AD-A035 160 DEFENSE SYSTEMS MANAGEMENT SCHOOL FORT BELVOIR VA F/G 5/1
THE ROLE OF THE PEM IN DEVELOPMENT AND ACQUISITION MANAGEMENT.(U)
NOV 76 J J RUFFING

UNCLASSIFIED NL

1 OF 2
ADA035160



AD A035160

DEFENSE SYSTEMS MANAGEMENT COLLEGE

PROGRAM MANAGEMENT COURSE
INDIVIDUAL STUDY PROGRAM

THE ROLE OF THE PEM
IN
DEVELOPMENT AND ACQUISITION MANAGEMENT

STUDY PROJECT REPORT
PMC 76-2

John J. Ruffing
Major USAF

DDC
RECEIVED
FEB 3 1977
A

FORT BELVOIR, VIRGINIA 22060

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO. / 3. RECIPIENT'S CATALOG NUMBER
4. TITLE *(and Subtitle)*: THE ROLE OF THE PEM IN DEVELOPMENT AND ACQUISITION MANAGEMENT.	5. TYPE OF REPORT & PERIOD COVERED: Study Project Report, 76-2
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s): John J. Ruffing	8. CONTRACT OR GRANT NUMBER(s): Nov 76
9. PERFORMING ORGANIZATION NAME AND ADDRESS: DEFENSE SYSTEMS MANAGEMENT COLLEGE, FT. BELVOIR, VA 22060	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: 121p.
11. CONTROLLING OFFICE NAME AND ADDRESS: DEFENSE SYSTEMS MANAGEMENT COLLEGE, FT. BELVOIR, VA 22060	12. REPORT DATE: 76-2 / 13. NUMBER OF PAGES: 119
14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*	15. SECURITY CLASS. *(of this report)*: UNCLASSIFIED / 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*

UNLIMITED

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

SEE ATTACHED SHEET

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

SEE ATTACHED SHEET

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

408 462

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

DEFENSE SYSTEMS MANAGEMENT COLLEGE

STUDY TITLE: THE ROLE OF THE PEM IN DEVELOPMENT AND ACQUISITION MANAGEMENT

STUDY PROJECT GOALS:

To understand and describe the critical management and financial elements which impact the job of the Program Element Monitor (PEM), and determine his ability and effectiveness as a member of the development and acquisition team.

STUDY REPORT ABSTRACT:

The purpose of the study is to provide the PEM, and counterpart staff members, with a summary of critical management information. The study provides an effective means of understanding the critical development and acquisition elements of: the PEM mission and responsibility; the Five Year Defense Program (FYDP); the Planning, Programming and Budgeting System (PPBS); the Congressional Process and Staff; and the Air Force Requirements Process. Also described are the key personal interface relationships which must be established with the functional organizations described above, and the key financial reprogramming aspects of the development and acquisition process.

The study was accomplished using previous personal experience, latest written documents, and interviews with members of the Congressional Staff, OSD and Headquarters USAF. The study is intended to suplement the education and training of the PEM, and other key members of the development and acquisition team. New arrivals often have limited experience and background in the areas covered in the report. The report contents are intended to provide a method for getting up to speed as quickly as possible, and thereby minimizing adverse impact on program elements and projects which could result from lack of experience.

SUBJECT DESCRIPTORS: Five Year Defense Program, Program Management, PPBS, Congressional relations, Air Force Requirements, Reprogramming.

NAME, RANK, SERVICE	CLASS	DATE
John J. Ruffing, Maj, USAF	PMC 76-2	November 1976

THE ROLE OF THE PEM

IN

DEVELOPMENT AND ACQUISITION MANAGEMENT

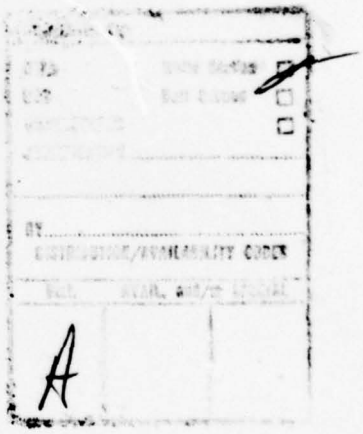
Study Project Report

Individual Study Program

Defense Systems Management School

Program Management Course

Class 76-2



by

John J. Ruffing

Maj. USAF

November 1976

Study Project Advisor
Mr. Wayne Schmidt

This study project report represents the views, conclusions and recommendations of the author and does not necessarily reflect the official opinion of the Defense Systems Management School or the Department of Defense.

EXECUTIVE SUMMARY

Air Force managers in the development and acquisition business are confronted with an environment which is rapidly increasing in difficulty and complexity at all levels of the chain-of-command. At the Headquarters level, the Program Element Monitor is the focal point for a program and its respective interface with the Air Staff, OSD and Congressional staff.

The objective of this study is to provide the PEMs with an effective means of understanding the critical interface requirements of the Air Staff and the basic driving elements of the Five Year Defense Plan (FYDP), the Planning/Programming/Budgeting System (PPBS), the Congressional process, the Requirements process and the flexibilities and limitations of financial reprogramming.

The degree of understanding achieved in the elements listed above will directly influence the effectiveness of the PEM to contribute to the overall good of the Air Force. The complexity of the process and the funds at stake will not permit ineffectiveness through lack of knowledge of these potential impact elements. It is hoped that this report will assist in developing better management effectiveness which will, in turn, provide better systems at the most efficient cost for the Air Force.

ACKNOWLEDGEMENTS

I would like to express special appreciation to Mr. Wayne Schmidt, Defense Systems Management College, whose quidance and experience were a major source of data for this study. I would also like to acknowledge the contributions made by Colonel Robert Ziernicki, Lt Col Harry Kotellos, Mr. Fred Tillman, Mr. Clyde Bloodworth, Mr. Robert Green and Lt Col Bob Morris. The major sections on the financial process, budget activities and reprogramming could not have been accomplished without their instruction and support.

TABLE OF CONTENTS

EXECUTIVE SUMMARY ii

ACKNOWLEDGEMENTS iii

Section

I. INTRODUCTION 1

Purpose of the Study Project 1
Scope of the Study Project 2

II. HQ USAF ORGANIZATION AND POLICY 4

The Deputy Chief of Staff 5
Directorates and Divisions 5
Divisions and the PEM 6

III. THE FIVE YEAR DEFENSE PROGRAM 9

Program Guidance 10
FYDP Structure 10
Defense Planning and Programming Categories . . . 12
Program Elements 13

IV. THE DOD PLANNING, PROGRAMMING AND BUDGETING SYSTEM 14

Planning 16
JSOP VOL I 17
DPPG 17
JSOP VOL II 18
PPGM 19
Programming 20
JFM 21
POM 21
PDMs 23
Budgeting 25
Budget Formulation 25
Program Budget Decisions 26

V. THE CONGRESSIONAL PROCESS AND EXECUTION 30

Authorization and Appropriation 30
Execution 33
Commitment, Obligation and Expenditure 34
Summary 35

VI. THE AIR FORCE REQUIREMENTS PROCESS 37

Identification 37
Validation 38
Selection of Suitable Alternatives 41
Program Approval 41
Informal Process 41

VII. REPROGRAMMING AND PROGRAM INITIATION 44

Classes of Reprogramming 45
Above Threshold Reprogramming 46
Below Threshold Reprogramming 47
New Starts 49

VIII. SUMMARY 52

ATTACHMENTS

1. The Air Force F&FP/Appropriations 54
2. Joint Strategic Planning System 76
3. Program Budget Review CY 1976 Schedule 78
4. Diagram: Planning Phase 84
5. Diagram: Programming Phase 85
6. FY 78-82 POM Formulation Schedules 86
7. Air Force POM Financial Summary 87
8. Diagram: Budgeting Phase 88
9. Diagram: Congressional Budget Schedule/ Enactment Phase 89
10. PPBS Flow Diagram with Concurrent Actions and Description 92
11. Reprogramming Summary Chart 95
12. Reprogramming 96
13. Glossary 103

BIBLIOGRAPHY 112

SECTION I

INTRODUCTION

Purpose of the Study

The purpose of this paper is to provide Air Force Program Element Monitors (PEMs) with a more effective means of understanding the critical elements which impact their effectiveness and ability to achieve the financial objectives of their programs. This will be attempted by providing a more complete understanding of their mission, the Five Year Defense Plan (FYDP), the Planning/Programming/Budgeting System (PPBS), the Congressional process, the Air Force requirements process and the constraints imposed by financial reprogramming directives. This paper is written for PEMs of both large and small programs with emphasis on the latter. All participants in the Air Force development and acquisition business may find the descriptive information and supporting Attachments useful as background information relative to their roles in the overall process.

There should be no need to justify the critical nature of understanding the financial process and the Congressional requirements which confront the ultimate success of any program. In today's environment, both represent a major source of potential problems. Current emphasis on Design-to-Cost, Life Cycle Cost and increased scrutiny by Congressional Committees plus inflation, increasing system complexity and

overall cost of weapon systems will continue to elicit difficulty in identifying and obtaining adequate funding. Few people assigned to the job of a PEM are fortunate enough to have prior experience or training in the subjects covered in this paper. This complicates a difficult situation even further. It is essential that every means be used by the PEM to get up to speed as quickly as possible. Hopefully, this paper will aid in the critical education process which must occur before a PEM is able to function as an effective planner, manager and respected member of the program team.

The PPBS and the Congressional process dictate the manner in which DOD accomplishes total force planning, obtains funds and executes individual development and acquisition programs. The PEM is the program focal point in these actions. He must understand the numerous interface requirements, nurture personal relationships at each interface, understand the timing and constraints of the PPBS elements and understand the constraints imposed on DOD by the Congress. Personal confidence will evolve as understanding improves.

Scope of the Study

Research, Development, Test and Evaluation (RDT&E) funding represents 10 to 20 per cent of the total Air Force budget. However, it represents the most difficult funding appropriation to manage. The primary reason for this difficulty stems from the close scrutiny and tight controls Congress and OSD place

on the RDT&E appropriation. This scrutiny and control elicits an inordinate number of orgainzations in the chain-of-command to insure compliance with Congressional requirements. Each of these organizations is able to inflict untold damage to a program either by intent or mistake as the RDT&E appropriation is processed. Therefore, the Air Staff structure, the FYDP, the PPBS, the requirements process and the aspects of financial reprogramming have been selected to discuss critical aspects of the PEM role in relation to the RDT&E appropriation and program management.

Attachments are provided on some of the more pertinent data associated with the major elements which dictate PEM effectiveness. They have been largely compiled or obtained from other documents and are included to make this a more complete source document.

SECTION 2

HQ USAF ORGANIZATION AND POLICY

Introduction

The HQ USAF mission, stated in Headquarters OI 21-10, is to plan, program, budget, develop policy and provide overall guidance and support to lower echelons. The Air Staff retains only those management functions that are essential to mission execution and cannot be delegated to the MAJCOMs and separate operating agencies. This substantial reference to the planing, programming and budgeting functions sets a pattern for discussing the major elements of Air Staff and PEM responsibilities in program management. Increasing OSD and Congressional involvements in development and acquisition demand pronounced PEM interaction with these agencies and their supporting organizations. This interaction is orchestrated by the events in the PPBS and the Congressional process. Understanding both is a requirement for the PEM to be able to effectively execute the Air Staff mission.

Headquarters Pamphlet 21-1 is referred to as the "Chartbook". This document is the official record of the organization of the Office of the Secretary and the Air Staff. The contents specify the overall mission and functions of each approved organization, each Deputy Chief of Staff, each Directorate and the Divisions within each Directorate. Primary and corollary responsibilities are also listed for assigned

mission areas. Familiarity with the contents of this document is a definite aid during the initial phases of an Air Staff assignment since it bounds the coordination responsibilities for given mission areas.

The Deputy Chief of Staff (DCS)

Five DCSs and the comptroller are the principal staff assistants to the Chief of Staff for executing the Air Force mission. These six individuals represent the Chief in their respective functional area and may act for him on matters within the scope of their responsibilities. All will be involved to some degree in the life cycle of a development and production effort. However, the DCS/RD is the responsible DCS for the scope of all activities ranging from basic research through the entire spectrum of defense system development and acquisition. One of the primary DCS/RD tasks is to recognize the requirements of the operational commands and to secure approval and resources that will permit the translation of new requirements into systems for improved operational capability. The structure of the Air Staff and the DCS/RD is shown in Figure 1.

Directorates and Divisions

The major organizational elements of a DCS are the directorates and divisions of each directorate. Each directorate is assigned a broad spectrum of functionally related responsibilities that are necessary to accomplish the stated mission of the DCS. The assigned functions directly relate

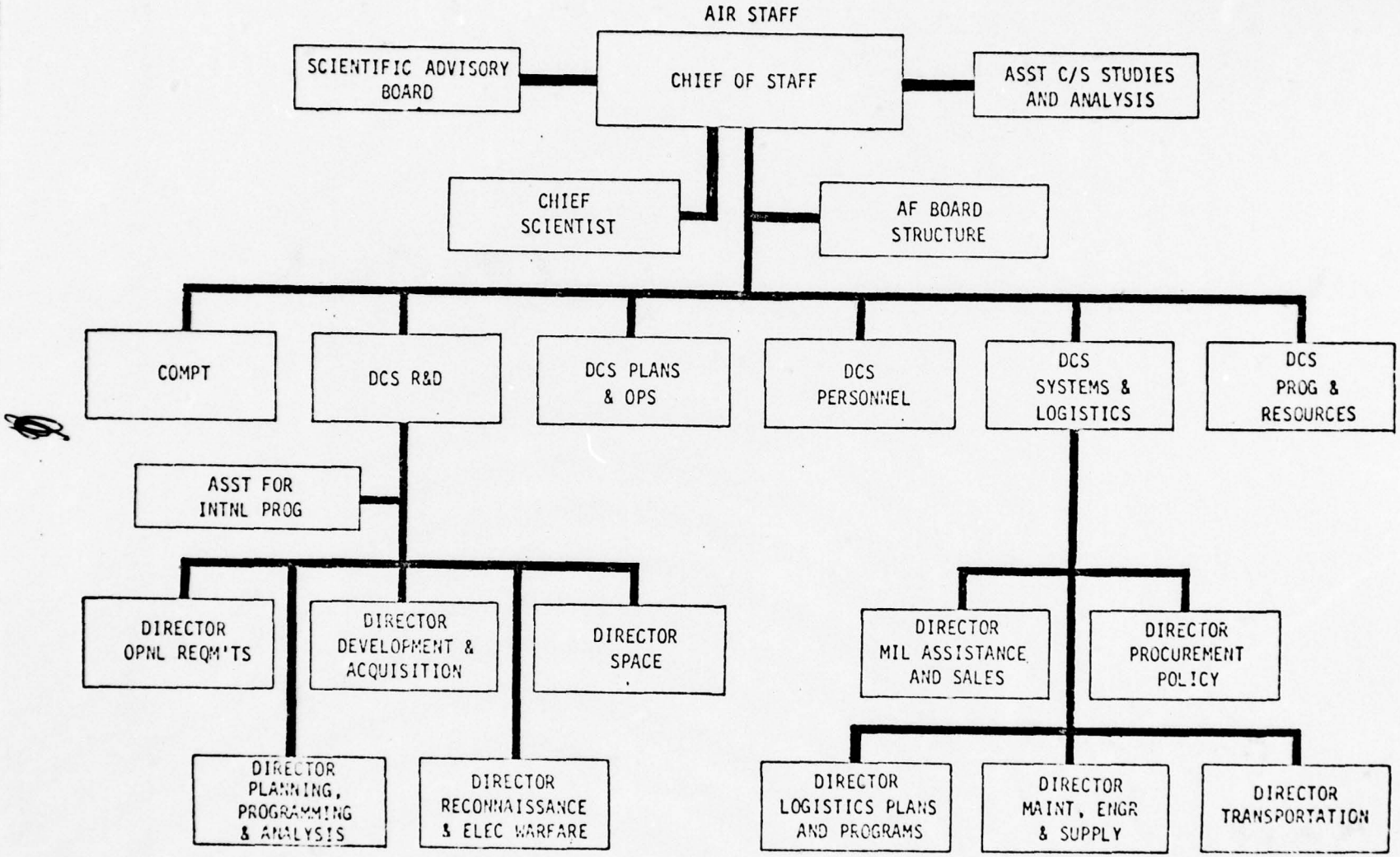

AIR STAFF
SCIENTIFIC ADVISORY BOARD
CHIEF OF STAFF
ASST C/S STUDIES AND ANALYSIS
CHIEF SCIENTIST
AF BOARD STRUCTURE
COMPT
DCS R&D
DCS PLANS & OPS
DCS PERSONNEL
DCS SYSTEMS & LOGISTICS
DCS PROG & RESOURCES
ASST FOR INTNL PROG
DIRECTOR OPNL REQM'TS
DIRECTOR DEVELOPMENT & ACQUISITION
DIRECTOR SPACE
DIRECTOR MIL ASSISTANCE AND SALES
DIRECTOR PROCUREMENT POLICY
DIRECTOR PLANNING, PROGRAMMING & ANALYSIS
DIRECTOR RECONNAISSANCE & ELEC WARFARE
DIRECTOR LOGISTICS PLANS AND PROGRAMS
DIRECTOR MAINT, ENGR & SUPPLY
DIRECTOR TRANSPORTATION

FIG 1

to the fundamental Air Staff mission and consist of:

(1) Policy formulation

(2) Planning and programming

(3) Providing advice and assistance to higher authorities.

The Directorate of Development and Acquisition (AF/RDP) will serve as a generalized example in the chain-of-command leading to the Division and PEM level. A segment of the AF/RDP mission contained in HP 21-1 states that, "RDP functions as the Air Staff OPR for the development and acquisition of systems and subsystems for Air Force aircraft; and for monitoring the technological base through programs in research, exploratory and advanced development". These and other functional responsibilities are listed for AF/RDP and further articulated under each of the specialized AF/RDP Divisions.

Divisions and the PEM

The program element is the basic financial and resource building block used in structuring the POM and directing development efforts. Management of the program elements assigned to each Directorate is the responsibility of the Division and the PEMs assigned to that Division. The Division delegates this responsibility to an assigned PEM for each program element. The PEM is responsible for monitoring the correct and efficient management of projects funded in his assigned PE. HP 21-1 outlines these mission responsibilities

as follows:

(1) Act as OPR for assigned projects

(2) Formulate policy and issue program management direction and related quidance to field agencies

(3) Prepare PPBS financial inputs for assigned programs

(4) Review process and coordinate all related program documents required by the Armed Services Procurement Regulations, related DOD Directives and AF 800 and 80 series regulations

(5) Perform technical review of munitions cases

(6) Perform technical review of potential Air Force participation in foreign exchange agreements and cooperative development programs

(7) Maintain liaison, coordination and correspondence exchange with Army, Navy, OSD, JCS, NASA, Congress, foreign governments and other U.S. Agencies relative to assigned projects.

Additional PEM responsibilities relative to the DOD PPBS are listed in HOI 27-1 and include:

(1) Advising AF/RDX, AF/ACB and AF/PRP counterparts of any required changes in program or cost data in the assigned program element

(2) Understanding all aspects of the data and rationale used in the development of the POM and FYDP and be prepared to brief essential decision

data to Air Staff and OSD review agencies

(3) Know milestone, financial, and performance data on assigned programs and prepare or coordinate reports with OSD counterparts

(4) Assist in the update of the FYDP and the Force and Financial Plan (F&FP) when the assiged program element is changed by an OSD decision.

The information discussed so far is a general but sufficient summary of the Air Staff organization, mission and program management responsibilities that transcend the vertical organization down to the PEM. The heavy emphasis on the PPBS, FYDP and liaison with OSD and Congress implies a requirement for thorough understanding of these areas to carry out implicit PEM roles.

SECTION 3

THE FIVE YEAR DEFENSE PROGRAM

Introduction

The FYDP is the official program which summarizes the SECDEF approved plans and programs for the Department of Defense. The FYDP is a computerized management tool used by the SECDEF to record actions and keep management informed of past accomplishments and what is to be achieved in the future to support national strategy decisions. Formulation of the annual budget requires intensive review and approval of the programs in the FYDP that are proposed for accomplishment during the fiscal year covered by the budget, together with an estimate of the funds required to enable accomplishment.

The FYDP is used to present the annual budget to Congress and represents a request and associated justification for budget authority or new obligational authority. In making the request, each Service presents the entire financial plan for each of its appropriations. The plan shows the obligations and expenditures which will result from the requested appropriations, as well as those which will result from prior appropriations remaining available for obligation. The FYDP is updated three times a year: after the POM is submitted, after the exercises involving the Program Decision Memorandums, and after the Program Budget Decisions.

These PPBS exercises will be discussed further in the next section along with their link to the military planning, programming and budgeting process.

Program Guidance

In addition to the guidance issued by the SECDEF, each Service publishes its own programming documents which implement the approved programs and provide information for the management of allocated resources. The Air Force breakout of the FYDP is the Force and Financial Plan (F&FP).* This documentation contains all of the Air Force program elements as modified by SECDEF decisions, financial reprogramming actions and below threshold changes approved by the Secretary of the Air Force.

FYDP Structure

Three criteria govern the construction of the FYDP. First, it is designed as an operating management tool to be used by the various OSD managers. It aggregates and displays force data and support data to assist in OSD decision making. This is accomplished by building the program structure on a foundation of ten mission and support related programs consisting of:

Program 1 - Strategic Forces

Program 2 - General Purpose Forces

Program 3 - Intelligence, Communications

Program 4 - Airlift/Sealift

*See Attachment 1 for additional information.

Program 5 - Guard and Reserve Forces

Program 6 - Research and Development

Program 7 - Central Supply and Maintenance

Program 8 - Training, Medical and Other General Personnel Activities

Program 9 - Administrative and Associated Activities

Program 10 - Support of Other Nations

The FYDP structure allows for both broad aggregations of data and detailed presentations of data that are useful to different OSD managers. For example, Programs 1, 2, 4, and 5 are considered force related and normally fall within the purview of the Assistant Secretary of Defense (DP&E). Conversely, Program 3 is divided between the Assistant Secretary of Defense (Intelligence), Assistant Secretary of Defense (Telecommunications) and the Assistant Secretary of Defense (Systems Analysis). Program 6 is the responsibility of the Director, Defense Research and Engineering. Program 7 is the responsibility of the Assistant Secretary of Defense (Installation and Logistics). Program 8 is the responsibility of the Assistant Secretary of Defense (Manpower and Reserve Affairs). Program 9 is the responsibility of the Assistant Secretary of Defense (Comptroller) and Program 10 is designated as the responsibility of the Assistant Secretary of Defense (ISA). Because many of the resources in these programs overlap areas of management and functional responsibility, these programs are not

considered the exclusive responsibility of the named activities.

The FYDP structure also allows the application of a systematic means of measuring the actual use of appropriated resources against the planned and approved programs.

Defense Planning and Programming Categories

The aggregation of program elements for the POM submission is different from the FYDP program structure. The POM is structured by major mission and support categories and special program aggregations as identified in the SECDEF Planning and Programming Guidance Memorandum. This gives a comprehensive and detailed expression of the total resource requirements associated with the total commitment of the department. Supporting detail is presented in program element terms except that the procurement programs, other than major weapon systems, may be expressed as procurement listings structured by Major Mission and Support Categories. The program elements are summarized into four DPPCs as follows:

FORCE MISSION	OTHER MISSION
Strategic Offensive Forces	Intelligence and Security
Strategic Defensive Forces	Centrally Managed Communications
Strategic Control and Surveillance Forces	Research and Development
Tactical Air Forces	Support to Other Nations
Mobility Forces	Geophysical Activities

GENERAL SUPPORT	MISCELLANEOUS COSTS
Base Operating Support	Retired Pay
Medical Support	ETC.
Other Individual Support	
Training	
Command	
Logistics	

Program Elements

The program elements are the basic FYDP building blocks. The program element concept allows each Service and PEM to participate in the programming decision process since transactions are stated and measured in program element terms. Results of decision exercises are also transmitted in terms of a specific program element. Attachment one includes a representative example which describes the meaning of each numeral making up the overall program number of an R&D program element. This summary of the FYDP and the supporting information in Attachment one are relevant to the overall understanding of the PPBS itself.

SECTION 4

THE DOD PLANNING, PROGRAMMING AND BUDGETING SYSTEM

Introduction

The PPBS is not a trivial subject and it requires individual effort to track the actions making up one complete cycle. Most of the associated complexity is generated by the fact that one PPBS cycle covers a time span of approximately 28 months before funds are received. Therefore, at any given time during the calendar year several simultaneous PPBS actions relating to different PPBS cycles can be ongoing at the same time. Complexity practically vanishes when one cycle is isolated and broken down into the separate components of planning, programming, and budgeting. However, a simplified approach to the PPBS, in itself, will not elicit enthusiasm from an unmotivated listener or reader. It is important, therefore, to emphasize that a general understanding of the PPBS is vital to the ability to execute effective management decisions related to development and acquisition programs. It is also an integral element of the overall Air Force requirement process. PEMs working these areas without a proper grasp of the PPBS fundamentals will be beaten out by more knowledgeable individuals during the annual competitions for scarce resources. In most funding issues, the knowledge of when to raise the issue for solution is often as important as

obtaining the funds themselves. Regardless of the quality of a proposed solution, funds are usually required and the PPBS normally dictates how and when the solution can be executed. The remainder of this section will be devoted to the planning, programming and budgeting phases of the PPBS.

PLANNING

Introduction

Planning is the first phase of the PPBS and sets the pattern for the entire process. The major portion of this phase is accomplished within the JCS organization through the Joint Strategic Planning System.* It suffices to say here, that planning begins with an assessment of the threat to national security, includes the development of strategy to counter the threat, and culminates with an identification of manpower, money and systems to support the strategy and assure national security. The planning phase is not financially constrained and has the least impact on program management. However, familiarity is important. One of the key documents is the Joint Research and Development Objectives Document (JRDOD) which can be used as a supporting document in which to describe development programs which offer a significant increase in operational capability, but do not have the priority and emphasis normally reserved for major programs.

The PPBS actions for a given calendar year are established each January when the SECDEF issues a memorandum containing the schedule for that year. The January 1976 memorandum will be used as an example for tracking the PPBS actions relating to the FY 78-82 cycle. A copy of this

*See Attachment 2 for additional information.

memorandum is provided at Attachment three and a milestone/event diagram of the planning phase is provided at Attachment four to aid the reader in tracking the key elements.

JSOP VOL. I

The first entry on the January 1976 schedule of PPBS actions is the May 1975 submittal date for the JSOP VOL. I. The JCS submittal of this document initiated the FY 78-85 PPBS planning phase. This document presents the unconstrained advice of the JCS to the President and SECDEF covering military strategy and force objectives for attaining national security and corresponding military objectives. Forces are addressed for the entire eight year period while manpower and funding requirements are only covered for the first five years (FY 78-82). Based on the information in JSOP VOL. I and related Presidential decisions, the SECDEF issues the Defense Policy and Planning Guidance (DPPG) in November.

DPPG

The DPPG contains definitive policy and force planning guidance from the SECDEF upon which the DOD planning and programming actions are to be based. It provides the essential national security policies, established or confirmed by the administration, which are to guide the defense program. It provides the assumptions to be made in sizing the forces and allocating resources. In short, the DPPG is the SECDEF answer to JSOP VOL. I Selected Analysis Topics are also issued in November to the JCS and Services for analysis and later

response to OSD during the programming phase. Tentative Planning and Programming Guidance (TPPG) is issued at this time to provide early guidance on what to expect from the SECDEF in the Planning and Programming Guidance Memorandum that is scheduled for issue in February. The JCS and Services are provided the opportunity to comment on the DPPG relative to major differences in military objectives or the threat appraisals. JSOP VOL. II, Analysis and Force Tabulations, is submitted to OSD in December.

JSOP VOL. II

JSOP VOL. II is based on VOL. I, but refined to reflect the DPPG guidance and translates the JSOP VOL. I data into manpower estimates and force objectives to support that strategy. Feasible, but not fiscally constrained manpower and force levels are advocated. The purpose of VOL. II is to provide an assessment of the military risk which results from the constraints imposed by the force levels reflected in the current FYDP versus the levels articulated in JSOP VOL. I. Also discussed are the capabilities inherent in the FYDP forces to support the national strategy reflected in the DPPG. A parallel JCS action is the JRDOD update and submittal to OSD for review and consideration. PEMs should pursue the entry of a program into the JRDOD if that program offers a significant operational potential and provides a solution to a deficiency highlighted in the JRDOD.

PPGM

In February, the SECDEF issues the Planning and Programming Guidance Memorandum which constitutes the final action in the planning phase. The PPGM provides overall programming guidance to the Services and contains four enclosures:

(1) An update to the previous DPPG submitted by the SECDEF

(2) Fiscal guidance which specifies the total obligational authority (TOA) limits for each Service in the following categories:

a. Strategic Offensive Forces

b. Intelligence and Security

c. Support to Other Nations

d. CHAMPUS, Hospital Investment

e. RDT&E

(3) Material Support Planning Guidance which prescribes a reasonable balance between combat forces and material support, and between new procurement funding and maintenance of existing assets

(4) Guidance for the Program Objective Memorandum preparation which is designed to insure that the Service POMs provide adequate supporting rationale for the programs and resources that will be requested.

PROGRAMMING

Introduction

The programming phase of the PPBS translates the concepts and objectives developed in the planning phase into the time phased resource requirements which correspond to the previous SECDEF guidance. This phase is initiated upon receipt of the PPGM and includes three primary efforts:

(1) Joint Force Memorandum (JFM)

(2) Program Objective Memorandum (POM)

(3) SECDEF Program Decision Memorandum (PDM)

These efforts "cost-out" the force objectives for financial and manpower resources for the FY 78-82, five year period and force levels for FY 78-85. The results of this phase provide OSD, Congress and the President with an outyear estimate of the impact associated with present day decisions and the request for the program year (FY 78). An overview milestone chart for the programming phase is provided at Attachment five.

The responsibilities of the PEM increase significantly during this phase and require the full support of the AFSC Systems Officer (SYSTO) and Program Manager to insure the successful inclusion of sufficient program funds in the POM. The POM exercise is the first of two annual oppportunities for properly programming funds in the FYDP. The long lead time involved in planning and submitting the POM input is equally shared by all programs. A failure to recognize the importance

of the POM exercise will result in a shortage of funds, at best, to meet project requirements.

JFM

The JFM is developed concurrently with the POM. The JCS uses inputs from the Services and provides their recommendations on the financially constrained force levels and support programs developed to meet the SECDEF guidance in the PPGM. The JFM compares the cost of the recommended forces and support programs with those in the existing FYDP. The JFM is intended for the use of the SECDEF to assist in making decisions on the defense program and by the Services in preparing the POM input to the SECDEF.

POM

The Service POMs are the recommendation to the SECDEF for the detailed allocation of resources. The POM is developed within the fiscal constraints and guidance imposed by the PPGM and the emphasis presented in the JFM. The POM is the primary means of revising the approved program published in the FYDP. All program elements compete for available funds within the overall financial constraints contained in the PPGM.

As indicated by the dashed line milestone events in Attachment five, the Air Force POM process starts as early as November for the May input. The Air Force Board Panels initiate program element reviews as early as possible in order to cover as many program elements as possible. The PEM is required to brief his programs and financial requirements

for the five year period of the POM exercise. Major emphasis must be placed on justifying the PE funding levels and especially the funds requested for the first two years; because the POM submission is the initial exercise that starts to lock-in the total funding level that will be available to the program element. The first POM year is especially critical since requirements for additional funds in a program element that arise after the POM is submitted are exceptionally difficult to obtain.

During the February through April period, the Air Force Board Program Review Committee issues guidance and initiates a series of POM exercises to compile and review total funding requirements. The schedule for the FY 78-82 exercises and the financial summary for each exercise are provided in Attachments six and seven for added background. The financial summary vividly depicts the decreasing levels of funding which exceeded the PPGM guidance as the POM formulation exercises progressed from A1 to A3. The annual reductions to meet PPGM directed funding levels are achieved by reducing the scope of programs, and/or by deleting ongoing and proposed programs.

Each POM exercise must be recognized as a serious and competitive venture to retain and/or program funds into a program element. The PEM role is to insure that Panel representatives and key Program Review Committee members are briefed ahead of time and thoroughly familiar with a program element in order to support the requested funds at the critical decision meetings.

Sizeable behind the scene effort is required to bring key people up to speed. PEMs who do not make the extra effort will experience the loss of critical project funds as reductions are made in each POM exercise to meet the OSD PPGM levels.

PDMs

After the May submission of the POM and JFM to the SECDEF, differences in the two documents must be addressed relative to the guidance issued in the PPGM. OSD prepares issue papers which analyze the POM and the JFM, define the resulting issues, list alternative capabilities, and cost out the listed alternatives. The issue papers are provided to the JCS and Services for comments prior to submitting them to the SECDEF for a decision.

The SECDEF reviews the POMs, the issue papers, and the JCS/Service comments on the issue papers before he issues the Tentative Program Decision Memorandums (TPDMs) in July. The Service comments on the TPDMs are reviewed by the SECDEF and the remaining issues are identified. Meetings between the SECDEF and the Service Chiefs are scheduled and held to resolve remaining issues. Amended PDMs are then published to complete the programming phase, and to provide the SECDEF guidance related to the Budgeting Phase.

The PDMs are prepared in the Office of the Director of Defense Research and Engineering (ODDR&E). During the issue paper and reclama process, additional funding manipulations and tradeoffs occur as compromises are negotiated. Therefore,

two additional counterpart organizations are likely to enter the process before the PDM issues are closed out. The DDR&E staff and the staff of the Assistant Secretary of the Air Force for R&D are usually called upon by their boss to provide additional information on a particular program element. When tradeoffs are negotiated between DDR&E and SAF/RD, the time factor may prevent calling in the PEM. The quality of information provided to the decision makers will be directly proportional to the PEM's previous ability to keep the DDR&E and SAF/RD staff members up to speed on the program element.

BUDGETING

Introduction

The budgeting process contains the final actions of the annual PPBS. The approved requirements generated during the planning and programming phases are translated into the financial budget authority and outlays necessary to execute the DOD program. The DOD Budget Estimate is submitted to Congress and describes precisely what each Serivce expects to accomplish with the resources requested in the first program year (FY 78). For the RDT&E programs, the substantiating information is compiled in the Descriptive Summaries written for each program element. Program information is provided in the Descriptive Summaries covering prior years, the current fiscal year and the coming fiscal year of first program year. The budgeting process is subdivided into three phases:

(1) Formulation

(2) Justification and Approval

(3) Execution.

Budget Formulation

Key actions and milestones are provided in Attachment eight for supporting information on this phase. This phase begins when OSD submits the Amended Program Decision Memorandums (APDMs) and the budget guidance to the Services. The budget guidance is based on the President's Budget Policy and recommendations from the Office of Management and Budget (OMB).

The Services are allowed until the end of September to forward their budget estimate to OSD. The Budget Estimate is the requested Service budget for the first year in the FYDP (FY 78). Once submitted, the funding levels for that year are pretty well locked in as far as the subsequent possibility of exceeding this level is concerned. Reductions can easily be made, especially by Congress, before the requested funds are available for program use. Any future funding increases to the program element will normally be limited to less than two million dollars. The point to be made is that the President's Budget Submission is the second of two opportunities to update the FYDP figures for the program element. It is also the last time the budget figures can be changed before Congress reviews the program element. Once these funding levels are authorized and appropriated by Congress, then the addition of funds is determined by the reprogramming constraints placed on the Services. This subject will be further discussed in the last section. PEM responsibilities include making sure that required RDT&E and procurement funds are submitted in the President's Budget to accomplish the programs directed under his program element.

Program Budget Decisions

A review of the Service Budget Estimate is jointly conducted by OSD and OMB staff members. The PEM is normally requested to present a program element overview briefing and a planned expenditure estimate for the funds requested.

Information generated by this review is submitted to the SECDEF for review and signature. If signed, the result is a Program Budget Decision which cuts requested RDT&E and/or procurement funds by a specified level. This annual exercise ranks as the most insidious of the cut exercises because of the magnitude of the proposed cuts and the critically short time available in which to correct errors. Another factor is that there is always a high level of misunderstandings that prevail throughout the involved staff as to what constitutes an effective reclama to a PBD cut.

For the past several years, the magnitude of the cuts made to each Service has been $100M - $200M for the current year and $1 - 2 billion for the budget year. At the beginning of each PBD cycle, there is approximately five days to reclama an OSD PBD. Toward the end of the cycle, the reclama process is compressed to about four hours. About 300 - 350 PBDs are issued between October and December (about 100 per Service). Some of the PBDs are quite broad. For example, a cut in the F-15 program could be included in a PBD taking issue with all Air Force fighter aircraft. In the past, cuts to the current year aircraft modification accounts have been made which would have cancelled funds for development programs transitioning to production if the reclamas had not been successful.

It is vital to understand the difference between a reclama and a major budget issue. Only those items on the major budget issue list are resolved between the SECDEF and the Service

Secretary and Service Chief. The PBD process is confusing because all PBD cuts are the subject of a Service reclama. However, only those escalated to the status of a major budget issue have any hope of being restored! The PEM must take a personal interest and monitor actions in all budget activities where money has been specified to support his program. There have been many past examples where one key procurement account is cut and the other supporting accounts are not cut. Once a PBD is issued, time is of the essence. Immediate Directorate, DCS and the AF/ACB OPR attention is required to place the proposed cut on the list of major budget issues. The 20 - 30 per cent of the PBDs that make the major budget issue list are usually restored. Sometimes, additional latitude may be given to the Service, in that the dollars may not be restored by OSD, but the Service is told that the cut can be restored to the original funding level if the Service will fund it "out of hide", i.e., internal decrement of other approved programs to provide the restoration dollars.

After the PBD process is over and issues have been resolved with the SECDEF, two final actions take place to complete the formulation phase. The "current services" budget and the President's Budget are submitted by OSD. The "current services" budget estimates the outlays and budget authority needed for the next fiscal year, it assumes that all activities are to be continued at the same funding levels as the fiscal year in progress. The intent is to provide an early input to the

Congress to enable them to start their annual analysis prior to the January date when the President submits the annual budget. By the end of December, the budget which now reflects the OSD/OMB adjustments is finalized and becomes the DOD input to the President's national budget.

SECTION 5

THE CONGRESSIONAL PROCESS AND EXECUTION

Introduction

The congressional review of the President's Budget consists of justification by the Services, and the Congressional authorization of programs and appropriations of funds. This overall process is accomplished during the January through October time frame and collectively referred to as the enactment cycle. A milestone and actions diagram of the enactment cycle is provided at Attachment nine.

The Congressional review is accomplished from the separate viewpoints of the authorization of programs and the appropriation of funds requested for programs that are authorized. The recently passed Congressional Budget Reform legislation, specifies the milestone events in the enactment cycle with a completion date for the major events. Since these completion dates now have the force of law, the delays encountered in the past should no longer occur and the Defense budget should be available for use by 1 October. Having the fiscal year funds available at the start of the fiscal year, rather than six months into the fiscal year, is a major improvement which simplifies some of the past complexity of the PPBS actions.

Authorization and Appropriation

A two step process of authorization and appropriation

begins when the congressional staffs review the President's Budget. Before the detailed review of each program element begins the Armed Services Committee of both the House and the Senate hear posture statements from the SECDEF, Chairman of the JCS, Service Secretaries, and the Service Chiefs. The posture statements cover the broad aspects of the military budget that has been requested in the President's Budget.

The posture hearings are then followed by the authorization hearings which are usually separate hearings on RDT&E and Procurement. The principal witnesses at these hearings are normally, the Assistant Secretaries of the military departments and the military Deputy Chiefs of Staff. Their primary responsibility is to defend the requested dollar amounts under review by the committee. Witnesses on behalf of the Services must support the President's Budget even if they disagree and/or believe more funds are required.

Normally, the hearings in the House and the Senate are conducted at approximately the same time. The House Armed Services Committee is usually the first to complete its review (markup) of the Defense Budget and recommend a bill to the full House. A report is also provided to the House with the rationale which supports the funding changes recommended by the Committee. The House then votes its own bill after several days of floor debate. The Senate normally allows the DOD a short period of time for the submission of a written appeal of the House actions to include the adverse impacts

imposed by any funding reductions made by the House. The Senate Armed Services Committee subsequently conducts its own analysis of the DOD budget and considers the DOD reclama before submitting its marked up version of a recommended bill to the full Senate. A report also accompanies this recommended bill which presents the Committes's rationale for funding changes. After a floor debate, the Senate votes on the bill.

The result of the House and the Senate actions so far is that two authorization bills now exist. The differences in the two bills must be resolved in a conference committee made up of selected representatives from the House and Senate Armed Services Committee staffs. Only those matters in disagreement may be deliberated by the conference committee. During the conference committee process, the DOD is allowed to reclama the Senate action to include adverse impact of proposed funding reductions (given that the previous House actions on the same program either did not cut the program or differed from the Senate reductions). When conference agreement is reached, the compromise version of the bill is returned to the House and Senate for further floor debate and ultimate passage. Once approved by the Congress, the bill is then forwarded to the President for signature.

The appropriation process is underway in parallel with the authorization process. The appropriation events are the same as the events in the authorization process described above. Most of the work and practically all of the funding

manipulations that may occur during the authorization and appropriation process are done by the Committee staff members and not members of the Senate or House Committee. Therefore, PEMs should make the effort to personally brief key staff members of each committee on the scope and status of important programs. Face-to-face discussion is good for both parties especially in clearing up misunderstandings and supplementing the inadequacies of the Descriptive Summaries to fully explain a particular program. It is without saying that a great deal of judgement is required on the part of the PEM and his congressional liaison counterparts when briefing the Congressional Staff. However, a personal acquaintance and relationship with key staff members will not hurt a strong development program with a good operational payoff. In addition, if a congressional cut is proposed by one of the committees, a knowledgeable staff member on one of the remaining staffs can be of help during the reclama process. Proper liaison channels are in being for communicating with the Congressional staff.

Execution

Prior to the start of the fiscal year, OSD/OMB hold apportionment hearings. The Services are required to update their programs to reflect fact of life changes and show a redistribution of money to these changes.

For the annual accounts, expenditures by quarters are estimated by the Services and submitted in briefings to OSD/OMB. These estimates become the basis for OMB apportionment

of funds for each quarter. For the procurement and RDT&E accounts, the information obtained by OSD during the apportionment hearings becomes the basis of deferring procurement dollars until the dollars are required, or until OSD is satisfied with the program. This technique of deferment gives OSD complete control over Service programs.

Commitment, Obligation, Expenditure

After funds are apportioned to the Services and released to the field through comptroller channels, there are three types of actions accomplished against the released funds.

Commitment is the process of administratively reserving funds for some future procurement action involving the approved program. This can be accomplished by preparing a Purchase Request (PR), Project Order (PO), or Obligational Authority (OA) document. Commitment can also be accomplished through preparation of a Military Interdepartmental Purchase Request (MIPR) or by processing an Administrative Commitment Document (ACD).

Obligation is the process of placing funds on a contractural document, thereby authorizing expenditure or billing against these funds.

Expenditure represents actual payments made in response to delivery of contracturally required products or billings submitted by contractors. Expenditures are also acknowledged by the Air Force when a contractor has made purchase commitments to subcontractors or vendors for hardware for subsequent use

in the prime contract.

Summary

The previous discussion of the PPBS and the Congressional process should establish their importance and an appreciation for the fast moving nature of each of the action milestones. Any success within the environment of these management actions is directly proportional to a team effort by the PEM and his field counterparts, and by the team effort of the PEM with his Air Staff counterparts.

Since the PPBS phases and the Congressional activities were broken down into separate entities for ease of description, it is now appropriate to reassemble them for a look at the combined picture. A summary diagram and description are provided for this purpose at Attachment ten to review the principal budget activities that are taking place concurrently:

(1) Execution of the current year and prior years budget

(2) Justification of the budget for the next year

(3) Formulation of the budget for the following year.

No one person can keep up with all of these ongoing actions singlehandedly. The PEM must have (and rely upon) support from his functional counterparts for maintaining the health of his program element. Constant communication is required to keep all counterparts up to speed on projects within the

in the prime contract.

Summary

The previous discussion of the PPBS and the Congressional process should establish their importance and an appreciation for the fast moving nature of each of the action milestones. Any success within the environment of these management actions is directly proportional to a team effort by the PEM and his field counterparts, and by the team effort of the PEM with his Air Staff counterparts.

Since the PPBS phases and the Congressional activities were broken down into separate entities for ease of description, it is now appropriate to reassemble them for a look at the combined picture. A summary diagram and description are provided for this purpose at Attachment ten to review the principal budget activities that are taking place concurrently:

(1) Execution of the current year and prior years budget

(2) Justification of the budget for the next year

(3) Formulation of the budget for the following year.

No one person can keep up with all of these ongoing actions singlehandedly. The PEM must have (and rely upon) support from his functional counterparts for maintaining the health of his program element. Constant communication is required to keep all counterparts up to speed on projects within the

element to elicit their participation and full support.

SECTION 6

THE AIR FORCE REQUIREMENTS PROCESS

Introduction

The formal operational requirements process is a management discipline of communication, iterative refinement, constructive conflict, and adaptation. There are four basic activities pursued during the requirements process: identification of a deficiency and/or requirement, validation, selection of suitable technical alternatives and approval. These activities constitute the formal process and adequately support major programs and the conceptual phase of potential DSARC programs. There is also a less formal, but equally essential, requirements process experienced during the team effort to transition development programs of lesser stature into improved operational capability. The PEM plays a primary and a corollary role in both the formal and the informal processes which will be discussed in this section.

Identification

Generation of a formal operational requirement consisting of a statement of deficiency or need is normally a major command activity and primarily oriented to major development programs. Even though the Air Staff can submit an operational requirement, more than 90 per cent of all statements of Required Operational Capability (ROC) are generated by the major commands. This is in keeping with the basic principle

of the operational requirements process which encourages and draws upon the ideas and judgements of experienced field personnel.

Prior to the publication of a ROC, the originator forwards draft copies of the proposed document to major commands and components having related mission, development, or support responsibilities. AFSC and AFLC review all draft ROCs and provide the originator information on technology and logistics considerations which relate to the satisfaction of the stated deficiency. Both AFSC and AFLC are normally invited to help write the ROC with the originator. After reviewing the received comments on the draft document, the originator includes those deemed appropriate and publishes the formal document. Distribution of the ROC is then made to required agencies.

Validation

Validation is the authority for a ROC to compete for funds and resources during the PPBS process. Validation results from a corporate Air Staff review made within the context of total Air Force requirements and priorities.

ROCs enter the Air Staff through the Directorate of Operational Requirements, AF/RDQ. An action division within the DCS R&D is then specified as the DCS R&D focal point for the ROC. The action division then distributes the ROC to the other Air Staff directorates and divisions having a valid input to the functional review and comment process that is

necessary to fully staff and validate the ROC. The focal point action officer, in conjunction with his counterparts, prepares an initial recommendation for or against validation. Study efforts are initiated to derive and support the recommendation. The studies usually address system tradeoffs, cost effectiveness, supportability, maintainability, and safety and survivability when appropriate. Additional comments are again solicited from the major commands, other Services, and cognizant agencies. PEMs responsible for ongoing development programs that offer a solution or alternative to solving the stated deficiency have an active role in contributing to the formulation and coordination of the initial validation recommendation. Budgetary Cost Information (BCI) is also provided by AFSC and AFLC to the originator and the focal point division to support the alternative solutions for satisfying the ROC.

The originator reviews the comments and recommendations provided from the major commands and agencies having an interest in the ROC along with the BCI data. The originator then provides an estimated position that this new ROC will occupy relative to the position of other ROCs on his Command ROC Certification and Priority List that this ROC will be assigned to if validated.

The action division and Air Staff counterparts then evaluate the received technical solutions or alternative approaches, identify the perferred approach and preferred alternatives, and formulate funding estimates phased by fiscal years that

are required to develop and procure the alternative solutions.

After completing the evaluation and coordination cycles, a summary of the information is prepared and provided to the Requirements Review Group (RRG) Secretariat by the action division. The summary contains the ROC description and justification, a discussion of MAJCOM comments, Air Staff comments, other Service comments, other high level support, a proposed program to satisfy the requirement, and a recommended course of action.

The RRG charter is to review, evaluate and recommend action on proposals for new or improved operational capabilities. The RRG membership includes:

AF/RDQ	Director of Operational Requirements, Chairman
AF/RDP	Director of Development and Acquisition
AF/RDR	Director of Reconnaissance and Electronic Warfare
AF/XOO	Director of Operations
AF/XOX	Director of Plans
AF/LGY	Director of Maintenance and Engineering
AF/PRP	Director of Programs

The RRG receives advanced copies of the requirements summary prior to a formal briefing on the ROC. Each member of the RRG also receives a separate written input from his responsible action officer (normally the PEMs in the case of RDP, RDR, XOO and RDQ) relative to the position that should be taken

by the Director during the RRG meeting. After the formal RRG review, the RRG may validate the ROC, defer action for additional information, or return the ROC to the originator for termination or other action.

Selection of Suitable Solutions

The formulation of a specific proposal to satisfy an operational requirement is an iterative process of dialogue among Air Staff, Operating, Developing and Supporting Commands until each is reasonably satisfied that a successful program can be achieved.

Program Approval

Once the ROC is validated, program approval activity begins to obtain both the necessary authority and resources for developing and procuring the solution. Major programs are individually reviewed and approved through the Chief of Staff and Secretary of the Air Force. This process includes serious review of the program content, fiscal requirements and associated impact on other Air Force programs. Once approved within the Air Force, OSD approval is sought by direct coordination and through the decision processes of the PPBS as the annual budget cycle is staffed. DSARC programs are naturally the subject of OSD acceptance or rejection during the transition of a program from the conceptual stage to approval for production.

Informal Process

Many operational deficiencies can be solved by small

ongoing development programs, modifying an existing system, straight forward procurement of developed hardware or a commercial item, or by a system available through another Service. In these cases a ROC may or may not be stated and approved prior to the initiation of development or solution activity. The process is still handled through the RRG once a ROC is available or before production is approved. However, the overall process is less formal and the actual transition of a solution to the operator may take more effort by the action officers than a major program handled under the formal process. The reason for this is that the staffing is done at a lower horizontal level in the chains-of-command which involves more coordination and interface elements. The impact of personnel reassignments are also greater on small programs. In addition, there is extreme competition for funds in the various accounts which remain after the major programs are fully funded.

The informal process also relates to the numerous 6.3XXX and 6.4XXX development programs that are addressing known operational deficiencies, but have not yet reached a demonstration milestone which will justify the publishing of a ROC and the sizeable manpower effort associated with the ROC process. These programs face extreme competition for funds and it is a prime responsibility of the PEM to see that funds are provided and the programs are kept on track. Once a program becomes inordinately strung out in schedule due to funding cuts, the solution may no longer justify development costs because the

period of usefulness is no longer viable.

The annual financial exercises cited in earlier chapters introduce numerous people into an impact position on a development program. Normally, the main objective of a financial review staff is to reduce development scope and effort in order to reduce overall funding requirements and meet the predetermined total funding goal that generated the exercise. The first question to a PEM at these "dog-eat-dog" exercises is, "Where is the supporting ROC for this program?". When no ROC is citeable, the budget review group often interprets this as a weakness which allows them to assume the role of a requirements review group. Cuts are normally made to many small programs rather than cancelling one or two programs to meet the total funding goal. Action of this type is usually based on little real knowledge of the programs that are cut, and bastardizes the requirements process. It also undermines the purpose behind strong Air Force RDT&E programs that are structured to explore new technology and uses of technology. While the RDT&E program should be supported by the ROC process, the RDT&E program cannot be effective if it is subservient to the ROC process or to budget exercises. When the formal requirements process is understood, it becomes obvious that it is not structured to support the non-DSARC or small RDT&E programs; and the ROC process is not a prerequisite to establishing all RDT&E efforts.

SECTION 7

REPROGRAMMING AND PROGRAM

INITIATION

Introduction

A discussion of PEM roles and responsibilities is not complete without an examination of the boundaries surrounding program initiatiion and reprogramming action. In other words, what are some of the flexibilities in these areas that legally are allowed to handle the day-to-day financial problems that arise which were not predicted in advance, nor submitted to Congress in the previous budget for authorization and appropriation of funds?

Congress recognizes that some deviations from the appropriated funding levels are needed for efficient management practices and to accommodate unforseen, high-priority, operational or development problems. Several important assumptions must be stated because of the judgmental nature of the topics discussed in this section. First, the intent of this section is to encourage action suggested by the old adage which states, "Where there's a will, there's a way.". However, it is also equally important to conduct these actions within the legal constraints of the PPBS and the Congressional constraints. The Air Force will not risk an accusation of circumventing the will of Congress. The PEM is required to spearhead the actions necessary to solve financial issues arising in his

programs. To do so, he must have the advice and support of his peers to construct a course of action that will solve the problem without circumventing the will of Congress.

Classes of Reprogramming

Congressional desires regarding reprogramming flexibility in a program element or a procurement budget activity are reflected in DOD Directives and DOD Instructions and through close cooperation and coordination between the OSD and Congressional Committees. The intent is to allow adequate flexibility for efficient management of the budget while not preempting Congressional responsibility to approve or deny funded efforts. There are three approved reprogramming classes provided for in DOD Instructions:

(1) Prior congressional approval is required to reprogram any funds to an item reduced by Congress or known to be of special interest to one of the committees

(2) Prior notification to Congress is required for other reprogramming above specified thresholds for a budget activity or a program element.*

(3) Below threshold actions are within the authority of OSD and are reported on a semi-annual or quarterly basis to Congress.

At the HQ USAF level, the Air Force is constrained by the same limits imposed on OSD and in general can exercise the

*See Attachment 11 for further information.

reprogramming flexibility. The Air Force can propose reprogramming actions for prior Congressional approval or notification, but these requests must be approved by OSD before being submitted to Congress. HQ USAF can engage in below threshold actions without OSD approval except in the cases where DDR&E has deferred funds or a reduction in DDR&E Special Interest items are involved.

HQ USAF has delegated $500 thousand reprogramming flexibility to HQ AFSC. AFSC flexibility can be exercised when there are no higher order constraints and when the action is for minor funding adjustments of directed effort due to unforeseen circumstances. AFSC flexibility is not to be used for new starts or changes in the scope or schedule of planned efforts.

Figure II is an abbreviated summary of limitations and R&D thresholds. Note that the priority of constraining conditions is from the top down. Proposed reprogramming actions must be free of all prior limits beginning at the top of the table. For example, the Air Force cannot accomplish below threshold reprogramming action if the item is one that has been reduced by Congressional action.*

Above Threshold Reprogramming

This type of reprogramming should not be viewed as a ready source of funds. In fact, it should not be used except in the case of major programs with high level support and/or emergency

*See Attachment 12 for additional information.

FIGURE II

ABBREVIATED SUMMARY OF RDT&E REPROGRAMMING LIMITATIONS

Program Status or Requirement Description	Action Required or Approval Level
1. Program (or item) denied by Congress.	Request for reprogramming is not permitted by law.
2. Program funding reduced by Congress, or known to be of special interest to a Committee, regardless of dollar amount.	Prior Congressional approval required. OSD must approve request to Congressional Committees.
3. Requirement is for $2 million or more. 4. Cumulative reprogrammings within the same fiscal year are $2 million or more. 5. New starts exceeding $10 million or more in first three years regardless of first year amount. 6. New starts with significant follow-on costs.	Prior notification to Congressional Committees. OSD must approve the notification before forwarding to the Committees. If no response in 15 days, OASD (Program/Budget) will advise extent of reprogramming that can be initiated.

FIGURE II (con't)

7. Reprogramming involves deferred funds or DDR&E Special Interest sources. Any amount.	OSD (DDR&E) must approve use of deferred or Special Interest funds.
8. Requirement for less than $2 million, but more than $500 thousand.	HQ USAF, AF/RD can approve and accomplish reprogramming action.
9. Requirements under $500 thousand for minor cost increases not related to change of scope of planned effort.	HQ AFSC can approve and initiate reprogramming action.

conditions. There are several reasons for this opinion. Congressional approval is required before funds can be made available and this normally requires a great deal of time. The funds required in the reprogramming must come from some other ongoing program. In addition, the program that is used as the source of funds must be identified in the reprogramming request submitted to Congress. By the time the Congressional staff can devote attention to the request, a major portion of the fiscal year has passed and usually little time remains in which to obligate and expend the funds requested. These factors plus the inherent dislike of a reprogramming request usually leads to less than a fifty-fifty chance of approval. To further complicate matters, when a reprogramming request is denied the funds identified as the source are normally forfeited because they were identified as excess resources to fund the reprogramming request.

Below Threshold Reprogramming

This form of reprogramming is a viable management tool to solve unexpected development problems, to improve the efficiency of an ongoing program or to respond to an added operational input that expands the scope of an ongoing program. As a development program matures the schedule itself becomes a critical and driving factor. If it becomes necessary to add funds to retain the schedule and protect the viability of a production decision or to better prepare for production, then reprogramming action should be pursued. Regardless of the

rationale used for the reprogramming or the time criticality of the funds involved, a reprogramming request is never looked upon as a pleasant subject. However, as difficult as the task may be, if the reprogramming request is in the best interests of the Air Force and the program it must be strongly pursued and accomplished in a timely manner to keep the program on track.

Below threshold reprogramming is not intended to be the cure for bad management planning during the POM exercise and the President's Budget Submission. Proper funding levels should be established for the program element at these primary times, and not be catch-up actions which plan on below threshold reprogramming actions to bail out the program. The easiest form of reprogramming is between projects within the same program element. This form of reprogramming does not vary the approved funding level of a P.E. and allows an additional $1.99 million to be added to the program element if the need arises.

A few comments are offered relative to below threshold reprogramming. First, it is possible to reprogram both RDT&E and procurement funds up to the specified program element or budget activity thresholds. Second, no reprogramming is possible within a P.E. that was cut by Congress during the enactment cycle. Finally, integrity among the peer group that is responsible for working the diverse elements of a reprogramming action is vital. The PEM, SYSTO and program manager must

speak with one pragmatic voice. The PEM must have complete trust in the SYSTO and program manager in order to speak with consistent integrity and authority to his peers and bosses; and to pursue the reprogramming action to the limits the system will bear without fear of being wrong. Many necks are on the block when justifiying the reprogramming to the bosses in the financial approval chain. A lapse in integrity for any reason is never really forgotten.

New Starts

New starts must be approved by Congress and should therefore be avoided unless accomplished in the annual submission of the Descriptive Summaries for a program element. However, most Descriptive Summaries are worded in general terms such that small tasks that are initiated within or under an ongoing project of similar description are not considered a new start. If necessary, the task can be expanded into a separate project within the P.E. and described in the next submission of the Descriptive Summaries. Below threshold reprogramming can be used in the interim to expand the scope of the ongoing effort.

In the case of a major operational deficiency arising which needs immediate development support and high level authority to move out, below threshold reprogramming can be used to start immediately if two important features are present: 1) funding requirements are less than 2 million dollars during the first year, and 2) the sum of the first three years of funding is less than 10 million dollars. If these

conditions are met the Air Force can initiate a new program element and begin work immediately using reprogrammed funds. There is some risk involved which is the reason for initiating the effort as a new program element. There is no guarantee that Congress will authorize and appropriate funds for the second and third year efforts. If the funds are cut, then the impact only occurs to the new program element. If this course of action is pursued to provide a responsive RDT&E solution, then the PEM must seek to brief the key Committee staff members on all aspects of the program during the next justification process. Unless this personal contact is made, the staff is likely to assume that an attempt was made to pre-empt the authorization and appropriation process. The result of this misunderstanding will probably result in all funds being cut.

The usual routine that is normally proposed by well meaning, but poorly informed, individuals is to propose new starts that require large funding levels that have not been programmed in the POM nor submitted to Congress for authorization and approval. The same amount of time is usually spent in wasting effort and attracting failure as would be involved in starting out small, one step at a time, within the limits of the PPBS and Congressional legality, and growing into a larger scope of effort that picks up added support as the program matures.

The formal requirements process solves the problem of initiating major development new starts. Non-major programs

that will require significant development funds and are not supported by a formal ROC have a better chance, of starting at all, if the initial steps are very small. The smaller the initial steps, the more likelihood of survival and maturing to a healthy stage of development.

SECTION 8

SUMMARY

The management effectiveness and overall contribution that the PEM can provide to the improvement of the Air Force is directly proportional to his ability to work with his Air Staff and AFSC counterparts. This ability will be contingent upon his understanding of the Air Staff organization, the FYDP, the PPBS, the Congressional process, the requirements process and the flexibilities and limitations of financial reprogramming. The above elements are subsystems of the overall environment which is normally slow moving. However, the dynamics of the development process and the actions making up the PPBS and Congressional process must be in sync. Otherwise, a program will be in real trouble. The PEM is responsible for keeping the various subsystems in sync with the environment. To do so requires a good understanding of the individual elements.

If the system is going to be manipulated properly, it must be done from within. Knocking heads with established PPBS, Congressional or requirements procedures is doomed to failure. The key is working with and not against. Key liaisons must be established on a foundation of trust and optimistic achievement aimed at providing significant operational improvements. Key areas of program impact and pitfalls have been listed in the study for consideration and application to

individual programs. It is hoped that the information will provide the confidence for the PEM to take charge of his program responsibilities and move out for the overall good of the Air Force.

ATTACHMENT ONE

1) Summary F&FP

2) Air Force Appropriations
   3010, 3020, 3080, 3600, 3400

3) RDT&E Budget Program, Categories
   Budget Activities

DESCRIPTION OF CONTENTS AND DEFINITIONS

I. ORGANIZATION: The F&FP consists of eleven volumes -- a Summary volume and a volume for each program:

Program 1	Strategic Forces
Program 2	General Purpose Forces
Program 3	Intelligence and Communications
Program 4	Airlift and Sealift Forces
Program 5	Guard and Reserve Forces
Program 6	Research and Development
Program 7	Central Supply and Maintenance
Program 8	Training, Medical and Other General Personnel Activities
Program 9	Administrative and Associated Activities
Program 10	Support of Other Nations

II. DESCRIPTION OF CONTENTS

A. Summary Volume. This volume contains definitions, program and cost data as follows:

1. Definitions. These provide a description of the basic building blocks of the USAF Force and Financial Program: cost elements, appropriations, program elements and programs.

2. Program Data. Included in this section are forces, flying hours, manpower, and aircraft and missile procurement quantities.

3. Cost Data. Total Obligation Authority (TOA) is shown by Total Air Force by program, by appropriation and by program element.

B. Program Volumes 1-10. Each volume contains: A summary of Flying Hours, Manpower, and TOA by Appropriation; TOA by Program Element; TOA by Appropriation and Cost Element; and Forces, Flying Hours, Manpower and Costs by Program Element.

III. DEFINITIONS

A. Program. A grouping of program elements having a common mission or set of purposes. The program elements within a program either complement each other or are close substitutes which should be considered together in making major program decisions. The USAF Force and Financial Program is composed of ten "programs."

1. Program 1 - Strategic Forces. Consists of major subdivisions; Strategic Offensive, Strategic Defensive, and Civil Defense. Includes command organizations associated with these forces.

2. Program 2 - General Purpose Forces. Consists of force-oriented program elements other than those in Program 1, including the command organizations associated with these forces, the logistics organizations organic to these forces, and the related logistics and support units which are deployed or deployable as constituent parts of military or naval forces and field organizations.

3. Program 3 - Intelligence and Communications. Consists of missions and activities directly related to combat forces, but are not a part of any of the forces listed in Program 1 or 2 on which independent decisions can be made. Includes resources for primarily national or centrally directed DOD objectives for intelligence and security; communications; specialized missions such as weather service, aerospace rescue/recovery, and oceanography.

4. Program 4 - Airlift/Sealift. Consists of airlift, sealift and other transportation organizations both industrially funded (IF) and non-industrially funded (NIF). Includes command, logistic, and support units organic to these organizations.

5. Program 5 - Guard and Reserve Forces. Consists of National Guard and Reserve training units. Elements are arranged in Program order to facilitate the relating of the Guard and Reserve training forces to the active force.

6. Program 6 - Research and Development. Consists of all R&D activities which are not related to items approved for procurement and deployment. The R&D costs related to operational systems will appear in appropriate elements in programs to which the weapon or support system may be identified.

7. Program 7 - Central Supply and Maintenance. Consists of supply and maintenance that is not organic to other program elements. Includes non-deployable supply depots and maintenance depots, both industrially funded and non-industrially funded.

8. Program 8 - Training, Medical and Other General Personnel Activities. Consists of training, medical and other activities associated with personnel. Excludes training specifically identified with another program element, and housing, subsistence, medical, recreational and similar costs that are organic to a program element such as base operations.

9. Program 9 - Administration and Associated Activities. Consists of resources for the administrative support of departmental and major administrative headquarters, field commands and administrative activities (not elsewhere accounted for), construction support activities and miscellaneous activities.

10. Program 10 - Support of Other Nations. Consists of elements identified to the MAP and AID Programs and those resources assigned to elements related to the Military Assistance Program or supporting the Military Assistance Program.

B. Program Element. An integrated activity, a combination of men, equipment, and facilities which together constitute an identifiable military or support activity.

C. Total Obligation Authority (TOA). The total financial requirements of the Five Year Defense Program or any component thereof required to support the approved program of a given fiscal year.

D. Cost Categories. This classification states the function that the funds will serve.

1. Development. Costs primarily associated with development of a new capability to the point where it is ready for introduction into operational use. These costs will include equipment such as prototypes and test vehicles required in a development program to the extent that such equipment is funded under the RDT&E appropriation. Related Military Construction appropriation costs are also included. Costs which appear in the Military Personnel, Operation and Maintenance, and Procurement appropriations are excluded from this category.

2. Investment. Capital costs required beyond the development phase to introduce a new capability into operational use. The bulk of these costs involves the procurement appropriations. All Military Construction appropriation costs except those associated with development are included. RDT&E, Military Personnel, and Operation and Maintenance appropriation costs are excluded.

3. Operating. The annual cost required to operate and maintain a given capability for an element throughout its projected life or operational use. Military Personnel and Operation and Maintenance costs are included in this category. RDT&E, Military Construction, and Procurement appropriation costs are excluded. Operating cost detail includes industrially-funded costs in appropriation program elements and cost elements. These are offset by a single negative entry in Program Element 4.11.68.F, Revenues (Airlift Services - Industrial Fund). Thus, the total cost figures for Program IV, Airlift and Sealift, represent total obligational authority net of industrial fund costs.

E. Cost Elements. Cost elements are subdivisions of cost categories and appropriations. Where the cost element title is the same as an appropriation, program, or activity title, the content of each is conceptually the same.

AIR FORCE APPROPRIATIONS

3010	AIRCRAFT PROCUREMENT AF
3020	MISSILE PROCUREMENT AF
3080	OTHER PROCUREMENT AF
3300	MILITARY CONSTRUCTION
	310 PROJECT PLANNING
	320 MAJOR CONSTRUCTION (USA)
	330 MAJOR CONSTRUCTION (OUTSIDE)
	340 MINOR CONSTRUCTION
	350 SUPPORT ACTIVITIES
3400	OPERATION & MAINTENANCE, AF
3500	MILITARY PERSONNEL, AF
3600	RDT&E, AF
3730	MIL CON AFR
3740	O&M AFR
3750	MIL PERS AFR
3830	MIL CON ANG
3840	O&M ANG
3850	MIL PERS ANG
0030	RETIREMENT
0070	FAMILY HOUSING
4922	INDUSTRIAL FUNDS

(See HQ USAF OI 27-1 Attachment 8 for OPR info)

BUDGET PROGRAMS

AIRCRAFT 57 X 3010

BP	SYSTEM/CATEGORY	
1000	WEAPON SYSTEM	(FLYAWAY, TECH DATA, TNG EQ. PEC AGE, ADVANCE BUY/CREDIT)
1100	MODIFICATIONS	(CLASS IV, CLASS V, UPDATE)
1200	COMMON AGE	(REPL ITEMS, CONS ITEMS, USAF/AFLC CONTROLLED, OUT-OF-PROD SIMULATOR
1300	COMPONENT IMPROVEMENT	(RELIABILITY, MAINTAINABILITY)
1400	INDUSTRIAL FACILITIES	(EXPANSIONS, PREP FOR SHIP, NON-RECURRING MAINT, MODERNIZATION)
1500	REPLENISHMENT SPARES	(AIRCRAFT, AGE, TNG, ETC)
1600	INITIAL SPARES	(WEAPON SYS, AGE, MOD INVESTMENT)
1700	WAR CONSUMABLES	(TANKS, PYLONS, MERS, TERS, ETC)
1800	PROC O/T AF	(ALL CATEGORIES)
1900	OTHER PRODUCTION CHARGES	(ECM, QRC, CLASSIFIED, PDT, ETC)

MISSILES 57 X 3020

BP	SYSTEM/CATEGORY	
2000	WEAPON SYSTEM	(FLYAWAY, TECH DATA, TRN EQ. PEC AGE, SITE ACTIVATION)
2100	MODIFICATIONS	(OUT OF PROD MSLS; UP-DATE)
2200	REPLACEMENT EQ	(AGE, VATE)
2300	SPACE PROGRAMS	(LAUNCH VEH, STAGES, SPACE VEH RV)
2400	INDUSTRIAL FACILITIES	(EXPANSIONS, PREP FOR SHIP, NONRECUR MAINT MACHINE TOOL MOD)
2500	REPLENISHMENT SPARES	(MISSILES, AGE, TNG)
2600	INITIAL SPARES	(WEAPON SYS, TNG, MOD INVESTMENT)
2700	SPECIAL PROJECTS	
2800	PROC O/T AF	(ALL CATEGORIES)
2900	OTHER PRODUCTION CHARGES	ICLASSIFIED)

OTHER PROCUREMENT (AF) 57 X 3080

BP		
8100	MUNITIONS	(BOMBS, ROCKETS, ATOMIC ORDNANCE, TARGETS, OTHER, SPARES)
8200	VEHICLES	(PASSENGER, CARGO, SPECIAL, FIRE, MATERIALS HANDLING, BASE, OTHER, SPARES)
8300	CRYPTOLOGIC	(USAFSS, OTHER CRYPTO, MODS SPARES)
8400	ELECTRONICS	(SYSTEMS, AIRCOMM, ORG & BASE, SPARES)
8500	OTHER BASE EQUIPMENT	(TEST, FTD, AFTAC, PERSONAL, SAFETY, ORG & BASE, PHOTO, COMPRESSORS, GENERATORS, SPARES, ETC)
8600	INDUSTRIAL FACILITIES	(EXPANSIONS, PREP FOR SHIP, NON RECUR MAINT, MODERNIZATION)
8700	PROC O/T AF	(ALL CATEGORIES)
8800	MODIFICATIONS	(CAT IV, CAT V, ALL PROGRAMS)

RDT&E 57x3600

BUDGET ACTIVITY		CATEGORY	
6100	MILITARY SCIENCES	61X	BASIC RESEARCH
6200	AIRCRAFT & RELATED EQ	62X	EXPLORATORY DEVELOPMENT
6300	MISSILES & RELATED EQ	63X	ADVANCED DEVELOPMENT
6400	ASTRONAUTICS & RELATED EQ	64X	ENGINEERING DEVELOPMENT
6600	ORDNANCE, COMBAT VEHICLES	65X	MANAGEMENT/SUPPORT
6700	OTHER EQUIPMENT	XXX	OPERATIONAL SYSTEMS
6800	PROGRAM MANAGEMENT & SUPPORT		

3010 APPROPRIATION
EXAMPLE BREAKOUT OF
SELECTED BUDGET PROGRAMS

BUDGET PROGRAM ACTIVITY CODES (BPAC)
SYSTEMS MANAGEMENT CODES (SMC)
MILITARY PROCUREMENT CODES (MPC)

BUDGET PROGRAM	SMC	MPC	
10XXXX			
AIRCRAFT PROCUREMENT			
	328X		
	F-15/TF-15		
			XXXX
		FLYAWAY	XX10
		TRAINING	XX20
		FLIGHT SIMULATOR	(XX22)
		OTHER	(XX29)
		ADVANCE PROC(CY)	XX30
		PECULIAR SUPPORT EQ.	XX40
		TECHNICAL DATA	XX70
		PRIOR YEAR CREDIT	XXXX
11XXXX			
MODIFICATIONS			
	327Z		
	F-4 ALL SERIES OR NO SERIES		
			XXXX
		CLASS V	1000
		CLASS IV	2000
		UPDATE	3000
19XXXX			
OTHER PRODUCTION CHARGES			
	9999		
	ALL ACTIVITIES		
			XXXX
		STOCK FUND FUEL	1009
		ALTERNATE MISSION EQ	2000
		HQ USAF APPROVED PROJECTS	3000
		SPECIAL PROCUREMENT PROGRAMS (QRC)	4000
		BCM PODs	5000
		FORCE PODs	(5001)
		ATTRITION PODs	(5002)
		UPDATE PODs	(5003)
		OTHER EQUIPMENT	6000
		PAVE PENNY	(6001)
		EXECUTIVE KITS	(6002)
		AIRCOMBAT MANEUVERING INSTRUMENTATION	(6003)
		GBU-15	(6004)
		AF ACADEMY SAIL PLANE	(6005)
		PAVE TACK	(6006)
		SIMULATOR FOR ELECTRONIC WARFARE TRAINING	(6007)
		FIRST DESTINATION TRANSPORTATION	9950

OPERATION & MAINTENANCE 57 X 3400	
OBJECT CLASSIFICATION	
12.1	PERSONNEL BENEFITS CIVILIAN
13.0	BENEFITS FOR FORMER PERSONNEL
21.0	TRAVEL & TRANSPORTATION OF PERSONS
22.0	TRANSPORTATION OF THINGS
23.0	RENT, COMMUNICATIONS & UTILITIES
24.0	PRINTING & REPRODUCTION
25.0	OTHER SERVICES
26.0	SUPPLIES & MATERIALS
31.0	EQUIPMENT
41.0	GRANTS, SUBSIDIES & CONTRIBUTIONS
42.0	INSURANCE CLAIMS & INDEMNITIES

OPERATION & MAINTENANCE 57 X 3400
ELEMENT OF EXPENSE
CIVILIAN PAY
DEPOT MAINTENANCE
SUPPLIES & EQUIPMENT
TRAVEL & TRANSPORTATION
RENT, COMMUNICATIONS & UTILITIES
OTHER PURCHASED SERVICES
CONTRACTOR OPERATED INSTALLATIONS
OTHER EQUIPMENT & MAINTENANCE
PRINTING, INSURANCE & INDEMNIFICATION

F. Air Force Appropriations

1. Aircraft Procurement (3010) - (Investment)

a. Aeronautical Vehicle. Procurement of complete air vehicle, including integration and assembly, propulsion, electronics and other costs.

(1) Integration and assembly includes hardware/effort procured from prime integrating contractor and involves costs for parts inherent to the assembled structure of the aircraft. These encompass airframe; installed electronics, communications/navigation equipment and other specialized equipment peculiar to the particular aircraft mission; installed fire power control; installed penetration aids, reconaissance equipment, non-recurring costs (such as specialized tooling); initial production planning and industrial engineering plant rearrangement.

(2) Propulsion includes installed engine.

(3) Electronics include equipment procured as GFAE and installed in the aircraft.

(4) Other costs include equipment, effort, and services procured separately from the subsystems described above.

b. Peculiar Support. Procurement of Peculiar Aerospace Ground Equipment (AGE) Training Devices and Technical Data associated with a particular type of aircraft. This includes AGE identified with integration and assembly, propulsion, electronics and other costs for a particular air vehicle.

(1) Peculiar AGE includes Aerospace Ground Equipment procured from the prime contractor to make the aircraft subsystem, or end items of equipment operational in its own environment. Base and depot AGE are also included.

(2) Training devices include equipment of sufficient significance to necessitate a separate contract line item. Also included are other costs such as service contracts and training film not included under data.

(3) Data includes all data as defined in AFR 310-1, such as technical manuals required for operational usage, maintenance, inspection, installation, overhaul or identification of equipment. Data may be associated with installation and assembly, propulsion, electronics or other costs.

c. Prior Year Credits. Includes advance buy funded in prior years to procure longer lead time items plus inventory items allocated to subsequent year procurements of specific weapons system.

d. Advance Buy. Procurements costs associated with procurement of Contractor Furnished Equipment (CFE) items incurred in a fiscal year to cover lead time requirements for aircraft programmed in subsequent years, such as engines and electronic equipment which may have a lead time greater than the airframe. These accumulated costs are applied as credits against costs of aircraft in the year of funding.

e. Prior Year Over Target Costs. Funds required to cover system expenses over and above approved prior year programs.

f. Modifications. Modification costs of in-service aircraft; aerospace ground equipment; training equipment and components thereof which are required as a result of safety of flight or aircraft configuration modifications. Current estimates are based on the scheduled modernization maintenance program. Projections are made by applying experience factors to the acquisition cost of aircraft in the inventory.

g. Common Aerospace Ground Equipment (AGE). Procurement of in-service aerospace ground equipment common to more than one aircraft type and model. Cost estimates are developed on the basis of organizational factors applied to the force structure.

h. Component Improvement. The Component Improvement Program (CIP) provides funds for improving Government Furnished Aeronautical Equipment (GFAE), primarily aircraft turbine engines, by applying engineering solutions to: improve durability, maintainability, and reliability; improve repair techniques, overhaul support, and production support. All effort of this nature is funded in the RDT&E appropriation until delivery of the first production support. All effort of this nature is funded in the RDT&E appropriation until delivery of the first production article, at which point CIP assumes funding responsibility. Upon completion of production, the funding responsibility transfers to the Operations and Maintenance appropriation.

i. Industrial Facilities. The Industrial Facilities program provides for capital type rehabilitation to real property at Air Force owned industrial facilities; finances preparation for shipment of Government production equipment to the Defense Industrial Plant Equipment Center or to other priority Air Force users; and provides funds for the Air Force Industrial Readiness and Mobilization Planning Program. This latter program provides for investigation of deficiencies. Funds are also requested for the manufacturing methods program which assures the timely establishment and improvement of manufacturing processes, techniques, or equipment required to support current and projected Air Force programs. In addition, funds are included to permit compliance with air and water environmental standards.

j. Replenishment Spares. Procurement of replenishment spare components and repair parts identified as investment items in accordance with AFR 170-14. Includes all items except those obtained from Defense Supply Agency, procured as follow-on-support primarily related to the flying hour program and War Reserve Stockage Policy. Excluded in FY 1969 and subsequent years are expense type items being procured in the stock fund account.

k. Weapon System Initial Spares. Includes spare engines and other initial spares associated with the procurement of spare equipment, components and spare parts for Contractor Furnished Equipment (CFE) and Government Furnished Aircraft Equipment (GFAE) end items.

l. Common AGE Spares. Spares required to support items of in-service aerospace ground equipment common to more than one aircraft type and model.

m. Modification Initial Spares. Modification initial spares are those initial spare parts required as a result of the modifications which are included in the Hq USAF approved and directed scheduled modification program and updating changes.

n. War Consumables. For procurement of items of equipment involved in the stockage requirements for war consumption including such items as auxiliary fuel tanks, pylons, and ejector racks.

o. Other Charges. AF stock fund fuel, electronic countermeasures and alternate mission photographic equipment not procured with a specific end item; and special non-reimbursable Hq USAF approved projects not identified with any special budget program in the Aircraft Procurement appropriation.

2. Missile Procurement (3020) - (Investment)

a. Aeronautical Vehicle. Provides for the procurement of complete missiles, boosters, spacecraft, drones and guided rockets. This includes the airframe, interstages, propulsion units, guidance systems, re-entry vehicles systems, long lead procurement, engineering change orders and non-recurring "one-time costs" such as tooling, plant layout, and other start-up costs as required.

b. Training Equipment. Provides for the procurement of necessary hardware and trainers required to support maintenance and operational training of the appropriate using commands. Instrumentation packages used in operational testing of the weapon system are also procured from this category.

c. AGE. Provides for the procurement of Aerospace Ground Equipment (AGE) to support the missile system in its operational environment including equipment required to install, launch, arrest, guide, transport, repair and maintain. The Depot Maintenance Ground Equipment (DMGE) and factory tools and test equipment used by special repair activities and air materiel areas are also procured under AGE.

d. Data. Provides for initial technical data in the form of multiple printed copies, films sound track and/or reproducible copy procured with the end item, or procured as a requirement in connection with modification or modernization programs. Other appropriation funds will be used following completion of the acquisition phase where open production contracts no longer exist.

e. Site Activation. Provides for the contractual costs associated with the installation and checkout of the system, subsystem or equipment at the site.

f. Modifications. Provides for updating and modification of previously delivered missile systems and drones to improve reliability; enhance performance and increase maintainability by incorporating approved changes resulting from technical advances, service use and from deficiencies revealed in the continuing test programs.

g. Modernization. Provides for the procurement of hardware, and necessary site activation effort required to modernize MINUTEMAN I Launch and Launch Control Facilities to a configuration that will accept either a MINUTEMAN II or MINUTEMAN III Missile. It also provides for the upgrading of these facilities to a higher hardness level including Command Data Buffer for MINUTEMAN III.

h. Replacement Equipment and VATE. Provides for the replacement of peculiar and common Aerospace Ground Equipment (AGE) for out-of-production systems and Versatile Automatic Test Equipment (VATE). Also, provides for war consumables such as auxiliary tanks, pylons, ejector racks, etc., used by Remotely Related Vehicles.

i. Replenishment Spares and Repair Parts. Provides for the procurement of replenishment spares and repair parts to support ballistic missiles, other missiles, and target drones.

j. Initial Spares. For the procurement of initial spares, spares components, and repair parts, and for provisioning documentation. Spares are procured for Flyaway, training devices, AGE and modification kits, VATE, depot tools and depot maintenance equipment.

k. Space Programs. Provides for the procurement of satellites, launch vehicles, and payload/booster integration.

l. Industrial Facilities. Provides for manufacturing methods, non-recurring maintenance or Government-owned industrial facilities engaged in missile/space production and for the maintenance, modernization and preparation for shipment or storage of machinery within these facilities.

m. Special Programs. Provides for the procurement for Special Programs.

n. Other Charges. Provides for classified drones and miscellaneous charges not identified to other cost elements.

3. Other Procurement (3080) - (Investment)

a. Munitions and Associated Equipment. Procurement of ammunitions and associated equipment (except guided missile warheads and explosive components); armament training devices; assist takeoff (ATO) units; atomic ordnance material; targets and associated equipment. Includes components, supplies and materials, and initial spares and repair parts to support new munitions and associated equipments during the initial period of operation. First destination transportation for items procured in this budget activity is also included.

b. Vehicular Equipment. Procurement of motor vehicles; gasoline reciprocating engines and accessories (except aircraft); materials handling, railway, ship and marine, fire-fighting, excavating, and cleaning equipment. Includes spare components and repair parts identified as investment items in AFR 170-14. Excluded are expense items procured in the stock fund account. First destination for items procured in this budget activity is also included.

c. Cryptological and Other USAF Security Service Equipment (USAFSS). Procurement of cryptological and other USAF security service equipment.

d. Cryptological Initial Spares. Procurement of spare parts to support new items of cryptological equipment entering the Air Force inventory.

e. Cryptological Replenishment Spares. Procurement of replacement parts to support items of cryptological equipment already in the Air Force inventory.

f. Cryptological Modifications. Modifications to correct operational deficiencies and to obtain new capabilities.

g. Electronic and Telecommunications Equipment. Procurement of radar, radio navigation, radio and television communication equipment, except airborne; telephone, telegraph and teletype equipment; wire and cable; peculiar test and calibration equipment; miscellaneous communication equipment; meteorological instruments; electronic and electrical equipments including milspec computers, data processing and display equipment. Also includes missile communication support equipment including intersite cable, to provide communications within and between missile sites; communications and electronics equipment, varied electronics and telecommunications equipment in support of the space activities of the Air Force. Includes equipment required to provide electronics and telecommunications equipment not provided for by an "L" system. These equipments include government-owned telephone lines, radios, and navigation aids, data gathering and reporting devices and training equipment. Includes aerospace ground equipment required to test, service or handle a particular item of electronics equipment (Peculiar AGE). First destination transportation for items procured in this budget activity is also included.

h. Electronic and Telecommunications Equipment Initial Spares. Procurement of initial spares to support electronic and telecommunications equipment.

i. Electronic and Telecommunications Equipment Replenishment Spares. Procurement of replenishment spare components and repair parts identified as investment items with AFR 179-14. Includes all items except those obtained from Defense Supply Agency, procured as follow-on support primarily related to the communications, electronics and meteorological program and War rescue Stockage Policy. Excluded are expense items procured in the stock fund account.

j. Other Base Maintenance and Support Equipment. Procurement of common test equipment, specialized calibration equipment, personal safety and rescue equipment, mechanization and materials handling equipment, maintenance and repair shop equipment, electrical equipment, relocatable buildings, aircraft arresting barriers, medical and other locally purchased investment equipment, air cargo handling equipment, other base support equipment, spares and repair parts, and procurement of special project equipment in support of intelligence programs, reconnaissance programs, and selected activities. First destination transportion for items procured in this budget activity is also included.

k. Industrial Facilities. Provides for initial construction or major expansion of plants for fabrication of items of equipment for operational inventory and related supporting equipment including land improvements and installed equipment. This does not include any brick and mortar.

l. Equipment Modification. Encompasses three types of changes to physical characteristics or configuration of a system or equipment.

(1) Class IV modifications required for safety of flight, mission accomplishment, or affecting maintainability and reliability.

(2) Class V modifications required to in-service systems or equipment and those items still in production following completion of Category II test program which result in changes to provide increased operational performance or capability not within original design or performance specifications.

(3) Updating changes to provide improvements required as recognized or revealed during the test program through Category II testing.



SERVICE

A Army
N Navy
M Marine Corps
F Air Force

ELEMENT

Represents the serial number, in combination with the first three digits, to identify a specific program element

BUDGET ACTIVITY

0 R&D Support from other Appropriations
1 Research (Military Sciences)
2 Aircraft and Related Equipment
3 Missiles and Related Equipment
4 Military Astronautics and Related Equipment
5 Ships, Small Craft and Related Equipment
6 Ordnance, Combat Vehicles and Related Equipment
7 Other Equipment
8 Management and Support

CATEGORY

1 Research
2 Exploratory Development
3 Advanced Development
4 Engineering Development
5 Management and Support
6 Operational Systems Development

PROGRAM

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 General Personnel Activities
9 Administration and Associated Activities
0 Support of Other Nations

COPY AVAILABLE TO DDC DOES NOT PERMIT FULLY LEGIBLE PRODUCTION

CATEGORIES

There are six categories in the Department of Defense RDT&E Program.

1 - Research

Includes scientific study and experimentation directed toward increasing knowledge and understanding in those fields of the physical, engineering, environmental, biological-medical, and behavioral-social sciences related to long-term national security needs. It provides fundamental knowledge for the solution of identified military problems. It also provides part of the base for subsequent exploratory and advanced developments in Defense-related technologies and of new or improved military functional capabilities in areas such as communications, detection, tracking, surveillance, propulsion, mobility, guidance and control, navigation, energy conversion, materials and structures, and personnel support.

2 - Exploratory Development

Includes all effort directed toward the solution of specific military problems, short of major development projects. This type of effort may vary from fairly fundamental applied research to quite sophisticated breadboard hardware, study, programming and planning efforts. It would thus include studies, investigations and minor development effort. The dominant characteristic of this category of effort is that it be pointed toward specific military problem areas with a view toward developing and evaluating the feasibility and practicability of proposed solutions and determining their parameters. Program control of the Exploratory Development element will normally be exercised by general level of effort.

3 - Advanced Developments

Include all projects which have moved into the development of hardware for experimental or operational test. It is characterized by line item projects and program control is exercised on a project basis. A further descriptive characteristic lies in the design of such items being directed toward hardware for test or experimentation as opposed to items designed and engineered for eventual Service use.

4 - Engineering Developments

Include those development programs being engineered for Service use but which have not yet been approved for procurement or operation. This area is characterized by major line item projects and program control will be exercised by review of individual projects.

5 - Management and Support

Includes research and development effort directed toward support of installations or operations required for general research and development use. Included would be test ranges, military construction, maintenance support of laboratories, operations and maintenance of test aircraft and ships and studies and analyses in support of the

COPY AVAILABLE TO DDC DOES NOT PERMIT FULLY LEGIBLE PRODUCTION

Copy available to DDC does not permit fully legible reproduction

R&D program. Costs of laboratory personnel, either in-house or contract-operated, would be assigned to appropriate projects or as a line item in the Research, Exploratory Development, or Advanced Development Programs areas, as appropriate. Military Construction costs directly related to a major development program will be included in the appropriate element.

6 - Operational System Developments

Include research and development effort directed toward development, engineering and test of systems, support programs, vehicles and weapons that have been approved for production and Service employment. This area is included for convenience in considering all RDT&E projects. All items in this area are major line item projects which appear as RDT&E Costs of Weapons Systems Elements in other Programs. Program control will thus be exercised by review of the individual research and development effort in each Weapon System Element.

BUDGET ACTIVITIES

There are nine Budget Activities under RDT&E:

0 - R&D Support From Other Appropriations

1 - Military Sciences

Includes basic and applied research tasks and projects of potential military application in the physical, mathematical, environmental, engineering, biomedical, and behavioral sciences. The research tasks selected are derived from an analysis of basic missions and corresponding technological requirements, as well as from a review of technical opportunities related to national security needs. Examples are: Oceanography research to increase the future effectiveness of anti-submarine warfare systems; computer research for improved command, control, and communications; biomedical research in shock and trauma; behavioral science research to achieve improvements in methods for personnel training and selection; and materials research to provide improved structures and components for military systems.

2 - Aircraft and Related Equipment

Development, test and evaluation of aircraft and related aircraft equipment, including airframes, engines and other propulsion systems, airmament, communications, navigation, bombing and fire control equipment, weapons and other equipment identifiable with

COPY AVAILABLE TO DDC DOES NOT PERMIT FULLY LEGIBLE PRODUCTION

aircraft and related aircraft equipment including specific ground support equipment; includes Operational Systems Developments.

3 - Missiles and Related Equipment

Development, test and evaluation of missiles of all types, and related missile equipment, including integral components and equipment identifiable with missiles, including air-to-air, surface-to-surface, surface-to-air, air-to-surface missiles, training missiles, test vehicles, and related missile equipment including specific ground support and training equipment; includes Operational Systems Developments.

4 - Military Astronautics and Related Equipment

Development, test and evaluation directed toward the improvement of space technology for military purposes and the development of military applications of space vehicles and space-related equipment including specific ground support and training equipment; includes Operational Systems Development.

5 - Ships, Small Craft, and Related Equipment

Development, test and evaluation of ships, small craft, and shipboard equipment, including hull, engines and propulsion machinery, ordnance, catapults and arresting gear, electronics, fittings and other installed equipment; includes Operational Systems Developments.

6 - Ordnance, Combat Vehicles, and Related Equipment

Development, test and evaluation of artillery, guns, rocket launchers, small arms, other individual weapons, torpedoes, mines, depth charges, rockets, bombs, grenades, mortar ammunition, demolition charges, other ordnance items, and integral components thereof; includes Operational Systems Development. Includes ammunition, fuses, other ammunition components, explosives, propellants, detonating devices, fire control systems, and integral components thereof; nuclear, biological, chemical and radiological munitions, dispensers and equipment; combat and support vehicles including armor, propulsion, armament mounting, communications and other electronic equipment, and other integral components and equipment related to combat and support vehicles as well as supporting training equipment.

7 - Other Equipment

Development, test and evaluation of equipment not separately provided for under other budget activities including surveillance, tactical and strategic communications, amphibious warfare support equipment, aircraft control and warning, missile detection, other electronic systems, chemical and biological agent detection and protection; railroad, materials handling, construction, training, shop and utilities, printing and reproduction, photographic, medical, personnel rescue, meteorological, organization and personnel, subsistence, protective (including clothing) equipment, and other similar equipment as well as integral components thereof; and testing related thereto; includes Operational Systems Development.

8 - Program-Wide Management and Support

Development, test and evaluation not separately provided for under other budget activities and not distributed directly to program elements/budget subactivities having specific program objectives (work managed by "project").

DISTRIBUTION

The Department of Defense Five Year Program (FYDP) is published and distributed by the Assistant Secretary of Defense (Comptroller). The DOD FYDP is updated at least once annually as of 31 December and records the President's budget to Congress. The DOD FYDP may also be updated on an "as directed" basis.

ATTACHMENT TWO

JOINT STRATEGIC PLANNING
SYSTEM

JOINT STRATEGIC PLANNING SYSTEM

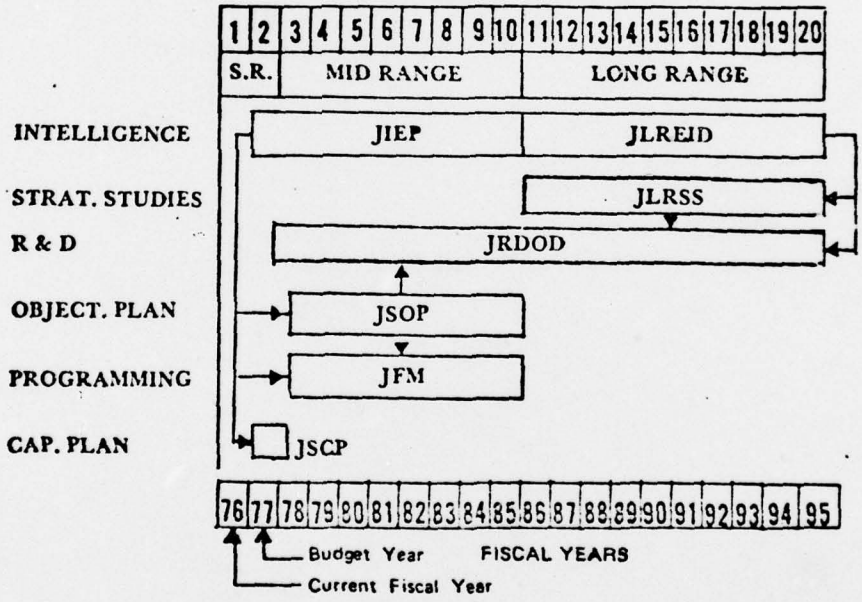
DESCRIPTION

The JCS are charged with certain planning responsibilities which are discharged by the promulgation of seven documents:

JIEP	–	**Joint Intelligence Estimate for Planning**
JLREID	–	**Joint Long Range Estimative Intelligence Document**
JLRSS	–	**Joint Long Range Strategic Study**
JSOP	–	**Joint Strategic Objective Plan**
JFM	–	**Joint Force Memorandum**
JSCP	–	**Joint Strategic Capabilities Plan**
JRDOD	–	**Joint Research and Development Objectives Document.**

These documents represent planning in three areas: strategy (JSOP, JFM, JSCP); intelligence (JIEP, JLREID) and research and development (JRDOD). The time frames they cover and their interrelationship are shown below:

JSPS DOCUMENT INTERRELATIONSHIPS



ATTACHMENT THREE

PROGRAM/BUDGET REVIEW - CALANDER
YEAR 1976 SCHEDULE

THE SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301

JAN 12 1976

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/CMB 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 POMs. 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.

W. P. Clements, Jr.
Deputy

Enclosure
Schedule

PROGRAM/BUDGET GUIDANCE AND REVIEW SCHEDULE
for
Calendar Year 1976

tem	Action	Agency	Action Date
1	Submit JSOP-Vol I (FY 78-85) - Military Strategy and Force Planning Guidance	J	May 1, 1975
2	Issue Defense Policy and Planning Guidance (DPPG)	O	Nov 4, 1975
3	Issue Tentative Planning and Programming Guidance Memorandum (TPPGM) Note: Provides tentative guidance in such areas as fiscal planning assumptions, forces, logistics, manpower, research and development, telecommunications, and intelligence.	O	Nov 5, 1975
4	Update Joint Research and Development Objectives Document (JRDOD) (FY 78-95)	J	Dec 15, 1975
5	Submit JSOP-Vol II (FY 78-85) - Analysis and Force Tabulations	J	Dec 19, 1975
6	Update Five Year Defense Program FY 75-77	C	Dec 30, 1975
7	Update Five Year Defense Program FY 78-81 (through FY 84 for Forces)	C	Jan 9, 1976
8	Submit Telecommunications Subsystem Data	C	Jan 15, 1976
9	Issue Planning and Programming Guidance Memorandum Note: Provides Fiscal Guidance and an updated version of the DPPG in addition to guidance indicated in item 3 above.	O	Feb 6, 1976
10	Issue Military Security Assistance Projection (MSAP)	O	Apr 9, 1976
11	Submit Joint Force Memorandum (JFM)	J	Apr 30, 1976
12	Submit JSOP-Vol I (FY 79-86) - Military Strategy and Force-Planning Guidance (CY 77 cycle)	J	Apr 30, 1976
13	Submit Program Objective Memoranda (POM)	C	May 7, 1976
14	Update FYDP, Procurement Annex, and RDT&E Annex Consistent with POM (FY 78-85)	C	May 7, 1976
15	Submit FYDP Telecommunications Subsystem Data	C	May 12, 1976
	Submit JFM Nuclear Annex, FY 78-85	J	May 31, 1976

Item	Action	Agency	Action Date
17	Transmit first Issue Paper to Components	O	Jun 11, 1976
18	Transmit last Issue Paper to SecDef	O	Jul 16, 1976
19	Issue Program Decision Memoranda (PDM)	O	Jul 26, 1976
20	Submit reclamas to PDMs	JC	Aug 9, 1976
21	Major PDM Issue Meetings	OJC	Aug 13-18, 197
22	Issue amended PDMs	O	Aug 23, 1976
23	Issue Budget Guidance	O	Sep 1, 1976
24	Issue Defense Policy and Planning Guidance (DPPG) (CY 1977 cycle)	O	Sep 8, 1976
25	Publish tentative Nuclear Weapons Stockpile for planning	O	Sep 13, 1976
26	Submit annual budget estimates and backup information	C	Sep 30, 1976
27	Start Budget Hearings	O	Oct 1, 1976
28	Update Five Year Defense Program, Procurement Annex, and RDT&E Annex	C	Oct 11, 1976
29	Submit FY 78-79 Nuclear Weapons Deployment Plan	J	Oct 15, 1976
30	Submit FYDP Telecommunications Subsystem Data	C	Oct 18, 1976
31	Start issue of Program/Budget Decisions (PBDs)	O	Oct 20, 1976
32	Issue Tentative Planning and Programming Guidance Memorandum (TPPGM) (CY 1977 cycle) Note: Provides tentative guidance in such areas as fiscal planning assumptions, forces, logistics, manpower, research and development, telecommunications, and intelligence.	O	Oct 22, 1976
33	Start PBD reclamas	JC	Oct 28, 1976
34	Issue revised PBDs based on reclamas	O	Nov 26, 1976 to Dec 6, 1976
35	Conduct joint meetings with JCS and Service Secretaries to discuss major unresolved budget issues	OJC	Dec 8-10, 1976
36	Submit Joint Research and Development Objectives Document (JRDOD) (FY 79-86)	J	Dec 15, 1976

Item	Action	Agency	Action Date
37	Issue FY 78-79 Nuclear Weapons Deployment Memorandum for Interagency Review	O	Dec 15, 1976
38	Submit JSOP-Vol II (FY 79-86) - Analysis and Force Tabulations (CY 1977 cycle)	J	Dec 20, 1976
39	Update Five Year Defense Program (FY 76-78)	C	Dec 30, 1976
40	Update Five Year Defense Program (FY 79-82) (through FY 85 for Forces)	C	Jan 10, 1977
41	Issue FY 78-80 Nuclear Weapons Stockpile	O	Jan 15, 1977
42	Submit FYDP Telecommunications Subsystem Data	C	Jan 17, 1977

LEGEND: O -- SecDef
J -- JCS
C -- Military Departments and Defense Agencies
JC -- JCS, Military Departments, Defense Agencies

AD-A035 160 DEFENSE SYSTEMS MANAGEMENT SCHOOL FORT BELVOIR VA F/G 5/1
THE ROLE OF THE PEM IN DEVELOPMENT AND ACQUISITION MANAGEMENT.(U)
NOV 76 J J RUFFING

UNCLASSIFIED NL

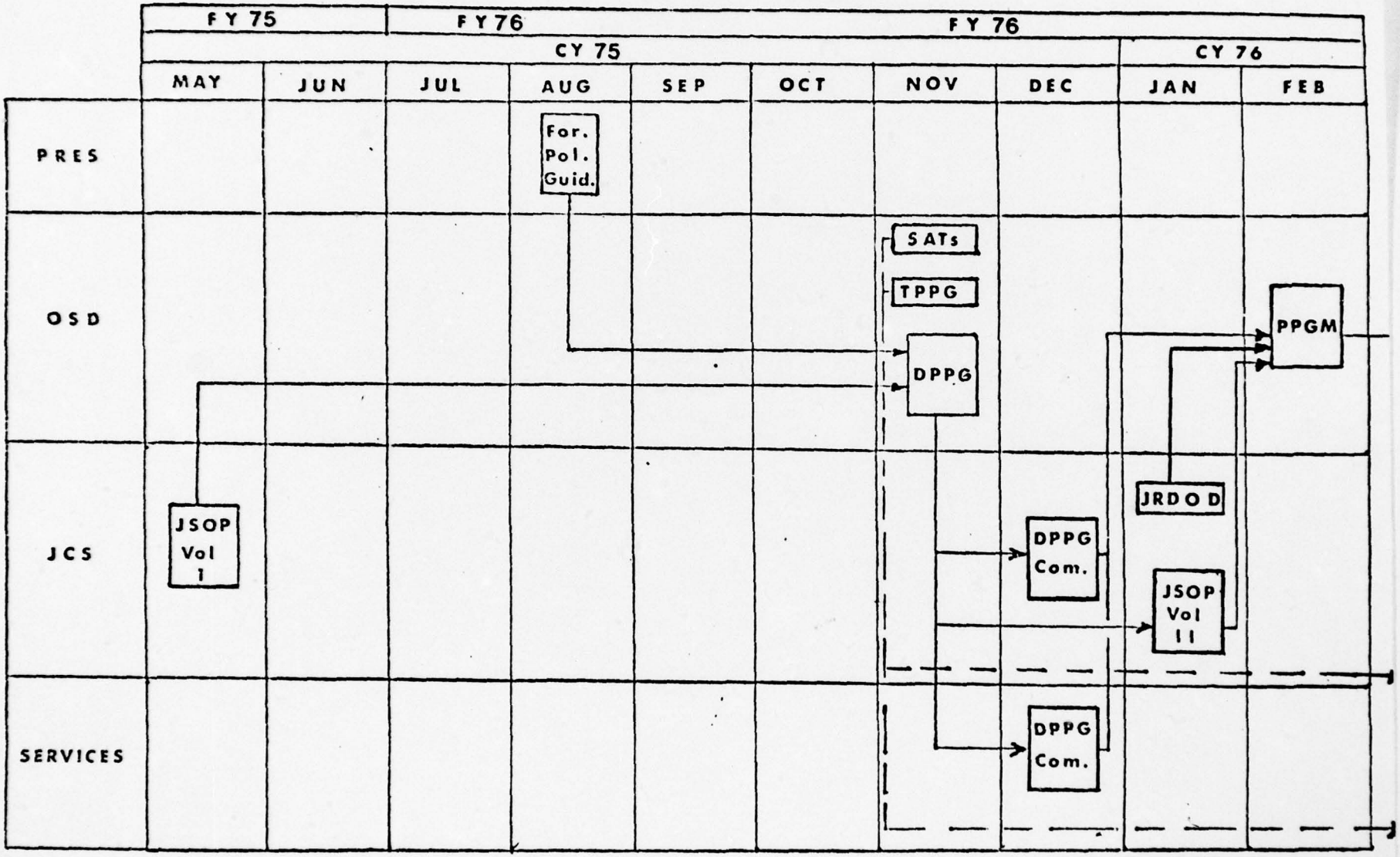
2 OF 2
AD A035160



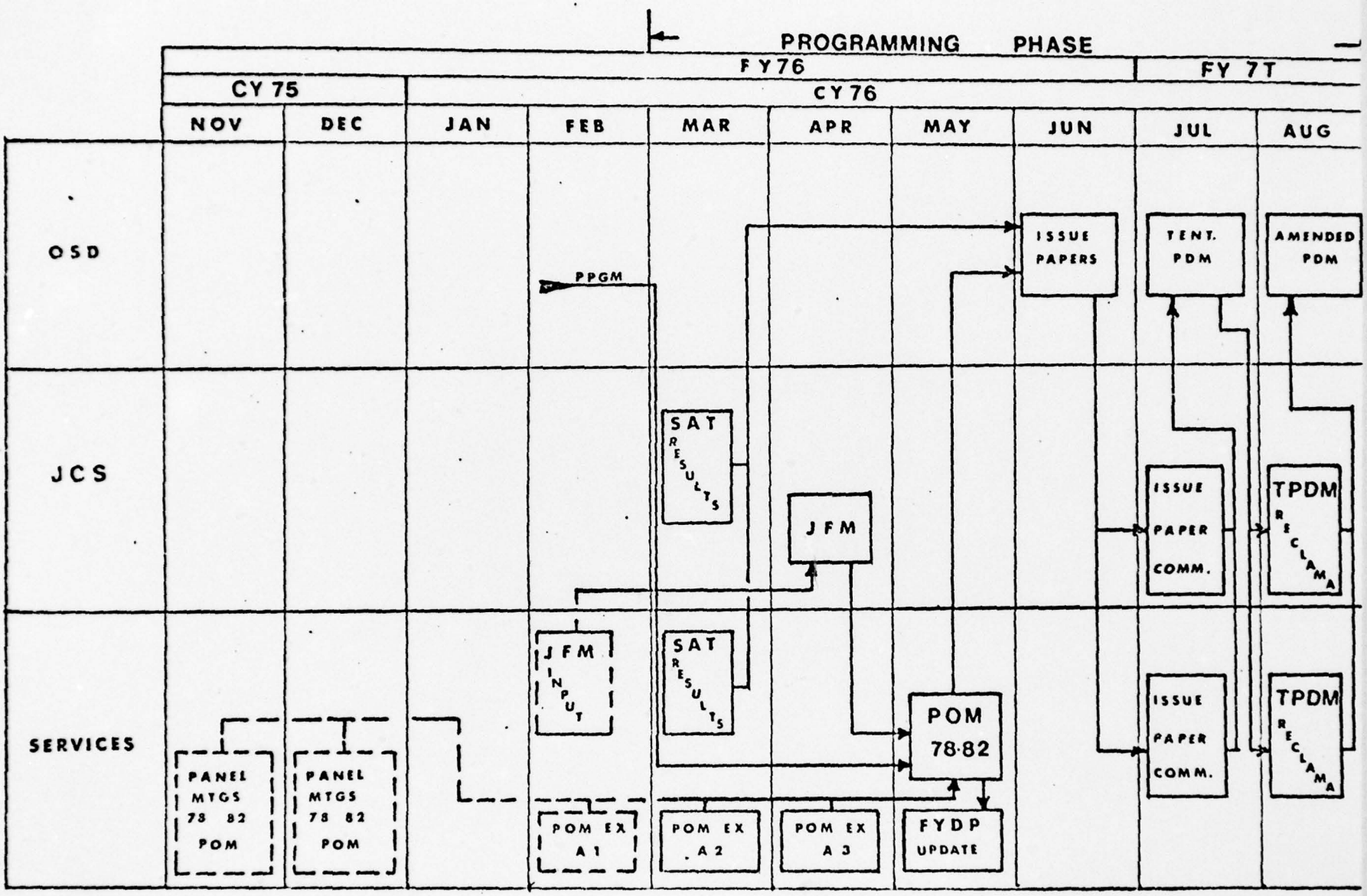
END

DATE
FILMED
3 - 77

PLANNING PHASE



ATTACHMENT 4



ATTACHMENT 5

FY 78-82 POM FORMULATION SCHEDULE

NOV - DEC 75:	PANEL MEETINGS AND BRIEFING TO PRC
FEB 76:	PRC GUIDANCE
10 - 26 FEB:	PROGRAM EXERCISE 78-A1
FEB:	PPGM WITH FISCAL GUIDANCE
27 FEB - 5 MAR:	AIR FORCE BOARD STRUCTURE REVIEW
8 - 31 MAR:	PROGRAM EXERCISE 78-A2
1 - 5 APR:	AIR FORCE BOARD STRUCTURE REVIEW
	. ANALYSIS OF IMPACTS
	. ANALYSIS OF TRENDS
	. COMPARISON AGAINST PPGM
6 - 8 APR:	BRIEF AFC, CSAF, AND SAF
9 - 27 APR:	PROGRAM EXERCISE 78-A3
15 - 29 APR:	DEVELOPMENT OF FORMAL POM
29 APR - 7 MAY:	POM COORDINATION AND SIGNATURE

ATTACHMENT 6

AIR FORCE POM CHALLENGE

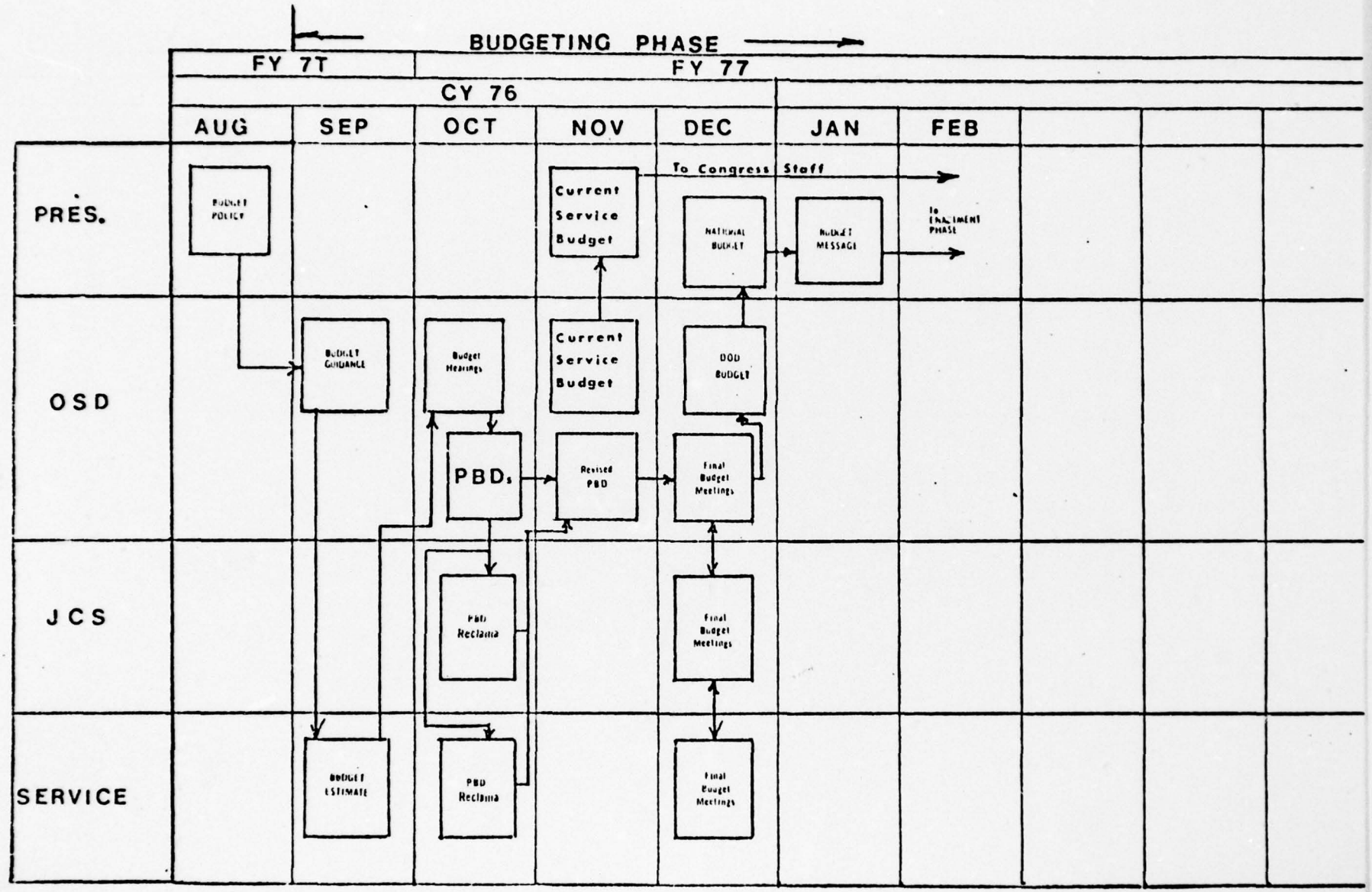
(AS AGAINST SECDEF FISCAL GUIDANCE)

($ MILLIONS)

FY 78 - 82 POM	FY 78	FY 79	FY 80	FY 81	FY 82
EXERCISE 78-A1	+1,288	+3,996	+4,185	+2,473	+ 479
EXERCISE 78-A2	+ 917	+1,116	+ 130	- 650	-1,011
EXERCISE 78-A3	+ 49	+ 49	+ 49	+ 49	+ 49

FY 77 - 81 POM	FY 77	FY 78	FY 79	FY 80	FY 81
EXERCISE 77-A1	+1,210	+1,740	+1,140	+1,070	+1,810
EXERCISE 77-A2	+ 736	+ 545	+ 464	- 446	- 398
EXERCISE 77-A3	+ 100	+ 99	+ 100	+ 97	- 296

ATTACHMENT 7



ATTACHMENT 8

ATTACHMENT NINE

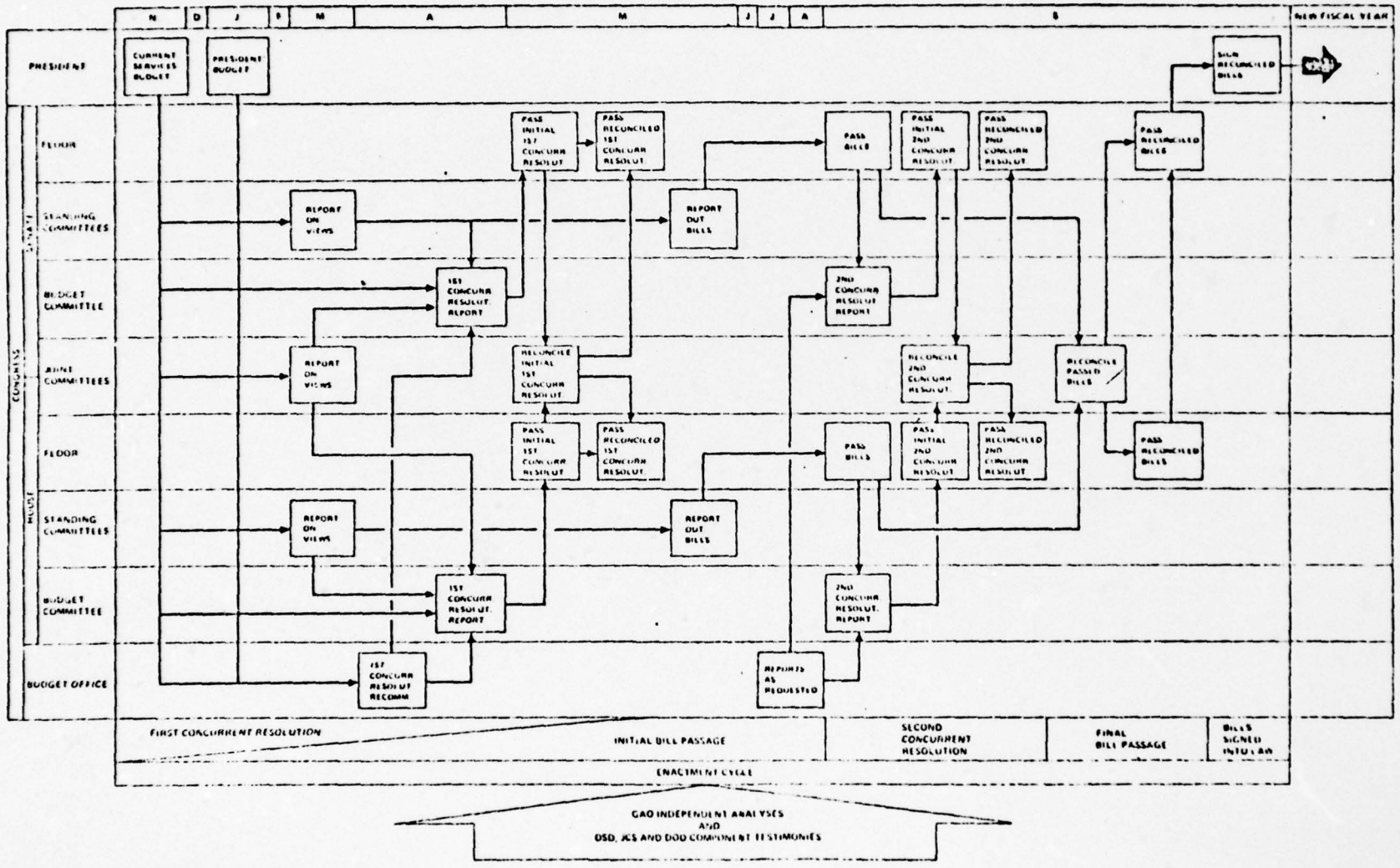
CONGRESSIONAL BUDGET TIMETABLE

DIAGRAM ENACTMENT PHASE

CONGRESSIONAL BUDGET TIMETABLE

On or before:	Action to be completed:
November 10	President submits current services budget.
15th day after Congress Convenes[1]	President submits his budget.
March 15	Committees submit reports to budget committees.
April 1	Congressional Budget Office submits report to budget committees.
April 15	Budget committees report first concurrent resolution on the budget to their Houses.
May 15	Committees report bills authorizing new budget authority.
May 15	Congress adopts first concurrent resolution on the budget.
7th day after Labor Day	Congress completes action on bills providing budget authority.
September 15	Congress completes actions on second required concurrent resolution on the budget.
September 25	Congress completes action reconciliation process implementing second concurrent resolution.
October 1	Fiscal year begins.

1 Public Law 94—186 required the President's 1977 budget to be transmitted to Congress on January 21, 1976, 2 days after Congress convenes.

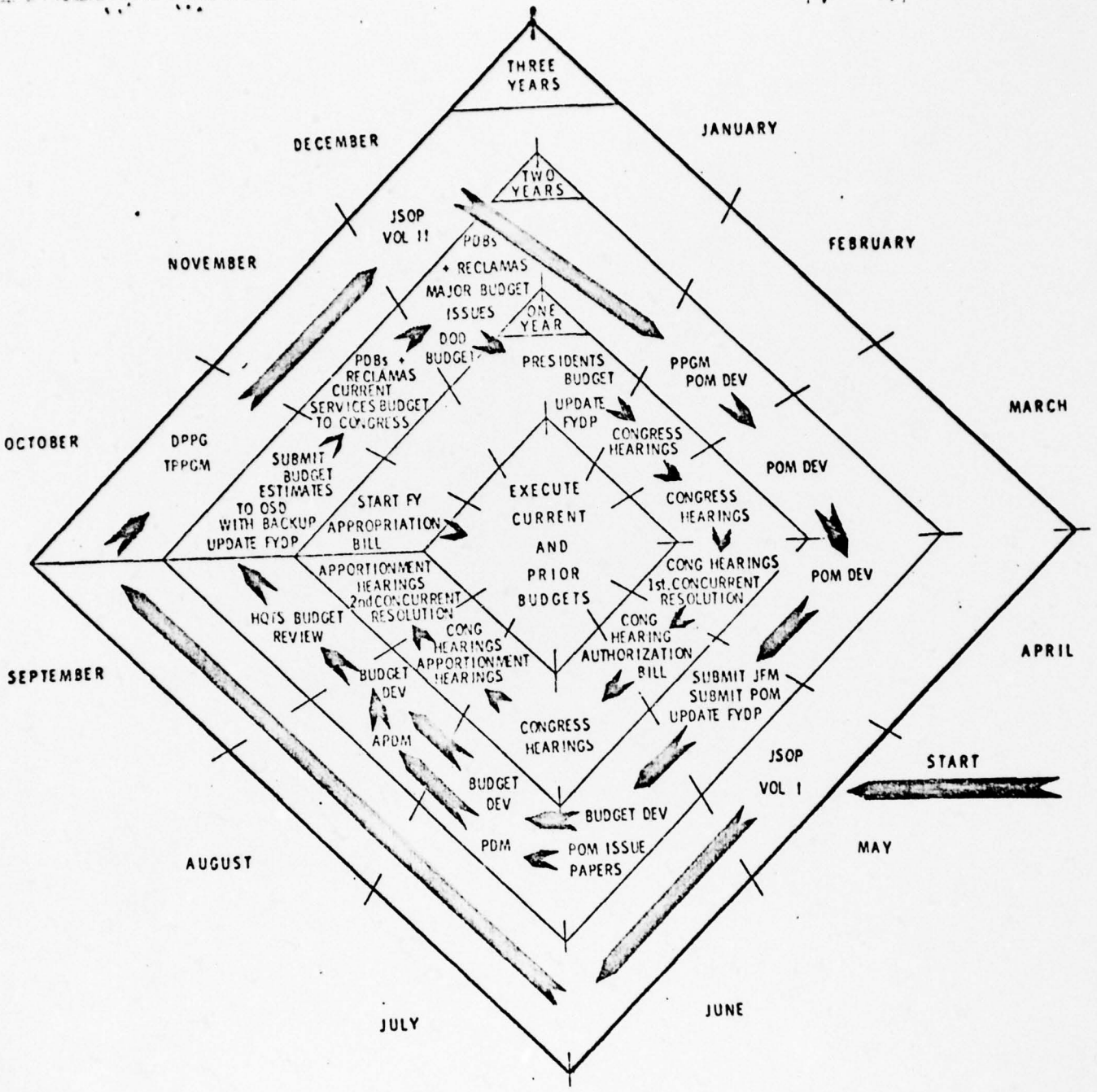

N
D
J
F
M
A
M
J
J
A
S
NEW FISCAL YEAR
PRESIDENT
CURRENT SERVICES BUDGET
PRESIDENT BUDGET
SIGN RECONCILED BILLS
CONGRESS
SENATE
FLOOR
PASS INITIAL 1ST CONCURR RESOLUT
PASS RECONCILED 1ST CONCURR RESOLUT
PASS BILLS
PASS INITIAL 2ND CONCURR RESOLUT
PASS RECONCILED 2ND CONCURR RESOLUT
PASS RECONCILED BILLS
STANDING COMMITTEES
REPORT ON VIEWS
REPORT OUT BILLS
BUDGET COMMITTEE
1ST CONCURR RESOLUT. REPORT
2ND CONCURR RESOLUT REPORT
JOINT COMMITTEES
REPORT ON VIEWS
RECONCILE INITIAL 1ST CONCURR RESOLUT
RECONCILE 2ND CONCURR RESOLUT
RECONCILE PASSED BILLS
HOUSE
FLOOR
PASS INITIAL 1ST CONCURR RESOLUT
PASS RECONCILED 1ST CONCURR RESOLUT
PASS BILLS
PASS INITIAL 2ND CONCURR RESOLUT
PASS RECONCILED 2ND CONCURR RESOLUT
PASS RECONCILED BILLS
STANDING COMMITTEES
REPORT ON VIEWS
REPORT OUT BILLS
BUDGET COMMITTEE
1ST CONCURR RESOLUT. REPORT
2ND CONCURR RESOLUT. REPORT
BUDGET OFFICE
1ST CONCURR RESOLUT RECOMM
REPORTS AS REQUESTED
FIRST CONCURRENT RESOLUTION
INITIAL BILL PASSAGE
SECOND CONCURRENT RESOLUTION
FINAL BILL PASSAGE
BILLS SIGNED INTO LAW
ENACTMENT CYCLE
GAO INDEPENDENT ANALYSES AND
OSD, JCS AND DOD COMPONENT TESTIMONIES

ATTACHMENT TEN

PPBS TIME FLOW
AND
CONCURRENCY

PPBS TIME FLOW

Due to the required lead time associated with one PPBS cycle in any given month, work is normally being accomplished concurrently in 3 fiscal years. In the figure shown, there are four squares. The center square represents the current fiscal year (FY 77 if this were November 77). The three outer squares represent the next three future fiscal years going from the inner to the outer squares (FY 78, 79 and 80 if this were November 77). The four sides of the squares are divided into 3 months each. Selecting May as an example and assuming the current fiscal year is FY 77, FY 80 JSOP Vol. I, FY 79 JFM, POM and FYDP and FY 78 Congressional Hearings actions are simultaneously under way.


THREE YEARS
TWO YEARS
ONE YEAR
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
JSOP VOL II
PDBs + RECLAMAS
MAJOR BUDGET ISSUES
DOD BUDGET
PRESIDENTS BUDGET
PPGM POM DEV
UPDATE FYDP
CONGRESS HEARINGS
POM DEV
CONGRESS HEARINGS
CONG HEARINGS 1st CONCURRENT RESOLUTION
POM DEV
CONG HEARING AUTHORIZATION BILL
SUBMIT JFM SUBMIT POM UPDATE FYDP
JSOP VOL I
START
BUDGET DEV
POM ISSUE PAPERS
CONGRESS HEARINGS
BUDGET DEV
PDM
APDM
BUDGET DEV
CONG HEARINGS APPORTIONMENT HEARINGS
HQTS BUDGET REVIEW
APPORTIONMENT HEARINGS 2nd CONCURRENT RESOLUTION
START FY APPROPRIATION BILL
SUBMIT BUDGET ESTIMATES TO OSD WITH BACKUP UPDATE FYDP
PDBs + RECLAMAS CURRENT SERVICES BUDGET TO CONGRESS
DPPG TPPGM
EXECUTE CURRENT AND PRIOR BUDGETS

APPROVAL AND/OR NOTIFICATION REQUIREMENTS FOR REPROGRAMMING ACTIONS

DoD Component Action	OSD Action			
	Obtain Prior Approval of House & Senate		Notify House and Senate	
	Armed Services Com.	Appropriation Com.	Armed Services Com.	Appropriation Com.
Actions Requiring Prior Committee Approval.				
▶ Any reprogramming of funds under any *appropriation*, regardless of amount, to items or activities specifically reduced by the Congress.	1	Yes		
▶ Any reprogramming to *increase the procurement quantity* of an individual aircraft, missile, naval vessel, tracked combat vehicle, other weapon or torpedo and related support equipment for which funds are authorized under 10 USC 138.	Yes	Yes		
▶ Any reprogramming action involving the application of funds, irrespective of the amount, to items in which any one or more of the Congressional Committees is known to have a special interest; also any reprogramming action which, by nature of the action, is known to be or has been designated as a matter of special interest to one or more Committees, e.g., reprogramming for transfers pursuant to Section 843 of Public Law 93-437.	1	Yes		
▶ Any decrease in the Research, Development, Test and Evaluation Appropriation to finance transfers to other appropriations.	Yes			
Actions Requiring Notification to the Committees.				
▶ *Military Personnel*—reprogramming increase of $5 million or more in a budget activity.				Yes
▶ *Operation & Maintenance*—reprogramming increase in budget activity of $5 million or more.				Yes
▶ *Procurement*—reprogramming increase of $5 million or more in a line item or the establishment of a new line item of $2 million or more.			1	Yes
▶ *RDT&E*—reprogramming increase of $2 million or more in any program element or the establishment of a new program element of $2 million or more, estimated to be $10 million or more within a 3-year period.			Yes	Yes
▶ *All Appropriations*—Any reprogramming of funds, regardless of amount, to a new proposal, line item, or program which was not previously justified to the Congress and which does not otherwise meet the criteria for prior approval.			1	Yes

1 Yes, if action involves an appropriation for which funds have been authorized under 10 USC 138.

ATTACHMENT 11

ATTACHMENT TWELVE

REPROGRAMMING

REPROGRAMMING GUIDANCE FROM DOD INSTRUCTIONS

7250.5 & 7250.10

(SUMMARY BY R. J. O'SHAUGHNESSY)

WHAT IS REPROGRAMMING?

Definition of Reprogramming. In the simplest of terms reprogramming is the transfer of congressionally appropriated funds and quantities from the original purpose intended to a related, or even entirely different purpose.

Requirement for Reprogramming. The necessity for reprogramming has its origin in"... the view that rigid adherence to the amounts justified for budget activities or for subsidiary items or programs may unduly jeopardize the effective accomplishment of planned programs in the most business-like and economical manner, and that unforeseen requirements, changes in operating conditions, revisions in price estimates, wage rate adjustments, etc., require some diversion of funds from the specific purposes for which they were justified."

Purpose of Reprogramming System. Recognizing that reprogramming is both necessary and desirable, measures have been developed, in consultation with the congressional committees, to "provide a firm basis for retention of congressional control over the utilization of defense appropriations by assuring that the congressional intent is carried out while, at the same time, providing a timely device for achieving flexibility in the execution of defense programs."

Initiation of Reprogramming Actions. Reprogramming actions can be initiated from the level of a program manager up through the chain of command to the level of the Secretary of Defense. Some reprogrammings are actually directed by the congress. In short, almost anyone can initiate a reprogramming action, but these actions must follow a prescribed course through succeeding levels of management.

WHEN DO YOU REPROGRAM?

A reprogramming action can actually be prepared at anytime prior to the expiration of the appropriation, but may not be processed (except for minor exceptions) until the appropriation is enacted, and should not be processed if the appropriations is very near its expiration. A new requirement has been introduced into the rules for reprogramming. This is the higher priority test. The Congress has indicated it will not approve a reprogramming action that is not a program of higher priority than the program chosen for the offset.

WHAT CAN BE REPROGRAMMED?

Congress has indicated that it will not approve a reprogramming action:

A. For items which the Congress has denied.

B. For items of a lower priority than the items for which funds were originally appropriated (higher priority test).

In addition, reprogramming actions as defined in the basic instructions are not processed for the military construction appropriation. This is because most of the funds appropriated for MILCON are in the budget activity, major

construction, where the appropriation language authorizes per centum changes so as not to require a reprogramming action. Funds in MILCON appropriations cannot be reprogrammed to other appropriations because MILCON funds are in a separate appropriation from those contained in the Defense Appropriations Act.

TYPES OF REPROGRAMMING ACTIONS.

1. Below Threshold (B/T). DOD Instructions provide specific thresholds for each appropriation. If a planned reprogramming action is below the established DOD threshold the action may be completed without OSD approval. B/T changes are cumulative: Once the accumulated B/T's exceed the threshold levels, a DOD approval is required. This reprogramming action will include all below threshold changes up through the one that breaks the threshold.

2. DOD Form 1415, Reprogramming Action. The 1415 is the form that brings together the required information, reflects the proposed change, and sets forth the new current program if the change is approved. Generally, a reprogramming action may be processed after the DOD Appropriation Act is passed and prior to the expiration of the appropriation. Of course, the purpose of the 1415 is to transfer congressionally appropriated funds and quantities from the original prupose intended to a related, or entirely different purpose.

In general, any permitted reprogramming action that cannot be processed as a B/T action requires approval of higher authority and use of DOD Form 1415. This form is so widely known that its number, 1415, is synonymous with the words, reprogramming action, and a lot easier to use in writing; repro-

gramming actions requiring DOD Form 1415 are of three major types: Congressional prior approval (P/A), Section 834 transfer authority, Non-Congressional prior approval or regular.

(a) Congressional Prior Approval (P/A) 1415's. The Congress, through the appropriation and the armed services committees, has established a number of criteria which, if contained in a 1415, will require review and approval of the reprogranning action by the subject committees. The specific points which involve congressional prior approval are:

(1) Congress has made specific reductions in the items or activities requested.

(2) An increase in quantity of an individual aircraft, missile, naval vessel, tracked combat vehicle, other weapons or torpedo and related support equipment, etc.

(3) Congressional interest items - both designated and known.

(4) Moving dollars forward, or between appropriations. There are some other specific requirements on preparation of 1415 that are congressional P/A, such as inserting an explanation as to why the particular 1415 is a congressional P/A.

Congressional P/A's may not be forwarded to the Committees until both service and OSD approval have been obtained. When this is accomplished, the 1415's are forwarded promptly to the Hill by OSD. The Senate, Appropriations Committee (SAC) and the House Appropriations Committee (HAC) must approve all Congressional P/A 1415's. In addition, those 1415's which contain authorization items muat also have the approval of the Senate Armed Services Committee (SASC) and the House Armed Services Committee(HASC). It can take

months to obtain Congressional P/A, but on occasion P/A 1415's have cleared the committees in one month. In general, however, expect this part of the evolution to take 3 to 4 months.

Congressional P/A 1415's cannot be implemented until congressional approval is secured. In addition the committees can escalate any 1415 to the congressional prior approval level.

(b) Section 834 Transfer Authority. In recent year the Department of Defense Appropriations Act has included a section which permits SECDEF to transfer a specific amount of dollars between appropriations. All of the rules for Congressional P/A's apply to these reprogramming actions. Transfer of dollars between separate appropriations such as FY 74 APN to FY 75 APN also come under the Section 834 Transfer Authority.

(c) Regular Reprogramming Actions. Reprogramming actions that exceed the thresholds established by OSD, but do not require congressional P/A, are considered to be regular 1415's. These reprogramming actions require the approval of SECDEF, and are "Notification Copy" to the congressional committees. Thresholds which require regular 1415's are as follows:

(1) An increase of $5M or more to a Budget Activity (B/A) in military pay appropriations: an increase of $5M or more in a budget activity of the Operations & Maintenance Appropriations.

(2) An increase of $5M or more in a Procurement Line Item, within the same appropriation.

(3) An increase of $2M or more in a program element in RDT&E, within the same appropriation, including addition of new program element, or the addition of a new program element which will cost $10M or more with three year period.

(4) Funding of any amount, in any appropriation, for a new proposal or program not previously justified to Congress, and which is not a congressional P/A.

(5) A below threshold amount, when added to previous B/T reprogrammings, crosses thresholds (as previously pointed out - B/T 1415's are cumulative).

(6) When offsets for the 1415 are provided from reimbursables (free assets).

(7) B/T reprogramming actions which are new starts.

After approval by SECDEF, regular 1415's, are subjects of notification to the congress. As in congressional P/A 1415's, all go to the Appropriations Committees, and those pertaining to authorization items are also forwarded to the Armed Services Committees. Only after the pertinent congressional committees have had an opportunity to review the notification 1415's, will the reprogramming actions be implemented. If no objection is received in 15 days, OSD can authorize implementation of the 1415. However, in practice, OSD normally waits until a no objection is received from the committees. This has caused considerable delays in implementing the above threshold reprogramming action.

GLOSSARY

Advanced Development: Include all projects which have moved into the development of hardware for experimental or operational test. It is characterized by line item projects and program control is exercised on a project basis. A further descriptive characteristic lies in the design of such items being directed toward hardware for test of experimentation as opposed to items designed and engineered for eventual Service use.

Air Force Council: Advisory Board to the Chief of Staff. Consists of Vice Chief of Staff, Assistant Vice Chief of Staff, Comptroller of the Air Force, the Inspector General and the Deputy Chiefs of Staff.

Air Staff Board: Chaired by the Director of Programs with membership consisting of the Director of Budget, Director of Operational Requirements and Development Plans, Director of Personnel Programs, Director of Plans, Assistant for Logistics Planning, and the ACS, Studies and Analysis. Reviews, evaluates, and makes recommendations with respect to the budget to the Air Force Council and the Chief of Staff.

Allocation: An official funding document issued by Headquarters, USAF to a major air command or other operating agency. It specifies the amount of cash that the command can commit and obligate against an approved program.

Allotment: This is similar to an allocation except that it is issued by a major air command or operating agency to its subordinate units.

Apportionment: A cut of an appropriation given to a department by the Office of Management and Budget. The amount may be all or only part of the dollars appropriated. An apportionment is an allocation at department level and represents the amount that can be committed or obligated, regardless of the amounts shown in the appropriation or financial plan.

Appropriated Funds: This is obligational authority made available by an Act of Congress (appropriation) and for use through the "apportionment-allocation" process.

Appropriation: A funding authorization established by an Act of Congress which permits a department or other governmental agency to obligate the U.S. Government to pay money for goods or services. By itself, the appropriation does not cost the taxpayer a cent. Actually, the appropriation constitutes a license for the department to obtain an apportionment (see

definition above), i.e., the administrative authority for the department to enter into contracts or otherwise obligate the Government. The Treasury raises the money to meet expenditures and expenditures take place only after there has been performance against an obligation. These are important distinctions. Appropriations may last for different periods of time. For the Air Force, it may be for one year, called an annual appropriation, or for a continuing period, referred to as a no-year appropriation.

Appropriation Language: The published text of an appropriation act (Public Law) in the Congress spells out the dollar amounts authorized and the purposes for which those funds can be used.

Appropriation Limitation: This is direction from Congress that states what can or cannot be done with an appropriation. Such directives are contained in appropriation language or in General Provisions.

Approved Program: Resources (Forces, Manpower, Obligational Authority and Materiel) for individual program elements reflected in the FYDP, as modified by Secretary of Defense decisions.

Authorization Act: An Act giving authority to buy certain things when the appropriations are made available by Congress.

Below Threshold Change (BTC): Below threshold changes are changes in the approved program which can be made by the authority of the Secretary of the Air Force when confined to the thresholds established in OSD. These are changes such as manpower changes between elements which do not increase approved year-end strengths, and fund reprogramming changes which do not meet the criteria established in DODI 7250.10.

Budget: A planned program for a fiscal period in terms of estimated costs, obligations, and expenditures.

Budget Authority: Authority provided by the Congress mainly in the form of appropriations which allows Federal agencies to incur obligations to spend or lend money. Budget authority is composed of New Obligational Authority (NOA) which is defined below; plus loan authority which is authority to incur obligations for loans. For example, debt payment on mortgages for Military Family Housing.

Budget Authorization: A document, referred to as a BA, representing an approved annual financial plan. This paper shows the amount of funds you may plan on using to accomplish your job. It does not authorize you to commit or obligate the

government unless accompanied by an allocation.

Budget Costs: Costing used in budget submissions as distinguished from costing used in programming documents, hereinafter referred to as programming costs. Budget costs represent the specific TOA requirement for funds in a particular fiscal period and generally represent a refinement of programming costs.

Budget Cycle: That period of time necessary to formulate, review, present and secure approval of the Fiscal Program for a specificied ensuing period of time.

Budget Program: A part of an appropriation set up in order to identify a significant segment of Air Force operations. (Example - Program 110 in the 100 appropriation buys airplanes).

Budget Year: This is the fiscal year covered by the budget estimate being submitted. The term budget year refers to that 12 month period, beginning 1 October and ending 30 September of the following calendar year, used by the Federal Government for accounting purposes. It is frequently referred to by the letters BY. Similar fiscal year references are: CY - current year, and PY - past year.

Budget Activity: A function or activity funded under an appropriation category.

Budget Estimating: The process of determining the amounts, kinds and costs of resources needed for accomplishing a mission.

Budgeting: The process of translating manpower and technical resource requirements into a time-phased financial resource.

Cost Analysis: The systematic examination of the cost interrelated activities and equipment to determine the relative costs of alternative courses of action.

Citation of Funds: A letter, teletype or formal document by which you, in one agency, tells another agency that it can commit and obligate your money.

Collateral Action Office (COA): Any office or organization within DOD (but usually at OSD staff level) having interest in some aspect of a force issue, but not primarily responsible for its solution (see "Primary Action Office" below).

Conference Action: Function of members of both the House of Representatives and the Senate in joint session, to reconcile their differences so that a single bill can be recommended

which will gain the approval of both Houses of Congress.

Commitment: An accounting procedure whereby funds are administratively earmarked for something to be bought in the near future. This procedure precedes obligation action and is normally based upon firm procurement directives, orders, requisitions or requests.

Cost Category: One of three types of costs into which the total cost of a program element is divided: (1) research and development, (2) investment and (3) operations.

Cost Element: As used in the USAF F&FP, a cost element is a subdivision of cost categories (defined above) and budget appropriation codes. Cost elements for the Operations and Maintenance (O&M) appropriation only are the Expense Elements prescribed in DODI 7220.20. For all other appropriations, cost elements generally relate to the budget structure, although such costs can be converted where applicable to the Expense Elements. Lists of individual cost elements and definitions are the summary volume (first volume) of the F&FP.

Cost Element Monitor (CEM): That office within the Air Staff and the National Guard Bureau (NGB) having responsibility for the financial data content and preparation of cost estimates, cost methods, and cost estimating relationship of a specific cost element in the USAF F&FP.

Costing Office: The Budget Management Division, Directorate of Budget (ACBM), is responsible for final consolidation, review, and analysis of cost data on program exercises, and release of the data to the Air Staff OPR or the program element monitor (PEM). This office also determines when there is a need to show cost methods, prescribes the format, and assigns responsibility for the preparation of data to the appropriate Air Staff office.

Decision Coordinating Paper (DCP): A document prepared by the Director of Defense Research and Engineering (DDR&E) and coordinated with key DOD officials providing a summary management document for the Secretary of Defense. DCPs reflect the Secretary of Defense decisions on important development and engineering modification programs. The document serves as a source of primary information and rationale and for updating the FYDP.

Engineering Development: Includes those development programs being engineered for Service use, but which have not yet been approved for procurement or operation. This area is characterized by major line item projects and program control will be exercised by review of individual projects.

Expenditure: An accounting term relative to the actual payments of funds for services or items received.

Exploratory Development: Includes all effort directed toward the solution of specific military problems, short of major development projects. This type of effort may vary from fairly fundamental applied research to quite sophisticated bread-board hardware, study programming and planning effort. It would thus include studies, investigations and minor development effort. The dominant characteristic of this category of effort is that it be pointed toward specific military problem areas with a view toward developing and evaluating the feasibility and practicability of proposed solutions and determining their parameters.

Fiscal Guidance: 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 Five Year Defense Programs, and by the Secretary of Defense staff in reviewing proposed programs.

Fiscal Guidance Category: A special aggregation of program elements prescribed by OSD in connection with the annual PPGM. The aggregations are referred to as "major mission and support categories" in which the annual POM must be arrayed. These aggregations are a re-sorting of the program elements, so that there is a different orientation of the program structure from the mission-oriented structure of the DOD Program to one which separates some of the mission elements into a functional array. For example, the fiscal guidance categories remove from the Strategic Forces Program certain elements supporting that mission-advanced flying training and base operations and aggregate all training or base operations elements together in separate categories.

Fiscal Year: The 12 month period which begins 1 October of one year and ends 30 September of the next year.

Five Year Defense Program (FYDP): The official program which summarizes the Secretary of Defense approved plans and programs for the Department of Defense. The FYDP is published at least once annually. The FYDP is also represented by a computer data base which is updated regularly to reflect decisions.

Force and Financial Program (F&FP): The F&FP is the Air Force "slice" of the DOD Five Year Defense Program. It is the approved program, consisting of all program elements pertaining to the Air Force, set forth in individual "Program Data and Cost Detail" forms, as modified by subsequent PMDs, PCDs, PBDs financial reprogramming actions, or other equivalent

Secretary of Defense decisions and BTCs approved by the Secretary of the Air Force.

Industrial Fund: A type of kitty established (with Congressional authorization) by an agency as a source of funds for business-type activities, such as printing, transportation and maintenance services. The proceeds from sales are retained in the fund in order to finance continuous operations; there, it is classed as a revolving fund.

Joint Force Memorandum (JFM): A document prepared annually by the 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.

Joint Research and Development Objective Document (JRDOD): A document prepared annually which provides the advice of the JCS to the Secretary of Defense concerning R&D objectives necessary to carry out the strategy and force recommendations in the JSOP.

Joint Strategic Objectives Plan (JSOP): A document prepared annually which provides the advice of the Joint Chiefs 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. In addition to recommendations on major forces, it includes the rationale supporting the forces and assessment of risks associated therewith, costs and manpower estimates, and other supporting data. The JSOP is published in two volumes: I-Strategy; II-Analysis and Force Tabulations.

Mark-ups: Budget estimates approved by the OSD after a joint review of Air Force, OSD, and OMB personnel. The House and Senate Appropriations Committees also have mark-ups of their bills.

MIPR: Usually referred to as mipper in order to avoid getting tangled up with Military Interdepartmental Purchase Request. It is a requisition with which one military department can order services, supplies or equipment from another military department.

NOA: A letter abbreviation for new obligational authority. It represents the additional amount Congress appropriates for an agency, over and above earlier appropriations and other funds the agency has or expects to receive from other sources. The term obligational authority may be encountered if referring to an authorization by Congress in connection with something other than a new appropriation.

Obligation: The estimate or actual amount of the cost of an authorized service or article. This estimate is carried in official accounting records, and reserves funds pending completion of the contract. This reservation is required by public law.

Office of Primary Responsibility (OPR): Any office having primary functional interest in, and responsibility for, a specific action, project, plan, program, or problem.

Outlays: Checks issues, interest accrued on the public debt, or other payments made, net of refunds and reimbursements.

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

Program Change Request (PCR): Proposal in prescribed format for out-of-cycle changes to the approved data in the Five Year Defense Program.

Program Decision Memorandum (PDM): A document which provides decisions of the Secretary of Defense on POMs and the JFM.

Program Element: A description of a mission by the identification of the organizational entities and resources needed to perform the assigned mission. Resources consist of forces, manpower, material quantities, and cost, as applicable. The program element is the basic building block of the FYDP.

Planning/Programming/Budgeting System (PPBS): An integrated system for the establishment, maintenance, and revision of the FYDP and the DOD budget. Through this system, an attempt is made to combine policy formulation with budgetary allocation and to provide a mechanism for analysis.

Planning-Programming Guidance Memorandum (PPGM): This OSD document issued annually provides revised policy and planning guidance and assumptions for the PPBS calendar year cycle, including sections for: Defense Policy Guidance, Fiscal Guidance, Materiel Support Planning Guidance, and Guidance for POM Preparation.

Primary Action Office (PAO): That office, normally at Office of the Secretary of Defense (OSD) level, with primary interest to resolve an issue or act upon a fiscal category of the POM or Program/Budget submission.

Prime Division: The PRP division designated to monitor a given program element for the Directorate of Aerospace Programs, as shown in the USAF Program Element Monitor Directory published by HQ USAF/PRPRC.

Procurement Annex: A section of the FYDP which displays the detail of planned procurement for aircraft, missile and other procurement. This annex is required for each FYDP update and is prescribed by DODI 7045.10.

Program/Budget Decision (PBD): A Secretary of Defense decision in prescribed format directing or authorizing changes to a submitted budget estimate and the FYDP.

Program/Budget Review Schedule: An annual Secretary of Defense memorandum issued to announce the schedule of significant events impacting on the DOD decision-making cycle.

Program Counterpart Officer (PCO): An officer designated by one deputate to perform the duties which fall within the functional responsibility of that deputate pertaining to a program element for which another deputate is office of primary responsibility (OPR).

Program Element Monitor (PEM): The individual within the Air Staff designated to monitor a program element including preparing and/or assembling data and processing POM data, PCRs, and presentation for review of all pertinent data on the element. PEMs are listed in the USAF Program Element Monitor Directory published by PRPRC.

Program-FYDP: A combination of program elements designed to express the accomplishment of a definite objective or plan which is specified as to the time-phasing of what is to be done and the means proposed for its accomplishment. Programs are aggregations of program elements, and, in turn, aggregate to the total FYDP.

Programming Cost: Cost data for making program decisions. Programming costs are based on sets of factors which will provide consistent cost data under the same or similar circumstances, and which are directly related to the explicit elements of the program decision.

Program Objective Memorandum (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 resource requirements within the parameters of the published Secretary of Defense fiscal guidance.

Program Year: A fiscal year in the Five Year Defense Program that ends not earlier than the second year beyond the current calendar year. Thus, during calendar year 1977 the first program year is 1979.

Progress Payments: These are payments to a contractor, under a fixed price contract, for a specific percentage of his actual costs for work in process. The idea is to keep the contractor reasonably solvent until he finally delivers the finished item.

Reclama: A reclama is submitted when a funding cut is proposed by OSD, OMB, the House of Representatives or the Senate. It is actually a formal restatement and presentation of budget requirements to OSD, OMB, or the Congress in further justification of that portion of the Air Force requirements that the reviewing authorities have refused to buy.

Revolving Fund: This is a fund authorized by law to finance a continuing cycle of operations. In this kind of situation, any proceeds from the operations are available for use by the fund. Examples are: stock funds, working capital funds, and industrial funds.

Stock Fund: A revolving fund with which we buy inventories of goods to be sold to Air Force activities. The collections from sales have been made available by law to replenish the inventory in order that this sort of thing can continue ad infinitum.

Total Obligational Authority (TOA): The total financial requirements of the Five Year Defense Program or any component thereof required to support the approved program of a given fiscal year.

Unexpended Balance: The sum of the unobligated balance and the unliquidated obligations. (See below)

Unliquidated Obligation: An obligation for which payment has not been made.

Unobligated Balance: That portion of your available funds which has not been obligated.

BIBLIOGRAPHY

1. AFM 172-1, "USAF Budget Manual Policies and Procedures," Budget. Volume 1, Washington, D.C.: 5 April 1972.

2. AFR 170-3, "Research and Development - Program/Budget Cost Definitions," Comptroller Activities. Washington, D.C.: 12 December 1969.

3. The Air Force Budget - Washington, D.C.: Department of the Air Force, AF/ACX, February 1976.

4. Deputy Secretary of Defense Memorandum, "Program/Budget Review - Calendar Year 1976 Schedule." 12 January 1976.

5. DOD Directive 7045.7, "Planning, Programming and Budgeting System," Washington, D.C.: 11 December 1969.

6. DOD Directive 7045.8, "Procedures for Updating Program Data in the FYDP," Washington, D.C.: 11 December 1969.

7. DOD Directive 7200.4, "Full Funding of DOD Procurement Programs," Washington, D.C.: 30 October 1969.

8. DOD Directive 7250.5, "Reprogramming of Appropriated Funds," Washington, D.C.: 14 January 1976.

9. DOD Directive 7250.10, "Implementation of Reprogramming of Appropriated Funds," Washington, D.C.: 23 June 1975.

10. Fiscal and Life Cycles of Defense Systems. General Dynamics, Pomona Division, Pomona, California 2nd Edition. March 1975.

11. Headquarters OI 27-1, "DOD Programming System," Programming. Washington, D.C.: Department of the Air Force, 26 September 1973.

12. Headquarters Pamphlet 21-1 "Chartbook," Washington, D.C.: Department of the Air Force.

13. Headquarters OI 800-2, "Acquisition Management," Washington, D.C.: 29 August 1976.

14. Fincher, E.G., "PPBS: The Only Game in Town," Defense Systems Management College Study Project Report PMC 76-1. 1976.

15. O'Shaughnessy, R.J., "An Overview of the Budget Process," Defense Systems Management School Study Guide - Course 516. 1976.