2007

Sponsored Programs Annual Report / Fiscal Year 2007

Monterey, California. Naval Postgraduate School, Research and Sponsored Programs Office

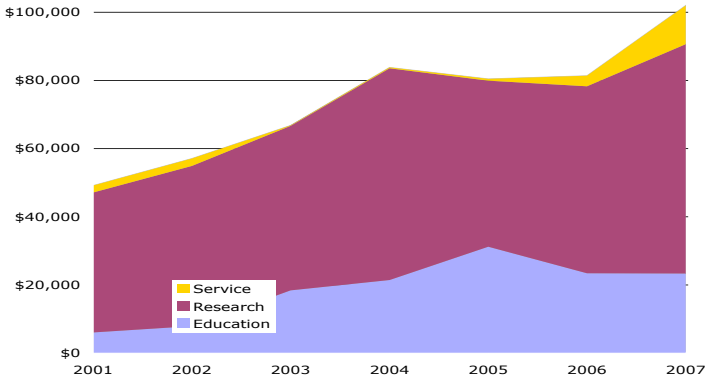
SPONSORED PROGRAMS ANNUAL REPORT

Naval Postgraduate School • Fiscal Year 2007

PROGRAM OVERVIEW

The Naval Postgraduate School has a strong sponsored program that has grown steadily to provide the faculty and staff required for a strong, viable graduate school. In FY07, NPS had available over $145.5M in sponsored program funding. Total expenditures in FY07 exceeded $102.9M.

Sponsored Program Profile FY 2000-2007



Sponsored programs (research, education, and services) are integral to the Naval Postgraduate School (NPS) mission. The research program supports graduate education by providing militarily relevant thesis topics that address issues from the current needs of the Fleet and Joint Forces to the science and technology required to sustain long-term superiority of the Navy/DoD. Research varies from the very fundamental to the very applied, at all levels of classification. Sponsored research includes:

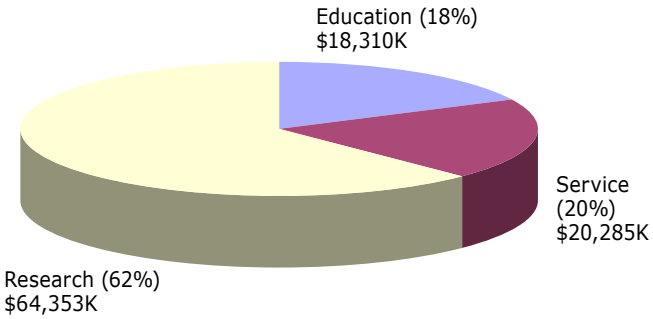
- Basic and Applied Research
- Individual and Interdisciplinary Group Projects
- Fleet Support
- Cooperative Research and Development Agreements

Integrated graduate education and research in space systems, total-ship systems engineering, combat systems, systems engineering and homeland security and defense, supplemented by off-campus graduate and certificate programs and short courses, are a few offerings of the sponsored education program.

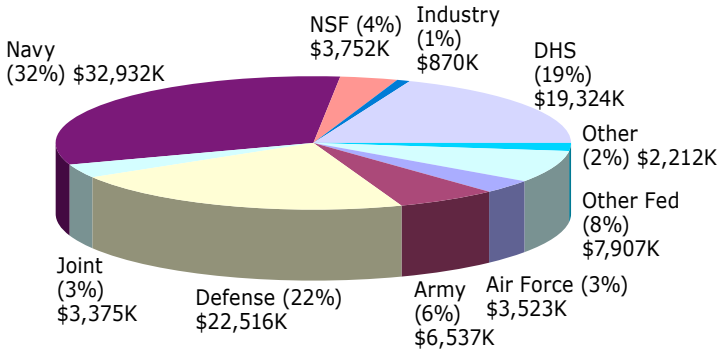
SPONSORED PROGRAM EXPENDITURES

1 October 2006 - 30 September 2007
Total Expenditures: $102.9M

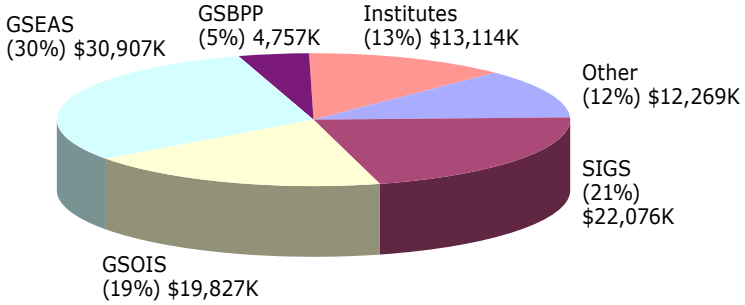
By Type of Activity



By Sponsor



By NPS Organization



Dan Oliver, NPS President
Leonard Ferarri, Executive Vice President and Provost
Dan Boger, Dean of Research
Danielle Kuska, Director, Research and Sponsored Programs Office

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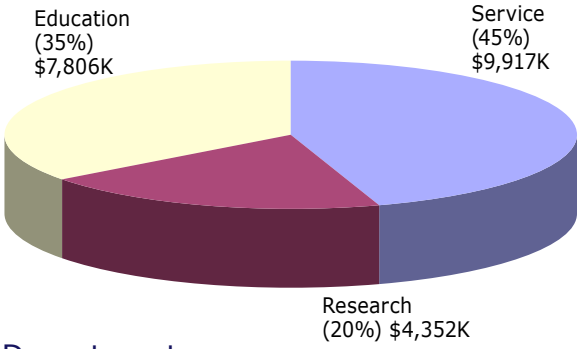
SCHOOL OF INTERNATIONAL GRADUATE STUDIES

SIGS provides graduate-level education to U.S. and international students and conducts research on current and emerging security concerns of the United States and allies. The SIGS mission is to educate the next generation of U.S. and international leaders and prepare them for assignments in defense and foreign policy, international relations, and security cooperation. SIGS organizational elements include the Department of National Security Affairs (NSA), Defense Resources Management Institute (DRMI), Center for Homeland Defense and Security (CHDS), International Graduate Programs Office (IGPO), and Center for Civil-Military Relations (CCMR). CCMR comprises the Center for Stabilization and Reconstruction (CSRS), International Defense Acquisition Resource Management (IDARM), and Leadership Development and Education for Sustained Peace (LDESP). Note: Statistics are for NSA, CHDS, and DRMI only.

Total Expenditures: $21,998K

By Type of Activity



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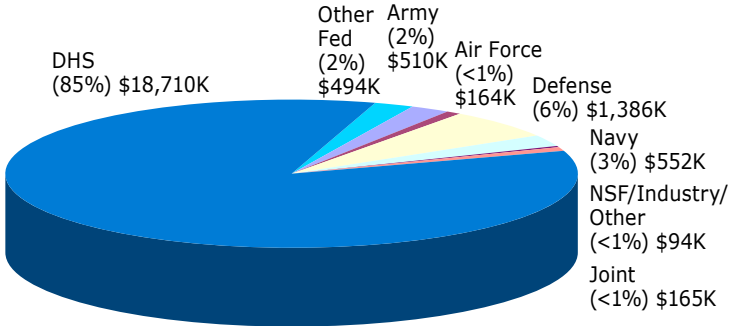
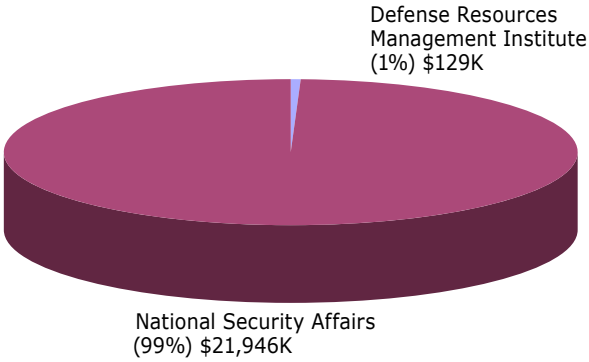


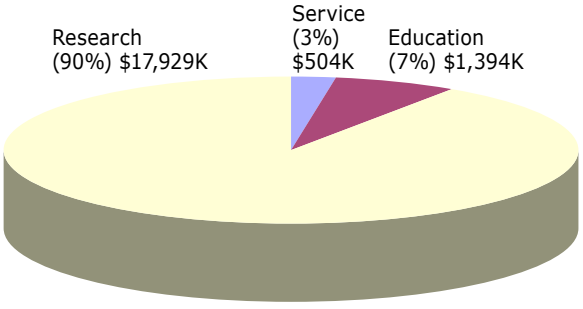
By Department



GRADUATE SCHOOL OF OPERATIONAL AND INFORMATION SCIENCES

Total Expenditures: $19,827K

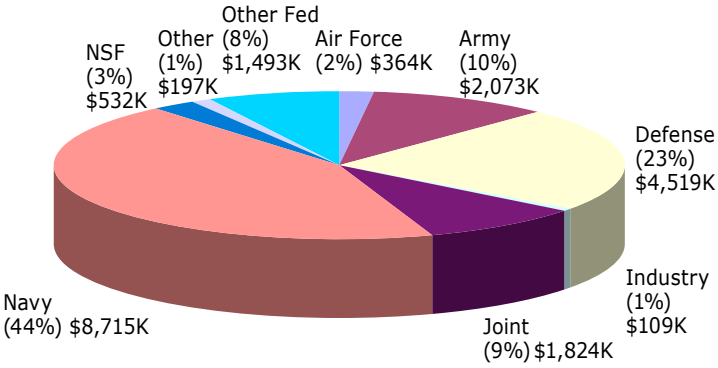
By Type of Activity



GSOIS includes graduate resident programs consisting of sixteen technical curricula and awards master of science and Ph.D. degrees across four academic departments. In response to the needs of naval and military customers, graduate-level education and cutting-edge research are focused in four non-traditional knowledge domains: information science and technology; military computer science; military operations analysis and research; and special operations and related defense analyses.

The emphasis of sponsored activities is on mathematical, scientific, and technical skills needed to understand current advances and foster improvement in military systems and operations, integration of subject matter contained in classical academic disciplines in militarily relevant ways, and subject matter suited to the corporate university's military customer.

By Sponsor



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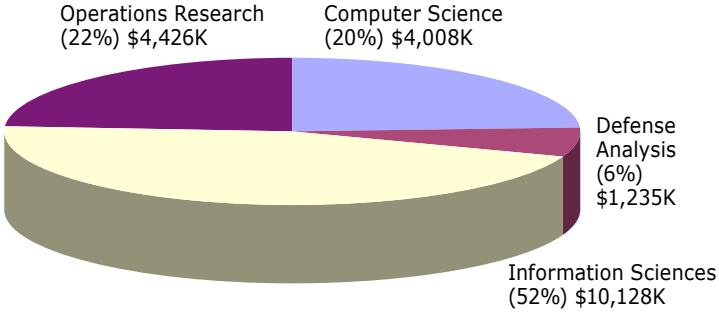
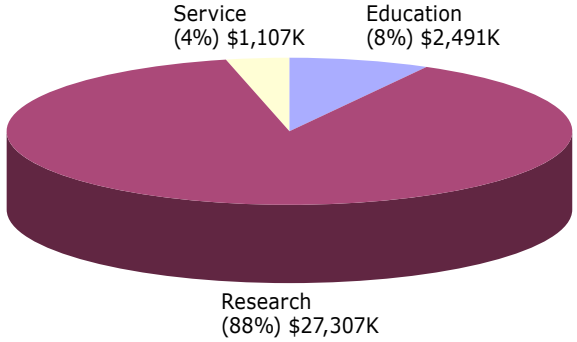


GRADUATE SCHOOL OF ENGINEERING AND APPLIED SCIENCES

GSEAS provides graduate education leading to the master of science, engineer, doctor of philosophy, and doctor of engineering degrees. GSEAS is composed of seven technical academic departments (applied mathematics, electrical and computer engineering, mechanical and astronautical engineering, meteorology, physics, oceanography, systems engineering) and one interdisciplinary academic group (space systems). These entities offer degree programs tailored to the specific needs of the Navy and defense community at large, at the same time providing the technical foundation for student theses and interdisciplinary projects of faculty and students. Research centers and unique laboratory facilities (e.g., the Spacecraft Research and Design Lab, Rockets and Combustion Lab, Signal Enhancement Lab, Ocean Acoustics Observatory, Interactive Digital Environment Analysis Lab, Secure Space-Systems Research Lab, Secure Computer-Network Research Lab, and Directed Energy Lab) add rigor to the resident academic and sponsored programs.

Total Expenditures: $30,907K

By Type of Activity



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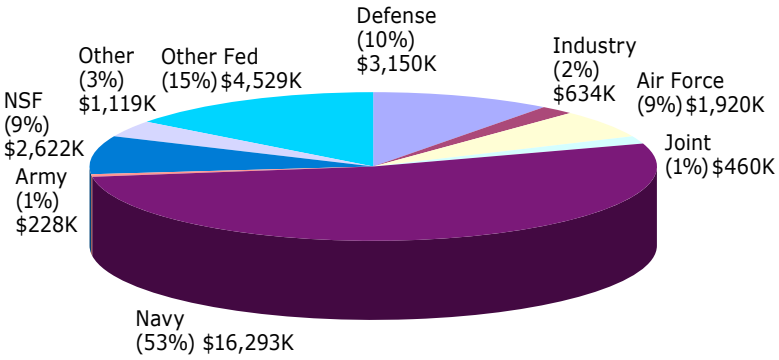
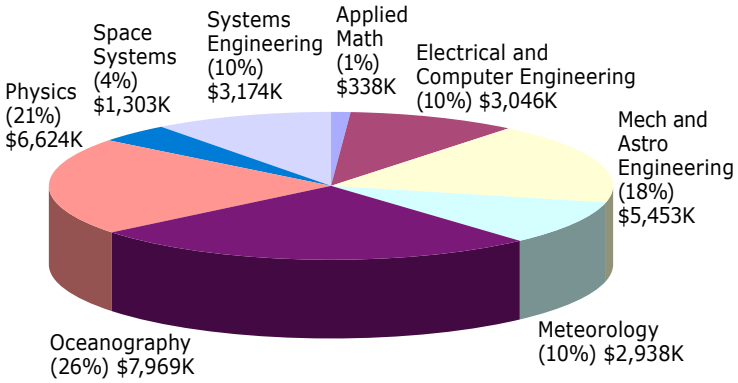


By Department

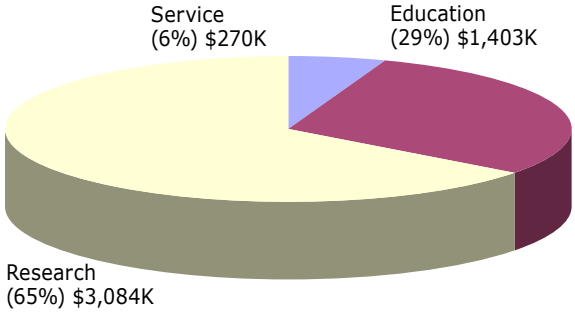


GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

GSBPP offers a unique residential defense-focused MBA program, plus master's degrees in five other DoD-relevant areas. Faculty research is an important component of the school and strives to support military decision making, problem solving, and policy setting; improve administrative processes and organizational effectiveness; contribute knowledge to academic disciplines; and advance the mission of graduate education. The 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. Topics and issues can be grouped into five broad functional areas: acquisition and contracting; budgeting and financial management; logistics and transportation; manpower-systems analysis; and policy formulation, analysis, and management.

Total Expenditures: $4,757K

By Type of Activity



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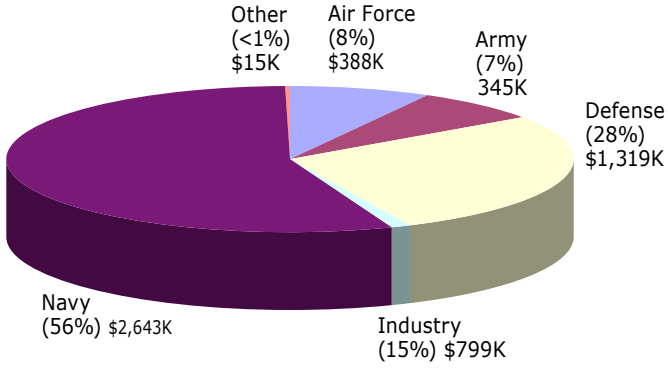


RESEARCH AND EDUCATION INSTITUTES AND CENTERS

NPS's research and education institutes apply interdisciplinary investigation to military challenges, offering or facilitating degree programs, executive and continuing education, student contact with senior naval leadership, and student and faculty research from basic to applied. Twenty-plus research centers, reporting to the Dean of Research, emphasize practical application.

The Wayne E. Meyer Institute of Systems Engineering supports research in combat effectiveness and US security. Topics include littoral undersea warfare, port security, ship-based ABM, littoral oceanography, attrition models for unmanned systems, deployable joint C&C, naval architecture, risk-informed decision making, impact-burial prediction, Chinese oceanography, technological surprise in nuclear physics, and MDA field-sensors.

The Cebrowski Institute for Innovation and Information Superiority sponsors cross-disciplinary investigation into ways that information processes and technologies, organizational development, and personal skill can strengthen stability, transitional operations, crisis response, warfighting, and defense.

The MOVES Institute investigates modeling, virtual environments, and simulation, with projects in 3D visual simulation, networked VE, computer-generated autonomy, computational cognition, human-performance engineering, immersive technologies, game-based simulation, and combat modeling and analysis.

The Center for Interdisciplinary Remotely Piloted Aircraft Studies (CIRPAS) provides manned aircraft, remotely piloted aircraft and ground radar for scientific research, test, and evaluation, especially atmospheric and oceanographic observation, payload integration, flight-safety reviews, logistics, and flight support.

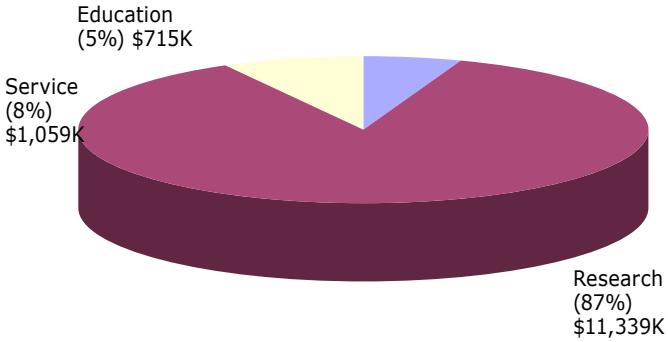
The Center for Defense Technology and Education for the Military Services (CDTEMS) provides research support for the Center for Post-Conflict Reconstruction, USSOCOM-NPS Cooperative Field Experimentation, Regional Security Education, and the Maritime Domain Protection project.

The National Security Institute (NSI) is a research and education collaboration among Lawrence Livermore National Laboratory, NPS, and UC Santa Barbara, focused on national and homeland security and offering a joint work-study doctoral program.

The Center for Asymmetric Warfare (CAW) predicts vulnerabilities in homeland defense and researches, develops, and tests protections. The CAW satellite center is at Pt. Mugu naval base.

Total Expenditures: $13,114K

By Type of Activity



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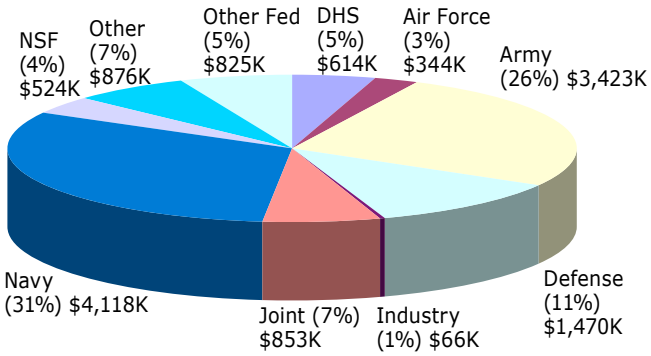
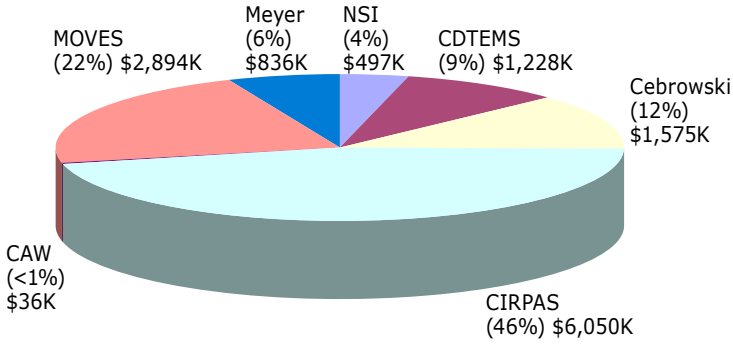


By Institute/Center



ADDITIONAL RESEARCH FACTS IN FY07

- Seventeen Cooperative Research and Development Agreements were executed: Integrated Applications Incorporated • Purdue University • San Francisco State University • Monterey Institute of International Studies Virginia Polytechnic Institute and State University • Kestrel Technology Group • XTAR • Scan Pacific Northwest • GATR Technologies • Northrop Grumman Space & Mission Systems • Trident Systems • Insitu • Fortinet • DRS Power & Control Technologies
- 1,240 degrees were conferred, including
  - 20 Advanced Degrees (Ph.D., Engineer)
  - 188 Masters of Business Administration
  - 743 Masters of Science
  - 195 Masters of Arts
- Nine Space and Naval Warfare Systems Center fellowships were awarded to NPS students.
- Eleven National Research Council Research Associates were on tenure at NPS.
- Three visiting faculty members from the Engineer and Scientist Exchange program were hosted.
- One new patent was issued: "Signal Synthesizer and Method Therefor."