Program budgeting in the Indonesian Navy.

Nusantoro, Priyadi
Monterey, California. Naval Postgraduate School

https://hdl.handle.net/10945/18247
PROGRAM BUDGETING IN THE
INDONESIAN NAVY.

Priyadi Nusantoro
NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS
Program Budgeting in the Indonesian Navy
by
Priyadi Nusantoro

June 1977

Thesis Advisor: J. C. Tibbitts

Approved for public release; distribution unlimited.
The Planning, Programming and Budgeting System is an attempt to provide information to the right people at the right time. Indonesia is one of the countries that uses PPBS in the military organizations.

This thesis reviews the current Program Budgeting process in the Indonesian Navy, and compares it with the process used by the
20. Abstract (continued)

U.S. Navy and the Department of Defense. Conclusions and recommendations are then generated for improving the process in the Indonesian Navy in order to provide for better use of systems analysis techniques and to be more adaptable to the rapidly changing environment of the country.
Program Budgeting In The Indonesian Navy

by

Priyadi Nusantoro
Major, Indonesian Navy, Administration Corps
B.S., Indonesian Naval Academy, 1964

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
June 1977
ABSTRACT

The Planning, Programming and Budgeting System is an attempt to provide information to the right people at the right time. Indonesia is one of the countries that uses PPBS in the military organizations.

This thesis reviews the current Program Budgeting process in the Indonesian Navy, and compares it with the process used by the U.S. Navy and the Department of Defense. Conclusions and recommendations are then generated for improving the process in the Indonesian Navy in order to provide for better use of systems analysis techniques and to be more adaptable to the rapidly changing environment of the country.
# TABLE OF CONTENTS

I. INTRODUCTION --------------------------------------------- 10  
II. CURRENT INDONESIAN NAVY PROGRAM BUDGETING -------- 13  
III. PROGRAM BUDGETING IN THE U.S. DEPARTMENT OF DEFENSE ------------------- 35  
IV. EVALUATION OF THE INDONESIAN NAVY PROGRAM BUDGETING ------------------- 63  
V. CONCLUSIONS AND RECOMMENDATIONS -------------------------- 81  

APPENDIX A: U.S. Five Year Defense Program (FYDP)/Department of the Navy Five Year Program (DNFYP) ----------------------------------- 90  

APPENDIX B: U.S. Program/Budget Review-Calendar Year 1976 Schedule ------------------------ 94  

LIST OF REFERENCES ---------------------------------------- 99  
INITIAL DISTRIBUTION LIST --------------------------------- 101
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Planning Period</td>
<td>13</td>
</tr>
<tr>
<td>2.</td>
<td>Organizational Structure of the Indonesian Navy</td>
<td>18</td>
</tr>
<tr>
<td>3.</td>
<td>The Indonesian Navy Strategic Planning Schedule</td>
<td>19</td>
</tr>
<tr>
<td>4.</td>
<td>Strategic Appreciation Process</td>
<td>21</td>
</tr>
<tr>
<td>5.</td>
<td>Strategic Estimates Process</td>
<td>22</td>
</tr>
<tr>
<td>6.</td>
<td>Strategic Planning Process</td>
<td>24</td>
</tr>
<tr>
<td>7.</td>
<td>Capabilities Planning Process</td>
<td>28</td>
</tr>
<tr>
<td>8.</td>
<td>Activities and Projects Proposal Lists</td>
<td>34</td>
</tr>
<tr>
<td>9.</td>
<td>The Location of Systems Analysis Office Alternative I</td>
<td>84</td>
</tr>
<tr>
<td>10.</td>
<td>The Location of Systems Analysis Office Alternative II</td>
<td>84</td>
</tr>
<tr>
<td>11.</td>
<td>Unit Cost vs. Volume or Complexity of Processing</td>
<td>88</td>
</tr>
</tbody>
</table>
LIST OF EXHIBITS

Exhibit 1. Planning, Programming, Budgeting 43
Exhibit 2. Programming Phase 50
Exhibit 3. Budgeting Phase 51
Exhibit 4. Appropriation and Apportionment Phase 53
Exhibit 5. Authorization Phase 54
Exhibit 6. Program Structures 66
Exhibit 7. Program Budget Structure of the U.S. Navy 69
Exhibit 8. Program Budget Structure of the Indonesian Navy 70
Exhibit 9. Major Documents in PPBS 73
Exhibit 10. Project Proposal List 76
ACKNOWLEDGMENTS

The author wishes to thank those who so willingly and ably assisted him in the research for and preparation of this thesis.

I would first like to thank CDR Jonathan Tibbitts, my advisor, for his generous assistance. He is a man of great patience and perseverance. His encouragement and guidance enable me to meet the personal and academic requirements of this thesis.

I would especially like to thank Professor William Campbell of the Defense Resource Management Education Center. He patiently worked with me and invited me to DRMEC lectures on PPBS. Much of my understanding of PPBS is the result of my discussions with Professor Campbell. He gave me the benefit of his extensive experience with PPBS, and despite his busy class schedule he always found time to spend with me.

I would also like to thank the following officers of Indonesia Navy for their time and valuable information which they provided me on management background and current concern: First Admiral Soekiswo, Col. Ashaf Abdullah, Col. Suwarso, Col. Teguh Santoso, Col. Slamet Soedibjo, Col. Sujoso Sukarno, Lt. Col. Roestam Musa, Major Hatomi, Major Thaha and Major Soenartojo.
Additionally, my thanks to CDR McGonigal, my second reader, for his assistance and comments, Major William F. Dunbar, USAF, my sponsor, for his encouragement and assistance, and Mrs. Winona Carlisle, my typist, for her contribution.

Finally, most sincere appreciation is felt for my lovely wife Maria who patiently took care of our children: Eddy, Totok and Christin. Her love and thoughtfulness are blessings for which I am very thankful.
I. INTRODUCTION

Planning is the production of a range of meaningful potentials for selecting courses of action through systematic consideration of alternatives. The need for organizational planning is obvious; the future is uncertain. For this reason, it is essential that any organization clarify its objectives, determine what action must be taken to achieve the objectives and by whom, and be able to determine the cost to achieve its goals.

Since the future is uncertain, planners must work with uncertainty. Assumptions must be made to simplify problems. Therefore the ultimate outcome of any plan may not be what was expected at the start. Proper planning which includes the ability to adapt the plan to changing information cannot guarantee that the future can be predicted with accuracy or that mistakes will not occur. Many people have been disappointed in planning for this reason. They expected too much from planning. It should be recognized that proper planning is not a "crystal ball" but that it is a means by which management can minimize unexpected events.1

In this decade of tremendous increase in speed, complexity of problems, competition, and the rate of change of the environment, an up-to-date planning process is a must.

---

1 Green, Edward J., Workbook for Corporate Planning, AMA pg. 19.
Enlightened managers can no longer rely solely on experience to judge whether they are meeting their original objective. They must have a system that provides them with the information to assess whether they are optimizing performance in a changing environment.

One attempt to provide information to the right people and at the right time is the Planning, Programming, and Budgeting (or Program Budgeting) System of the United States. This system was introduced in the U.S. Department of Defense by Secretary Robert McNamara in 1961.² Similar systems exist in many other countries, including Indonesia.

The introduction and first phase of the implementation of Program Budgeting in Indonesia began in 1969 with the use of the Program Proposal Lists.³ In 1973, a PPBS study group, headed by Maj. Gen. A. Kadir Prawiraatmadja, published the "Conceptional Skeleton of the Application of PPBS in Indonesia." At the same time, the Indonesian Department of Defense-Security issued "Buku Induk Perencanaan Strategis, Program dan Anngaran HANKAM" or "The Manual for Strategic Planning, Programming and Budgeting in the DoD Security."

³Prawiraatmadja, Kadir A., Conceptional Skeleton of the Application of PPBS in Indonesia. LAN pg. 2.
As a follow up action, the Indonesian Navy issued "Buku Petunjuk Perencanaan Strategis Penyusunan Program dan Anggaran TNI-AL (UM-9.1)" or "Guidebook for Planning, Programming, and Budgeting for the Indonesian Navy." A second book, UM-9.1A, "Administration Guidance of the Planning, Programming and Budgeting for the Indonesian Navy" was issued in 1977.

The purpose of this thesis is:

1. To review the current Program Budgeting Process in the Indonesian Navy;

2. To compare this process with that used by the U.S. Navy/DoD;

3. To suggest improvements in the Indonesian Navy process as required to better control program changes.
II. CURRENT INDONESIAN NAVY PROGRAM BUDGETING

A. CURRENT STRUCTURE OF PLANNING

A planning system is the means by which management outlines the direction it desires its organization to take. The Indonesian Navy planning process is an integral part of the Department of Defense Security planning. The system used is centralized planning. The inputs for the plans come from assistants to the Chief of Staff of the Navy (CSN), Naval Districts and others. The Assistant CSN for Planning and Budgeting is the coordinator of the Navy Planning.

The Navy planning consists of three stages corresponding to three time periods, long-range, mid-range, and current period, as shown in Fig. 1. The plans in each succeeding stage are based upon plans from prior stages or on some other plan that is in the same stage.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LONG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHORT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig. 1
Planning Period

4UM-9.1 is the main source of this chapter.
1. **Long Range Planning**

Strategic Appreciation provides a statement of the Indonesian Navy force requirements in the next 10 years. Strategic estimates are generated that highlight the second five years of the 10 years plan. These estimates discuss how environment, economics, international politics and technology changes might influence the National Security. Also guidance for long term Research and Development activities is provided. The document "Strategic Appreciation" is prepared and reviewed annually from July 1 to October 31.

2. **Mid-Range Planning Consists of the Following Documents:**

   a. **Strategic Estimates**

      The Indonesian Navy Mid-Range Planning provides a Navy position in the first five years of the Long-Range Plan. Mid-Range Planning develops a proposed strategic concept, mission and efforts for two years after an emergency case that happen at the end of the Mid-Range Planning. This Plan also calculates the forces needed and the risk if the objectives can not be met. The document "Strategic Estimates" is the title of this plan and is prepared and reviewed annually from May 1 to July 31.

   b. **Strategic Objective Plans**

      From the Mid-Range Plan of the Department of Defense-Security, the Navy develops a Navy Program Control that states the annual objectives and budget
estimates for the first 6 years of the Long-Range Planning. Mid-Range Objectives are prepared and reviewed annually from December 1 to April 30.

3. **Short-Range Planning**

   This planning provides a statement of current capabilities, considering constraints such as budget, environment, etc. Short-Range Planning consists of the following documents:
   
   a. **Force Planning:**
      Provides the Naval Forces development, logistics guidance, and administration support to meet the annual objectives. Force Planning is prepared and reviewed from May 1 to August 31.
   
   b. **Mobilization Plans**
      Provides directions and guidance for the development of Naval Forces for prompt and sustained combat incident to operations at sea that might happen in the first years of the Long-Range Plan.

B. **CURRENT PLANNING PROCESS**

   1. Planning generates a range of meaningful courses of action through systematic considerations of alternatives. The roles of the major organizational elements in the Long-Range Planning are as follows:
      
      a. **Chief of Staff of the Navy:**
         CSN determines the Navy Management Policy. This will be the basic document for Navy Planning.
b. Deputy Chief of Staff of the Navy:
   Organizes and coordinates the General Staff activities in Long-Range Planning.

c. General Staff-Intelligence:
   Prepares Intelligence Estimates that are relevant for the development of the posture of the Navy.

d. General Staff-Personnel:
   Prepare Personnel Estimates and proposes the personnel plan based upon evaluation of the present situation.

e. General Staff-Logistics:
   Prepares Logistics Estimates and proposes the logistics plan based upon the evaluation of the present situation.

f. General Staff-Operations and Readiness:
   Prepares Long-Range Requirements and Capabilities Study that will be used as the basis for developing the strategic planning.

g. General Staff-Planning and Budgeting:
   With the help of the other General Staffs and/or study groups, this staff prepares:

   (1) Strategic Appreciations:
       Describes the threat, obstacles and environmental proposals for long range policy and requirements to support it.
(2) Strategic Estimates:
Describes the projected position in the second five years of the long-range plan and provides alternatives courses of action. Determines the objectives that might be accomplished.

(3) Strategic Objectives Plan:
Describes the strategic objectives and estimates the budget needed for the first six years of the long term planning.

(4) Mobilization Plan:
Describes the force level, probability of accomplishment of objectives, mobilization need, mobilization phases and demobilization plan.

h. Navy Major Commands and Central Offices/Institutions:
Supports the data as needed for strategic planning and reports periodically the execution of the programs. A simplified organization structure of the Indonesian Navy is shown in Fig. 2. Figure 3 illustrate the Indonesian Navy strategic planning schedule.

2. The Major Steps of the Strategic Appreciation are outlined below:
   b. Step-2. General Staff prepare estimates in their respective fields.
Organizational Structure of the Indonesian Navy (simplified)

Fig. 2
The Indonesian Navy Planning Schedule
(1) Intelligence Estimates by Assistant CSN for Intelligence.

(2) Personnel Estimates by Assistant CSN for Personnel.

(3) Logistics Estimates by Assistant CSN for Logistics.

This should be done within three weeks after receipt of NMP-LR.

c. Step-3. Assistant CSN for Operations and Readiness, prepares Long-Range Requirement based upon the staff estimates (Intelligence, Personnel, and Logistics) within four weeks, starting August 15.

d. Step-4. Assistant CSN for Planning and Budgeting based upon the Long-Range Requirement, prepares Strategic Appreciation and submits to CSN by the last week of October.

e. Step-5. CSN submits Strategic Appreciation to Minister of Defense-Security.

Figure 4 portrays the steps of the Strategic Appreciation process.
3. The major steps of the Strategic Estimates process are outlined as follows:


   b. Step-2 General Staffs prepare Mid-Range Estimates in their respective fields:

      (1) Intelligence Estimates-Mid Range (tentative) by Assistant CSN for Intelligence.

      (2) Personnel Estimates-Mid Range (tentative) by Assistant CSN for Personnel.

      (3) Logistic Estimates-Mid Range (tentative) by Assistant CSN for Logistics.
This should be done within three weeks after receipt of NMP-MR.

c. Step-3. Assistant CSN for Operations and Readiness prepares Mid-Range Requirement (tentative) based upon the Intelligence, Personnel, and Logistics Estimates. This should be done within three weeks after receipt of Staff Estimates.

d. Step-4. Assistant CSN for Planning and Budgeting prepares Strategic Estimates (tentative) based upon the Mid-Range Requirement (tentative), and submits it to CSN by August 1.

e. Step-5. CSN submits Strategic Estimates (tentative) to Minister of Defense-Security.

The steps of the Strategic Estimates process are shown in Fig. 5.

<table>
<thead>
<tr>
<th></th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSN</td>
<td>NMR-LR</td>
<td></td>
<td></td>
<td>REV</td>
</tr>
<tr>
<td></td>
<td>(2W)</td>
<td></td>
<td></td>
<td>(1 W)</td>
</tr>
<tr>
<td>GEN STAFF (I,P,L)</td>
<td>STAFF EST MR (TENT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEN STAFF OPS READINESS</td>
<td></td>
<td>REQ MR (TENT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3 W)</td>
</tr>
<tr>
<td>GEN STAFF PLKN/BUD</td>
<td>STRATEGIC EST (TENT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(3 W)</td>
</tr>
</tbody>
</table>

Fig. 5
Strategic Estimates Process
4. The major steps of strategic objective planning are outlined as follows:
   c. Step-3. Assistant CSN's prepare Staff Estimates. More accurate intelligence estimates, personnel estimates and logistics estimates are prepared by the respective assistant CSN's. These should be done within five weeks after the issuance of NMP-MR.
   d. Step-4. Assistant CSN for Operation and Readiness prepares Mid-Range Requirement Estimates based upon the three estimates (Intelligence, Personnel and Logistic). Five weeks are allowed for this.
   e. Step-5. Assistant CSN for Planning and Budgeting prepares Strategic Plan-Mid Range Plan based upon the Mid-Range Requirement Estimates.

   This should be done within seven weeks and is submitted to CSN by the last week of April, and then to Minister of Defense. The steps in Strategic Planning are shown in Fig. 6.
5. The major steps of the Capabilities Planning are listed as follows:

a. Step-1. CSN issues Navy Management Policy-Short Range (NMP-SR). Based upon the Strategic Plan (Navy) and Capabilities Plan (Department of Defense-Security), CSN issues NMP-SR containing guidance and determine program priorities.

b. Step-2. Assistant CSN's prepare Staff Estimates (Short-Range) in their respective fields. This should be done within three weeks from the second week of May.

c. Step-3. Assistant CSN for Operation and Readiness prepares the Capability Study. This plan, based
upon the Staff Estimates and its supplement "Battle Structure," should be done within three weeks. These documents are distributed to Commandants of the Prominent Command and Offices.

d. Step-4. Prominent Commands and Offices prepare "Activity Proposal List" and/or "Projects Proposal List." These should be done by the end of July.

e. Step-5. Assistant CSN for Planning and Budgeting prepares Capability Plan and Mobilization Plan. This should be submitted to CSN by the end of August, who will submit it to the Minister of Defense by September 15. The Capability Plan has two supplements:

(1) Battle Structure: Describes and identifies strength, command structure and personnel disposition, unit and equipment for the coming year.
(2) Program and Budget Plan.

Steps in the Capabilities Planning process are shown in Fig. 7.

C. CURRENT STRUCTURE OF PROGRAMMING

1. The Strategic Plan (mid-range) of the Department of Defense-Security consists of three major programs, each broken into further subprograms. The Indonesian Navy Plan has the same structure which is as follows:

a. Major Program Number One, Force Level, includes the following five subprograms:
b. Major Program Number Two, Armed Forces Support/Facilities Requirements, includes the following six subprograms:

(1) Education
(2) Naval Bases
(3) Communication and Electronics
(4) Maintenance
(5) Management
(6) Research and Development

c. Major Program Number, National Defense-Security Support/Facilities Requirements, includes the following three subprograms.

(1) Small Industry
(2) Maintenance/Overhaul
(3) Personnel Transition

2. Program Management

The roles of the key personnel in managing the programs are as follows:

a. Program Coordinator. The Assistant for Planning and Budgeting at each level is the Program Coordinator for that level and is responsible as follows:
(1) Assistant CSN for Planning and Budgeting is responsible for all programs in the Navy.

(2) Assistant Commandant's for Planning and Budgeting of the major commands are responsible for programs in major commands.

b. Program Supervisors: Assistant Intelligence, Personnel, Logistics and Finance Officers are Program Supervisors for their respective fields.

(1) Assistant CSN's and Navy Finance Officer are program supervisors in Headquarters.

(2) Assistant Commandant's and Finance Officer in the Commands are program supervisors in Major Commands.

c. Program Officers responsible for the entire program:

(1) Commandant/Head of Major Commands for major commands.

(2) Head of HQ offices for centralized programs.

(3) Officers appointed by CSN for special programs.

d. Program Executioners

(1) Heads of Offices, Type Commanders, Commanding Officers of stations, or bases in Major Commands.

(2) Heads of HQ Sections in the HQ offices.
Fig. 7
Capabilities Planning Process
(3) Officers appointed by Head/Commandant of HQ offices or Major Commands for special project.

D. CURRENT PROGRAMMING AND BUDGETING PROCESS

1. The Budget is an expression in financial terms, organized by appropriation and fund structure, of a plan for carrying out approved program objectives for the specific period of time under consideration. Budgeting is a continuous process usually involving a time span of more than one year.

2. Major Commands and Offices at Headquarters prepare and Activities Proposal List and Project Proposal List, based upon their assessment of the needs of the field. The Activities Proposal List budgets for routine (operating) appropriations, and the Project Proposal List budgets for investment appropriations.

3. The Programming and Budgeting process for a fiscal year begins 11 months before it becomes effective. The steps are as follows, as shown in Fig. 8.

   a. General Guidance from HQ for all Program Officers (Heads of Major Commands, etc.) is issued early in May. This informs the Major Commands of the percentage changes for the coming year from the current year.

   b. Program Officers then prepare the Budget Plan for their Commands. This contains the desired budgets and computations for both Routine and Investment Program. This must be done in two weeks.
c. Program Supervisors then review the Budget proposed by the Program Officers. The evaluation is posted to the Assistant CSN for Planning and Budgeting.

d. The Program Coordinator (Assistant CSN for Planning and Budgeting) compiles the budget for routine and investment expenditures into the Navy Budget Plan and, after signed by the CSN, it is submitted to Minister of Defense-Security prior to June 7.

e. Department of Defense-Security will make decisions (tentative) on June 30 that can be used to prepare "Activities Proposal and Project Proposal Lists."

f. Based upon DoD-S decision (tentative), the Program Coordinator coordinates the staff of the Program Supervisors at HQ level in preparing the detailed allocation for HQ offices and Major Commands. This should be done in two weeks.

g. Program Coordinators and Supervisors (HQ level) then presents detailed guidance to Program Officers at RAKOR RENAKU I (the first coordination meeting of Planning and Budgeting and Finance Officers) that is held during the third week of July.

h. Based upon the detailed guidance from RAKOR RENAKU I the Program Officers prepare the detailed program in their respective command to the SATKER level.  

---

5Program Officers must break down the approved program into the smallest units possible called "Satuan Kerja (SATKER) or job unit. This is the lowest echelon recorded in financial management as a cost center, and is usually one level below major command.
i. Each SATKER then prepares the data needed for Activities Proposal Lists. The Program Officers then compile the data and this becomes Major Commands Activities and Projects Lists. This should be done within two weeks.

j. Program Officers then submit the consolidated Activities Proposal List to CSN by August 15. Assistant CSN for Planning and Budgeting then compiles all these proposals. Program Supervisors at HQ level monitor whether the activities proposal plans meet the detailed guidance. Program Supervisors and Program Officers may make adjustments as needed.

k. The Navy Activities Proposal List should be submitted to the Minister of Defense-Security by the end of August.

l. As soon as these are approved by Department of Defense-Security General Staff CSN for Planning and Budgeting issues "Program Execution Guidance" that describe:

   (1) Budget structure
   (2) Indexes
   (3) Allocations
   (4) Administrative instructions

4. The Project Proposal List is prepared at the Major Commands, based upon DoD-Security guidance, by Program Supervisors under Program Coordinator coordination. With the issuance of the Presidential Note in December, the DoD-Security receive the fixed allocation. DoD-Security then
adjusts the Proposal to meet the allocation. In January during the second Planning and Financial Officers' meeting, the major commands will get the final direction/guidance to reconcile the fixed Projects and Activities Proposal with the actual allocation. There are two appropriations of funds; routine and investment funds. The expenses consist of salaries expense, procurement expense, maintenance expense and transportation expense. Fig. 8 illustrate the Activities and Project Proposal Lists Process.

5. The distribution of the funds to the administrators is as follows:

a. The Minister of Defense issues the main authorization letter (SKOIN) for all services.
b. The Assistant Minister of Defense for Finance issues authorization letters (SKO) for all services.
c. The Assistant Minister of Defense for Finance issues authorization execution letters (SKOP) for Department of Defense-Security Staffs.
d. The Chief of Staff or each service issues execution authorization letters (SKOP) for its major commands. SKOIN and SKOP are issued quarterly.

6. The budget execution can be described as follows:

a. At HQ level:

   When the time comes, Program Officers inform the appropriate Program Supervisor. The Program Supervisor reviews and evaluates "The Program Operation Plan" (RENOPSPRO), and issues a Program Execution Recommendation
(RECOM) to the Program Coordinator. Based upon that recommendation, the Program Coordinator issues a Program Memo to the Chief of Finance Office of the Navy with regard to the priority of the program and budget situation. The Chief Finance Office of the Navy on behalf of the CSN issues execution authorization letters (SKOP). This is a delegation of authority to the Program Officers. The Program Officers delegate this authority to their program executioners by issuing Program Executioner Orders, or (P3). Unlike SKOP, P3 is issued as needed.

b. At Major Command levels:

The budget execution at major commands is similar to HQ. The Finance Officer issues P3 after the Program Coordinator issues the Program Memo.

7. Program Review and Analysis

Both program progress and funds used must be reported periodically. The Program Officer is responsible for the reports.
<table>
<thead>
<tr>
<th></th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOD</strong></td>
<td></td>
<td><strong>DECISION</strong></td>
<td></td>
<td><strong>PROGRAM</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>(TENT)</strong></td>
<td></td>
<td><strong>EXECUTION</strong></td>
</tr>
<tr>
<td><strong>CSN</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>GUIDANCE</strong></td>
</tr>
<tr>
<td><strong>GEN</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>COMPILE</strong></td>
</tr>
<tr>
<td><strong>GUIDANCE</strong></td>
<td>(1 W)</td>
<td></td>
<td></td>
<td>(2 W)</td>
</tr>
<tr>
<td><strong>PROGRAM</strong></td>
<td></td>
<td><strong>EVALUATE</strong></td>
<td><strong>DETAIL COORD</strong></td>
<td></td>
</tr>
<tr>
<td><strong>SUPERVISORS</strong></td>
<td></td>
<td>(1 W)</td>
<td><strong>ALLOC MEETING</strong></td>
<td></td>
</tr>
<tr>
<td><strong>COORDINATOR</strong></td>
<td></td>
<td><strong>COMPILE</strong></td>
<td><strong>COORD COORD</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PROGRAM</strong></td>
<td></td>
<td>(1 W)</td>
<td><strong>COORD METTING</strong></td>
<td><strong>COMPILE</strong></td>
</tr>
<tr>
<td><strong>OFFICERS</strong></td>
<td></td>
<td><strong>BUDGET</strong></td>
<td><strong>COORD MEETING</strong></td>
<td>(2 W)</td>
</tr>
<tr>
<td><strong>JOB UNITS</strong></td>
<td></td>
<td><strong>PLAN</strong></td>
<td>(2 W)</td>
<td>(1 W)</td>
</tr>
<tr>
<td><strong>(SATKER)</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>ACT PROP</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1 W)</td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 8**

Activities and Project Proposal List Process.
III. PROGRAM BUDGETING IN THE U.S. DEPARTMENT OF DEFENSE

A. PPBS

1. The Planning, Programming and Budgeting System (PPBS), often called Program Budgeting, is an integrated system for the establishment, maintenance and revision of the Five Year Defense Program and the DoD budget. Program Budgeting is the third stage of budget reform encountered in the 1900s. The first stage was Line-Item Budgeting that stressed developing an adequate system of expenditure control. The second was Performance Budgeting, or budgeting based upon functions, activities and projects. Program Budgeting, the third phase, emphasizes planning.

Program Budgeting has the following advantages:

a. It provides a formal and systematic method to improve decision-making concerning the allocation of resources.

b. It is carried on with adequate recognition of what costs are.

c. It provides a basis for choosing between available and feasible alternatives.7

---

6 Department of Defense Instruction No. 7045.7 Oct. 29, 1969 page 4. PPBS is not only used in military, but also for other organizations.

2. The major PPBS components are:
   a. Systems analysis
   b. Program structure
   c. Multi-year program and financial plan
   d. Documentation
   e. Continuous decision-making
   f. Accounting and Reporting

B. SYSTEMS ANALYSIS

1. PPB is a management tool to assist decision-making. A good decision is made by selecting the best alternative. To prepare and evaluate alternatives, an analysis should be made. Quade defined systems analysis as:

   "A systematic approach to helping a decision-maker choose a course of action by investigating his full problem, searching out objectives, and comparing them in the light of their consequences, using an appropriate framework - insofar as possible analytic - to bring expert judgement and intuition to bear on the problem."

2. The analyst group and planning staff should be close to the top of the organization hierarchy. Recommendations made by the analyst group should be presented in such a way that management has alternative choices and it is not, in effect, approving decisions made by the staff. The analytical steps are:

---

8 NMSC Handout IX-48 (11-70).
a. Determination of Mission
A statement of the task and its purpose. If the mission is general in nature, determine by analysis what tasks must be performed to ensure that the mission is accomplished. State multiple tasks in the sequence in which they are to be accomplished.

b. The Situation and Courses of Action
(1) Determine all facts, or in the absence of facts, logical assumptions which have a bearing on the situation and which contribute to or influence the ultimate choice or a course of action. Analyze available facts and/or assumptions and arrive at deductions from these as to their favorable or adverse influence or effect on the accomplishment of the mission.

(2) Determine and list significant difficulties or difficulty patterns which are anticipated and which could adversely the accomplishment of the mission.

(3) Determine and list all feasible courses of action which will accomplish the mission if successful.

c. Analysis of Opposing Courses of Action
Determine through analysis the probable outcome of each course of action listed in paragraph b(3) when opposed by each significant difficulty enumerated in paragraph b(2). This may be done in two steps:

(1) Determine and state those anticipated difficulties or difficulty patterns which have an approximately equal effect on all courses of actions.
(2) Analyze each course of action against each remaining significant difficulty pattern to determine strengths and weakness inherent in each course of action.

d. Comparison of All Courses of Action

Compare courses of action in terms of significant advantages and disadvantages which emerged during analysis. Decide which courses of action promises to be most successful in accomplishing the mission.

e. Decision

Translate the course of action selected into a complete plan showing the who, what, when, where, how and why as appropriate.

3. Several techniques can be used in analysis such as simulation, gaming, SAMSON,\textsuperscript{11} linear programming, Monte Carlo, etc. There is no best technique. The kind of analysis performed depends on the level of decision-making. Quade and Boucher identify four levels of decision-making and discuss the type of analysis used at each level.\textsuperscript{12}

a. Management of Operations - which is essentially no different from management science: an attempt to increase the efficiency of some particular man-machine system, where "efficiency" is something as straightforward as maximizing profits.

b. Choice of Tactical Alternatives - which is sometimes called "conflict design in the small," and where the objective of the operation is usually clear, and some reasonably satisfactory measure of effectiveness already is assumed to exist.

\textsuperscript{11}An acronym for Support-Availability Multi-System Operation-Model.

\textsuperscript{12}Quade, ES, ed, System Analysis, pg. 302-303.
c. Systems Engineering, Systems Designs, and Systems Research - where the problem is to find better ways, or the best way, of implementing a system requirement. The operations to be performed are given, are already specified; the analysis assumes these operations are important, it accepts the requirement, but the inquiry may question established criteria of costs and effectiveness, or indeed may be explicitly charged with the responsibility for coming up with better measures for evaluating the responsibility for coming up with better measures for evaluating the performance of alternative systems.

d. Determination of Major Policy Alternatives - which is sometimes called "conflict design in the large": the analysis of alternative means for implementing basic strategies, or the analysis of the impact of force posture choices and strategic alternatives upon the nation's ability to achieve its foreign policy objectives.

C. PROGRAM STRUCTURE

1. Program structure is a classification system that categorizes the activities of an organization according to their relationship to the organization's objectives.  

This definition expresses the single most important criterion formulating program categories, i.e., that they be linked to a conception of the purposes of the organization. Program structure is very important because it:

a. Displays information in a way that will be meaningful to management and directly usable in decision-making.

---

b. Provides an information base that will support subsequent efforts at systems analysis.

2. Other characteristics of a program structure are:
   a. The program structure should embrace all the activities of organization.
   b. The program structure is a hierarchial classification scheme: Program, Subprograms, Program elements.
   c. The program structure should allow for categorization of activities according to several attributes.
   d. The program structure should allow for and reflect differences in how activities directly relate to objectives.
   e. The program structure should be made up of categories that remain relatively stable over the years, so that long range planning can be carried on. It should also be able to accommodate new activities.\textsuperscript{14}

3. Program structure development usually begins by defining objectives in terms of measurable output. This should provide a framework within which proposals for alternatives can be examined. However the objectives sometimes are hard to measure, especially the philosophical objectives which are always abstract. The objective must be operational. If possible, the objective statement should consist of three elements: behavior (what to do), condition (how to do), and standard (how well).

\textsuperscript{14}\textit{Ibid}, pg. 21-23.
Neither the philosophical nor the behavioral/operational objectives are directly usable in formulating a program structure. The philosophical objectives are too abstract and not operational, and the behavioral objectives are too specific and too detailed. Objectives for the program budgeting need to be stated at levels of abstraction that lie between the philosophical and behavioral objectives.

D. MULTI-YEAR PROGRAM AND FINANCIAL PLAN

1. The Five Year Defense Program (FYDP) is a series of force tables giving an eight year projection of forces and five year projections of cost and manpower. The U.S. DoD PPBS operates on an 18 month cycle, that involves the following basic steps, the timing of which is promulgated by the SECDEF annually in the Program/Budget Review Schedule:

   a. JCS submits JSOP Vol. I (Strategy) to SECDEF.
   b. SECDEF issues Defense Policy and Planning Guidance (DPPG).
   c. SECDEF issues Material Support Planning Guidance (draft logistics guidance).
   d. JCS submits JSOP Vol. II (Forces) to SECDEF.

It is based on JSOP Vol. I and Defense Policy and Planning Guidance and is not fiscally constrained. (Requirements are identified and objective forces are recommended.)

---

e. SECDEF issues Planning and Programming Guidance Memorandum (PPGM) (modification to DPPG Strategy, if appropriate; Fiscal Guidance, Material Support Planning Guidance; and Guidance for Program Objective Memorandum/ Joint Force Memorandum Preparation).

f. JCS submits the Joint Force Memorandum (JFM) to SECDEF. It includes force and resource recommendations, rationale and risk assessments. The JFM is fiscally constrained consistent with Fiscal Guidance contained in the PPGM.

g. Military Departments/Defense Agencies submit Program Objective Memoranda (POM) to SECDEF. Forces and resource recommendations with rationale and risk assessment are included. The POM is fiscally constrained consistent with Fiscal Guidance contained in the PPGM.

h. SECDEF issues Program Decisions. Reclamas to these decisions are submitted by Departments/Agencies; then final decisions are issued.

i. Departments/Agencies submit budget estimates for budget year.

j. SECDEF issues Program/Budget decisions. The system is recycled annually and an overlap results. This means simultaneous budgeting for one year, programming for the following year, and planning for the succeeding year. This method is known as a "Rolling Plan." Exhibit 1 illustrate the Program Budgeting in the U.S. DoD.
EXHIBIT I

PLANNING * PROGRAMMING * BUDGETING

MAY | SEPT - OCT | DEC | FEBRUARY | MAY | JULY - AUG | OCTOBER | NOV - DEC

SECRETARY OF DEFENSE

POLICY & PLANNING GUIDANCE

TENT. PLANNING & PROGRAMMING GUIDANCE

PLANNING & PROGRAMMING GUIDANCE

FORCE PLANNING

FISCAL MATERIAL

PROGRAM DECISION MEMOS

R & C

BUDGET DECISIONS

JSOP = JOINT STRATEGIC OBJECTIVES PLAN

R & C = REVIEW & COMMENT
2. The U.S. Navy Program Budgeting\textsuperscript{16}
   a. The Department of the Navy's portion of the
      DoD FYDP is summarized, displayed and distributed by the
      publication titled "Department of the Navy Five Year Program"
      (DNFYP). The structure of the DNFYP is shown in Appendix A.
   b. Program management
      (1) Program Coordinator. Director Navy
          Planning (OP-090) is the coordinator of the program
          budgeting in the U.S. Navy.
      (2) Program Sponsor. The Program Sponsorship is aimed at facilitating the overall direction of the
          Navy/Marine Corps programs in accordance with directive
          and policy. There are five sponsors within the OPNAV:
          Mission Sponsor, Function Sponsor, Appropriation Sponsor,
          Program Sponsor and Development Coordinator.
         a. Mission Sponsor
            A Mission Sponsor is a DCNO or
            a Director of a Major Staff office (DMSO) responsible for
            developing the overall goals, objectives, rationale, justifi-
            cation and resource requirements, for a specified mission
            area. Implementing programs to obtain the overall goals
            and objectives must be time phased to the realities of
            technology, production capacity, fiscal and military manpower
            constraints, and within these realities must be responsive

\textsuperscript{16}U.S. Navy Programming Manual is the main source of
this part.
to the projected threat. The Mission Sponsor has "birth to death" interest in the systems under his cognizance with reliance on other types of sponsorship for appropriate emphasis at different phases in the systems life cycle. The Mission Sponsor shall determine the priority ranking of programs or parts of programs under his cognizance. The order of priority is not to be realigned by Appropriation Sponsors without the concurrence of the Mission Sponsor. In instances of disagreement over assignment of program responsibility, the DNPP will provide recommendations to the VCNO, based on information from DCNO's/DMSO's.

(b) Function Sponsor

A function sponsor is the DCNO/DMSO designated as responsible for the preparation, substantiation, and justification of a Navy position on the level, composition and related direct support for a force, platform or support area. The Function Sponsor receives guidance from the Mission Sponsor relative to mission related requirements. In selected instances, a Function Sponsor may also be a Program Sponsor.

(c) Program Sponsor

A Program Sponsor is a DCNO or DMSO who, by organizational charter, is responsible for determining program objectives, time phased support requirements, and for appraising progress, readiness, and military worth for a given weapon system, function, or task in support of
the goals and objectives of the appropriate Mission Sponsor. In selected instances, the Program Sponsor may also be a Function Sponsor. The Program Sponsor will be the primary Navy spokesman on matters related to the requirement for and development/procurement progress of the particular program.

(d) Appropriation Sponsor

An Appropriation Sponsor is responsible for supervisory control over an appropriation. Resource application must satisfy the Mission Sponsor's goal and objectives and support the force levels and program objectives of the Function and Program Sponsor. The Appropriation Sponsor will function as the primary Navy spokesman on matters relating to the resource requirement and will coordinate with the Mission and Program Sponsors to ensure that a balanced presentation is made. Program Sponsors are responsible for effecting coordination with Appropriation Sponsors when program requirements and dollar resources become or threaten to become out of balance. Similarly, Appropriation Sponsors are responsible for effecting coordination with cognizant program sponsors when formulating financial programming or changes to financial requirements of approved programs. If mutual agreement is not achieved on issues, the matter will be referred to Director, Navy Program Planning for assistance in developing satisfactory solutions.
(e) Development Coordinator

The Director, RDT&E has the responsibility for exercising CNO's authority in RDT&E matters for all weapon systems programs. He will support the Program Sponsors and Program Coordinators by accomplishing all RDT&E effort, at the OPNAV level, associated with Navy Programs. Should disagreement arise between the Development Coordinator and the Program Coordinator the problem will be referred to the Program Sponsor and the Director, RDT&E for solution.

(3) Program Coordinator. The Program Sponsor appoints a Program Coordinator for each program. The Program Coordinator will maintain an overview of the development, acquisition and planning for logistics support of the program, and act as the single point of contact within the Office of CNO for all matters concerning his assigned system. The Program Coordinator should be given enough authority to initiate correspondence and to negotiate agreements with participating organizations. The Program Coordinator relationships with the Project Manager should be particularized in order that the separate authorities of each may recognize those of the other, while at the same time recognizing the requirement that the Program Coordinator maintain an overview of all program activities from the point of view of the operating forces of the Navy and the Marine Corps.
(4) Project Manager. The Chief of Naval Material has been delegated the responsibility for project management within the Department of the Navy. In the Naval Material Command most designated projects are established in one of the Systems Commands with the Project Manager reporting directly to the Systems Commander. A limited number of Project Managers report directly to the Chief of Naval Material. Project Manager is a designated individual assigned the responsibility and delegated the authority for centralized management of a particular system.

(5) Program Coordination Group. The Program Coordinator Group consists of Project Managers for all designated projects, with representation from other activities participating in the programs as required, and will be chaired by the Program Coordinator. The function of the group is to assist the Program Coordinator.

3. The U.S. Navy Budget Process

The budget process can be divided in three phases, the formulation, justification and execution.

a. The budget formulation - planning and development of the budget for the fiscal year which commence one year from the next July 1. Annually, each military Department and Defense Agency prepares and submits to the Secretary of Defense a Program Objective Memorandum (POM), that provides

force, manpower, cost and material recommendations. The Secretary of Defense responds to and approves the POM by means of the Program Decision Memorandum (PDM). This process is shown in Exhibit 2.

Formulation of the actual budget then occurs when the contents of the approved PDM are translated into the requirements generated by the budget estimates of the CNO, CMC, CHNAVMAT, Offices, Bureaus, Systems Commands, Fleet Commands, and other commands which report directly to the Chief of Naval Operations. These budget estimates were prepared at the call of the Comptroller of the Navy, which consolidated the guidance from the DoD and the Department of the Navy's level. The formulation phase concludes with approval of the Navy's budget by means of the OSD Program Budget Decision (PBD), as shown in Exhibit 3.

b. Justification - presenting and justifying to the Congress the budget for the fiscal year which begins on the next 1 Oct. The Comptroller and staff directs the budget process during Congressional hearings concerning the Navy's appropriations by providing appropriate representation, by supplying additional information requested by Appropriation Committees, and by performing a continuing liaison function with the Congress. This process is shown by Exhibit 4.

Some appropriations, specifically procurement, military construction and RDT&E, require special authorization by
### EXHIBIT 2

<table>
<thead>
<tr>
<th>Yr</th>
<th>Mo</th>
<th>PRESIDENT</th>
<th>SENATE</th>
<th>HOUSE</th>
<th>OMB</th>
<th>OSD</th>
<th>JCS</th>
<th>DOD COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977</td>
<td>Jul</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PDM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TENTATIVE PDM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PDM COMMENTS</td>
</tr>
<tr>
<td></td>
<td>Aug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AMENDED PDM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>To BUDGETING PHASE</td>
</tr>
</tbody>
</table>

**PROGRAMMING PHASE**
BUDGETING PHASE

EXHIBIT 3

<table>
<thead>
<tr>
<th>Yr/Mo</th>
<th>PRESIDENT</th>
<th>SENATE</th>
<th>HOUSE</th>
<th>OMB</th>
<th>OSD</th>
<th>JCS</th>
<th>DOD COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug</td>
<td>BUDGET POLICY</td>
<td>BUDGET GUIDANCE</td>
<td>BUDGET GUIDANCE</td>
<td>From PROGRAMMING PHASE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From PROGRAMMING PHASE

To AUTHORIZATION PHASE
Congress for each project undertaken. This process is shown in Exhibit 5.

c. Execution - obligating and expending Congressionally appropriated funds for the current and prior fiscal years. Budgets are formulated, justified and executed on the basis of appropriations. Funds are requested and allocated in terms of a quarterly basis. The appropriations are subdivided into budget activities, subheads, program projects, etc.

The annual budget expresses the financial requirements necessary to support the approved Navy and Marine Corps programs which were developed during the planning and programming processes.

E. DOCUMENTATION

Many persons from different levels are involved in Program Budgeting. Each person needs different information. Documents, where findings, conclusions, and recommendations are recorded, are important.

The Program Budgeting documents used in the U.S. Navy/DoD are as follows:

a. Joint Long-Range Estimative Intelligence Document (JLREID). This document summarizes factors and trends in world power relationships and assesses the capabilities of important foreign nations.
EXHIBIT 5

AUTHORIZATION PHASE

<table>
<thead>
<tr>
<th>Yr</th>
<th>Mo</th>
<th>PRESIDENT</th>
<th>SENATE</th>
<th>HOUSE</th>
<th>OMB</th>
<th>OSD</th>
<th>JCS</th>
<th>DOD COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NATIONAL BUDGET</td>
<td>PROPOSED NATIONAL BUDGET</td>
<td>HEARINGS</td>
<td>COMMITTEE REPORT</td>
<td>AUTHORIZATION BILL</td>
<td>TESTIFY</td>
<td>TESTIFY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HEARINGS</td>
<td>COMMITTEE REPORT</td>
<td>AUTHORIZATION BILL</td>
<td>CONFERENCE</td>
<td>CONFERENCE</td>
<td>REACT</td>
<td>REACT</td>
</tr>
<tr>
<td>Jan - Sep 1978</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To APPROPRIATION PHASE
b. Joint Intelligence Estimates for Planning (JIEP). Describes situations and developments throughout the world that could effect U.S. security interests in the short- and mid-range periods.


d. Joint Strategic Capabilities Plan (JCSP). This document provides guidance to the Commanders of the Unified and Specified Commands and the service Chiefs for the accomplishment of military task, based on the projected military capabilities and conditions. The documents are supported by the following Navy and Marine Corps documents:

(1) Navy Strategic Study
(2) Marine Corps Long-Range Plan
(3) Navy Capabilities Plan
(4) Marine Capabilities Plan
(5) Navy Support and Mobilization Plan

e. Joint Strategy Objective Plan (JSOP). A document prepared annually which provides the advice of the Joint Chief's of Staff to the President and the Secretary of Defense on the military strategy and force objectives for attaining the national security objective of the United States. JSOP consists of three volumes: Vol. I - Strategy,
Vol. II - Analysis and force tabulation and Vol. III - Free world forces. 18

f. Defense Policy and Planning Guidance (DPPG). This document establishes the preliminary strategy framework for the planning, programming and budgeting phases in PPBS. In addition to DPPG, Secretary of the Navy, CNO and Commandant of the Marine Corps also issue policy and planning guidance.

(1) DNPPG (Department of the Navy Planning and Programming Guidance). This document transmits Secretary of the Navy planning and programming guidance to the Department of the Navy at appropriate times in the PPBS process.

(2) CPPD (CNO Policy and Planning Guidance). This document transmits the essence of the Secretary of Defense's policy and planning guidance as it applies to the Navy, along with the CNO's amplification of this guidance, his goals and priorities.

(3) CMC PPPG (CMC Program Policy and Planning Guidance). This document provides CMC interpretation of the National Strategy and the implications of that strategy on the Marine Corp. 19

Joint Research and Development Objectives Document (JRDOD). This document translates the broad strategy guidance as projected in the JLRSS, and the Strategy Concepts, objective force levels, and functional area requirements of the JSOP, into research and development objectives.

Five Year Defense Program (FYDP). This document is the summary of the approved Five-Year Program of all DoD components.

Department of the Navy Five Year Program (DNFYP). This is the official programming document, commonly referred to as the Blue Streak. This publication consists of volumes or booklets and displays the Navy's portion of the Five Year Defense Program (FYDP). SECDEF approved forces, manpower and financial data are given for each Navy Program Element for the current budget and program years.

Planning and Programming Guidance Memorandum (PPGM). This document provides fiscal guidance and an updated section of the DPPG, in addition to guidance indicated in subpara. f above. Fiscal guidance is annual guidance issued by the Secretary of Defense which provides the fiscal constraints that must be observed by the JCS, the military departments, and defense agencies in the formulation of force structures and FYDP, and by the Secretary of Defense Staff in reviewing proposed programs.
k. Joint Force Memorandum (JFM). A document prepared annually by JCS and submitted to the Secretary of Defense which provides recommendations on the joint force program within the fiscal guidance issued by the Secretary of Defense.

l. Program Objective Memoranda (POM). A memorandum in prescribed format submitted to the Secretary of Defense by the Secretary of a Military Department or the Director of a Defense Agency which recommends the total resources requirements within the parameters of the published Secretary of Defense fiscal guidance.

m. Program Decision Memoranda (PDM). A document which provides decisions of the Secretary of Defense on POM's and the JFM.

n. Program Change Request (PCR). Proposal in prescribed format for out-of-cycle changes to the approved data in the FYDP.

o. Program Change Decision (PCD). A Secretary of Defense decision, in prescribed format, authorizing changes to the Five Year Defense Program.

F. CONTINUOUS DECISION MAKING

The management of each level should encourage their organization elements to propose changes in program at any time, because of changes in the environment such as new plans, technological breakthroughs, revisions in military policy,
changes in assessment of the enemy threat, revision in cost, poor estimating, new research ideas and changes in program emphasis. Recommended POM changes should be made only when the change may be completely processed to permit analysis with the originally submitted POM in advance of Secretary of Defense Program Decision Memorandum. When changes cannot be processed in time to be included in Secretary of Defense Program Decision Memorandum, such changes can be processed using the Program Change Request.

The program change control system for out-of-cycle changes consists of:

1. Forms. The forms that are used in the U.S. Navy are:
   a. Program Change Request (PCR). A proposal to the Secretary of Defense in prescribed format for the out-of-cycle changes to the approved data in the FYDP.
   b. Program Change Decision (PCD). Secretary of Defense decision in prescribed format. Authorizes changes to the Five Year Defense Program.

---

20 U.S. Navy: Program Change Control System in the Department of the Navy, pg. 4-1.


22 U.S. Navy: *Program Change*, pg. 4-1.
c. Memorandum Program Change Request (MPCR).

MPCD provides a simplified proposal format by which proposed changes to the approved program may be approved at the SECNAV level.\(^\text{23}\)

2. Responsible Office

In the U.S. Navy the office that is responsible for reviewing and processing PCR's is the Department of the Navy Program Information Center (DONPIC), an office in OP-090.

3. Procedure

The procedure consists of criteria for submission, preparation and processing a PCR.

a. Criteria for submission

(1) An increase in total obligatory allocation or a transfer of dollars from one appropriation to another in the program years.

(2) Manpower changes when the net effect will increase the total military or civilian end-year strength.

(3) When directed by Secretary of Defense or an organization within Office of Secretary of Defense, to confirm a Secretary of Defense decision expressed by other than recognized decision documents and the decision is not insufficient detail to allow FYDP update action.

\(^{23}\)U.S. Navy Programming Manual, Appendix E-G.
(4) When directed by Secretary of the Navy as a result of a Secretary of the Navy decision on a Memorandum Program Change Request.

b. Preparation of a PCR

(1) A PCR is prepared by an Action Officer designated by the Program Sponsor. This document is submitted to DONPIC. This office will review and forward by memorandum to the Office of Secretary of Defense.

c. Processing a PCR

(1) A DONPIC Action Officer is assigned to process a PCR. The Action Officer will review and gather opinions from offices that will be affected by the substance of the PCR. After rework where necessary by the Program Sponsor, the PCR is returned to DONPIC, and is ready to be reviewed by Secretary of the Navy.

(2) The purpose of the PCR is to:

(a) Describe program objectives and expected concrete accomplishments and cost for several years into the future.

(b) Describe the program objective insofar as possible in quantitative physical terms.

(c) Compare the effectiveness and costs of alternative objectives, of alternative type of programs designed to meet the same or comparable objectives, and of different levels within any given program category.
(d) Make explicit the assumption and criteria which support recommended program.

(e) Identify and analyze the main uncertainties in the assumptions and estimations of program effectiveness costs, and show the sensitivity of recommendations to these uncertainties. 24

G. ACCOUNTING AND REPORTING

Prior to 1968, Navy accounting principally reported allotment status, since all funds including operations/maintenance were passed to activities by allotment and the allotment balance was the principal area of interest.

After 1968, as a result of Project PRIME (Priority Management Effort), accounting for the program structure of PPBS was passed to the field as a requirement of RMS (Resource Management Systems) accounting, for the operations and maintenance appropriations and the military personnel appropriations.

Today, as a result of RMS, a complicated accounting and reporting system for financial and performance measurement exists in the U.S. DoD that reports obligations and expenditures in terms of both the program structure and the appropriation structure.

24 Lyden, Fremont J. and Miller, Earnest G., Planning Programming Budgeting a system approach to management, Markham, pg. 413-414.
IV. EVALUATION OF THE PROGRAM BUDGETING OF THE INDONESIAN NAVY

A. SYSTEMS ANALYSIS

At Headquarters level and in the major commands there are Budget Committees that consist of a chairman who is the Assistant for Planning and Budgeting, a secretary who is the Program/Budgeting Officer, and a membership consisting of Program Supervisors. This Committee is charged with the responsibility of programming and budgeting, output appraisal of each program, analysis of the overall output and report preparation for higher authority. It does not, however, possess the capability for systems analysis discussed in earlier chapters.

The principal reason for this is the lack of trained professional analysts. Some progress has been made but to date it has been insufficient to provide satisfactory quantitative analysis. Another difficulty confronting the Indonesian Navy is the determination as to where the Analysis Group should be placed once it is developed. Parapat has suggested that the group (called the Operations Research Group) be coordinated by the Assistant of each Program Coordinator.

---

25 Program/Budgeting Officer is an officer who is responsible for the administration of the program and reports to the Assistant CSN (Commander) for Planning/Budgeting.

The United States experience provides no clear guidance. In the U.S. Navy, the Operations Analysis Group is under the Planning Office while in the U.S. Air Force it is under the Comptroller. A danger exists that if the group is under the Comptroller it will become too involved with just budgetary issues. To avoid this, it is suggested that the organization clearly separate programming and budgeting. A decision must also be made whether the group will originate proposals or simply review proposals of others. It is suggested that the group will be stronger if it originates proposals.  

The Operations Analysis Group should perform the following functions:

1. Develop measures of cost and effectiveness in order to make quick and accurate analysis of a variety of alternative programs of Navy force structure, weapon systems and other military capabilities projected over a period of several years.

2. Assemble, consolidate, summarize and present data in various forms so as to show the total implications of alternative programs in terms of relative cost, feasibility and effectiveness, and the problems of choice involved.

3. Analyze and review quantitative requirements in the following functional fields:
   a. Force structure
   b. Total manpower
   c. Weapon Systems and Major End Items of Material
   d. Transportation, including mobility and deployment
   e. Information and communication systems closely related with the above requirements

4. Assist Chief of Staff of the Navy in initiating, monitoring, guiding, reviewing and summarizing requirements of studies.28

B. PROGRAM STRUCTURE

There is a great similarity between the Indonesian DoD-Security and the U.S. DoD program structure as shown in Exhibit 6. Exhibit 7 shows the program structure of the U.S. Navy. Exhibit 8 shows the program structure of the Indonesian Navy.

<table>
<thead>
<tr>
<th>Major Programs</th>
<th>Programs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORCES</strong></td>
<td>Strategic Forces</td>
<td>Strategic Forces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Although both Navies have the same program structure, there is a difference, since in the U.S. &quot;strategic&quot; is synonymous with nuclear.</td>
</tr>
<tr>
<td>Territorial Forces</td>
<td>General Purpose Forces</td>
<td>The purpose of the Territorial Forces is the same as the General Purpose Forces, with the exception that transportation management is a separate program in the U.S. Navy, while included as an activity of the Indonesian Territorial Forces.</td>
</tr>
<tr>
<td>Strategic Intelligence and Communication</td>
<td>Intelligence and Communications Programs</td>
<td>The Indonesian DoD-Security separates Strategic Intelligence and Communications Programs, while the U.S. DoD combines them. The Indonesian Navy has no strategic Intelligence Capability and strategic control and surveillance forces. The General Purpose Forces also have air defense capability, for tactical purposes. The Indonesian DoD-Security Air Defense program consists of active air defense, passive air defense, and special air defense activities.</td>
</tr>
<tr>
<td>National Reserve Forces</td>
<td>Guard and Reserve Forces</td>
<td>In the Indonesian Navy this consists of administration and preparation activities.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>USA</td>
<td>Remarks</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>ARMED FORCES SUPPORT</strong></td>
<td><strong>Education</strong></td>
<td>In the Indonesian Navy Education is a separate program, but in the U.S. Navy it is included in the General Personnel Activities including medical.</td>
</tr>
<tr>
<td><strong>Naval Base</strong></td>
<td><strong>Central Supply and Maintenance</strong></td>
<td>Basically these programs are the same, but in the Indonesian Navy the Naval Bases program includes personnel support, other than education.</td>
</tr>
<tr>
<td><strong>Communications and Electronic</strong></td>
<td></td>
<td>In the U.S. this is included in the Intelligence and Communication. It is understandable since Intelligence and Communication are interwoven.</td>
</tr>
<tr>
<td><strong>Maintenance</strong></td>
<td></td>
<td>In the U.S. this program is included in the Central Supply and Maintenance program.</td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td><strong>Administration and Associated Act</strong></td>
<td>There is no difference in this program.</td>
</tr>
<tr>
<td><strong>Research &amp; Development</strong></td>
<td><strong>Research and Development</strong></td>
<td>There is no difference in this program.</td>
</tr>
<tr>
<td><strong>National Air Defense Forces</strong></td>
<td></td>
<td>In the U.S. this program is included in the Strategic Forces consisting of strategic offensive forces, strategic defensive forces, ...and</td>
</tr>
<tr>
<td>Major Programs</td>
<td>Programs</td>
<td>Remarks</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>NATIONAL DEFENSE SECURITY</td>
<td>Small Industry</td>
<td>There is no small industry program in the U.S. Navy. This consists of two subprograms, administration and industry activities.</td>
</tr>
<tr>
<td></td>
<td>Maintenance Service</td>
<td>In the U.S. Navy this is not a separate program, but included in the Central Supply and Maintenance.</td>
</tr>
<tr>
<td></td>
<td>Personnel Transfer (channeling)</td>
<td>No such program exists in the U.S. Navy. In the Indonesian Navy this program consists of vocational training, resettlement and the like.</td>
</tr>
<tr>
<td>Support to other Nations</td>
<td>Airlift</td>
<td>No such program exists in the Indonesian Navy or DoD-Security.</td>
</tr>
<tr>
<td></td>
<td>Sealift</td>
<td>In the Indonesian Navy/DoD-Security, this program is included in the Territorial Forces.</td>
</tr>
</tbody>
</table>
EXHIBIT 7

Program Budget Structure of the U.S. Navy

<table>
<thead>
<tr>
<th>Programs</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strategic Forces</td>
<td>Fleet Ballistic Missile System</td>
</tr>
<tr>
<td>2. General Purpose Forces</td>
<td>Acft Patrol SQ, Submarines, Amphibious forces</td>
</tr>
<tr>
<td>3. Intelligence and Communication</td>
<td>NAVCOM, Cryptologic Activity, Rescue/Recovery, Oceanography</td>
</tr>
<tr>
<td>4. Airlift and Sealift</td>
<td>Troop Transport, Tankers, Fast Deployment, Logistic Ships</td>
</tr>
<tr>
<td>5. Guard and Reserve Forces</td>
<td>Patrol (VP) SQS, Support Units</td>
</tr>
<tr>
<td>6. Research and Development</td>
<td>Research and Development</td>
</tr>
<tr>
<td>7. Central Supply and Maintenance</td>
<td>Supply Depots, ICPS, Aero Maintenance Activity</td>
</tr>
<tr>
<td>8. Training, Medical and other general personnel activities</td>
<td>Training Activities, Medical Activity</td>
</tr>
<tr>
<td>9. Administration and Associated activities</td>
<td></td>
</tr>
<tr>
<td>10. Support to other Nation</td>
<td>NATO support of allies</td>
</tr>
<tr>
<td>Program</td>
<td>Activities</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Strategic Forces</td>
<td>Battle Operation</td>
</tr>
<tr>
<td></td>
<td>Battle Support</td>
</tr>
<tr>
<td>Territorial Forces</td>
<td>Maintaining Battle Forces</td>
</tr>
<tr>
<td></td>
<td>Maintaining Territorial Forces</td>
</tr>
<tr>
<td></td>
<td>Transportation Management</td>
</tr>
<tr>
<td>National Air Defense Forces</td>
<td>Active Air Defense</td>
</tr>
<tr>
<td></td>
<td>Passive Air Defense</td>
</tr>
<tr>
<td></td>
<td>Special Air Defense</td>
</tr>
<tr>
<td>National Reserve Forces</td>
<td>General Administration</td>
</tr>
<tr>
<td></td>
<td>Unit Building Preparation</td>
</tr>
<tr>
<td>Training and Education</td>
<td>Recruiting</td>
</tr>
<tr>
<td></td>
<td>Training and Education for Enlisted petty officer, officers, and civilians</td>
</tr>
<tr>
<td>Naval Base</td>
<td>Engineering Activities</td>
</tr>
<tr>
<td></td>
<td>Medical</td>
</tr>
<tr>
<td></td>
<td>Personnel Support Activities</td>
</tr>
<tr>
<td></td>
<td>General Administration</td>
</tr>
<tr>
<td>Communication and Electronics Maintenance</td>
<td>Maintain Communication System</td>
</tr>
<tr>
<td></td>
<td>Building Maintenance</td>
</tr>
<tr>
<td></td>
<td>Transportation Maintenance</td>
</tr>
<tr>
<td></td>
<td>Machines Maintenance</td>
</tr>
<tr>
<td></td>
<td>Weapons Maintenance</td>
</tr>
<tr>
<td></td>
<td>Control and Command</td>
</tr>
<tr>
<td></td>
<td>General Management</td>
</tr>
<tr>
<td></td>
<td>Personnel Management</td>
</tr>
<tr>
<td></td>
<td>Material Management</td>
</tr>
<tr>
<td></td>
<td>Financial Management</td>
</tr>
<tr>
<td></td>
<td>Control and Auditing Management</td>
</tr>
<tr>
<td></td>
<td>Special Function Management</td>
</tr>
<tr>
<td></td>
<td>Organization Management</td>
</tr>
<tr>
<td>Management</td>
<td>General Administration</td>
</tr>
<tr>
<td>Small Industries</td>
<td>Industries</td>
</tr>
<tr>
<td>Maintenance Service Channeling</td>
<td>Overhaul</td>
</tr>
<tr>
<td></td>
<td>Personnel Channeling</td>
</tr>
<tr>
<td></td>
<td>Vocational Training</td>
</tr>
<tr>
<td></td>
<td>Transmigration/Resettlement</td>
</tr>
</tbody>
</table>
C. MULTI-YEAR PROGRAM AND FINANCIAL PLAN

There are two methods of preparing the strategic plan, i.e., the rolling plan and the periodic plan. The Indonesian Navy has not decided which method will be used. Currently the Indonesian Navy uses the periodic plan more than the rolling plan. One evidence was the program for training and education, called "Program Kendali Pendidikan dan Latihan (PRODALDIK)," or the multi-year training program. This program is not published annually. The current PRODALDIK is for FY 74-78.

The multi-year program in the Indonesian Navy as well as the Indonesian DoD-Security contains the objectives and phases to meet the objectives. The financial plan consists of budgeted research and development, budgeted investment, and budgeted operation and maintenance. It is understandable that the periodic plan is popular since it requires less work. Another factor that influences the use of the periodic plan is The National Development Plan (known as REPELITA or Five Year Development Plan) is also periodic.

Rolling plans require more work as compared to periodic plans, since the whole document should be reviewed and renewed every year. The advantages of a rolling plan are that it is always up-to-date, it is responsive to the environmental

\footnotesize

29 UM-9.1, pg. 10.

changes, and personnel trained in planning do not become diverted to other jobs between plan updates. With the rolling plan, the horizon of the plan is always constant; say five years or so. In the periodic plan this is true at the beginning, but the horizon is reduced as the years pass. At the end of the fourth year, it becomes an annual plan. In this era the environmental changes are so rapid that a good plan today may become useless next year. The rolling plan is a more current system than the periodic plan, and would improve the periodic plan.

There are differences in terminologies used in program management, such as Program Coordinator, Program Sponsor, etc. For example, Program Sponsors in the U.S. Navy are similar to Program Officers in the Indonesian Navy.

D. DOCUMENTATION

The comparison of major documents in PPBS in both the Indonesian and U.S. Navy are listed in Exhibit 9.

There are significant differences in the organizational structure of the Indonesian and U.S. Navy. The Secretary of the Navy in the U.S. is always a civilian, and the Commandant of the U.S. Marine Corps has the same level as the Chief of Naval Operations. Therefore in the U.S. Navy after the issuance of the DNPPG, it is necessary for CNO and CMC to issue PPG for their respective personnel. In the Indonesian Navy, the Commandant of the Marine Corps is under Chief of Staff of the Navy.
EXHIBIT 9
Major Documents in PPBS

<table>
<thead>
<tr>
<th>Indonesia</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. &quot;Navy&quot; Strategic Appreciation(^{31})</td>
<td>JSOP</td>
</tr>
<tr>
<td>2. Defense Strategic Study</td>
<td>DPPG</td>
</tr>
<tr>
<td>3. Navy Management Policy</td>
<td>DNPPG</td>
</tr>
<tr>
<td></td>
<td>CPPG</td>
</tr>
<tr>
<td></td>
<td>CMCPPG</td>
</tr>
<tr>
<td></td>
<td>JRDOD</td>
</tr>
<tr>
<td>(Part of the Navy Appreciation)</td>
<td>FYDP</td>
</tr>
<tr>
<td>4. Defense Strategic Objective Plan</td>
<td>PPGM</td>
</tr>
<tr>
<td></td>
<td>JFM</td>
</tr>
<tr>
<td>5. Activities and Projects Proposal List</td>
<td>POM</td>
</tr>
<tr>
<td>6. Activities and Projects Filling List(^{32})</td>
<td>PDM</td>
</tr>
<tr>
<td>7. Intelligence Estimates</td>
<td>JIEP</td>
</tr>
<tr>
<td>8. &quot;Navy&quot; Strategic Studies</td>
<td>JLREID</td>
</tr>
<tr>
<td>9. &quot;Navy&quot; Capabilities Plan</td>
<td>JLRSS</td>
</tr>
<tr>
<td></td>
<td>JSCP</td>
</tr>
</tbody>
</table>

\(^{31}\) Each service will submit Strategic Appreciation. The other documents are Army and Air Force Strategic Appreciation.

\(^{32}\) This is a Decision on the Activities and Project Proposal Lists.
In the U.S. DoD there are two documents submitted to the Secretary of Defense that contain essentially the same data, The JFM and The POM. The JFM is a document prepared annually by JCS and is submitted to the Secretary of Defense which provides recommendations on the joint force program within the fiscal guidance issued by the Secretary of Defense. The POM is a memorandum in prescribed format submitted to the Secretary of Defense by the Secretary of a Military Department or the Director of a Defense Agency which recommends the total resource requirements within the parameters of the published Secretary of Defense fiscal guidance.

The JFM is submitted because of the functions of JCS established by the National Security Act of 1947 which include:

1. To serve as the principal military advisor to the President, the National Security Council and the Secretary of Defense.
2. To prepare strategic plans.
3. To provide for the strategic direction of the Armed Forces.33

As the Secretary of the Navy is responsible for the operation of the Navy, SECNAV also prepares a strategic plan. The Indonesian DoD-Security does not have the JCS institution, so there is no "joint document." Each service submits a

33U.S. DoD, Commanders Digest, Vol. 20, No. 1, Jan 77, pg. 3.
Strategic Objective Plan to the Minister of Defense-Security, called Strategic Appreciation. In the U.S. DoD, to change approved data in the FYDP, a PCR (Program Change Request) and a PCD (Program Change Decision) are needed.

There is no special document for research and development in the Indonesian Navy. This is part of the Navy Appreciation.

In the U.S. the Joint Long Range Estimative Intelligence Document provides the principal Intelligence for the development of the JLRSS and JRDOD. These documents do not exist in the Indonesian Navy. The estimates and other long-range intelligence data is included in the Navy Strategic Appreciation.

The Project Proposal List form is illustrated in Exhibit 10. The project executioner and financial officer are listed there, clearly displaying who is responsible for each project.

The preparation section lists the documents that are essential for proposing a project, i.e., survey, feasibility study, project design and operation plan documents. If the documents are not provided and attached, it becomes very difficult to make a decision, and HQ must prepare them. The HQ should discourage such project proposals without all supporting documentation. A rather rough analysis is better than nothing.

All documents used in Program Budgeting are bound together in the Indonesian Navy. Although neat, it is difficult to change a part of the document. The U.S. DoD uses
EXHIBIT 10

INDONESIAN NAVY

PROJECT CODE NO. =
DEPARTMENT =
SECTOR =

MAJOR PROGRAM =
PROGRAM =
EXECUTIONER =

PROJECT PROPOSAL LIST

197-/197-

I GENERAL

1. TYPE/PROJECT NAME =
2. LOCATION =
3. PROJECT EXECUTIONER =
   NAME =
   RANK =
   BILLET POSITION =
   ADDRESS =
   NO. AND DATE OF LETTER OF DECISION =
4. FINANCE OFFICER =
   NAME =
   RANK =
   BILLET POSITION =
   ADDRESS =
   NO. AND DATE OF LETTER OF DECISION =
5. DESCRIPTION OF THE PROJECT
   
a. Project Preparations (Answer provided/not)
   
   (1) Survey = Provided/Not Provided
   
   (2) Feasibility Study = Provided/Not Provided
   
   (3) Project Design = Provided/Not Provided
   
   (4) Operation Plan = Provided/Not Provided
   
   b. Objectiveness and Activities in 197-/197-
   
   (1) Project Objectives =
   
   (2) Goal =
   
   (3) Activities =
   
6. a. Budget 197-/197- RP--
   b. Project Filling List 197-/197-

7. a. Aids U.S. $ RP--
   b. From =

8. TOTAL BUDGET FOR THE PROJECT RP--

9. a. Date the Project Starts =RP--
   b. Estimated Date Finish

10. a. New Project or Continuation of previous project
   b. New Project of 197-/197-
   c. Continuation Project of 197-/197-

   Type/Name Project 197-/197-
   
   Code No. of Budget 197-/197-
   
   ---
   
   ---

   PROJECT OFFICER
   APPROVED:

   PROGRAM SUPERVISOR
computers to maintain and retrieve present data. The Indonesian Navy computer facilities are only available to the Headquarters offices. The Navy's Commands in Surabaya for example, consisting of the Fourth Naval District, Fleet, Naval Training Command and Naval Shipyard, do not have a computer. The planning documents in the Indonesian Navy could easily be changed to loose leaf documents. Take out the old data and insert the new one for changes. Computers have often been regarded as part of PPBS, and the benefits from computerized data should be taken further advantage of as techniques for making management data more readily available.34

E. CONTINUOUS DECISION MAKING

In the Indonesian Navy the Activities and Projects Proposals Lists are reviewed at the Planning and Finance Officer's Meeting. The responses to the Activities and Projects Proposal Lists are stated in the Activities Filling List, and Projects Filling Lists.

There is not official document for change proposal, which are processed in similar ways with the ordinary proposals. Typically the proposal is discussed in a budget committee meeting before being submitted to higher levels. There again the proposal will be reviewed. In some cases changes come from higher authority. In general, "ad hoc"

34Novick, David, Current Practice, pg. 15.
committees are formed and change proposals are dealt with on a case-by-case basis.

F. ACCOUNTING AND REPORTING

The Indonesian DoD-Security financial resources consists of the Routine and the Investment Budgets. The Routine Budget finances the "Activities," and the Investment Budget finances the "Projects."

There are four elements of expense in the Indonesian Navy:
1. Wages and Salary expense
2. Material expense
3. Maintenance expense
4. Travel expense

To report completion of activities and projects, management should prepare two reports, financial and progress. The financial report is intended to report the resources that have been applied to the activities or projects. The report can be divided into two types, the Operations Report and the Administration Report. The Operations Report is a report that is intended to control day-to-day operations and the Administration Report is intended to control the management.

The Indonesian DoD-Security has used unified accounting system since 1971, with the issuance of financial management guidance for DoD-Security. The system is double entry bookkeeping.

---

In the U.S. DoD, all activities use an operating budget. This is expressed in full cost, as a tool to manage the consumable resources including military personnel required in the day-to-day performance. Military personnel costs are charged to the using activity by means of a standard cost system.
V. CONCLUSIONS AND RECOMMENDATIONS

A. SYSTEM ANALYSIS

In trying to meet its goals, management often has more than one alternative course of action. The ultimate effect of a decision usually is not immediately known. Management in the Indonesian Navy needs to analyze the alternatives, so that the best course of action can be identified. Systems analysis can and does provide knowledge that decision makers need.

There are many potential analysts in the Indonesian Navy, but they are scattered. The first thing to do to overcome this problem should be a research of the personnel records and scouting for talent and analytical capability. The disciplines required include Business Administration, Industrial Management, Mathematics, Operation Research/Systems Analysis and Philosophy. 36

If the analysis group were initially placed at the Headquarters level, all the available qualified personnel making the most efficient use of the few trained personnel available, thereby would be located in a single agency. It would provide the opportunity for training and specialization in various analytical techniques. It would permit analysts

36 An interview with Prof. William Campbell, DRMEC.
to view the Navy as a whole. It would allow the Chief of Staff of the Navy to direct major analytical emphasis to high priority activities such as the Indonesian Fleet and Shipyard. Finally it would allow the specialists the opportunity to develop centralized guidance for developing the analytical capability of lower echelons of commands as more specialists become available.

1. Conclusions
   a. A systems analysis office at Headquarters and Major Commands is essential.
   b. The Indonesian Navy does not have enough trained personnel to establish such an office.

2. Recommendation
   Establish systems analysis offices, first at the Headquarters level and later at Major Commands level as personnel become available, with the objective of providing an analytical agency to evaluate all proposed alternatives as well as changes to the proposals. The analysis offices should be headed by an officer of rank equal to the other staff heads. Two alternative organizational locations are as follows:
   a. Alternative I. The Office of Systems Analysis reporting directly to the CSN (at HQ level), and Commander of the Major Commands (at Major Commands level).
      (1) Advantages. The office will not be subject to the pressure of the divisions or activities. The
alternatives will be analyzed objectively. If the analysis office is under any activity other than the management, it is likely that the activity will influence the analysis efforts.

(2) Disadvantages. There would be undoubtedly unavoidable "friction" between the planners and the analysts. However the analysis office would be a center of controversy wherever it is placed in the organization. With the analysis directly reporting to Top Management in the organization, the possibility of outside pressure would be reduced. Fig. 9 illustrates this proposed location of the office.

b. Alternative II. Locate the office under the Comptroller. The analysis process deals with choosing the best way to use resources. There should be a distinct separation between analysis and budgeting, but they could be located in the same organization since both functions deal with finance. Fig. 10 illustrates this proposed location of this office.

B. PROGRAM STRUCTURE

The purpose of the program structure is to provide a framework for budgeting information and a vehicle for the allocation of resources, including operations and maintenance. The U.S. structure differs from the Indonesian Navy's program structure, which is based more on functional classifications such as education, base facilities, administration, etc.
Fig. 9
The Location of Systems Analysis Office Alternative I.

Fig. 10
The Location of Systems Analysis Office Alternative II.
There are programs that can be compared such as Strategic Forces and Administration, but the U.S. has no program referring to small industry or personnel transfer (channeling). These two programs are dictated by the requirements of organization, culture, influences and economics of the Country of Indonesia.

1. **Conclusions**

The Indonesian Navy program structure does not need to be changed. The differences do not indicate any deficiency, but a continuing awareness of the differences would be advantageous.

2. **Recommendations.** A continuing study of the comparative program structure of the two countries is recommended. There may be areas of potential for improvement.

C. MUTLI-YEAR PROGRAM

1. **Conclusions**

There is no official multi-year planning method currently in existence in the Indonesian Navy. The periodic plan is used by some offices since it is less work and is parallel with the periodic National Development Plan.

2. **Recommendations**

Strategic planning in Indonesia should use a rolling plan method. This will provide a constant time horizon. The Headquarters should also make a study of current planning techniques, to make sure that each office is capable of
performing the planning. A manual or guide should be published to help the personnel in that matter. A staff exercise or game could significantly increase the efficiency of the personnel involved in planning. This exercise is important since the rolling plan would increase the current workload.

The strategic rolling plan can be implemented without changing the National Development Plan to a rolling plan.

D. DOCUMENTATION

Because of the differences in the organizational structure there are differences in the PPBS cycle. The Indonesian DoD-Security does not have "joint" documents, since it has no JCS.

1. Conclusion

The difference in the organizational structure shortened the Indonesian DoD-Security Program Budgeting cycle. Up to now the computer facilities are only available to the Headquarters offices. The Major Commands do not have access to a computer to maintain and retrieve data.

2. Recommendations

a. For the Major Commands and other offices that do not have computer facilities, a loose-leaf document rather than the bound document system should be used. This will allow changes and updating without reproducing the entire document.
b. A study to determine the position of the Navy's Commands in Surabaya on the manual vs. computer processing chart as shown in Fig. 11, should be accomplished. If the position is still on the left side of the "break even point," an estimation of when the break even point will be reached should be included in the study. Preliminary action such as training for personnel, procedures and information structure should be planned.

c. The Office of Navy Data Processing Center (DISPULAHTAL) should be responsible for the Program Budgeting documentation. An annual Program Budget Review Schedule, similar to Appendix B, should be issued to make sure that each agency know the action date for each document.

E. CONTINUOUS DECISION MAKING

1. Conclusions

The Indonesian DoD-Security does not have a system that provides a means for the Minister of Defense to make continuous decisions. All out-of-cycle programs are the product of "ad hoc" planning, and always treated as "non program."

2. Recommendations

Establish a system that provides a means to change the approved program and adjust to the changing environment. A study to establish a system for processing changes to the

37 Mader, Chris and Hagin, Robert, Information System Technology, Economics, Application, SRA, pg. 7.
Processing cost per unit

High initial costs make low volume or simple processing comparatively expensive

Human limitations reached resulting in no further improvements

Average cost continues to decline, approaching the level of variable cost per unit

Human learning improves performance after early experiences

B_o = Breakeven Point

FIG. 11  Unit cost vs. volume or complexity of processing
approved multi-year program is necessary. An instruction for all Indonesian DoD-Security agency should follow the study.

F. ACCOUNTING AND REPORTING

1. Conclusion

The Indonesian Navy and Dod-Security use a unified accounting system. There are periodic reports for both fund and performance, monthly, quarterly and annually. However, there are potential areas for improvement to increase the reliability and validity of the data/information.

2. Recommendation

Establish a study to investigate whether the current Financial Management System is responsive to the Navy Management and to DoD-Security needs. A system similar to the Resource Management System (RMS) for Operations used by the U.S. DoD might be useful to the Indonesian DoD-Security.
A 10 General

The Five Year Defense Program (FYDP) is the title given to the publication that records, summarizes and display the decisions that have been approved by the Secretary of Defense as constituting the Department of Defense's program. It is a management tool that keeps management informed of what has been accomplished in the past and what is to be accomplished in the future to support the national strategy decisions. To accomplish this, the FYDP displays the manpower and dollars involved in these approved programs for the Fiscal Years 1962 through the current year plus five additional program years. Force authorizations are also displayed for three additional years to include the current year plus eight program years.

These displays of manpower, dollars and forces are further categorized in terms of Major Programs; that is, those programs in which the major decisions are required to insure that the DOD resources are expended to provide the capabilities dictated by the National strategy. The Structuring in the Major Program, therefore, aligns the resources with the operating budget activities. The Major Programs are:

0 (Zero) - Support of Other Nations
1 - Strategic Forces
2 - General Purpose Forces
3 - Intelligence and Communications
4 - Airlift and Sealift
5 - Guard and Reserve Forces
6 - Research and Development
7 - Central Supply and Maintenance
8 - Training, Medical and Other Personnel Activities
9 - Administration and Associated Activities
The Department of the Navy's portion of the DOD FYDP is summarized, displayed and distributed by the publication titled "Department of the Navy Five Year Program" (DNFYP). To provide a useful display of the approved programs in terms consistent with the decision environment within the Department of the Navy, the DNFYP is structured in terms of Defense Planning and Programming Categories as follows:

**Strategic Forces**

- Strategic Offensive Forces
- Strategic Defensive Forces
- Strategic Control and Surveillance Forces
  Consolidated Telecommunications Program

**General Purpose Forces**

**Land Forces**

- Division Forces
  Consolidated Telecommunications Program

**Tactical Air Forces**

- Tactical Air Forces (Navy)
- Tactical Air Forces (Marine Corps)

**Naval Forces**

- ASW and Fleet Air Defense Forces
  Consolidated Telecommunications Program
- Amphibious Forces
- Naval Support Forces
  Consolidated Telecommunications Program

**Mobility Forces**

**Auxiliary Forces**

- Intelligence and Security
  Consolidated and Telecommunications Program
- National and Special Activities
  Centrally Managed Communications
  Consolidated Telecommunications Program

**Research and Development**

- Research and Development (Navy)
  Consolidated Telecommunications Program
- Research and Development (Marine Corps)
Support to Other Nations
Military Assistance Service Funded

Military Assistance Service Funded (Navy)
Military Assistance Service Funded (Marine Corps)

Geophysical Activities
Consolidated Telecommunications Program

Mission Support Forces
Reserve Components Support

Reserve Components Support (Navy)
Reserve Components Support (Marine Corps)

Base Operating Support

Base Operating Support (Navy)
Consolidated Telecommunications Program
Base Operating Support (Marine Corps)
Consolidated Telecommunications Program

Force Support Training
Force Support Training (Navy)
Force Support Training (Marine Corps)

Command
Command (Navy)
Consolidated Telecommunications Program
Command (Marine Corps)
Consolidated Telecommunications Program

Central Support Forces

Base Operating Support
Base Operating Support (Navy)
Consolidated Telecommunications Program
Base Operating Support (Marine Corps)
Consolidated Telecommunications Program

Medical Support

Personnel Support
Personnel Support (Navy)
Personnel Support (Marine Corps)

Individual Training
Individual Training (Navy)
Individual Training (Marine Corps)
Command
  Command (Navy)
  Command (Marine Corps)

Logistics
  Supply Operations
    Supply Operations (Navy)
    Supply Operations (Marine)
  Maintenance Operations
    Maintenance Operations (Navy)
    Maintenance Operations (Marine Corps)
  Logistics Support Operations
    Logistics Support Operations (Navy)
    Logistics Support Operations (Marine Corps)
  Federal Agency Support
    Federal Agency Support (Navy)
    Federal Agency Support (Marine Corps)

Individuals
  Transients
    Transients (Navy)
    Transients (Marine Corps)
  Patients and Prisoners
    Patients and Prisoners (Navy)
    Patients and Prisoners (Marine Corps)

Miscellaneous Costs
  Undistributed contingencies
MEMORANDUM FOR Secretaries of the Military Departments
Chairman of the Joint Chiefs of Staff
Director of Defense Research and Engineering
Assistant Secretaries of Defense
Director of Telecommunications and Command and
Control Systems
Assistants to the Secretary of Defense
Directors of Defense Agencies

SUBJECT: Program/Budget Review - Calendar Year 1976 Schedule

This memorandum expresses the schedule of the significant actions of the Calendar Year 1976 Planning-Programming-Budgeting cycle. Actions outlined will be accomplished as prescribed by DoD Instruction 7045.7, as modified by this memorandum.

The coming year will see us move through a transition to the first fiscal year that starts on October 1. Additional aspects of the Congressional Budget and Impoundment Control Act of 1974 will also be implemented. Although we have attempted to anticipate all the impacts of that legislation, we must be alert for changing circumstances and be prepared to respond appropriately.

The Planning cycle began on May 1, 1975 with the publication and receipt of the Joint Strategic Objective Plan (JSOP), Volume I.

The Planning cycle will be completed February 6, 1976 (Items 1-2 and 4-8 of enclosure) with the issuance of the Planning and Programming Guidance Memorandum (PPGM).

Last year a tentative version of the PPGM was issued to assist your programming processes. Based on the favorable response to this action, I asked the Assistant Secretary for Program Analysis and Evaluation to again issue this document. This was distributed on November 5, 1975. The tentative programming guidance will be modified, as appropriate, in February 1976, after taking into account the OSD/OMB review of the FY77 budget, JSOP Volume II, and other relevant factors.

The PPGM (Item 9 of enclosure) will include an updated version of the DPPG (as required), the fiscal guidance and specific guidance in such areas as nuclear forces, general purpose forces, logistics, manpower, research and development, telecommunications and intelligence. The Programming cycle will continue through the preparation of the Joint
Force Memorandum (JFM), the Program Objective Memoranda (POMs), the review and analysis of these documents, the transmittal of tentative Program Decision Memoranda (PDMs), a reclama cycle, and the publication of amended PDMs as appropriate. The Programming cycle will be considered completed on August 23, 1976. (Items 9-22 of enclosure.)

The Budgeting cycle will start with the initial issuance of Budget Guidance on September 1, 1976. The cycle will continue through the submission of the budget estimates, the review and evaluation of these estimates by the OSD and OMB staffs, and the transmittal of budget decisions in the form of PBDs. Additionally, the Budget cycle will include the update of the FYDP on October 11, 1976, and will be considered completed after the FYDP is updated to reflect the President's Budget, and its outyear impact, in January 1977. (Items 23, 26-28, 30-31, 33-35, 39, 42 of enclosure.)

Apart from the attached schedule, the OSD staff offices will be provided with a separate detailed schedule of the Issue Paper process emanating from the review of the JFM and the POIs. The OSD staff will also be provided with a budget schedule to insure timely budget actions and transmittal of decisions. The JCS, Military Departments and Defense Agencies will be provided copies of these additional schedules.

The attached schedule identifies specific actions and dates necessary to make up the total calendar, not only for the CY 1976 cycle, but also reflects actions that must commence to insure a solid foundation for our CY 1977 cycle. It is imperative that every effort be made by all concerned to meet the scheduled dates if we are to have a successful cycle. When specific actions are anticipated to be late, this information should be forwarded to my office to evaluate the impact on the remainder of the schedule.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Note</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Submit JSOP-Vol I (FY 78-85) - Military Strategy and Force Planning Guidance</td>
<td>J</td>
<td>May 1, 1975</td>
</tr>
<tr>
<td>2</td>
<td>Issue Defense Policy and Planning Guidance (DPPG)</td>
<td>O</td>
<td>Nov 4, 1975</td>
</tr>
<tr>
<td>3</td>
<td>Issue Tentative Planning and Programming Guidance Memorandum (TPPGM) &lt;br&gt;Note: Provides tentative guidance in such areas as fiscal planning assumptions, forces, logistics manpower, research and development, telecommunications, and intelligence</td>
<td>O</td>
<td>Nov 5, 1975</td>
</tr>
<tr>
<td>4</td>
<td>Update Joint Research and Development Objectives Document (JRDOD) (FY 78-95)</td>
<td>J</td>
<td>Dec 15, 1975</td>
</tr>
<tr>
<td>5</td>
<td>Submit JSOP-Vol II (FY 78-85) - Analysis and Force Tabulations</td>
<td>J</td>
<td>Dec 19, 1975</td>
</tr>
<tr>
<td>6</td>
<td>Update Five Year Defense Program FY 75-77</td>
<td>C</td>
<td>Dec 30, 1975</td>
</tr>
<tr>
<td>7</td>
<td>Update Five Year Defense Program FY 78-81 (through FY 84 for Forces)</td>
<td>C</td>
<td>Jan 9, 1976</td>
</tr>
<tr>
<td>8</td>
<td>Submit Telecommunications Subsystem Data</td>
<td>C</td>
<td>Jan 15, 1976</td>
</tr>
<tr>
<td>9</td>
<td>Issue Planning and Programming Guidance Memorandum &lt;br&gt;Note: Provides Fiscal Guidance and an updated version of the DPPG in addition to guidance indicated in item 3 above.</td>
<td>O</td>
<td>Feb 6, 1976</td>
</tr>
<tr>
<td>10</td>
<td>Issue Military Security Assistance Projection (MSAP)</td>
<td>O</td>
<td>Apr 9, 1976</td>
</tr>
<tr>
<td>11</td>
<td>Submit Joint Force Memorandum (JFM)</td>
<td>J</td>
<td>Apr 30, 1976</td>
</tr>
<tr>
<td>Item</td>
<td>Action</td>
<td>Agency</td>
<td>Action Date</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td>13</td>
<td>Submit Program Objective Memoranda (POM)</td>
<td>C</td>
<td>May 7, 1976</td>
</tr>
<tr>
<td>14</td>
<td>Update FYDP, Procurement Annex, and RDT&amp;E Annex Consistent with POM (FY 78-85)</td>
<td>C</td>
<td>May 7, 1976</td>
</tr>
<tr>
<td>15</td>
<td>Submit FYDP Telecommunications Subsystem Data</td>
<td>C</td>
<td>May 12, 1976</td>
</tr>
<tr>
<td>16</td>
<td>Submit JFM Nuclear Annex, FY 78-85</td>
<td>J</td>
<td>May 31, 1976</td>
</tr>
<tr>
<td>17</td>
<td>Transmit first Issue Paper to Components</td>
<td>O</td>
<td>Jun 11, 1976</td>
</tr>
<tr>
<td>18</td>
<td>Transmit last Issue Paper to SecDef</td>
<td>O</td>
<td>Jul 16, 1976</td>
</tr>
<tr>
<td>19</td>
<td>Issue Program Decision Memoranda (PDM)</td>
<td>O</td>
<td>Jul 26, 1976</td>
</tr>
<tr>
<td>20</td>
<td>Submit reclamas to PDMs</td>
<td>JC</td>
<td>Aug 9, 1976</td>
</tr>
<tr>
<td>21</td>
<td>Major PDM Issue Meetings</td>
<td>OJC</td>
<td>Aug 13-18, 1976</td>
</tr>
<tr>
<td>22</td>
<td>Issue amended PDMs</td>
<td>O</td>
<td>Aug 23, 1976</td>
</tr>
<tr>
<td>23</td>
<td>Issue Budget Guidance</td>
<td>O</td>
<td>Sep 1, 1976</td>
</tr>
<tr>
<td>25</td>
<td>Publish tentative Nuclear Weapons Stockpile for planning</td>
<td>O</td>
<td>Sep 13, 1976</td>
</tr>
<tr>
<td>26</td>
<td>Submit annual budget estimates and backup information</td>
<td>C</td>
<td>Sep 30, 1976</td>
</tr>
<tr>
<td>27</td>
<td>Start Budget Hearings</td>
<td>O</td>
<td>Oct 1, 1976</td>
</tr>
<tr>
<td>30</td>
<td>Submit FYDP Telecommunications Subsystem Data</td>
<td>C</td>
<td>Oct 18, 1976</td>
</tr>
<tr>
<td>31</td>
<td>Start issue of Program/Budget Decisions (PBDs)</td>
<td>O</td>
<td>Oct 20, 1976</td>
</tr>
<tr>
<td>Item</td>
<td>Action</td>
<td>Agency</td>
<td>Action Date</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------------</td>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>Note: Provides tentative guidance in such areas as fiscal planning assumptions, forces, logistics, manpower, research and development, telecommunications and intelligence.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Start PBD reclamas</td>
<td>JC</td>
<td>Oct 28, 1976</td>
</tr>
<tr>
<td>34</td>
<td>Issue revised PBDs based on reclamas</td>
<td>O</td>
<td>Nov 26, 1976  to Dec 6, 1976</td>
</tr>
<tr>
<td>35</td>
<td>Conduct joint meetings with JCS and Service Secretaries to discuss major unresolved budget issues</td>
<td>OJC</td>
<td>Dec 8-10, 1976</td>
</tr>
<tr>
<td>38</td>
<td>Submit JSOP-Vol II (FY 79-86) - Analysis and Force Tabulations (CY 1977 cycle)</td>
<td>J</td>
<td>Dec 20, 1976</td>
</tr>
<tr>
<td>39</td>
<td>Update Five Year Defense Program (FY 76-78)</td>
<td>C</td>
<td>Dec 30, 1976</td>
</tr>
<tr>
<td>40</td>
<td>Update Five Year Defense Program (FY 79-82) (through FY 85 for Forces)</td>
<td>C</td>
<td>Jan 10, 1977</td>
</tr>
<tr>
<td>41</td>
<td>Issue FY 78-80 Nuclear Weapons Stockpile</td>
<td>O</td>
<td>Jan 15, 1977</td>
</tr>
<tr>
<td>42</td>
<td>Submit FYDP Telecommunications Subsystem Data</td>
<td>C</td>
<td>Jan 17, 1977</td>
</tr>
</tbody>
</table>

**LEGEND:**
- O -- SecDef
- J -- JCS
- C -- Military Departments and Defense Agencies
- JC -- JCS, Military Departments, Defense Agencies
LIST OF REFERENCES


5. Garcia, Plaridel Comentan, PPBS in Developing Countries, the Philippines Case, NPS 1975.


17. **Staff Field Manual, FM 101.5 (1960 ed.).**


22. U.S. Navy, **Program Change Control System in the Department of the Navy.**
## INITIAL DISTRIBUTION LIST

<table>
<thead>
<tr>
<th>No.</th>
<th>Name and Address</th>
</tr>
</thead>
</table>
| 1.  | Defense Documentation Center  
Cameron Station  
Alexandria, VA  22314                                                   |
| 2.  | Library, Code 0142  
Naval Postgraduate School  
Monterey, CA  93940                                           |
| 3.  | Department Chairman, Code 54  
Department of Administrative Sciences  
Naval Postgraduate School  
Monterey, CA  93940                                |
| 4.  | CDR J. C. Tibbitts, Code 54Ti  
Department of Administrative Sciences  
Naval Postgraduate School  
Monterey, CA  93940                                  |
| 5.  | Prof. William A. Campbell  
Defense Resources Management Education Center  
Naval Postgraduate School  
Monterey, CA  93940                                      |
| 6.  | Maj. Priyadi Nusantoro  
KODIKAL, Morokrembangan  
Surabaya, Indonesia                                    |
| 7.  | Kepala Korps Administrasi  
Markas Besar TNI-AL  
Jakarta, Indonesia                                      |
| 8.  | Komandar Jendral KODIKAL  
Morakrembangan  
Surabaya, Indonesia                                    |
| 9.  | Perpustakaan Pusat  
Markas Besar TNI-AL  
Jakarta, Indonesia                                      |
Nusantoro

Program budgeting in the Indonesian Navy.