master List of Subjects and Project Plan

Appendix B: List of Administrative Websites Reviewed, Other Schools

Appendix C: Labor Process Flowchart

Appendix D: Mock Web Pages - Labor/Timekeeping

Appendix E: Financial Systems Flow

NAVAL POSTGRADUATE SCHOOL

CONTENT FOR BUSINESS and ADMINISTRATIVE PROCESSES WEBSITE

**Executed in close coordination with ITACS Web Operations*

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Academic/Students																								
Academic Council		Associate Provost - Academic Affairs																						
Academic Policy Manual		Associate Provost - Academic Affairs																						
Accreditation		Director of Institutional Research																						
Alumni		Director of Alumni Affairs																						
Curricula		Registrar																						
Admissions/Registrar		Registrar																						
Faculty Handbook		Director of Academic Planning																						
NPS Course Catalog		Registrar																						
Pink Book		Director of Academic Planning																						
~~NSTAR~~		Weatherford																						
Fellowships or Scholarship for Service		Shifflet																						
Points of Contact (POC)		Associate Provost - Academic Affairs																						
Program Officers		Associate Provost - Academic Affairs																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Curriculum Officers		Associate Provost - Academic Affairs																						
Program Managers		Associate Provost - Academic Affairs																						
Academic Associates		Associate Provost - Academic Affairs																						
Education Technicians		Associate Provost - Academic Affairs																						
Student Services		Associate Provost - Academic Affairs																						
Office of Continuous Learning		Director - Office of Continuous Learning																						
Students																								
Thesis Processing		Director - Research and Sponsored Programs Office																						
PhD Dissertation Processing		Director - Research and Sponsored Programs Office																						
Graduation		Associate Provost - Academic Affairs																						
Student Services		Associate Provost - Academic Affairs																						
Programs		Associate Provost - Academic Affairs																						
Registrar/Admissions		Registrar																						
Transcript Production		Registrar																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Facilities																								
Audio Visual		Associate Provost - Academic Affairs																						
Conferences/Events		Director of Institutional Research																						
Scheduling Use of NPS Facilities																								
Classrooms		Registrar																						
Labs		Registrar																						
Meeting Rooms		Director of Institutional Research																						
Conference Rooms		Director of Institutional Research																						
Banquet Facilities		Quality of Life Director																						
Recreational Facilities		Quality of Life Director																						
Tower Room																								
Quarterdeck																								
DL Facilities																								

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
VTC Rooms																								
Repair		Base Director																						
Maintenance		Base Director																						
Classrooms		Registrar																						
Scheduling		Registrar																						
Cleaning		Base Director																						
Request for Technology Support		Registrar																						
Equipment		Registrar																						
Audio Visual		Registrar																						
Public Works		Base Director																						
Conference Rooms		Director of Institutional Research																						
MWR (Morale, Education and Welfare)		Quality of Life Director																						
Protocol on Government Facility		Flag Secretary																						
Parking																								

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Building Monitors		Base Director																						
Emergency Services		Base Director																						
Police																								
Fire																								
Status of On-Going Campus Projects/Construction		Base Director																						
Gate Access		Flag Secretary																						
Space Utilization Plan		Base Director																						
Vistors																								
Gate Access		Flag Secretary																						
VIPs		Flag Secretary																						
BOQ		Flag Secretary																						
Public Works																								
Moving Furniture		Base Director																						
Maintenance		Base Director																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Repair		Base Director																						
Key Control/Locksmith		Base Director																						
Custodial		Base Director																						
Recreation		Quality of Life Director																						
Funding and Fund Administration																								
Mission Budget		Director of Academic Planning																						
Labor Plans		Director of Academic Planning																						
Types of Funding																								
Direct Funds (DT, NIFR, RIP, Workload Relief, DL)		Director of Academic Planning																						
Reimbursable Funds		Director - Research and Sponsored Programs Office																						
FMT		Deputy Comptroller																						
Tuition		Deputy Comptroller																						
Indirect		Director - Research and Sponsored Programs Office																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Gifts		Deputy Comptroller																						
Department Accounting of Funds		Academic Planning (D)/RSPO(B)																						
Funding Reports																								
DMAS		Direct accounts-ITACS/ NIFR and Indirect -RSPO																						
DORS		Deputy Comptroller																						
DORS/DMAS		RSPO																						
Lines of Accounting																								
Account Structure		Deputy Comptroller																						
Expense Elements		Deputy Comptroller																						
Expense Sub Codes in DMAS		RSPO																						
Funds Transfers																								
Direct		Director of Academic Planning																						
NIFR/RIP		Director - Research and Sponsored Programs Office																						
Indirect		Director - Research and Sponsored Programs Office																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Reimbursable		Director - Research and Sponsored Programs Office																						
Financial Systems																								
DORS	1	Deputy Comptroller																						
DMAS	1	RSPO																						
DORS/DMAS	1	RSPO																						
STARS	1	Deputy Comptroller																						
ETAC	1	Deputy Comptroller																						
CITIDIRECT	1	Deputy Comptroller																						
DTS	1	Travel Office																						
FAST DATA	1	Deputy Comptroller																						
Comptroller Budget Analyst Directory		Deputy Comptroller																						
SPFA Directory		RSPO																						
Other Funds Administrators Directory		Director of Academic Planning																						
Spending Cut-Offs		Deputy Comptroller																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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Spending Limitations		Deputy Comptroller																						
Funding Documents		Deputy Comptroller																						
General Administrative																								
Emergency Preparedness																								
Tracking of Personnel																								
Contact of Personnel																								
Personnaly Identifiable Information																								
NPS Organization Chart		Associate Provost - Academic Affairs																						
Organization Codes		Director of Academic Planning																						
Organization Directories		Associate Provost - Academic Affairs																						
NPS Strategic Plan		Associate Provost - Academic Affairs																						
NPS Annual Report		Director of Institutional Research																						
NPS SORM		Associate Provost - Academic Affairs																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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NPS Calendars		Associate Provost - Academic Affairs																						
NPS Map		Flag Secretary																						
NPS Instructions/Notices		Flag Secretary																						
NPS Decision Memoranda		Flag Secretary																						
Correspondence		Flag Secretary																						
Files		Flag Secretary																						
Signature Authority/By Direction Authority		Flag Secretary																						
Staffing Command Correspondence		Flag Secretary																						
ID Cards		Flag Secretary																						
Car Decals																								
Campus Mail																								
Navy																								
Dictionary of Common Navy Terms		Flag Secretary																						
Navy Military Ranks		Flag Secretary																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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Flag Admin		Flag Secretary																						
Protocol		Flag Secretary																						
Systems at NPS																								
ETAC	1	Timekeeping																						
CITIDIRECT		Deputy Comptroller																						
DTS		Travel Office																						
DORS	1	Deputy Comptroller																						
DMAS	1	Direct accounts-ITACS/ NIFR and Indirect -RSPO																						
DMAS/DORS	1	RSPO																						
MODERN		Human Resources																						
eKM		Flag Secretary																						
NPS Training Site		Laura Cole																						
PYTHON		Registrar																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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Personnel																								
General		Human Resources																						
Personnel Actions	1	Human Resources																						
Awards	1	Human Resources																						
~~Timekeeping~~	1	Timekeeping																						
~~Labor Plans~~	1	Director of Academic Planning																						
J-1 VISAs	1	Academic Planning																						
Security Clearances	1	Security Manager																						
Standards of Conduct	1	Human Resources																						
Ethics	1	NPS Attorney																						
Performance Reviews	1	Human Resources																						
Training	1	Laura Cole																						
Off-Duty Employment	1	Human Resources																						
Benefits	1	Human Resources																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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Job Opportunities	1	Human Resources																						
Reassignment	1	Human Resources																						
Inprocessing/Outprocessing	1	Human Resources																						
Retirement	1	Human Resources																						
Equal Employment Opportunity	1	Human Resources																						
VISAs for Foreign Personnel & Students (J-1)	1	Academic Planning																						
Off-Duty Employment	1	Human Resources																						
Dress Code	1	Human Resources																						
Human Resources Office	1	Human Resources																						
Incoming Personnel Orientations	1	Human Resources																						
Mandatory Training	1	Human Resources																						
Education and Training Opportunities	1	Laura Cole																						
Duty Hours	1	Human Resources																						
Faculty																								

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Types of Appointments	1	Director of Academic Planning																						
Step/Pay Scale	1	Director of Academic Planning																						
Hiring of Faculty	1	Director of Academic Planning																						
Pay/Promotion/Tenure	1	Director of Academic Planning																						
Intersessionals	1	Director of Academic Planning																						
Sabbaticals	1	Director of Academic Planning																						
Faculty CV	1	Director - Research and Sponsored Programs Office																						
Faculty Handbook	1	Director of Academic Planning																						
IPAs (Intergovernmental Personnel Act) Agreements	1	Director - Research and Sponsored Programs Office																						
Post-Doctoral Programs	1	Director - Research and Sponsored Programs Office																						
Staff																								
Employee Status	1	Human Resources																						
GS Pay Scale	1	Human Resources																						
WG Pay Scale	1	Human Resources																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Hiring/Recruiting/Evaulating/Disciplining Staff	1	Human Resources																						
National Security Personnel System (NSPS)	1	Human Resources/Laura Cole																						
Position Descriptions	1	Human Resources																						
Benefits	1	Human Resources																						
Student Hiring Programs	1	Human Resources																						
Military Personnel																								
Rank by Service		Flag Secretary																						
Civilian Equivalency		Flag Secretary																						
Student Muster System		Dean of Students																						
Labor and Timekeeping																								
General Information	1	Timekeeping																						
Labor Planning (faculty)	1	Director of Academic Planning																						
Electronic Time and Attendance Certification (ETAC) - timekeeping system	1	Timekeeping																						
Faculty Timekeeping	1	Timekeeping																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Staff Timekeeping	1	Timekeeping																						
Staff Timesheets	1	Timekeeping																						
Leave Slips/Requests, form SF71	1	Timekeeping																						
Official Time Entry into Official System	1	Timekeeping																						
Post Certification Adjustments (Supplementals)	1	Timekeeping/ Academic Planning																						
Entry of planned and executed labor into appropriate checkbook system	1	Direct accounts- ITACS/ NIFR and Indirect -RSPO																						
Procurement/Contracting/Property																								
Contracts	1	Director - Research and Sponsored Programs Office																						
General Information	1	Procurement Oversight Board																						
Purchase of Commodities	1	Procurement Oversight Board																						
Process	1	Procurement Oversight Board																						
Purchase Request Form	1	Procurement Oversight Board																						
Sole Source Justifications	1	Procurement Oversight Board																						
Credit Card Procurement	1	Procurement Oversight Board																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Request for Contractual Procurement	1	Procurement Oversight Board																						
NPS/FISC Cut-Offs	1	Procurement Oversight Board																						
Purchase of Services	1	Director - Research and Sponsored Programs Office																						
Introduction/Flowchart of Process/Timelines	1	Director - Research and Sponsored Programs Office																						
Completing a Cost Estimate	1	Director - Research and Sponsored Programs Office																						
Funding a Contract	1	Director - Research and Sponsored Programs Office																						
Contracts for Classified Work	1	Director - Research and Sponsored Programs Office																						
Contracts for Non-US Citizens	1	Director - Research and Sponsored Programs Office																						
Contracts Outside of CONUS	1	Director - Research and Sponsored Programs Office																						
Invoicing	1	Director - Research and Sponsored Programs Office																						
ID Cards for Contractors	1	Director - Research and Sponsored Programs Office																						
Business Cards for Contractors	1	Director - Research and Sponsored Programs Office																						
Unauthorized Commitments	1	Director - Research and Sponsored Programs Office																						
Contractor Do's and Don'ts	1	Director - Research and Sponsored Programs Office																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
FAQs	1	Director - Research and Sponsored Programs Office																						
Glossary of Terms	1	Director - Research and Sponsored Programs Office																						
Forms	1	Director - Research and Sponsored Programs Office																						
IDIQ Contracts	1	Director - Research and Sponsored Programs Office																						
Seaport-E	1	Director - Research and Sponsored Programs Office																						
Procuring Furniture	1	Procurement Oversight Board																						
Procuring Maintenance	1	Procurement Oversight Board																						
Procuring Repair Services	1	Procurement Oversight Board																						
Procuring Printing	1	Procurement Oversight Board																						
Procuring Food	1	Procurement Oversight Board																						
Procuring Training	1	Procurement Oversight Board																						
Procuring Conference Fees	1	Procurement Oversight Board																						
Procuring Fed Ex	1	Procurement Oversight Board																						
Purchasing Computers	1	Procurement Oversight Board																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Procuring Supplies	1	Procurement Oversight Board																						
Page Publication Charges	1	Procurement Oversight Board																						
Honoraria	1	Deputy Comptroller																						
Procuring Use of Off-Campus Facilities	1	Procurement Oversight Board																						
Procuring Use of NPS Facilities	1	Procurement Oversight Board																						
Unauthorized Commitments	1	Procurement Oversight Board																						
Spending Limits	1	Procurement Oversight Board																						
Vendors	1	Procurement Oversight Board																						
DoD Emall	1	Procurement Oversight Board																						
Credit Cards	1	Procurement Oversight Board																						
Travel Card	1	Procurement Oversight Board																						
IMPAC Card	1	Procurement Oversight Board																						
Government Purchase Card	1	Procurement Oversight Board																						
APC	1	Procurement Oversight Board																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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AO	1	Procurement Oversight Board																						
Purchasing Agent Directory	1	Procurement Oversight Board																						
Property	1	Base Director																						
Property Management	1	Base Director																						
Property Disposal	1	Base Director																						
Property Custody	1	Base Director																						
Property Repair	1	Base Director																						
Storage	1	Base Director																						
Warehouse	1	Base Director																						
Moving	1	Base Director																						
Excess Property	1	Base Director																						
Delivery	1	Base Director																						

Research

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Policies/Instructions		Director - Research and Sponsored Programs Office																						
Proposals		Director - Research and Sponsored Programs Office																						
Interim Accounts		Director - Research and Sponsored Programs Office																						
NIFR		Director - Research and Sponsored Programs Office																						
RIP		Director - Research and Sponsored Programs Office																						
Indirect Costs		Director - Research and Sponsored Programs Office																						
Use of Human Subjects		Director - Research and Sponsored Programs Office																						
Student Fellowships		Director - Research and Sponsored Programs Office																						
Technology Transfer		Director - Research and Sponsored Programs Office																						
Working with Industry		Director - Research and Sponsored Programs Office																						
Post-Doc Programs		Director - Research and Sponsored Programs Office																						
Contracts and Grants		Director - Research and Sponsored Programs Office																						
Research Publications		Director - Research and Sponsored Programs Office																						
Technical Reports		Director - Research and Sponsored Programs Office																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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Faculty Resume Website		Director - Research and Sponsored Programs Office																						
RSPO/Department Admin Interaction		Director - Research and Sponsored Programs Office																						
Travel																								
General Information		Travel Office																						
Defense Travel System		Travel Office																						
Domestic Travel		Travel Office																						
Invitational Travel Orders		Travel Office																						
Foreign Travel		Travel Office																						
Fund Cites		Travel Office																						
Gift of Travel		Travel Office																						
Approval Authority		Travel Office																						
Individual Force Protection Plans		Security Manager																						
Travel Vouchers		Travel Office																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
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Conference Registration Fees		Travel Office																						
SATO		Travel Office																						
Help Desk		Travel Office																						
Training		Travel Office																						
Government Travel Card		Travel Office																						
Other- General																								
NPS Forms/Templates		BPC																						
Standard Operating Procedures		BPC																						
Glossary of Terms		BPC																						
Common Acronymns		BPC																						
Other Support Functions																								
Information Technology																								

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
ITACS/Help Desk		Director - ITACS																						
Telephones		Director - ITACS																						
Classroom Technology		Director - ITACS																						
Purchasing Computers		Director - ITACS																						
Legal																								
Ethics		NPS Attorney																						
Privacy Act Compliance		NPS Attorney																						
Gifts of Travel		NPS Attorney																						
Off Duty Employment		NPS Attorney																						
Financial Disclosure		NPS Attorney																						
Library		Associate Provost for Library and Information Resources																						
Morale Welfare and Recreation (MWR)																								
Catering		Quality of Life Director																						
MWR Facilities		Quality of Life Director																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Equipment		Quality of Life Director																						
Events		Quality of Life Director																						
Gym		Quality of Life Director																						
Exchange		Quality of Life Director																						
Gas Station		Quality of Life Director																						
NPS Foundation		Director of Institutional Research																						
Public Affairs/Institutional Advancement																								
NPS in the Media		Director of Institutional Research																						
NPS Publications		Director of Institutional Research																						
Marketing and Communications		Director of Institutional Research																						
Photographer		Director of Institutional Research																						
Security																								
Police Department		Security Manager																						
Physical (Base) Security		Security Manager																						

Activity/Process/Resource	Priority	Process Owner	SOP PM Rep.	Est. Time to Complete	Admin Website Project		1: Review/revise topics		*2: Establish structure for 'home' page		3: Identify existing content for each topic		4: Identify gaps in content; create new content		*5: ITACS places content into web structure		*6: Review draft site and adjust as needed.		7: Facilitate user testing; incorporate feedback as deemed appropriate.		*8: Release site; provide orientation to potential users.		*9. Process owner assumes ownership of site	
					Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date	Start Date	Finish Date
Security Clearances		Security Manager																						
Secure Facilities		Security Manager																						
Individual Force Protection Plans		Security Manager																						

SOP and Process Mapping Group
Appendix B
List of Administrative Websites Reviewed -Other Schools
12/15/07

Sonoma State University:
http://www.sonoma.edu/university/facstaff.shtml

California State University, Sacramento:
http://www.csus.edu/aba/

Oregon State University:
http://oregonstate.edu/fa/businessaffairs/index.php

Massachusetts Institute of Technology:
http://mit.edu/offices/
http://web.mit.edu/offices/category/admin-resources.html#links
http://controllers.mit.edu/procurement/
http://controllers.mit.edu/site/procurement/policies_procedures/cancellation_close_termination
http://controllers.mit.edu/site/procurement/policies_procedures/policies_and_procedure_manual
http://controllers.mit.edu/site/procurement/policies_procedures/procurement_card

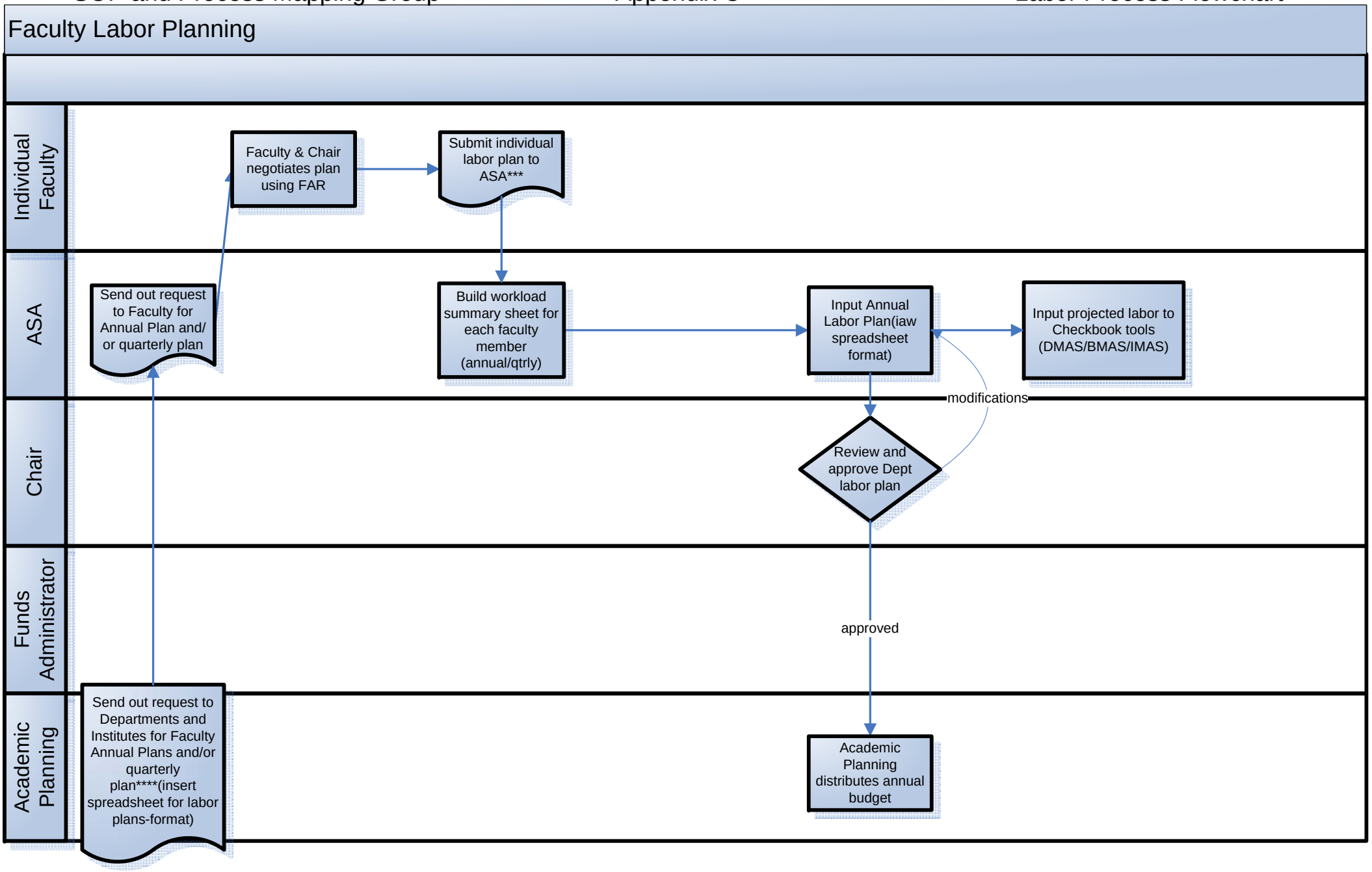
Stanford University:
http://stanford.edu/
http://stanford.edu/home/working/
http://stanford.edu/home/administration/dept.html
http://purchasing.stanford.edu/
http://purchasing.stanford.edu/howtobuy/
http://stanford.edu/home/atoz/letterf.html
http://financialgateway.stanford.edu/
http://financialgateway.stanford.edu/staff/index.html
http://financialgateway.stanford.edu/staff/finauthority/index.html
http://financialgateway.stanford.edu/staff/finauthority/quick_steps/grant_revoke_auth.html

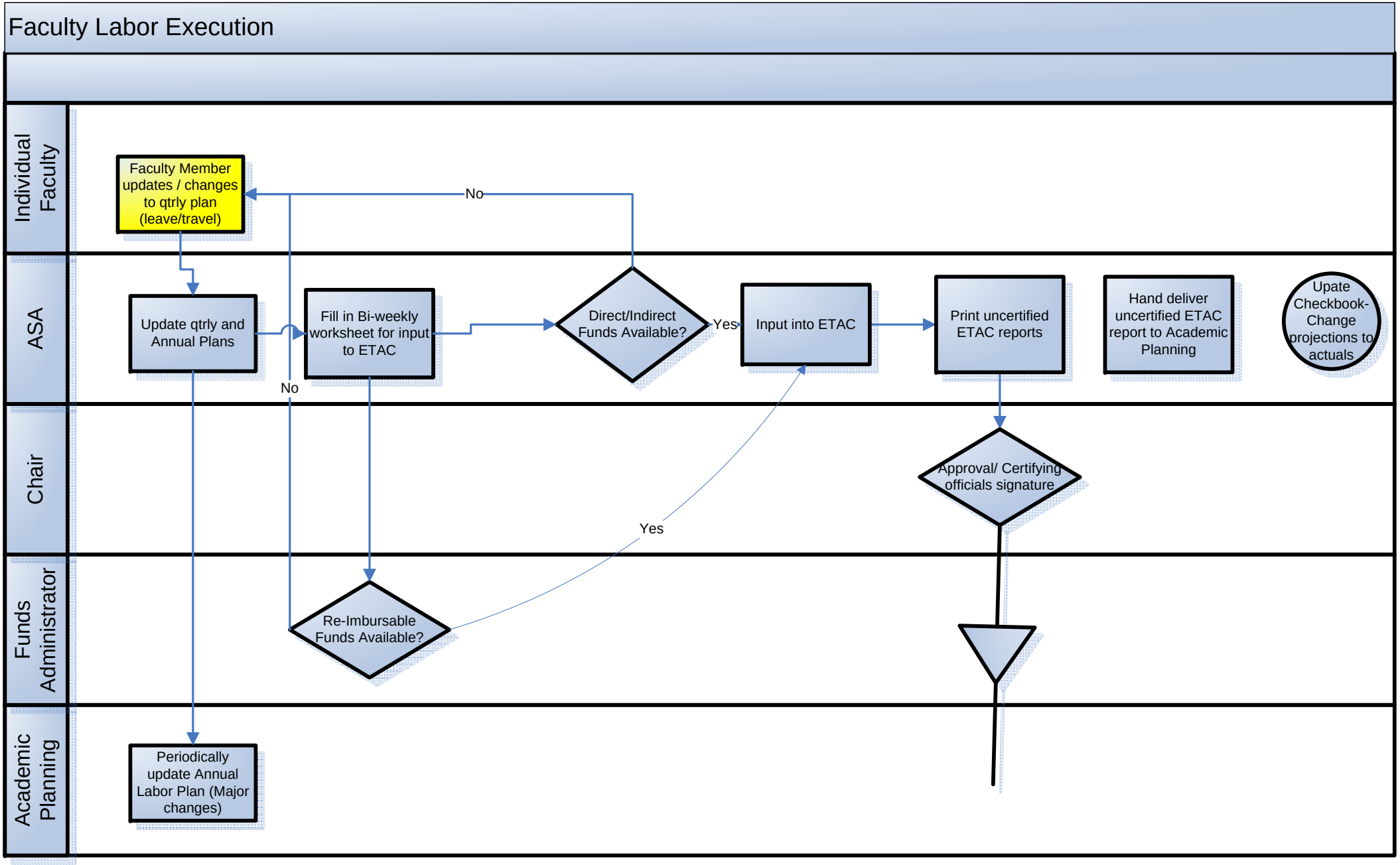
University of California, Berkeley:
http://administration.berkeley.edu/
http://businessservices.berkeley.edu/HtmFiles/ProcurementHome.htm
http://businessservices.berkeley.edu/HtmFiles/HowDoIBuy.htm
http://businessservices.berkeley.edu/HtmFiles/HighValuePRO.htm
http://businessservices.berkeley.edu/HtmFiles/CampusBuyerProgram.htm

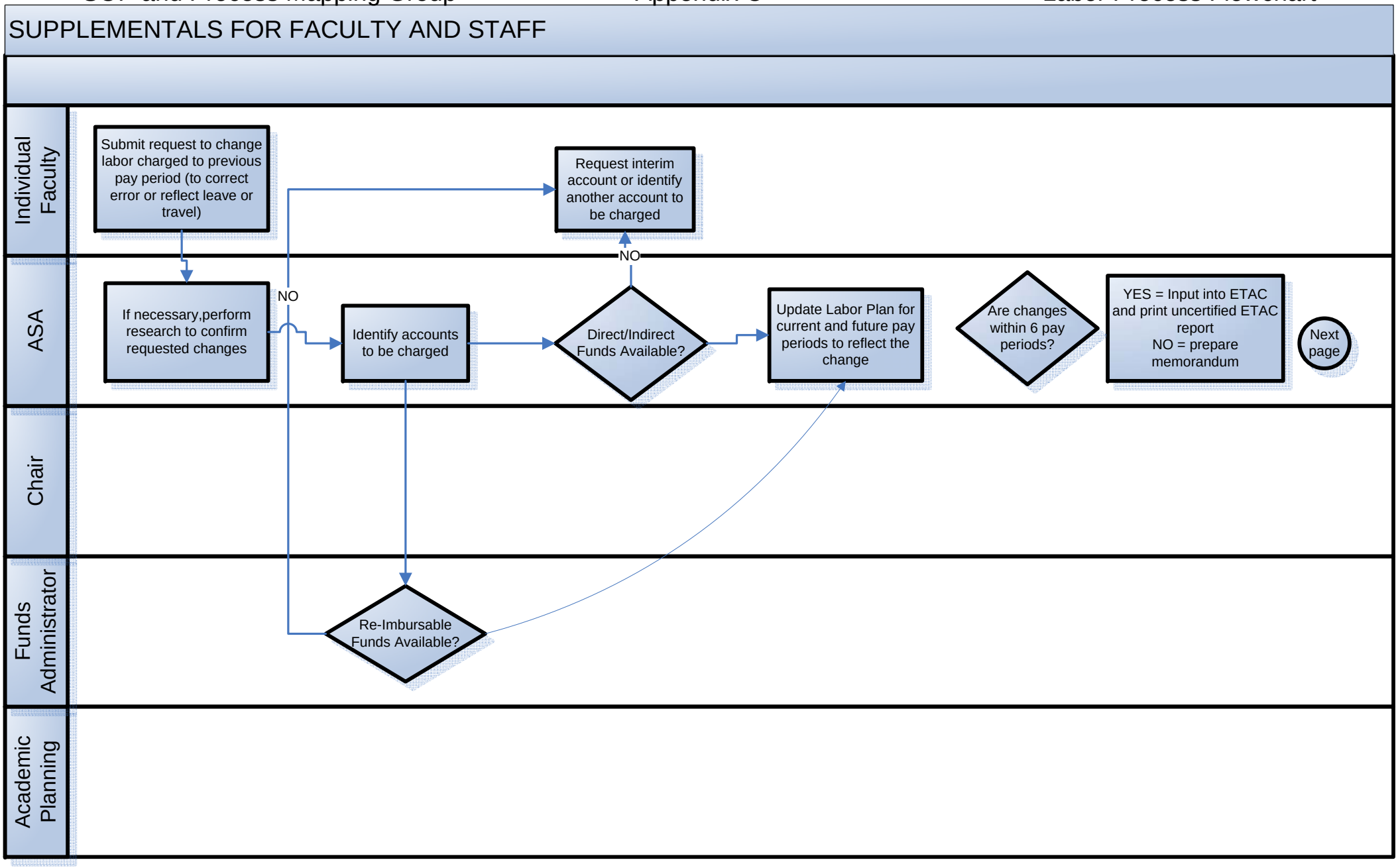
http://www.bai.berkeley.edu/bfs.htm
http://www.bai.berkeley.edu/Support.htm
http://www.bai.berkeley.edu/gl/default.htm

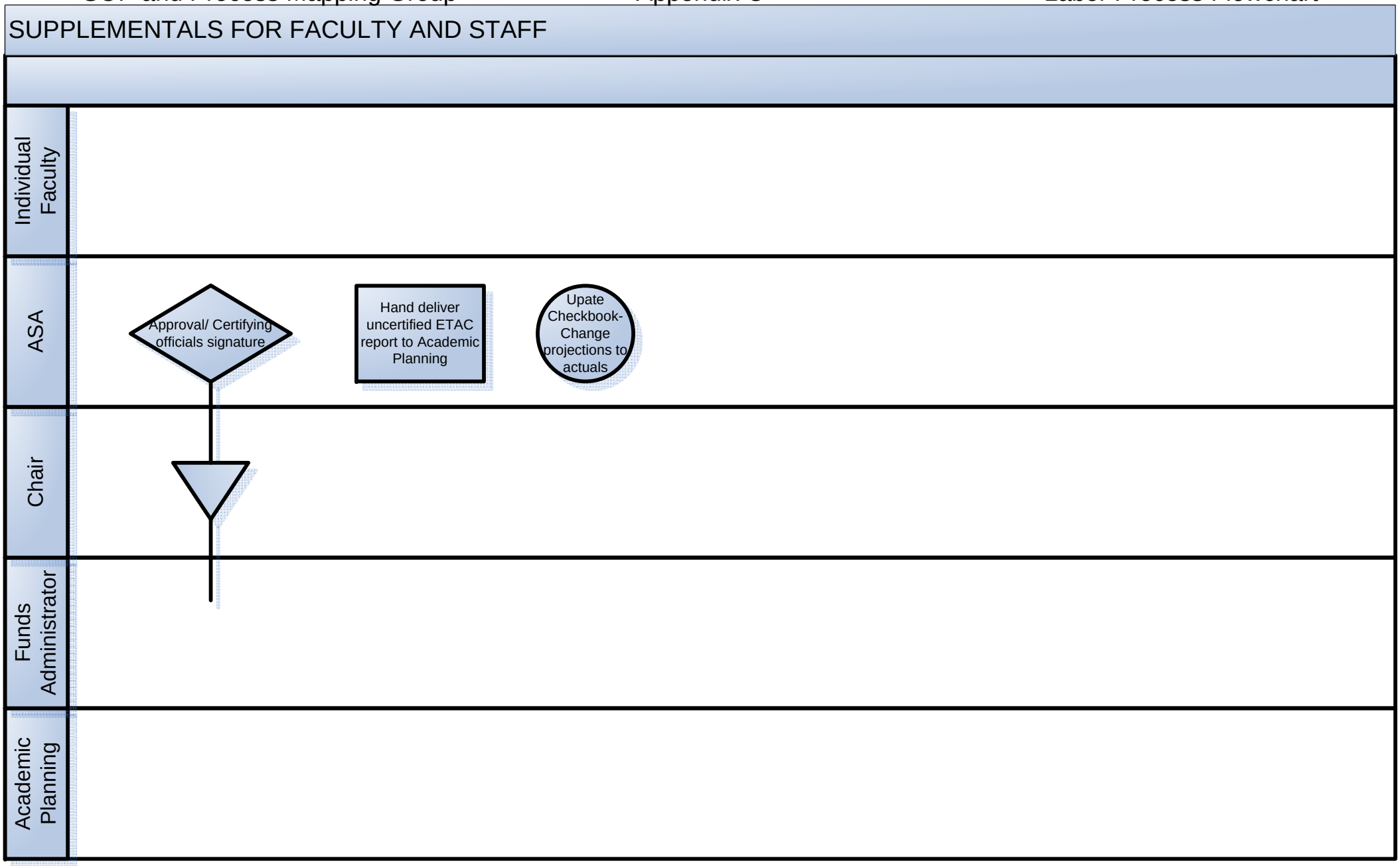
http://www.bai.berkeley.edu/gl/FAQ.htm
http://www.bai.berkeley.edu/gl/accounts.html
http://www.bai.berkeley.edu/gl/accounts.html#Accounting

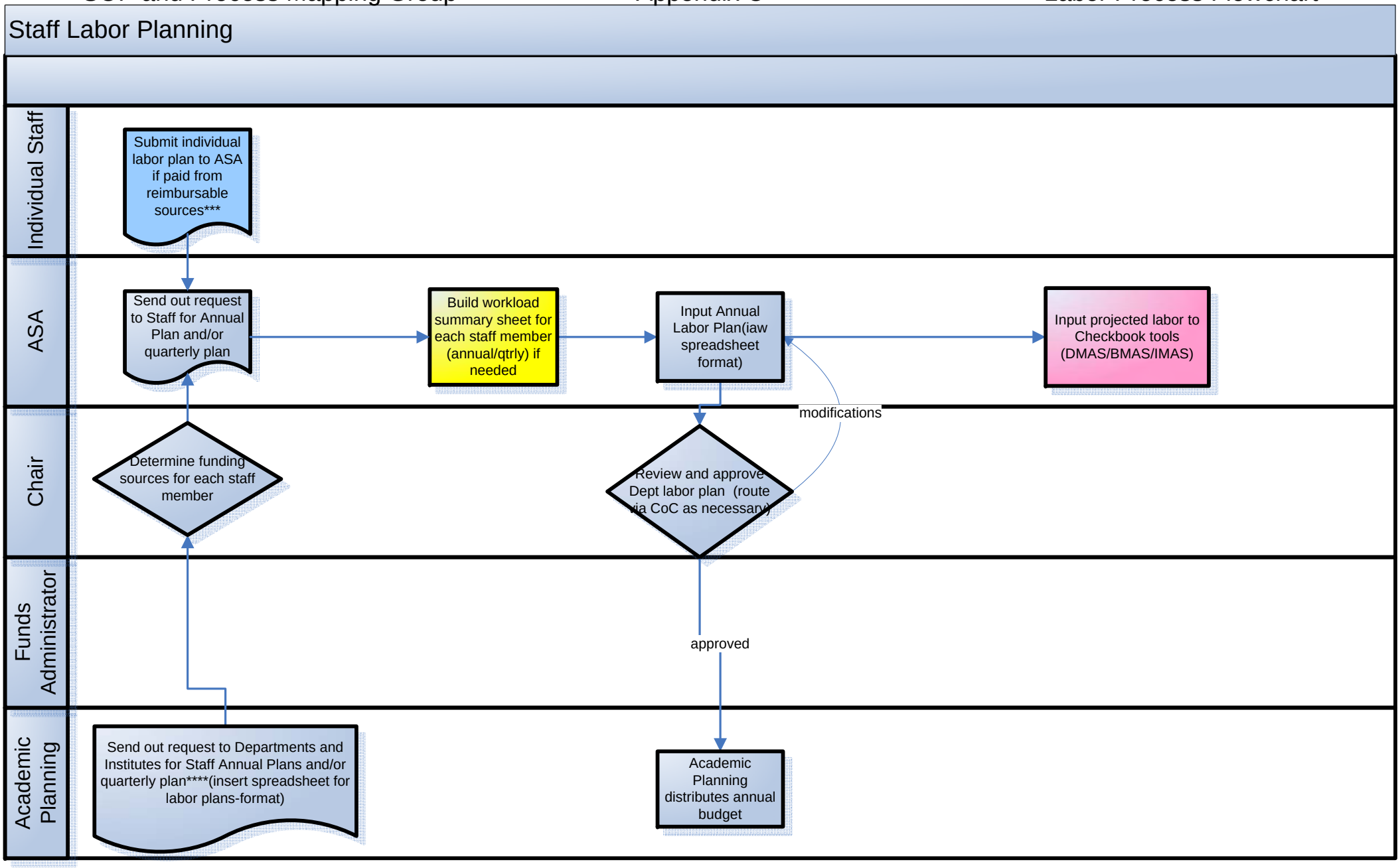
http://financialoperations.berkeley.edu/
http://travel.berkeley.edu/
http://travel.berkeley.edu/CorpCard/CorporateCard.htm

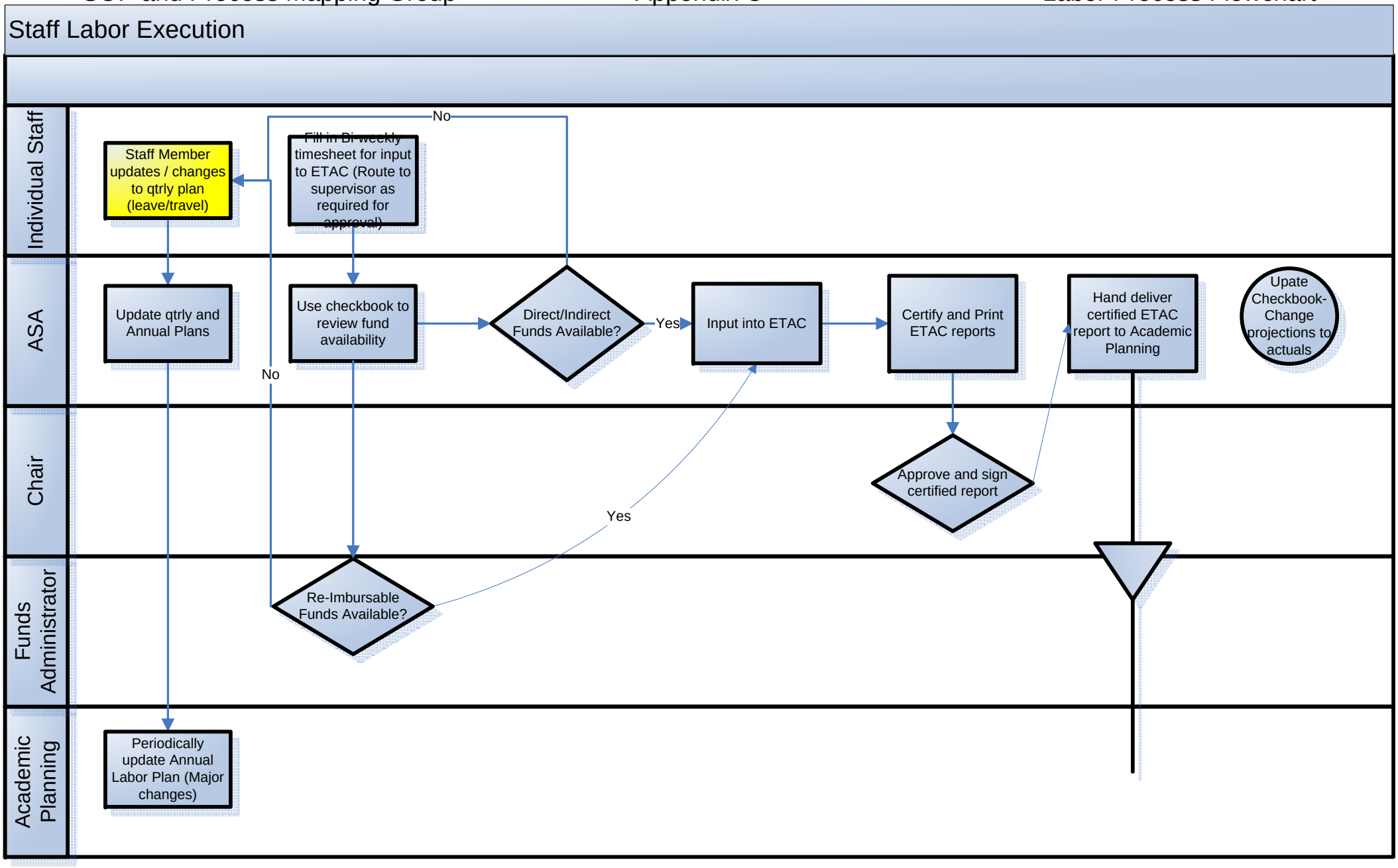

Faculty Labor Planning
Individual Faculty
ASA
Chair
Funds Administrator
Academic Planning
Faculty & Chair negotiates plan using FAR
Submit individual labor plan to ASA***
Send out request to Faculty for Annual Plan and/ or quarterly plan
Build workload summary sheet for each faculty member (annual/qtrly)
Input Annual Labor Plan(iaw spreadsheet format)
Input projected labor to Checkbook tools (DMAS/BMAS/IMAS)
modifications
Review and approve Dept labor plan
approved
Send out request to Departments and Institutes for Faculty Annual Plans and/or quarterly plan****(insert spreadsheet for labor plans-format)
Academic Planning distributes annual budget


Faculty Labor Execution
Individual Faculty
ASA
Chair
Funds Administrator
Academic Planning
Faculty Member updates / changes to qtrly plan (leave/travel)
No
Update qtrly and Annual Plans
Fill in Bi-weekly worksheet for input to ETAC
Direct/Indirect Funds Available?
Yes
Input into ETAC
Print uncertified ETAC reports
Hand deliver uncertified ETAC report to Academic Planning
Upate Checkbook-Change projections to actuals
No
Approval/ Certifying officials signature
Yes
Re-Imbursable Funds Available?
Periodically update Annual Labor Plan (Major changes)


SUPPLEMENTALS FOR FACULTY AND STAFF
Individual Faculty
ASA
Chair
Funds Administrator
Academic Planning
Submit request to change labor charged to previous pay period (to correct error or reflect leave or travel)
Request interim account or identify another account to be charged
NO
If necessary,perform research to confirm requested changes
NO
Identify accounts to be charged
Direct/Indirect Funds Available?
Update Labor Plan for current and future pay periods to reflect the change
Are changes within 6 pay periods?
YES = Input into ETAC and print uncertified ETAC report
NO = prepare memorandum
Next page
Re-Imbursable Funds Available?


SUPPLEMENTALS FOR FACULTY AND STAFF
Individual Faculty
ASA
Chair
Funds Administrator
Academic Planning
Approval/ Certifying officials signature
Hand deliver uncertified ETAC report to Academic Planning
Upate Checkbook- Change projections to actuals


Staff Labor Planning
Individual Staff
ASA
Chair
Funds Administrator
Academic Planning
Submit individual labor plan to ASA if paid from reimbursable sources***
Send out request to Staff for Annual Plan and/or quarterly plan
Build workload summary sheet for each staff member (annual/qtrly) if needed
Input Annual Labor Plan(iaw spreadsheet format)
Input projected labor to Checkbook tools (DMAS/BMAS/IMAS)
modifications
Determine funding sources for each staff member
Review and approve Dept labor plan (route via CoC as necessary)
approved
Send out request to Departments and Institutes for Staff Annual Plans and/or quarterly plan****(insert spreadsheet for labor plans-format)
Academic Planning distributes annual budget


Staff Labor Execution
Individual Staff
ASA
Chair
Funds Administrator
Academic Planning
Staff Member updates / changes to qtrly plan (leave/travel)
Fill in Bi-weekly timesheet for input to ETAC (Route to supervisor as required for approval)
No
Update qtrly and Annual Plans
Use checkbook to review fund availability
Direct/Indirect Funds Available?
Yes
Input into ETAC
Certify and Print ETAC reports
Hand deliver certified ETAC report to Academic Planning
Upate Checkbook-Change projections to actuals
No
Approve and sign certified report
Yes
Re-Imbursable Funds Available?
Periodically update Annual Labor Plan (Major changes)

NAVAL POSTGRADUATE SCHOOL INTRANET

FOR NPS STUDENTS, FACULTY & STAFF

Assistance | Phones | Python | Calendars | Search | Student Check-In | Suggestion Box | Publications | Sitemap

Intranet Home > NPS Administrative Resources

SEARCH

- HOME
- ACADEMIC
- FACILITIES
- FUNDING & FUND ADMINISTRATION
- GENERAL ADMINISTRATIVE
- PERSONEL
- LABOR & TIMEKEEPING
- PROCUREMENT / CONTRACTING / PROPERTY
- RESEARCH
- TRAVEL
- OTHER - GENERAL
- OTHER SUPPORT FUNCTIONS

NPS Administrative Resources

This site has been developed to provide the standard processes for NPS business functions. Each section will have an email link to the process owner if additional information is required from customer. Where appropriate, a flow chart for the process is provided. References for each business practice are provided as well as a glossary of terms.

Our goals are to:

- improve support of core mission of graduate education and research;
- increase efficiency,
- reduce redundancy,
- improve communication and responsiveness as goals of all business processes;
- encourage customer service as demonstrable priority;
- ensure accountability at right level;
- create sustainability;
- uphoald standards of professionalism

Below is a list of project the Task Force will be focusing on:
Note: Items in gray do not currently have any information.

Academic
Academic Council
Academic Policy Manual
Accreditation
Alumni
Curricula
more...

Facilities
Audio Visual
Conferences/Events
Scheduling Use of NPS Facilities
Classrooms
more...

Funding and Fund Administration
Mission Budget
Labor Plans
Types of Funding

Procurement
Purchase of Commodities
Procuring Maintenance
Procuring Repair Services
Procuring Printing
Procuring Food
more...

Property
Property Management
Property Disposal
Property Custody
Property Repair
more...

Information Technology
ITACS/Help Desk
Cell Phones
Library

Personnel
General
Faculty
Staff
Types of Appointments
Pay Scales
Hiring Staff
more...

Other
Public Affairs
Public Works
Conferences/Events/Scheduling
MWR
Technical Reports
more...

Related Information
Glossary of Terms

NAVAL POSTGRADUATE SCHOOL INTRANET

FOR NPS STUDENTS, FACULTY & STAFF

Assistance Phones Python Calendars Search Student Check-In Suggestion Box Publications Sitemap

Intranet Home > NPS Administrative Resources SEARCH

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FACILITIES
FUNDING & FUND ADMINISTRATION
GENERAL ADMINISTRATIVE
PERSONEL
LABOR & TIMEKEEPING
PROCUREMENT / CONTRACTING / PROPERTY
RESEARCH
TRAVEL
OTHER - GENERAL
OTHER SUPPORT FUNCTIONS

NPS Administrative Resources

This site has been developed to provide the standard processes for NPS business functions. Each section will have an email link to the process owner if additional information is required from customer. Where appropriate, a flow chart for the process is provided. References for each business practice are provided as well as a glossary of terms.

Our goals are to:

General Information
Labor Planning
Electronic Time & Attendance Certification (ETAC)
Faculty Timekeeping
Staff Timekeeping
Leave
Supplementals
Entry of Info Appropriate Checkbook System

port of core mission of graduate education and research;
ciency,
ndancy,
mmunication and responsiveness as goals of all business processes;
ustomer service as demonstrable priority;
untability at right level;
inability;
ndards of professionalism

oject the Task Force will be focusing on:
do not currently have any information.

Academic Council
Academic Policy Manual
Accreditation
Alumni
Curricula
more...

Facilities
Audio Visual
Conferences/Events
Scheduling Use of NPS Facilities
Classrooms
more...

Funding and Fund Administration
Mission Budget
Labor Plans
Types of Funding

Procurement
Purchase of Commodities
Procuring Maintenance
Procuring Repair Services
Procuring Printing
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Intranet Home > NPS Administrative Resources > **Labor & Timekeeping** SEARCH

- HOME
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- FACILITIES
- FUNDING & FUND ADMINISTRATION
- GENERAL ADMINISTRATIVE
- PERSONEL
- LABOR & TIMEKEEPING ▸
- PROCUREMENT / CONTRACTING / PROPERTY
- RESEARCH
- TRAVEL
- OTHER - GENERAL
- OTHER SUPPORT FUNCTIONS

Labor & Timekeeping

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General Information | **ETAC** | **Entry of Labor into Checkbook System** | **Faculty Timekeeping**

- Process Flowchart
- Labor planning worksheet (individual)
- Attestation

Faculty Timekeeping

Labor Planning (Faculty) | **Leave** | **Staff Timekeeping** | **Supplementals**

- Policy Guidance
- Process Flowchart
- Who does what?
- Labor plan (department)
- Labor planning worksheet (individual)
- 2007 Pay Tables: faculty/staff
- Acceleration Rates
- Labor Planning Worksheet (individual)

Labor Planning (Faculty)

NAVAL POSTGRADUATE SCHOOL INTRANET

FOR NPS STUDENTS, FACULTY & STAFF

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PERSONEL
LABOR & TIMEKEEPING ▸
PROCUREMENT / CONTRACTING / PROPERTY
RESEARCH
TRAVEL
OTHER - GENERAL
OTHER SUPPORT FUNCTIONS

Labor & Timekeeping

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General Information | ETAC | **Entry of Labor into Checkbook System** | Faculty Timekeeping

- Definitions, purpose
- 2007 Pay Tables (faculty, staff)
- Acceleration Rates
- DMAS User Guides
  - Direct Funds
  - NPS funded research and indirec account

Entry of Labor into Checkbook System

Labor Planning (Faculty) | Leave | Staff Timekeeping | Supplementals

- Policy Guidance
- Process Flowchart
- Who does what?
- Labor plan (department)
- Labor planning worksheet (individual)
- 2007 Pay Tables: faculty/staff
- Acceleration Rates
- Labor Planning Worksheet (individual)

Labor Planning (Faculty)

NAVAL POSTGRADUATE SCHOOL

Financial Systems Flow

29 November 2007

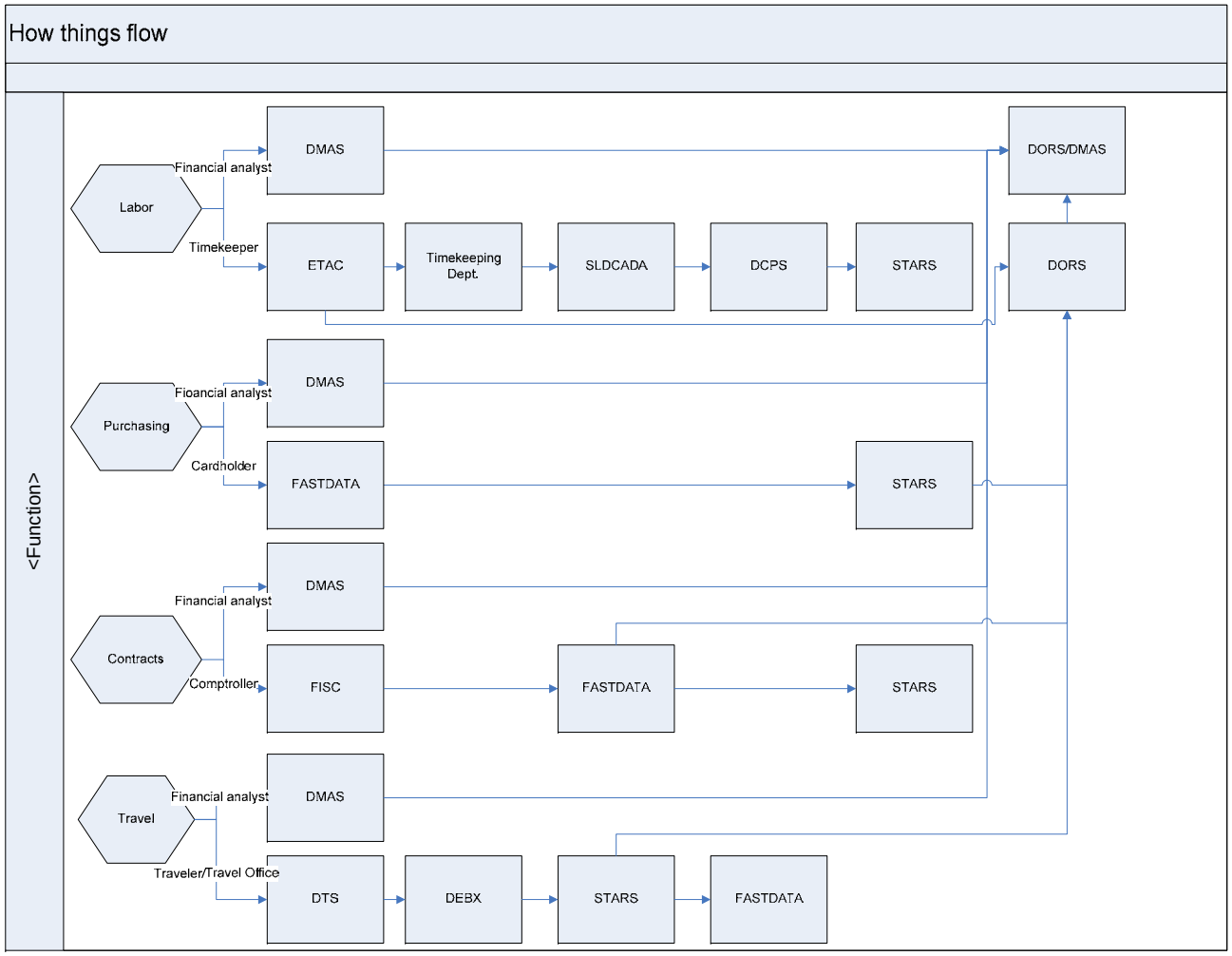
NAVAL POSTGRADUATE SCHOOL

I. The Overall Process

- Labor
- Purchasing
- Contracts
- Travel

NAVAL POSTGRADUATE SCHOOL

How Things Flow



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II. Labor

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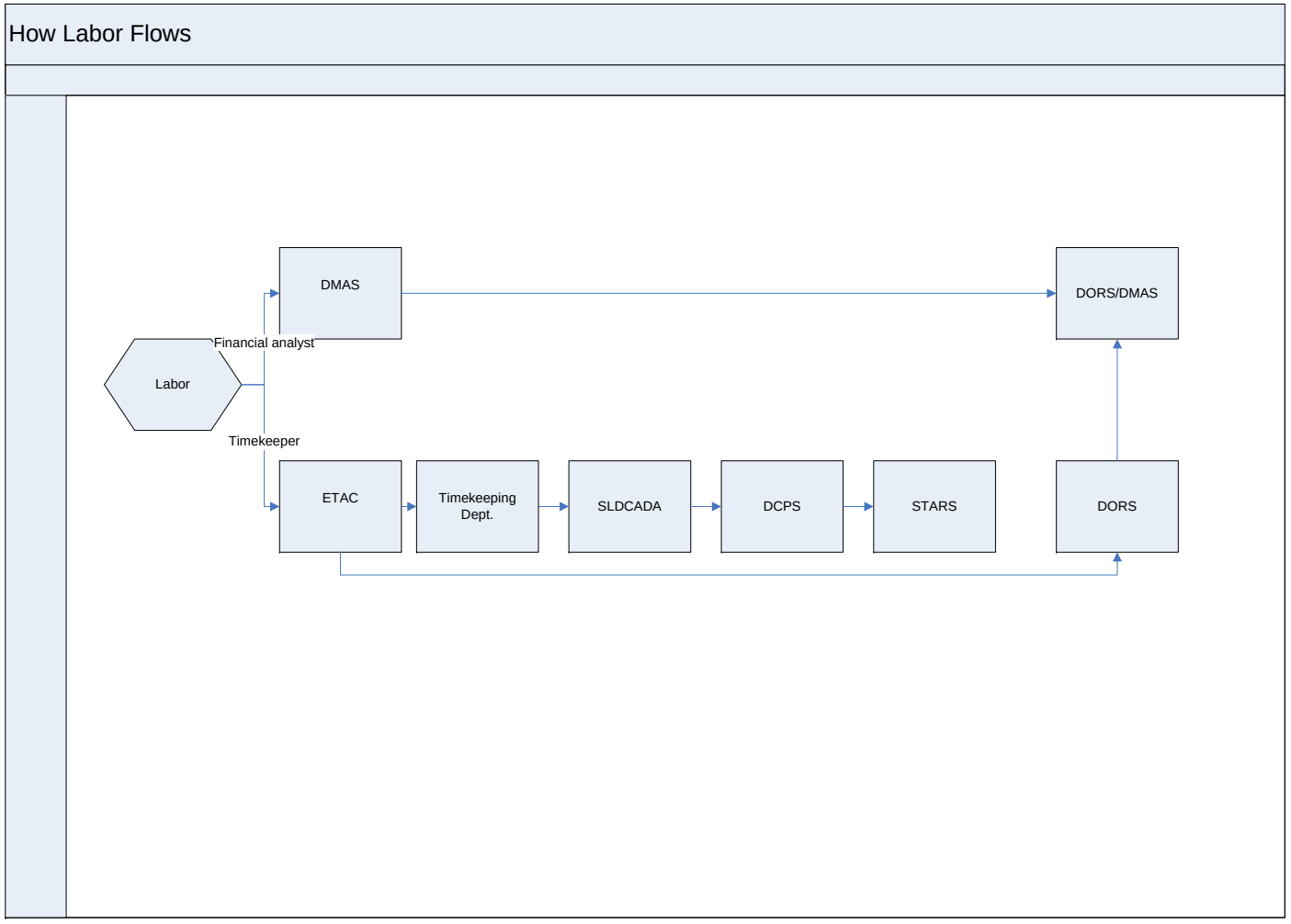
How Labor Flows



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How Labor Works

- Dept. financial analysts load data into DMAS
- DMAS data flows into DORS/DMAS
- Dept. timekeepers load data into ETAC (same as below)
- ETAC data flows to DORS
- DORS data flows to DORS/DMAS

- Dept. timekeepers load data into ETAC (same as above)
- Timekeeping Dept. reviews ETAC data, then inputs data into SLDCADA
- SLDCADA is uploaded automatically into DCPS
- DCPS initiates payroll via DFAS
- DCPS uploads data into STARS

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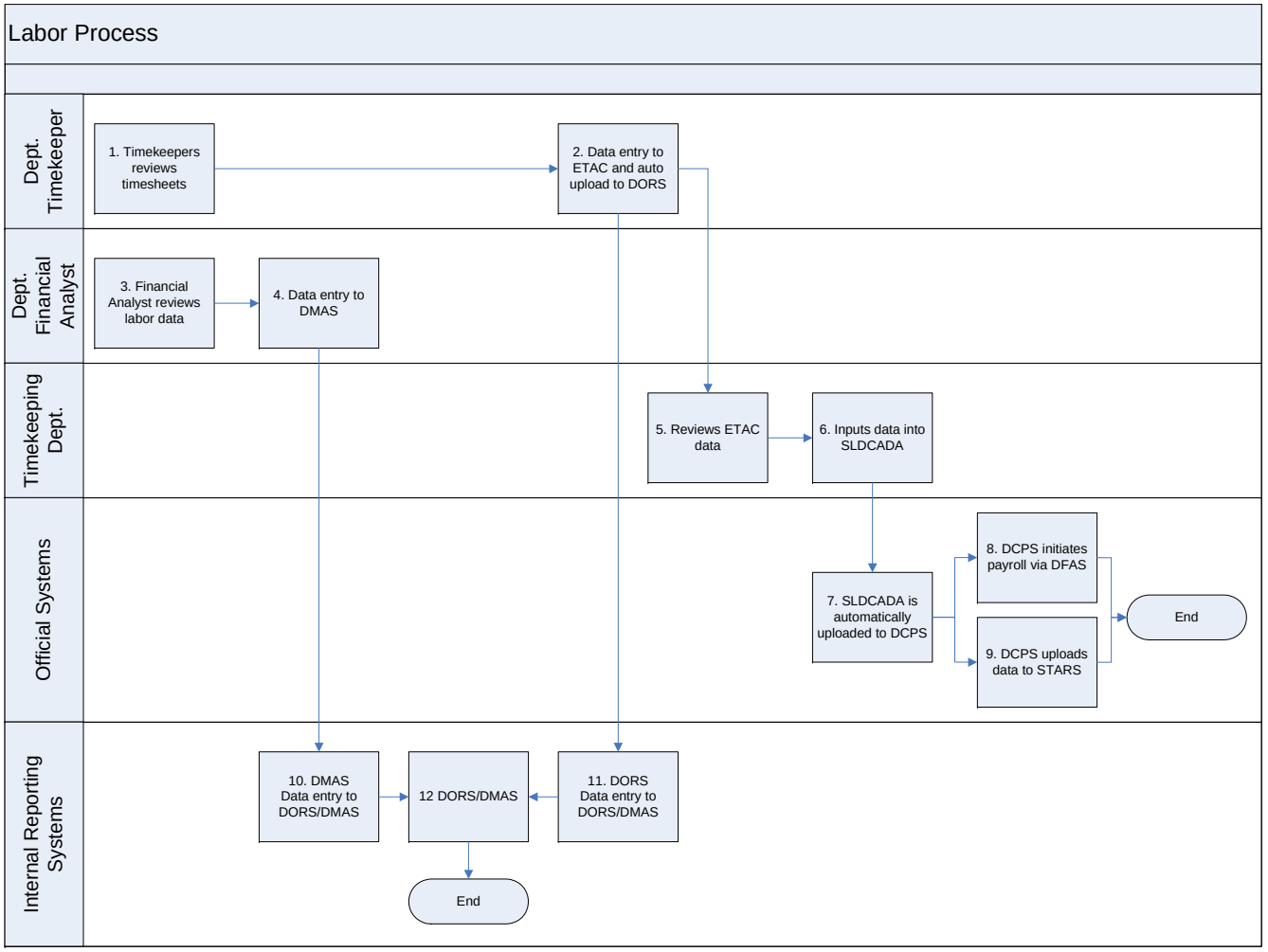
Labor Process



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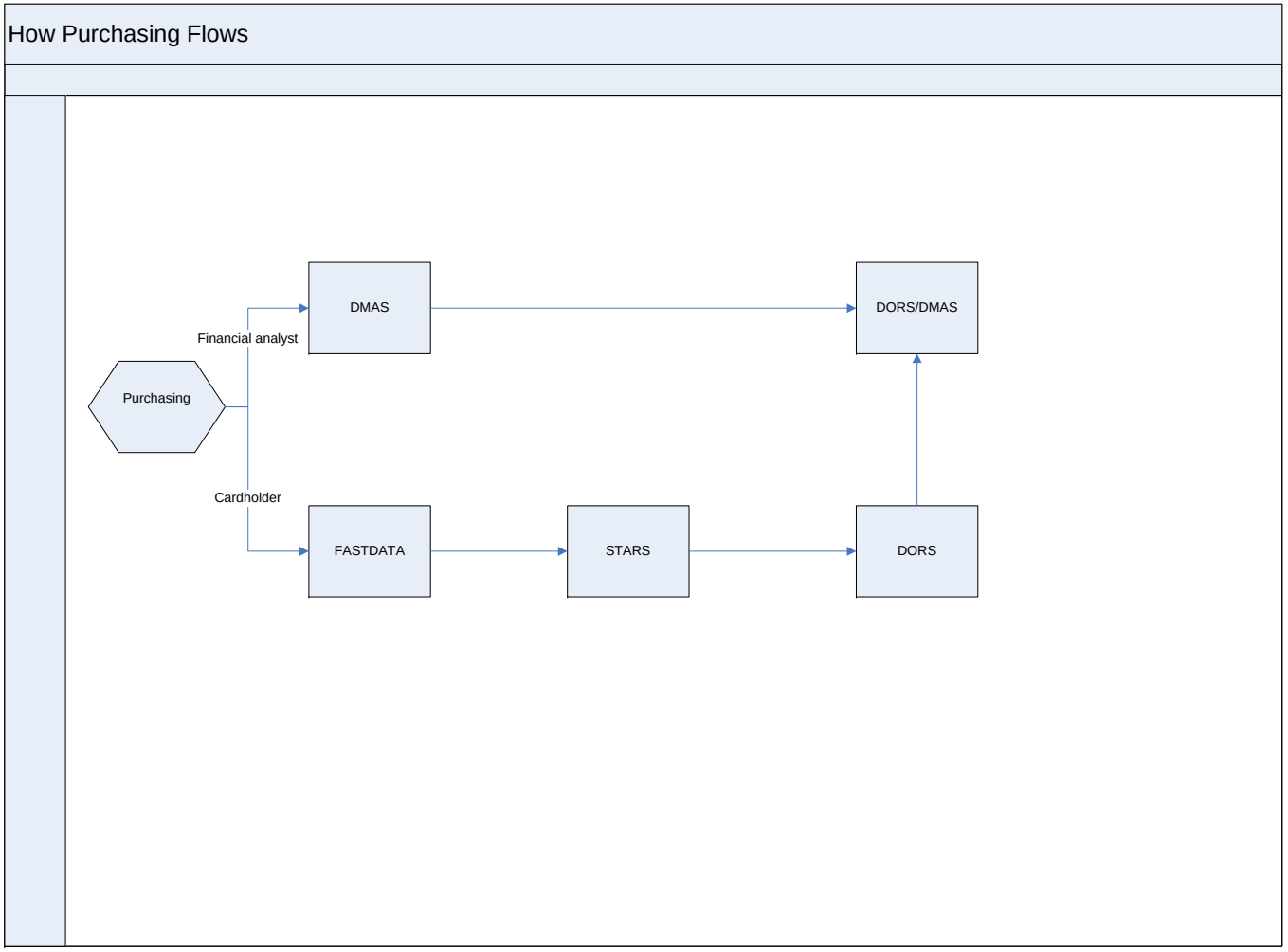
III. Purchasing

NAVAL POSTGRADUATE SCHOOL

How Purchasing Flows



NAVAL POSTGRADUATE SCHOOL

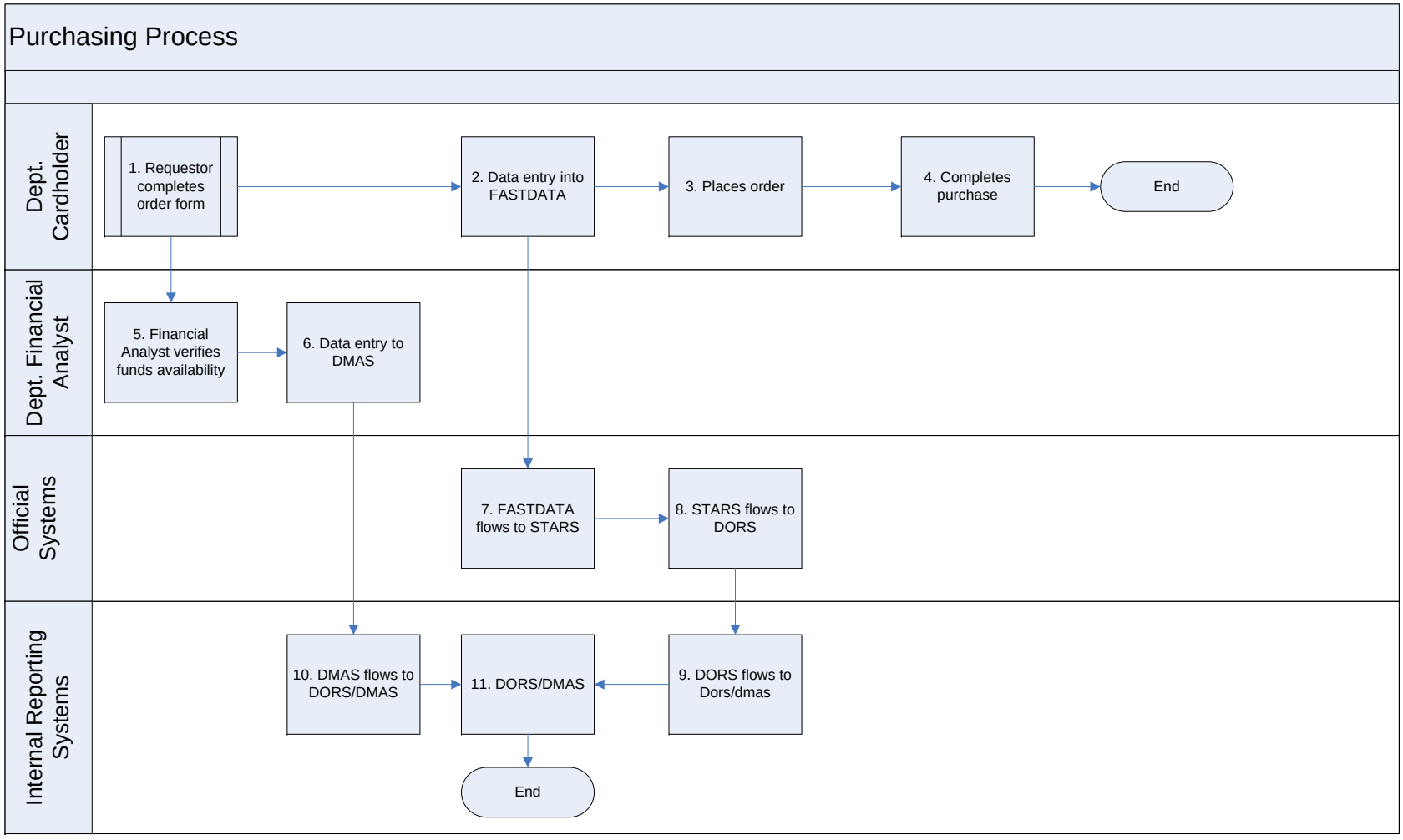
How Purchasing Works

- Dept. financial analysts load data into DMAS
- DMAS data flows into DORS/DMAS

- Dept. cardholder loads data into FASTDATA
- FASTDATA is uploaded by Comptroller to STARS
- STARS is downloaded to DORS
- DORS flows to DORS/DMAS

NAVAL POSTGRADUATE SCHOOL

Purchasing Process



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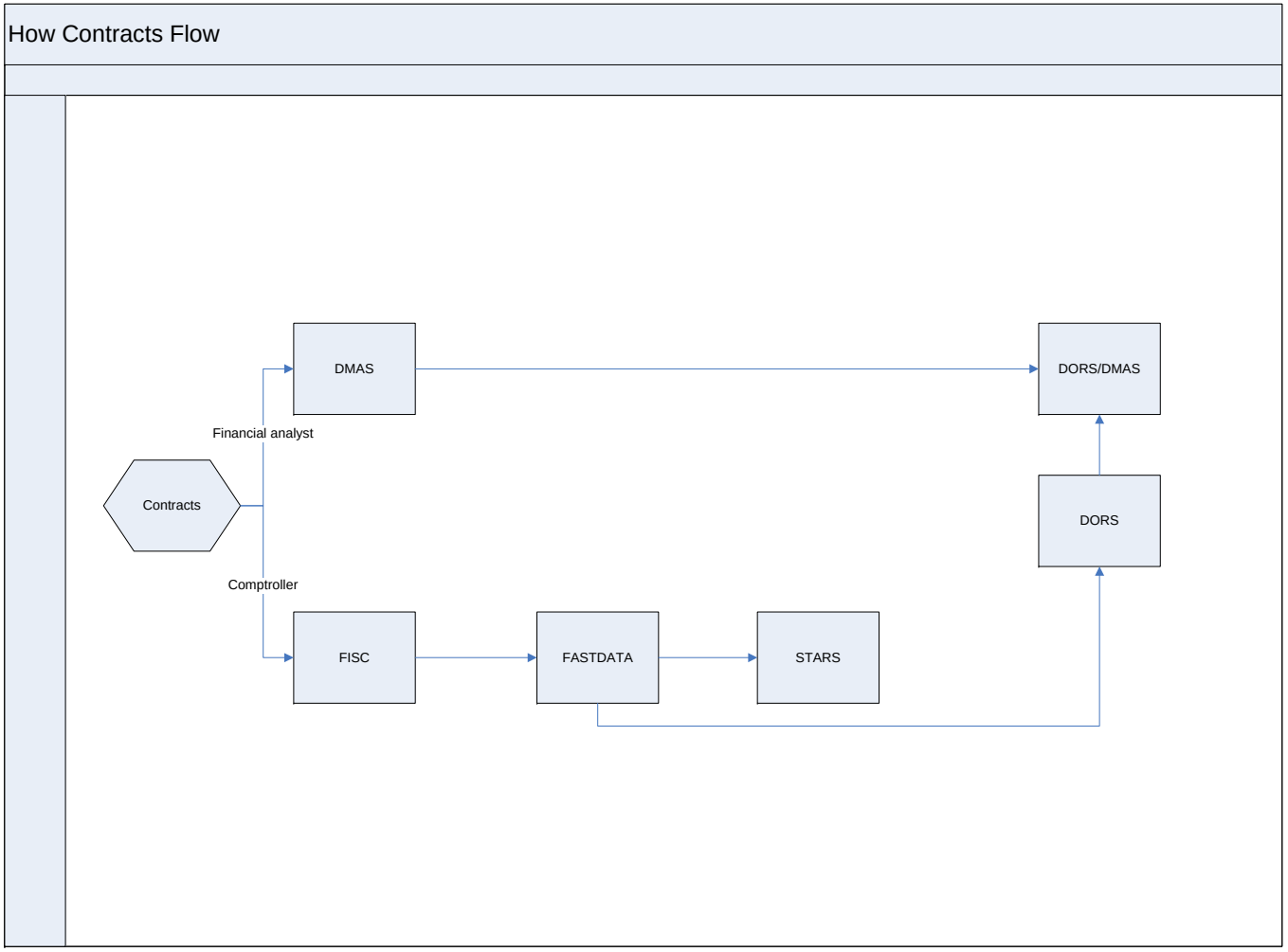
IV. Contracts

NAVAL POSTGRADUATE SCHOOL

How Contracts Flow



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How Contracting Works

- Requestor prepares Standard Form (SF) 2276
- Information and costs are input into DMAS by Financial Analyst
- Requestor emails completed form to Comptroller
- Comptroller faxes data to Fleet and Industrial Supply Center (FISC)
- FISC reviews request
- If FISC approves, it forwards information to Comptroller
- Comptroller inputs to FASTDATA
- FASTDATA uploads to STARS
- FASTDATA uploads to DORS
- DORS and DMAS upload to DORS/DMAS

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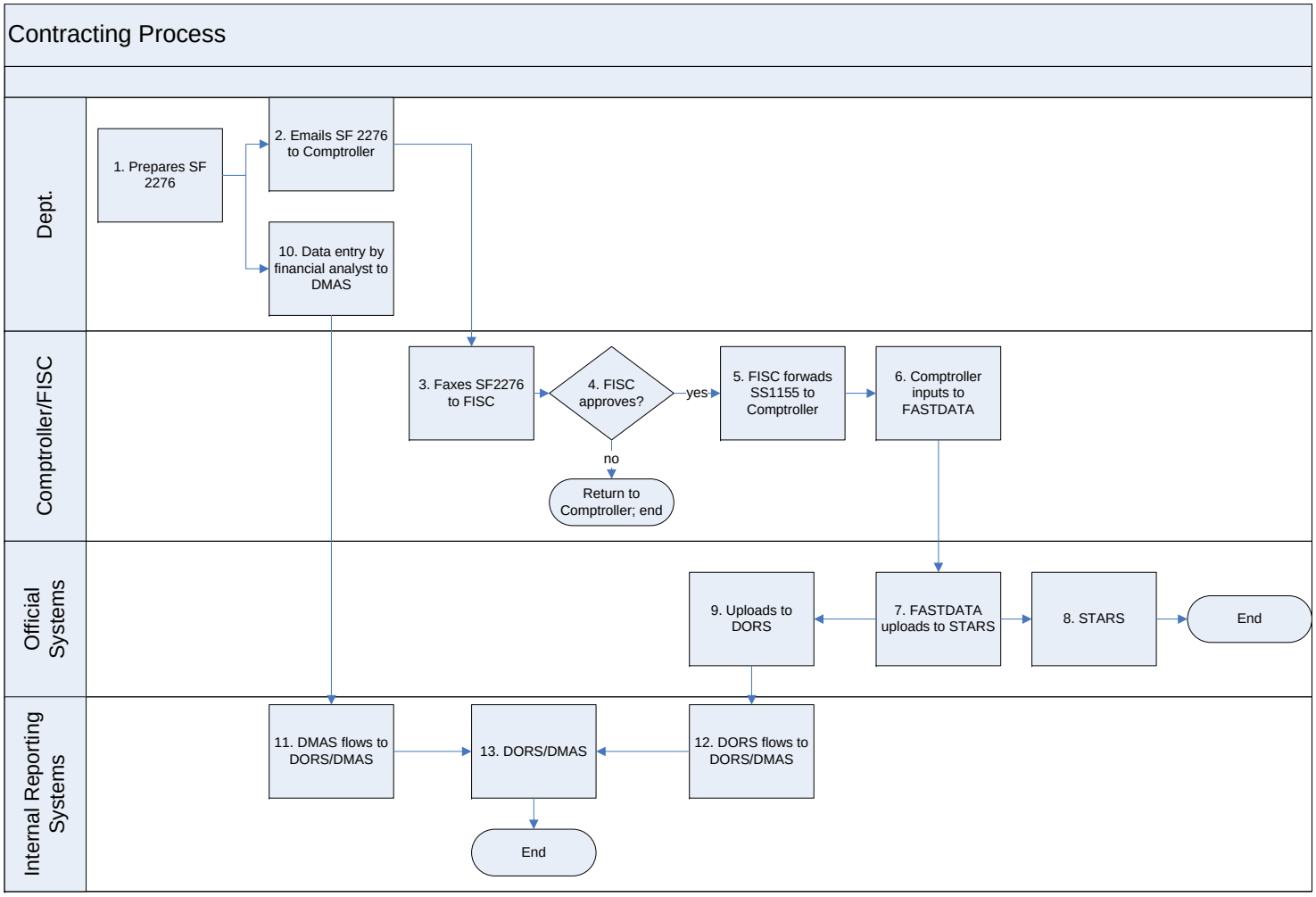
Contracting Process



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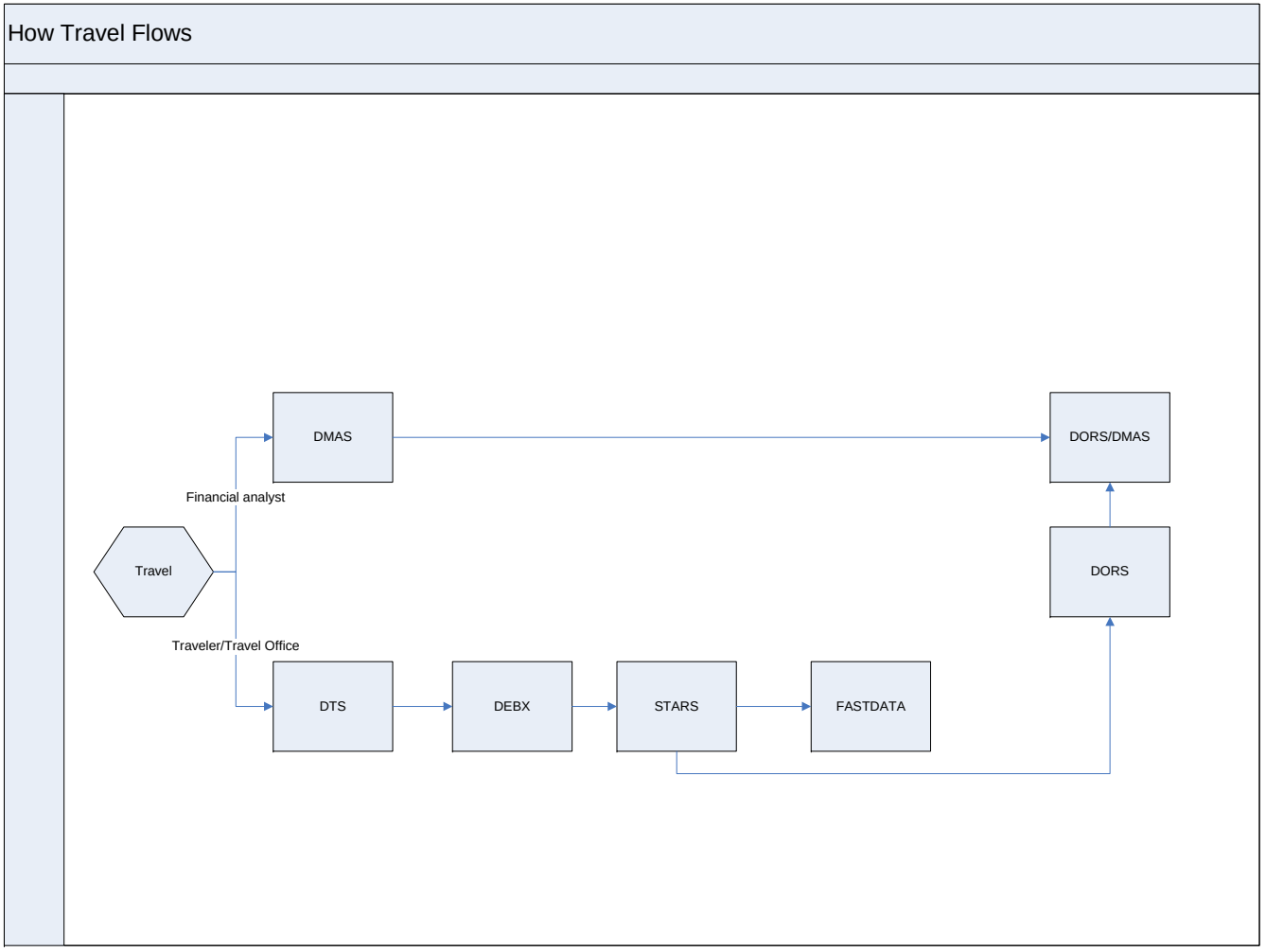
V. Travel

NAVAL POSTGRADUATE SCHOOL

How Travel Flows



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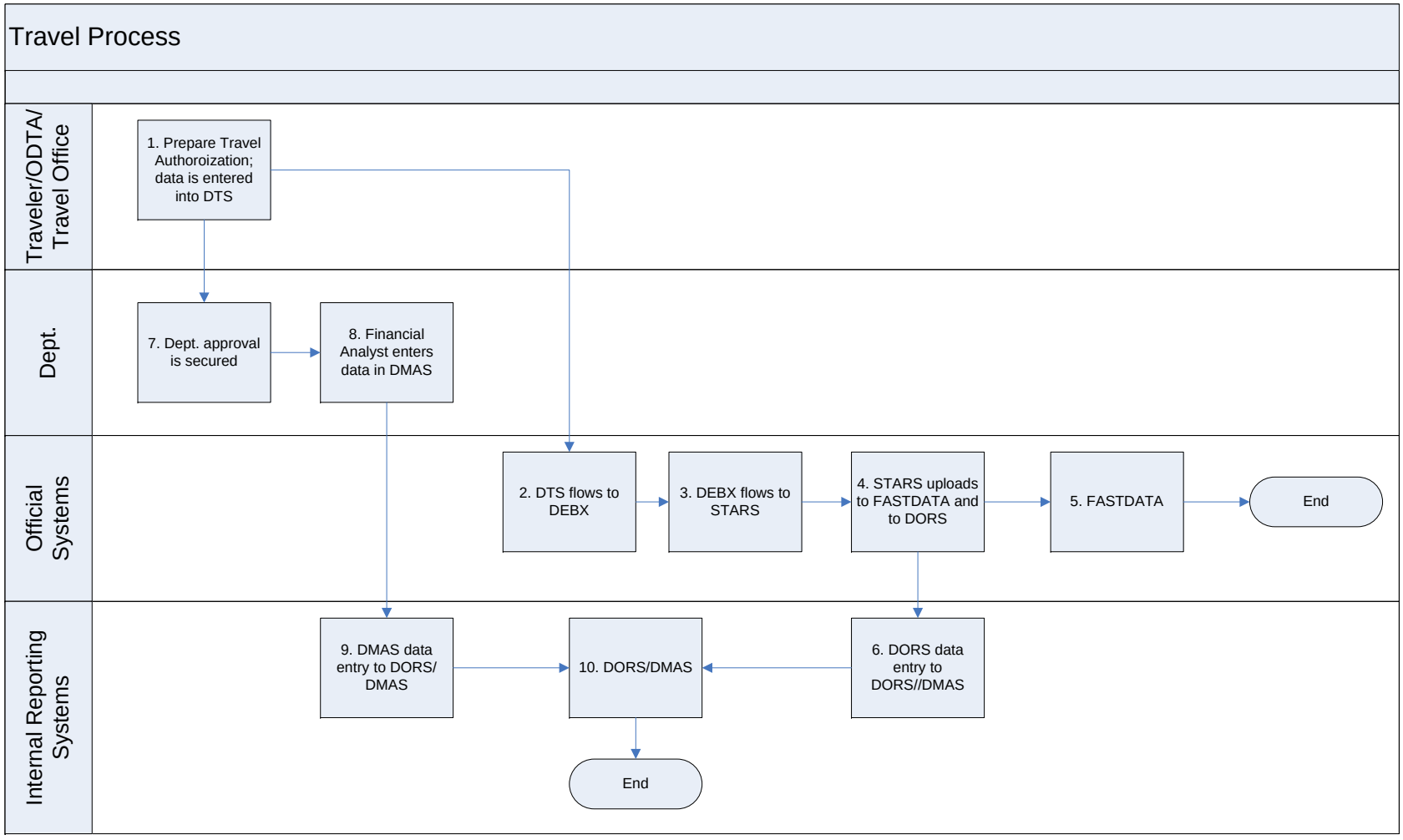
How Travel Works

- Traveler or ODTA or Travel Office completes Travel Request form
- Data is entered into DTS
- Departmental approval is secured
- Financial Analyst enters data into DMAS
- DMAS flows to DORS/DMAS
- DTS data flows to DEBX
- DEBX flows to STARS
- STARS uploads to FASTDATA and to DORS
- DORS flows to DORS/DMAS

NAVAL POSTGRADUATE SCHOOL

Travel Process



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VI. Systems

NAVAL POSTGRADUATE SCHOOL

Systems Used by ASAs

- DORS
- DMAS
- DORS/DMAS
- ETAC

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VII. Financial Reports

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DORS Reports

- Reports can contain the following elements
  - Annual Plan
  - Actual Cost
  - Balance
  - Authorizations by Quarter
  - JONs
  - Account description
  - Department
- Reports can be by specific type of funding (i.e. indirect, direct, reimbursable)

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DORS/DMAS Reports

- Accounts by PI (currently only Reimbursable)
- Account Summary
- Transaction Reports
  - Faculty Labor
  - Travel
  - Equipment/Supplies
  - Contracts
  - Reconciling Items Detail

NAVAL POSTGRADUATE SCHOOL

VIII. Useful Links

NAVAL POSTGRADUATE SCHOOL

Links

- **DORS System & DORS/DMAS Report**
  - http://intranet.nps.edu/dors/
- **User Guides**
  - DMAS
    - Access: http://intranet.nps.edu/ResAdmin/sop/appendix_a_DMAS.pdf
    - Excel: http://intranet.nps.edu/ResAdmin/sop/appendix_a.pdf
  - DORS: http://intranet.nps.edu/dors/DORS_Manual.pdf
  - DORS/DMAS: http://intranet.nps.edu/dors/docs/DORS_DMAS_user_guide.pdf
- **Contracts**
  - http://www.nps.edu/research/rspa.html#Contracting
  - http://intranet.nps.edu/ResAdmin/sop/form_2276_completion.pdf
- **Research Office (several useful links)**
  - http://www.nps.edu/research/rspa.html

NAVAL POSTGRADUATE SCHOOL

IX. Glossary

NAVAL POSTGRADUATE SCHOOL

ETAC (Labor)

What is ETAC?

- **E**lectronic **T**ime And **A**ttendance **C**ertification
- It provides NPS a means to ensure that accounts are valid and not over expended in labor.

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How ETAC works (Labor)

- A department inputs its labor into ETAC
- ETAC determines if there are sufficient funds to meet this obligation
- If not, department is informed of how many hours can be charged
- This assures compliance with Title 31, United States Code, Section 1517, Obligation of Expenditure Limits

- After review by Timekeeping, labor data is input to SLDCADA

NAVAL POSTGRADUATE SCHOOL

SLDCADA (Labor)

What is SLDCADA?

- **S**tandard **L**abor **D**ata **C**ollection **A**nd **D**istribution **A**pplication
- Timekeeping system that provides ability to track labor hours (not dollars) against job order numbers (JONs) for financial reporting purposes, and against type hour codes for pay purposes.
- Data automatically uploads to DCPS

NAVAL POSTGRADUATE SCHOOL

DCPS (Labor)

What is DCPS?

- **D**efense **C**ivilian **P**ay **S**ystem
- Provides bi-weekly payroll processing and support to all DoD civilian employees

NAVAL POSTGRADUATE SCHOOL

STARS (All)

What is STARS?

- **St**andard **A**ccounting and **R**eporting **S**ystem
- STARS is the official online accounting system that provides real-time processing of all financial activities at NPS.

NAVAL POSTGRADUATE SCHOOL

FASTDATA (All)

What is FASTDATA?

- **F**und **A**dministration and **St**andardized **D**ocument **A**utomation
- It is a PC-based, menu driven, “one-time” data input system.

NAVAL POSTGRADUATE SCHOOL

DMAS (All)

What is DMAS?

- **D**epartmental **M**emorandum **A**ccounting **S**ystem
- An Excel or Access ‘checkbook’ system developed for tracking and monitoring expenditures on a sponsored project account

NAVAL POSTGRADUATE SCHOOL

DORS (All)

What is DORS?

- **D**epartmental **O**nline **R**eporting **S**ystem
- A data warehouse-based software application that pulls data from various systems and builds a central database
- It reflects expenditures/balances for sponsored project accounts

NAVAL POSTGRADUATE SCHOOL

DORS/DMAS (All)

What is DORS/DMAS?

- A financial report that the PI can view online that compares figures in DMAS and DORS.
- This report will identify any variances that need to be corrected

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FISC (Contracts)

What is FISC?

- Fleet and Industrial Supply Center
- Provides logistics, business and support services to fleet, shore, and industrial commands of the Navy, Coast Guard and Military Sealift Command, and other Joint and Allied Forces.

NAVAL POSTGRADUATE SCHOOL

DEBX (Travel)

What is DEBX?

- **D**efense **E**lectronic **B**usiness E**x**change

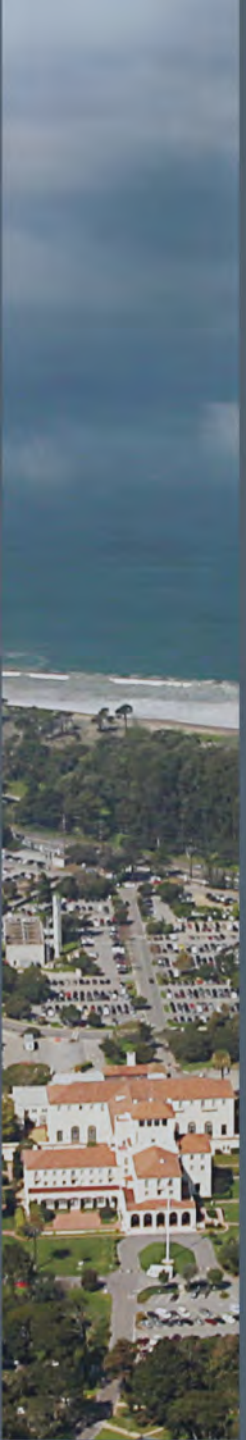
- A third party system that translates DTS financial transactions into the language of the special financial systems and sends the transactions to those targets.

NAVAL POSTGRADUATE SCHOOL

DTS (Travel)

What is DTS?

- **D**efense **T**ravel **S**ystem
- Official DoD travel system that allows travelers to arrange their own travel plans



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SOP and Process Mapping Group

Final Report - Content Development for the Administrative Web Pages

12/21/07

Charter Tasking

- The SOP and Process Mapping Group will take charge of the content development for the Administrative/Business Processes webpage. The Group will work with the process owners identified by the Business Processes Implementation Task Force, to establish NPS SOPs, process maps and flow charts for all relevant NPS administrative processes.
- Once a significant portion of this content has been developed, the Group will work with the Web Advisory Group to organize and post the content in a way that will be accessible and meaningful to website users campus-wide. The Group will also seek assistance as needed from NPS experts in process improvement and Operations Risk Management (ORM) experts as well as from Command Evaluation to ensure that the processes are efficient and effective.

Set Priorities

- Prioritized topical areas based on spreadsheet input from Business Practices Group
- Developed three subgroups and starting points
  - Labor
  - Financial Systems
  - Procurement

Important Aspects for Project Success

- Must have public backing of senior leadership at NPS.
- Web content should be written with the assumption that the user has no knowledge of the subject matter. Information should be **clear, logical, and sequential**. Acronyms should be spelled out. Web content should follow a template and include all contact info.
- Must be in standardized format to create a consistent look and feel.
- Process/function owners are subject matter experts; they need be very involved with the development of content (facilitated by mapping-group members).
- Owners will be responsible for updates to web material after initial release.
- Release all website section as they are finished.

Project Plan

1. Review topics from master list and add or remove as needed. Group the topics logically for comprehension.
2. Identify existing content to be included in the organizational structure; review content and revise as needed.
3. For areas without existing content, create content to complete background, SOP, process flowcharts, etc.
4. Create content for the opening page of the subject area. Provide:
    1. Introduction
    2. Description of task
    3. Related policy guidance, regulations and instructions
    4. Background information
    5. Process or system flowcharts.

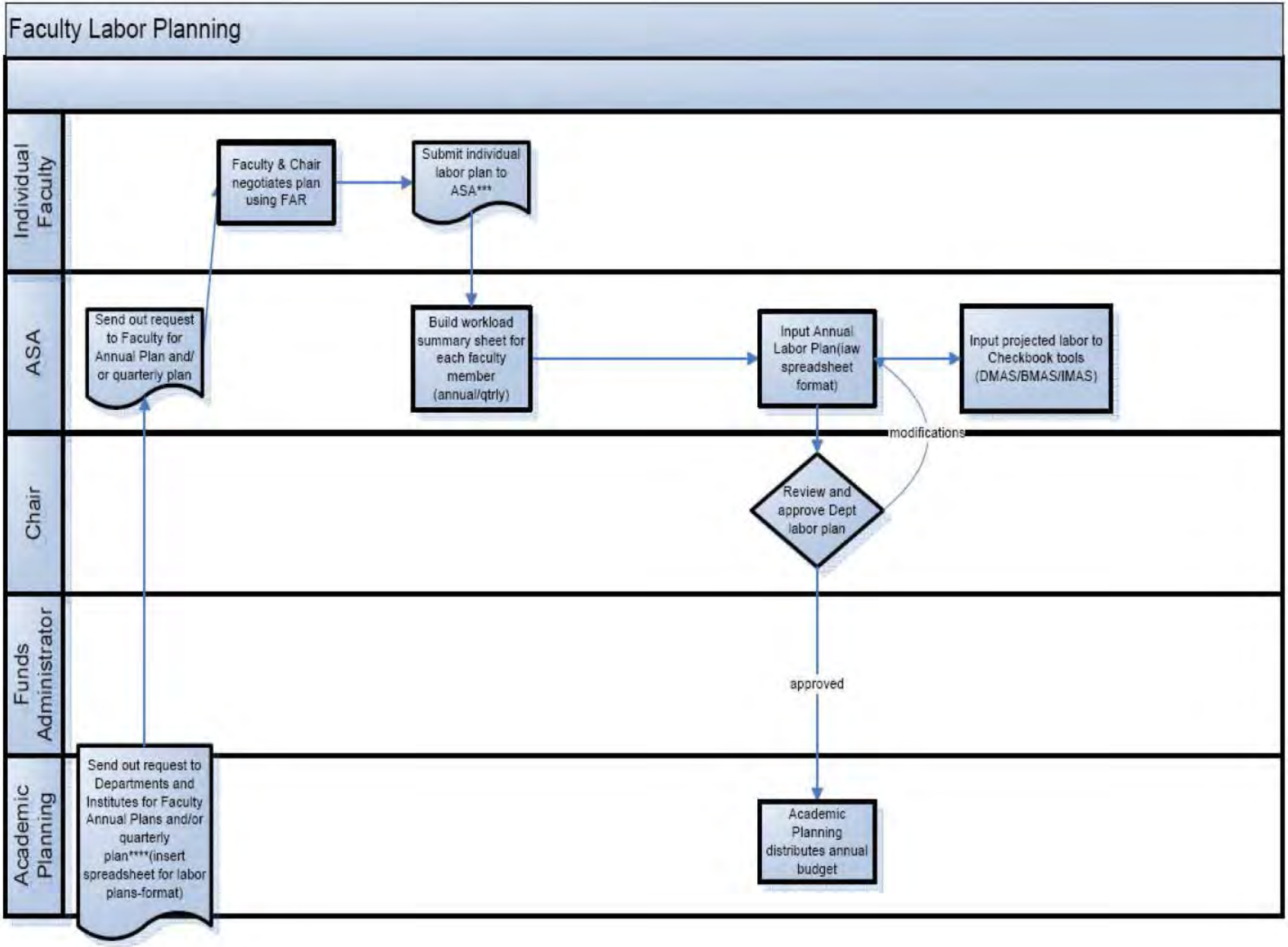
    Support organizations should include a section with POC, CoC and contact information.

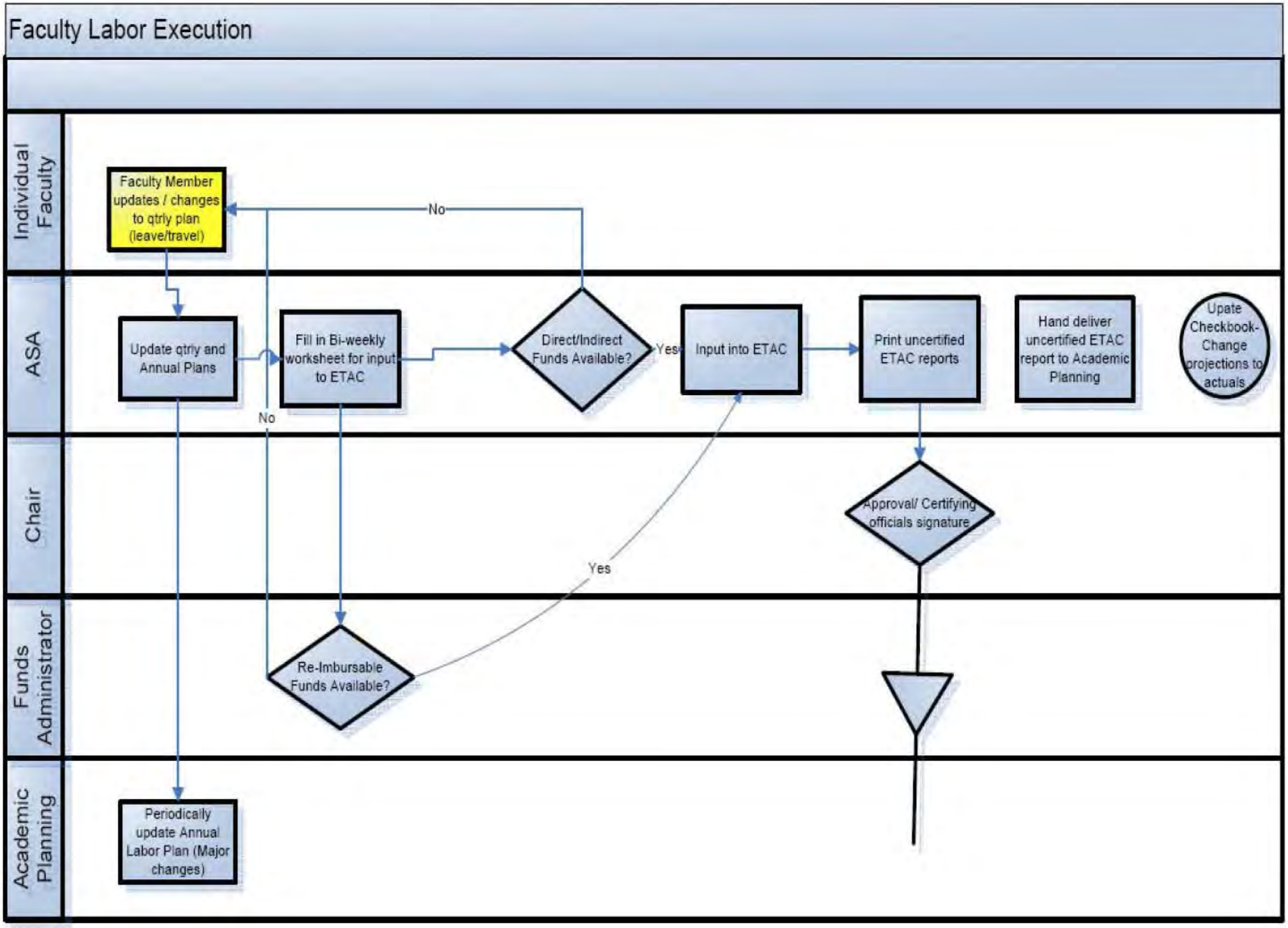
Project Plan

5. Organize the information in a simple, logical way with the user audience in mind. Include descriptions, explanations, step-by-step instructions, standard operating procedures (SOP), forms, and links to related topics and resources.
6. Create draft site with collected and created information
7. Distribute draft site to primary intended user group; collect and incorporate feedback into site.
8. Release site to users and notify users of its availability.
9. Process owners will assume ownership of their content after initial release of their segments. This includes updates and maintenance.

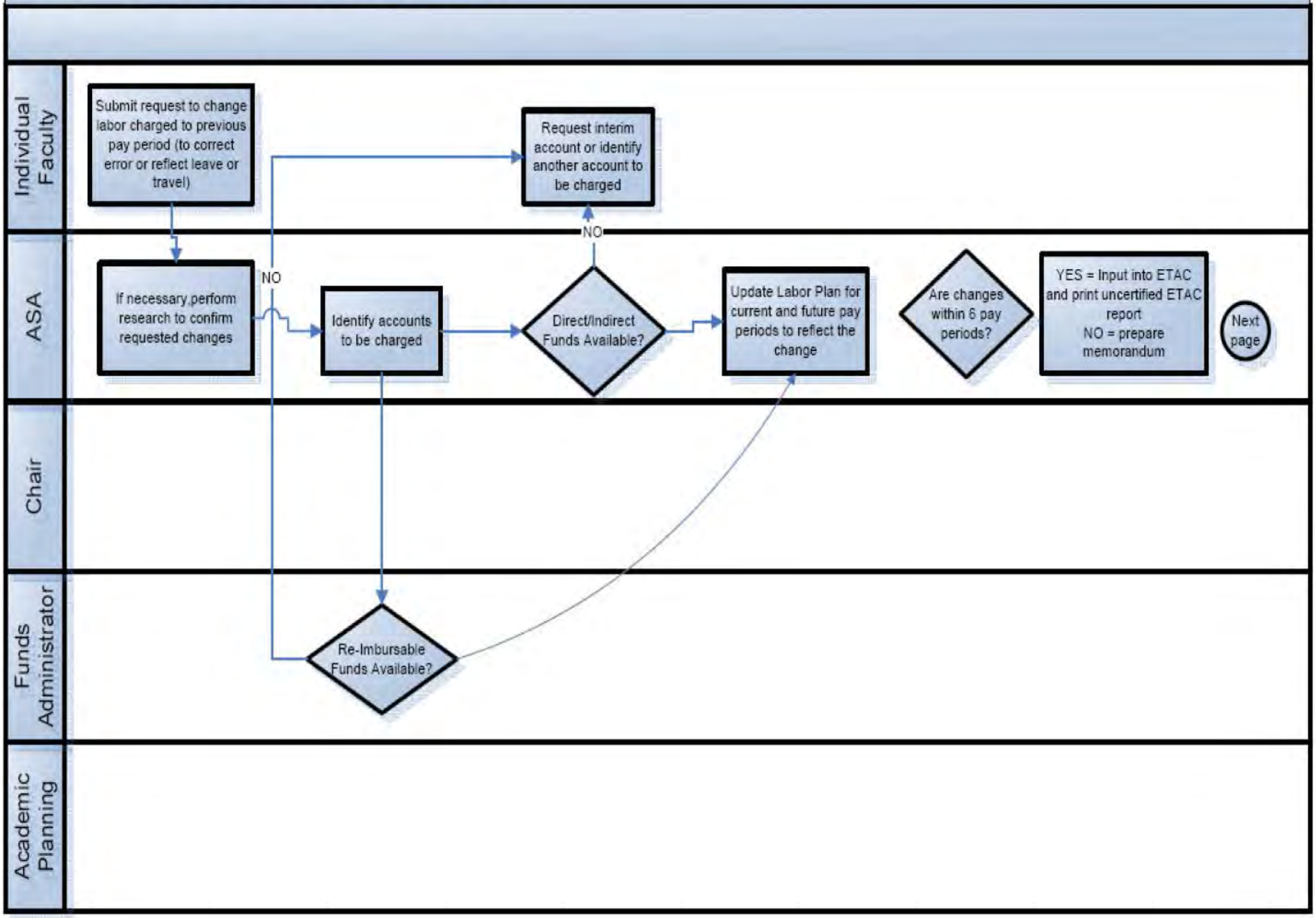
Labor

- The labor process was flowcharted, using “swim-lane” style, for that segment of the process visible to a department administrator (such as an ASA).
- The subgroup reviewed and modified the website topics list.
- The group incorporated some of the elements recommended above into a mock-website structure provided by ITACS


Faculty Labor Planning
Individual Faculty
ASA
Chair
Funds Administrator
Academic Planning
Faculty & Chair negotiates plan using FAR
Submit individual labor plan to ASA***
Send out request to Faculty for Annual Plan and/ or quarterly plan
Build workload summary sheet for each faculty member (annual/qtrly)
Input Annual Labor Plan(iaw spreadsheet format)
Input projected labor to Checkbook tools (DMAS/BMAS/IMAS)
modifications
Review and approve Dept labor plan
approved
Send out request to Departments and Institutes for Faculty Annual Plans and/or quarterly plan****(insert spreadsheet for labor plans-format)
Academic Planning distributes annual budget


Faculty Labor Execution
Individual Faculty
ASA
Chair
Funds Administrator
Academic Planning
Faculty Member updates / changes to qtrly plan (leave/travel)
No
Update qtrly and Annual Plans
Fill in Bi-weekly worksheet for input to ETAC
Direct/Indirect Funds Available?
Yes
Input into ETAC
Print uncertified ETAC reports
Hand deliver uncertified ETAC report to Academic Planning
Upate Checkbook-Change projections to actuals
No
Approval/ Certifying officials signature
Yes
Re-Imbursable Funds Available?
Periodically update Annual Labor Plan (Major changes)

SUPPLEMENTALS FOR FACULTY AND STAFF



Sample Website Development

- NPS Administrative Resources

ITACS Proposed SOP and Estimated Timeline

- Estimated time to collect information for each subsection: 2-8 weeks
- ITACS will provide a list of established URLs in identified websites for each topic (this can be concurrent with initial collection time): 1-3 weeks
- Map processes- probably 3-5 meetings for a working copy: 3-12 weeks
- Decide what must be covered in the web content (all resource material); compare this to existing content, and then determine the 'gaps': 3-12 weeks
- Revise existing content as needed; create content and materials from scratch: 4-24 weeks

- Turnover information to ITACS for posting: 2-3 weeks
  - ITACS places content into existing web infrastructure
- Draft Review by process owner and SOP Group: 2-8 weeks
- Adjust site as needed after draft review: 2-3 weeks
- Test site with select process users: 2-5 weeks
- Adjust site as needed after user testing: 2-5 weeks
- Follow-up and Updates: ITACS will work individually with each process owner to maintain currency and adjust site as needed.

Conclusion

- Development needs to continue for at least another quarter
- Hiring a professional project manager should be considered.
- Coordinate with the Web Content Management Project for the Intranet to ensure that the group's work is in line with standards set for the NPS Intranet

NPS Financial System Plan

Introduction

The functionality of existing enterprise financial information systems are insufficient to meet the on-going needs of the campus. The systems do not provide managers and executives with the data necessary to proactively manage, and the systems represent a technical risk because of the aging architecture. Procuring a commercial product to replace the existing financial management suite is not feasible for the campus. Because of staffing and ongoing maintenance concerns, building a replacement internally is not a sound approach organizationally. In recent years, the community source Kuali Financial System (KFS) has emerged as the collaborative product of many research universities including the University of California (UC). KFS offers a new approach to replacing the internal financial management systems that does not incur the level of cost associated with a commercial product while also mitigating the organizational risk associated with locally developed products. This document describes an approach to moving the NPS enterprise financial systems toward a KFS solution.

Description of KFS

The Kuali Financial System is a full featured financial information system that is intended specifically to meet the financial needs of research universities. It is the result of the collaborative efforts of many universities led by Indiana University and based upon a product that has been serving the needs of Indiana University and UC Davis for several years. KFS is a Community Source project with oversight from the Kuali Foundation. Community Source means that there is a defined group of institutions (partners) that contribute development and functional staff collaboratively to create and enhance the system. While institutions such as UC that are members of the Kuali Foundation pay a yearly support fee, there is no license cost to obtain the product. The future direction and functionality of KFS is determined and managed by the community partners, with input from all user institutions, and each is empowered to influence the future direction.

Currently there are seven core members of the KFS community (Indiana University, Michigan State University, University of Arizona, the University of Southern California, Cornell University, San Joaquin Delta College, and University of California) that have invested significant resources to do the initial development. A measure of the confidence in this initiative is the $2,500,000 grant given by the Andrew W. Mellon foundation to augment the effort. The Kuali Foundation has been formally incorporated as a non-profit corporation, so the organizational support structure for the product is reasonably assured for the long term.

The following reflects the functions that the completed KFS project will provide to NPS.

- General Ledger
- Chart of Accounts
- General Accounting
- Capital Asset Management
- Purchasing
- Accounts Payable
- Non-Student Accounts Receivable
- Post Award Contract and Grant Administration (Pre-Award is an option but not included in this project)
- Budget Construction/Management
- Data interchange with GUS/Major Shadow Financial Systems
- UCOP and campus financial reporting
- Financial Data Warehouse

Project Approach

Phased Project

The approach that will be taken with the NPS KFS project will be a phased approach that will begin with project preparation tasks. As preparation tasks finish up, the project will flow into a phase where major work concentrates on migration of NPS data to KFS and KFS is run in parallel with existing applications to provide assurance that KFS workflows and processes are structured properly to achieve the correct data results. Finally, interfaces to other campus systems will be implemented and business intelligence reporting and data warehouse functions will be addressed to complete the initial KFS implementation. Throughout all phases of the project, the NPS KFS project team, with support and guidance from project oversight committees, will communicate project direction and status to campus constituencies.

Description of Project Phases

Migrating from NPS's existing financial system to a replacement suite in a phased project approach allows the campus to evolve toward the target rather than experience large changes over a short period of time. Given that the Kuali baseline that would be most appropriate for NPS use will not be ready for operational use until 2009, we have the opportunity to begin the organizational, functional, and technical tasks associated with that evolution now so that we will be prepared for a smooth, well organized, well understood transition of business processes and functions beginning some time in 2009. The following sections provide an overview of the project phases.

- The initial phase, Project Start Up, will likely proceed for a year and a half to two years. The reason for the extended project startup is to allow the full KFS baseline to be developed and tested. This phase will involve

extensive organization and communication efforts and preliminary technical tasks. The anticipated tasks associated with this phase are described in subsequent paragraphs.

- The second phase, KFS implementation, will begin once the full KFS suite has passed rigorous quality assurance by the Kuali Foundation. This phase will see the initial implementation and testing of KFS within the NPS context. We will run a local version of KFS in parallel with existing systems to ensure that business processes and data results can be validated in a test environment. In addition, the following tasks will take place; initial rollout of KFS functionality to the campus, initial campus training for the new systems and work processes, and continued communication to gather feedback.
- The third phase, reporting and data warehouse implementation, will address the campus needs for reports and data exchanges, and will continue campus training for the new systems and work processes. It is highly likely that some of the tasks in this phase will run concurrently with tasks that are part of the second phase.
- The final phase of the project will be on-going operational support and minor tailoring as necessary to meet evolving NPS needs.

Project Schedule Overview

As mentioned, the KFS baseline that is most appropriate to NPS needs will be available in early 2009. The project schedule that we are proposing has project startup tasks beginning in 2008 so that solid communications and project personnel and resources can be put in place before that actual system migration tasks are schedule to begin. We anticipate beginning activities to start the migration from the existing NPS financial systems to KFS during the fall of 2009 and anticipate completing the migration by late 2011. Training is anticipated to complete during the first quarter of 2012 with full system operational status at approximately the same time. UC Davis has targeted an implementation date of 2010, so NPS will be able to work with UCD and learn from UCD experiences in order to minimize risk.

Anticipated Phase I (Project Startup) Tasks

The near term (2008 thru mid summer 2009) tasks associated with migration from our existing financial systems to KFS are intended to:

- establish the necessary project organization
- allow the campus to understand the KFS product through communication and demonstrations,
- introduce KFS to the campus,

As we accomplish these tasks over the early phase of the project, we will introduce Kuali to the campus in low risk, low impact stages to establish the base for full migration during the later phases of the project. This approach will allow

us to minimize business process disruption and minimize the need to train the entire campus in a short period of time.

Organizational Tasks

The following tasks will be accomplished over the near term future and will be ongoing at least through the end of KFS implementation. Where noted, the resulting organization may be retained after full implementation to provide ongoing guidance and support.

- **Executive Steering Committee**: This organization will be formed as soon as possible and will include campus executive leaders. This committee will be expected to provide campus level guidance with regard to staffing, budget, schedule, policy, and subordinate organization. This committee will also be expected to provide campus level strategic direction and guidance, help manage scope, and resolve conflicts where necessary.
- **Project Oversight Board**: This organization will be formed as soon as possible and will include business leaders from major campus departments and organizations. This committee will be expected to provide guidance/buy-in with regard to project task schedules and scope, department level requirements, department level resource allocations, and product deployment coordination. This committee will likely continue to serve a valuable purpose after the KFS implementation is complete.
- **Subject Matter Expert (SME) Committees**: SME committees have previously been formed to address requirements within specific functional areas of the KFS. These committees will be expected to assess current NPS business process with regard to KFS functionality, identify where KFS fits NPS requirements, identify where there are gaps between NPS requirements and KFS functionality, and recommend methods for addressing gaps where possible. In addition, these committees will support testing of the KFS in relation to NPS requirements as the KFS functionality becomes available. These committees will likely continue to serve a valuable purpose after the KFS implementation is complete.
- **Technical Committees**: The technical committees will be formed and dissolved on an ad hoc basis to address technical details such as data migration, network issues, security, and authorization. These committees may continue to serve a valuable purpose and may continue to be formed after the KFS implementation is complete.

Functional Tasks

The following functional tasks will begin in 2008. Where noted some of these tasks will continue after KFS implementation is complete as part of the ongoing support and maintenance of KFS.

- **Town Hall Meetings**: These meetings will take place throughout the duration of the project and will allow us to introduce the concepts of the project plan to the campus and introduce the campus to the KFS functionality. These meetings will also serve a valuable purpose in

beginning the conversations of business process migration and/or modification and providing guidance regarding follow-on tasks. These meetings will likely continue through the final implementation of KFS.

- **KFS Demonstrations/Testing**: These activities have already begun and will continue through the final implementation of KFS. KFS will be run in parallel with existing NPS financial systems to ensure that business process, workflows, and support data are properly implemented to achieve the proper processing results. The scope of the demonstrations and testing will expand to include department level managers and users to a far greater degree as KFS implementation ramps up and continues to completion. Execution of these tasks will require functional experts in several administrative departments to spend significant time on the KFS project. Therefore resources to backfill those experts will be required.

Technical Tasks

The following technical tasks will begin in the near-term. Where noted some of these tasks will continue after KFS implementation is complete as part of the ongoing support and maintenance of KFS.

- **Kuali Foundation participation**:
- **NPS KFS Installation**: NPS has obtained installations of KFS and associated databases to support local testing, demonstration and development efforts.

Tasks Associated with Successive Project Phases

As previously stated, the full KFS product is expected to be released in early 2009. At that time, the NPS KFS project team will begin the activities required to migrate from the existing financial systems to the KFS replacements. The following is a list of major tasks that will be accomplished to complete the migration.

- Identify, coordinate, and test business process changes identified by fit-gap analysis tasks,
- Integration of KFS with NPS -- Identity and authentication infrastructure,
- Identify, implement, and test interfaces between KFS and other systems
- Plan, implement, and test migration of existing legacy data to KFS database,
- Implement and test external interfaces to support rollup testing,
- Plan and implement workflows,
- Plan, implement, and test reporting requirements,
- Define and staff system support tasks such as help desk, operational maintenance, on-going training,
- Train campus users.

A complete NPS KFS Project Gantt Chart providing detailed tasks and schedule is contained in Appendix I of this document.

Required Resources

The following table depicts the resources that are anticipated to support the NPS KFS project. The resources reflected in this table are a combination of resources that already exist at NPS and resources that must be added over time. The Estimated Cost section contains details regarding level of support required from each resource and which resources must be added to existing staffing.

Resource Type	Number Needed	Anticipated Tasks	When Needed
Senior Functional Experts	10 (existing) AP, Extramural Funds, GL/COA, Procurement, Capital Assets, Vendor Management, Financial Controls, Accounts Receivable, Budget	Functional project management, KFS assessment, fit/gap, process re-engineering, process validation, data validation, project coordination, UC KFS collaboration	Project Start
Functional Support Personnel	15 (new hires)	Backfill for senior functional experts, project management support, business process validation, data validation, training, test support,	Project Start with phase in of resources according to the project plan
Technical Support	8 (5 existing + 3 new hires)	Technical project management, Kuali Foundation support, UC KFS support, business process re-engineering, data migration, interface development/test, report	Late Phase I

		development/test, system test	

Expertise of the following functional experts will be critical to the success of the NPS KFS project. As these experts allocate their time to the KFS project, backfill will be required to address the tasks they currently accomplish on a daily basis.

Functional Expert	Critical Area of Expertise
	Extramural Funds/GL
	Plant Accounting/GL
	Financial Transactions, Financial Controls
	Accounts Payable/GL
	Accounts Receivable
	Chart of Accounts/GL
	GL/UCOP Data Reporting
	Budget/Staffing
	Procurement, Vendor Management
	Capital Assets

Anticipated Schedule

The NPS KFS project is anticipated to begin in the summer of 2008 with project startup tasks. Implementation of KFS at NPS is anticipated to begin in late-summer 2009 and continue through mid 2012. On-going functional and technical support will persist through the lifecycle of the KFS product at NPS. A project Gantt chart which depicts the major project tasks and estimated task durations is attached to this document.

Estimated Cost

New and existing resources, hosting costs, test server, travel. Costs by year with totals.

NOTE: There will be ongoing support and maintenance costs associated with running KFS once this project concludes in 2012. The recurring cost items beyond 2012 will be existing and newly hired functional and technical personnel, help desk costs. The estimated cost of the first year of support (FY2012/13) is ???????????

COMMAND CLIMATE SURVEY

2008

PREPARED BY:
DEBORAH A. BAITY
COMMAND DEPUTY EEO OFFICER
AND THE
COMMAND ASSESSMENT TEAM
(CAT)

Survey Date: 04/03/08
Survey Completion Date: 04/17/08
Released Date: 12/01/08

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BACKGROUND

In early January 2008, the Naval Postgraduate School's (NPS) President requested a Command Climate Survey be conducted in accordance with OPNAVINST 5354.1F, Navy Equal Opportunity Policy. This instruction states the Commanding Officer should ensure the establishment of a Command Assessment Team (CAT) to assist in the implementation and analysis of the results of the survey. NPS' major claimant the Chief of Naval Operations (CNO) Command Deputy EEO Officer recommended we utilize the Defense Equal Opportunity Management Institute (DEOMI) Organizational Climate Survey (DEOCS) because this survey would provide an effective analysis and comparison to the Department of the Navy's data. The DEOMI Survey measures climate factors associated with military equal opportunity (EO) programs, civilian equal employment opportunity (EEO) programs, and organizational effectiveness (OE) issues.

The actual launch date of the survey was 3 April 2008 and ended 17 April 2008.

The CAT used a "Triangulation Method" to determine the "health" and functional effectiveness of the organization by identifying areas of concern or issues related by funding areas of commonality in three of the six areas.

Climate Survey*	Review of records and reports*
Observations*	Individual interviews
Focus Groups	Other methods identified

* Areas used by NPS CAT.

ESTABLISHMENT OF THE "CAT"

The purpose of the CAT is to evaluate the command climate to determine morale, if there exists an environment in which all personnel can perform to their maximum ability, and work in an environment unimpeded by institutional or individual biases of race, color, ethnicity, national origin, sex or religious stereotypes. This tool will allow the NPS President to proactively assess critical organization climate dimensions that can have an impact on effectiveness within the organization.

The Command Deputy Equal Opportunity Officer extended an invitation to all major NPS departments requesting a representative to serve on the CAT. The following individuals were nominated and are serving on the Command Assessment Team (CAT).

COL David Smarsh	Chief of Staff/Executive Officer Reviewer/Advisor to CAT Team
Lynn Murch	Internal Control, Civilian Staff
Denise Ross	Internal Control, Civilian Staff
SCPO Jacqueline Kiel	Public Affairs Office, Code 004
John Sanders	Local 1690 Representative
PO1 Clifton Cates	EO Representative
LT Kevin Albertsen	03/Student Council Representative
Professor Curt Collins	Faculty Council Representative
Professor Val Moule	Continuous Learning Faculty
CDR Troy Johnson	Code 38 Military Staff
Jeffrey Calhoon	Code 21 Civilian Staff
Rikki Panis	Code 04 Civilian Staff
Dr. (Professor) Fran Horvath	Code 25 Faculty
Richard Mastowski	Code 06 Civilian Staff
LCDR Steve Tackett	Code 07 Military Staff
Vickie Fishell-Frantz	Code 08 Civilian Staff
Kathi Noyes	Code 09 Civilian Staff
Deborah A. Baity	NPS Survey Administrator Command Deputy EEO Officer

This committee serves as an advisory panel to the President of the Naval Postgraduate School. As the EEO Officer, he retains responsibility and authority for final decisions regarding the climate survey.

The first meeting held with the committee was 25 February 2008 which consisted of required mandatory training for the NPS CAT, and reviewed all of the

survey requirements and responsibilities. Numerous additional meetings were held during the months of March through June 2008, and will continue throughout the year.

METHODOLOGY

The DEOCS was administered in an Internet version through NPS Information Technology Center. It uses a race-ethnic classification system and is consistent with the Office of Management and Budget guidelines for classification of racial groups and multi-ranking designations.

The questionnaire contained 63 items. The military only complete 56 items on the survey. Half of the questions address EO/EEO issues; the remainder addressed organizational and demographic areas.

The DEOCS is a climate assessment instrument, designed to access the "shared perceptions" of respondents about formal or informal policies, practices, and procedures likely to occur in the organization. It uses a statistical technique known as "factor analysis"; items that measure the same perceptual domain are combined into 14 "scales."

The Climate Survey Reporting Sections included in the report are:

1. Demographic Breakdown
2. Perceptions of Discrimination and the Complaint Process
    a. Experiences of Discrimination during the past 12 months
3. Subgroups Factor Comparisons
    a. EO/EEO Factors
    b. Organizational Effectiveness Factors
4. Overall Unit Summary
5. Locally Developed Questions (10 questions)
6. Short Answer Questions (5 questions)
7. Written Comments for the Organization

The Demographic Breakdown data shown in the charts are computer-generated, and based on the inputs received from the survey respondents.

The Perceptions of Discrimination and the Complaint Process data are based on three specific areas expressed by the respondents. These areas are:

1. Who Experienced an Incident of Discrimination?

2. What Action Did You Take Following the Incident of Discrimination?
3. Are You Satisfied with the Issue and its Resolution?

Under the Subgroups Factor Comparisons there are 14 Climate Scales of EO/EEO Behaviors and Organizational Effectiveness that were reviewed. Those scales included:

Eight (8) EO/EEO Behaviors:

1. Sexual Harassment and (Sex) Discrimination
2. Differential Command Behavior
3. Positive Equal Opportunity Behavior
4. Racist Behavior
5. Age Discrimination
6. Religious Discrimination
7. Disability Discrimination
8. Overall EO Climate

Six (6) Organizational Effectiveness Areas:

1. Organizational Commitment
2. Trust in the Organization
3. Perceived Work Group Effectiveness
4. Work Group Cohesion
5. Leadership
6. Job Satisfaction

Also included in the survey were 10 Locally Developed Questions that were added to the Survey from a list of selected questions that DEOMI provided.

1. An atmosphere of respect exists in my work area.
2. I view contract employees as a part of the team.
3. Communication flows freely from senior leadership to all levels of the organization.
4. I have sufficient time in my duty day to conduct my core duties.
5. The leaders in my command show a real interest in the welfare of single service members.
6. I can raise concerns about issues that affect my job without fear of reprisal.
7. I receive periodic formal feedback from my rater.

8. I trust management to handle complaints, problems, or issues seriously.
9. I experience a high level of stress in this command
10. Rules, regulations and policies are enforced in this command, I experience a high level of stress in this command.

These questions were presented so individuals could respond using a five- point response scale.

#1	-	Totally Agree
#2	-	Moderately Agree
#3	-	Neither Agree nor Disagree
#4	-	Moderately Disagree
#5	-	Totally Disagree

The next part of the survey asked five (5) Short Answer Open-ended Questions.

1. Are there adequate recruitment sources, promotion opportunities, and/or retention incentives for minority and female members? Explain.
2. Are enlisted personnel being adequately utilized? Explain.
3. Do you work in a hostile and/or offensive work environment? Explain.
4. As an NPS student, do you feel your needs are being met and you have the tools to be a successful NPS graduate? Explain.
5. Are there other equal opportunity issues, concerns or problems at the command that were not included in the survey that should be addressed? Explain.

The last section was dedicated to open written comments from all survey participants.

The CAT was divided into six (6) groups with designated color codes:

Civilian Staff	-	**Green**
Students	-	**Purple**
Civilian Faculty	-	**Blue**

Officers	-	**Brown**
Enlisted	-	**Black**
Contractors	-	**Red**

The team reviewed, compared, tallied, and analyzed the results of the Locally Developed Questions, Short Answer Open-ended Questions and the Written Comments Section. The team compared each specific group to determine percentage results compared to Navy and Overall NPS Totals.

The five Short Answer Open-ended Questions responses were reviewed by category with the CAT determining the top 5-10 Positive Findings and 5-10 Areas of Concern.

The Written Comments were reviewed and separated into eight categories per Population Group. Within each category the top ten comments were identified and listed for review.

1. Personnel Management (HR)
2. Leadership/Management
3. Faculty Concerns
4. Communication
5. Student Concerns
6. Overall Climate
7. EEO/EO
8. Miscellaneous

The Final Step by the CAT was to review all categories and to determine NPS Areas of Concern and Positive Findings.

WHAT'S NEXT?

1. Brief the Preliminary Report to the President and Executive Vice President then to other senior leaders.
2. Develop a Plan of Action & Milestones (POA&M).
3. Provide briefs on the results of the survey.
4. Publicize the results on Internet/Intranet with a link to the report.
5. Follow-up with condensed survey within six months of final report.

FINDINGS

I. DEMOGRAPHIC BREAKDOWN

A. Survey Population

	Surveys Distributed	Surveys Completed	Percentage (%) Completed
FACULTY	589	233	40%
STUDENTS	2327	830	36%
CONTRACTORS	261	86	33%
CIVILIAN STAFF	498	262	53%
ENLISTED	45	17	38%
OFFICER STAFF	85	32	38%
TOTALS	3805	1460	39.7%

B. Overall Climate Survey Responses

DEMOGRAPHIC BREAKDOWN

Minority 24.81%
Majority 75.19%
Missing Responses 3.35%

Race

American Indian 0.43%
Asian 8.70%
Black 5.58%
Native Hawaiian 0.72%
White 81.52%
Two or More 3.04%
Missing Responses 5.47%

Gender

Women 23.22%
Men 76.78%

C. Overall Climate Survey Responses - Continued

Military	
Officer	97.89%
Enlisted	2.11%
Military	58.49%
Civilian	41.51%
Civilians	
Other Civilian Employee	17.33%
Federal Civilian Employee	82.67%
Military	
Other Military	1.41%
US Military	98.59%

II. PERCEPTIONS OF DISCRIMINATION AND THE COMPLAINT PROCESS

Experienced an Incident of Discrimination

TYPE OF DISCRIMINATION	NUMBER / PERCENTAGE (%)	
Race/National Origin/Color	30	19.11%
Gender (Sex)	50	31.85%
Age	23	14.65%
Disability	4	2.55%
Religion	13	8.28%
Two or More	37	23.57%
TOTAL INCIDENTS	157	

What Action Did You Take Following the Incident of Discrimination?

CATEGORY	NUMBER / PERCENTAGE (%)	
Filed Formal Discrimination Complaint	6	7.50%
Reported to EO/EEO	7	8.75%
Reported to Supervisor	27	33.75%
Confronted Individual	40	50.00%
TOTAL CASES REPORTED	80	

Satisfied With Issue/Resolution

CATEGORY	NUMBER / PERCENTAGE (%)	
Very Satisfied	7	17.50%
Moderately Satisfied	13	32.50%
Moderately Dissatisfied	9	22.50%
Very Dissatisfied	11	27.50%
TOTAL CASES	40	

III. Overall Unit Summary

The Overall Unit Summary is based on NPS scores using the actual survey response scales. The categories are compared to the DEOMI data base for NPS, Navy, and all services for the last six months. Reviewing the Areas of Concern, highlighted in yellow, the following are areas of interest:

- Under Positive EO Behavior, the Enlisted with a score of 3.82% were below the Overall Navy percentage of 4.04%.
- Under Age Discrimination, Civilian Staff (3.97%) believe age discrimination exists compared to Navy's 4.14 percentage rate.
- NPS Enlisted score of 3.45% indicated some concern under Organizational Commitment (3.50%).

- Three (3) out of the 6 groups {Staff (3.49%), Faculty (3.32%) and Officers (3.33%)} strongly believe there are Leadership Cohesion issues when compared to Navy's goal of 3.52%.

Based on the results of the Unit Summary 4 of the 13 categories have groups that fall below the Navy's average for specific areas. These low percentage areas are problematic throughout the survey including the open-ended and written comment section.

TEAM CLIMATE GROUP

OVERALL UNIT SUMMARY

(Note: Data taken from DEOMI COMMAND CLIMATE SURVEY 2008, DEOMI Report)

	Overall Navy	NPS	NPS Staff	NPS Students	NPS Faculty	NPS Officers	NPS Enlisted	NPS Contractors
Sexual Harassment/ Discrimination	% 4.12	% 4.37	% 4.30	% 4.38	% 4.37	% 4.50	% 4.51	% 4.42
Differential Command Behavior Towards Minorities	4.48	4.67	4.52	4.69	4.77	4.71	4.87	4.68
Positive EO Behavior	4.04	4.29	4.08	4.38	4.28	4.42	3.82	4.24
Racist Behavior	3.93	4.43	4.39	4.36	4.64	4.55	4.35	4.63
Age Discrimination	4.14	4.41	3.97	4.59	4.27	4.64	4.53	4.29
Religious Discrimination	4.45	4.52	4.49	4.52	4.53	4.65	4.75	4.55
Disability Discrimination	4.40	4.63	4.44	4.69	4.65	4.78	4.78	4.60
Organizational Commitment	3.50	4.06	3.81	4.18	3.98	3.93	3.45	3.96
Trust in the Organization	3.42	3.86	3.51	4.02	3.67	3.92	3.51	3.93
Work Group Effectiveness	4.17	4.29	4.50	4.20	4.37	4.19	4.32	4.43
Work Group Cohesion	3.97	4.17	4.18	4.18	4.04	4.07	4.10	4.35
Leadership Cohesion	3.52	3.67	3.49	3.82	3.32	3.33	3.63	3.87
Job Satisfaction	3.85	4.16	4.00	4.21	4.12	4.21	3.91	4.27

IV. LOCALLY DEVELOPED QUESTIONS

From a list of 150 DEOMI generated questions, the CAT Team selected additional questions specifically not addressed in the main portion of the survey. The yellow hi-lighted percentages are those areas when combining Totally Agree and Moderately Agree are below the Overall NPS Totals for the top two categories. The following chart identifies the percentages based on each question asked of the individual groups.

TEAM CLIMATE GROUP							
LOCALLY DEVELOPED QUESTIONS							
(Note: Data taken from DEOMI COMMAND SURVEY 2008-2 BRIEF and Appendix A, DEOMI Report 4)							
	Overall NPS	**NPS Staff**	**NPS Students**	**NPS Faculty**	**NPS Officers**	**NPS Enlisted**	**NPS Contractors**
1. An atmosphere of respect exists in my work area.							
• **Totally Agree**	**51.4%**	39.7%	55.7%	49.4%	**56.3%**	52.9%	48.8%
• **Moderately Agree**	**35.6%**	37.8%	34.8%	36.1%	**34.4%**	29.4%	37.2%
• **Neither Agree nor Disagree**	**7.4%**	10.3%	6.7%	8.6%	**3.1%**	17.6%	7.0%
• **Moderately Disagree**	**3.9%**	8.4%	1.8%	4.3%	---	---	5.8%
• **Totally Disagree**	**1.7%**	3.8%	1%	1.7%	**6.3%**	---	1.2%
2. I view contract employees as a part of the team.							
• **Totally Agree**	**51.3%**	55.7%	43.5%	62.2%	**68.8%**	52.9%	76.7%
• **Moderately Agree**	**28.1%**	23.3%	32.2%	27.0%	**21.9%**	23.5%	9.3%
• **Neither Agree nor Disagree**	**14.5%**	4.2%	17.6%	7.7%	**6.3%**	23.5%	8.1%
• **Moderately Disagree**	**3.6%**	13.4%	4%	2.1%	---	---	3.5%
• **Totally Disagree**	**2.5%**	3.4%	2.8%	0.9%	**3.1%**	---	2.3%
3. Communication flows freely from senior leadership to all levels of the organization.							
• **Totally Agree**	**20.3%**	11.1%	25.3%	11.2%	**9.4%**	11.8%	30.2%
• **Moderately Agree**	**35.5%**	27.9%	39.6%	30.9%	**34.4%**	41.2%	30.2%
• **Neither Agree nor Disagree**	**17.9%**	19.1%	19.3%	17.6%	**12.5%**	5.9%	10.5%
• **Moderately Disagree**	**15.3%**	17.9%	10.6%	25.3%	**25.0%**	17.6%	18.6%
• **Totally Disagree**	**11.0%**	24.0%	5.2%	15.0%	**18.8%**	23.5%	10.5%
4. I have sufficient time in my duty day to conduct my core duties.							
• **Totally Agree**	**31.8%**	29.8%	32.2%	26.6%	**34.4%**	35.3%	47.7%
• **Moderately Agree**	**36.2%**	36.3%	36.7%	33.5%	**43.8%**	52.9%	32.6%
• **Neither Agree nor Disagree**	**13.4%**	15.3%	15.7%	12.4%	**3.1%**	---	9.3%
• **Moderately Disagree**	**12.7%**	10.7%	11.2%	17.2%	**12.5%**	11.8%	8.1%
• **Totally Disagree**	**5.8%**	8.0%	4.2%	10.3%	**6.3%**	---	2.3%

5. The leaders in my command show a real interest in the welfare of single service members.							
• **Totally Agree**	**23.2%**	16.8%	25.5%	20.2%	**15.6%**	17.6%	31.4%
• **Moderately Agree**	**25.7%**	16.4%	30.7%	19.3%	**18.8%**	41.2%	22.1%
• **Neither Agree nor Disagree**	**39.5%**	8.0%	32%	48.9%	**56.3%**	17.6%	38.4%
• **Moderately Disagree**	**8.1%**	54.6%	8.3%	7.7%	**6.3%**	17.6%	5.8%
• **Totally Disagree**	**3.6%**	4.2%	3.4%	3.9%	**3.1%**	5.9%	2.3%
6. I can raise concerns about issues that affect my job without fear of reprisal.							
• **Totally Agree**	**36.0%**	30.9%	36.5%	33.5%	**43.8%**	35.3%	50.0%
• **Moderately Agree**	**34.6%**	35.5%	35.5%	33.0%	**31.3%**	35.3%	27.9%
• **Neither Agree nor Disagree**	**15.8%**	10.7%	16.7%	16.3%	**12.5%**	17.6%	9.3%
• **Moderately Disagree**	**9.2%**	14.5%	8.2%	12.0%	**9.4%**	5.9%	7.0%
• **Totally Disagree**	**4.5%**	8.4%	3%	5.2%	**3.1%**	5.9%	5.8%
7. I receive periodic formal feedback from my rater.							
• **Totally Agree**	**25.7%**	30.5%	20.5%	33.0%	**50.0%**	23.5%	32.6%
• **Moderately Agree**	**24.8%**	29.0%	22.5%	26.2%	**12.5%**	29.4%	33.7%
• **Neither Agree nor Disagree**	**29.0%**	10.3%	37.5%	18.5%	**21.9%**	17.6%	18.6%
• **Moderately Disagree**	**8.8%**	16.8%	7.8%	11.2%	**3.1%**	17.6%	8.1%
• **Totally Disagree**	**11.6%**	13.4%	11.7%	11.2%	**12.5%**	11.8%	7.0%
8. I trust management to handle complaints, problems, or issues seriously.							
• **Totally Agree**	**32.1%**	26.0%	35.3%	25.8%	**31.3%**	35.3%	36.0%
• **Moderately Agree**	**35.1%**	29.0%	37.3%	34.8%	**46.9%**	17.6%	32.6%
• **Neither Agree nor Disagree**	**16.2%**	17.6%	15.1%	17.6%	**12.5%**	29.4%	17.4%
• **Moderately Disagree**	**11.0%**	17.6%	8.3%	15.0%	**3.1%**	11.8%	9.3%
• **Totally Disagree**	**5.6%**	9.9%	4%	6.9%	**6.3%**	5.9%	4.7%
9. I experience a high level of stress in this command.							
• **Totally Agree**	**11.4%**	12.2%	11.2%	12.4%	**6.3%**	5.9%	10.5%
• **Moderately Agree**	**30.5%**	34.0%	29.5%	32.6%	**31.3%**	35.3%	23.3%
• **Neither Agree nor Disagree**	**23.8%**	15.3%	24.5%	22.3%	**15.6%**	17.6%	19.8%
• **Moderately Disagree**	**20.8%**	26.0%	21.6%	17.6%	**37.5%**	29.4%	31.4%
• **Totally Disagree**	**13.4%**	12.6%	13.3%	15.0%	**9.4%**	11.8%	15.1%
10. Rules, regulations and policies are enforced in this command.							
• **Totally Agree**	**29.4%**	21.0%	33.5%	23.6%	**15.6%**	5.9%	40.7%
• **Moderately Agree**	**38.8%**	34.4%	39.8%	44.6%	**40.6%**	41.2%	26.7%
• **Neither Agree nor Disagree**	**17.1%**	18.3%	15.9%	19.3%	**28.1%**	23.5%	17.4%
• **Moderately Disagree**	**10.7%**	16.8%	7.7%	10.3%	**9.4%**	29.4%	14.0%
• **Totally Disagree**	**4.0%**	9.5%	3.1%	2.1%	**6.3%**		1.2%

The specific questions with low scores, when compared to NPS overall averages, are in the areas of:

- Respect in the work area
- Communication with senior leadership
- Time to complete major duties
- Fear of reprisal
- Trust in management to handle work place issues
- High level of stress in command.

POSITIVE COMMENTS/FINDINGS

There was quite an extended list of positive comments provided by the survey participants but the CAT Team narrowed them down to the following.

* No signs of racist behavior.

* Contract workers viewed as team players.

* Enlisted and officers view single service members programs as exceeding Navy's percentage.

* Employees like their jobs, very satisfied with actual duties – strong organizational commitment.

* Professional opportunities are available.

* Discrimination not identified in the following protected classes: disability, national origin, race, religion, sexual harassment, and gender.

* Command Behavior and relationship with minorities are excellent.

* Enlisted personnel are professional, steps up to the plate and complete assignments.

* Within departments/work group, employees believe they work as a team.

* NPS overall has multi-ethnic groups

* Supportive and encouraging working environment

* NPS classes are great.

* Faculty are superb.

NPS AREAS OF CONCERN (AOC)

Through extensive discussion and review of the documented survey results by the CAT, the following seven (7) areas of concern have been identified for action by the President and NPS Executive Leadership.

AOC #1: Communication/Leadership

AOC #2: Lack of respect

AOC #3: Workload – Lack of time

AOC #4: Fear of reprisal

AOC #5: Lack of trust in management

AOC #6: High level of stress

AOC #7: Recruitment of faculty (minorities and women)

There were four (4) other areas that were identified as significant but not listed as Areas of Concern for action.

Secretary of the Navy Guest Lecturer (SGL)
(POC: Student Council)
Senior Military and Enlisted being underutilized
Lack of training of personnel
(POC: Staff Development Committee)
Building maintenance – Poor

Identified within each AOC are possible "Causes" for that particular area and "Recommended Improvements." The Recommendations will serve as the basis for developing a Plan of Action to remedy the identified Areas of Concern (AOC).

Recommendations for Improvement will be provided under separate cover.

Any questions should be directed to Deborah A. Baity, NPS Survey Administrator/ Command Deputy EEO Officer, Herrmann Hall, Room 139h, Tel No.: (831) 656-2480 or email: dbaity@nps.edu.