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PLANNING FOR THE ACQUISITION CYCLE WITHIN THE NAVAL ELECTRONIC --ETC(U)
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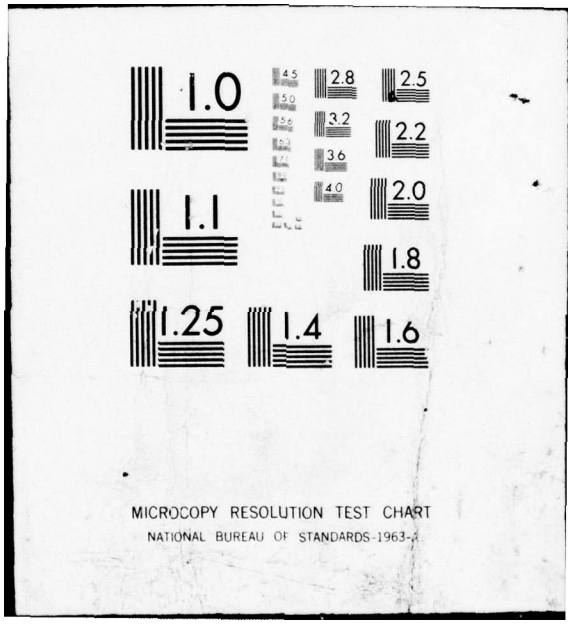
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DEFENSE SYSTEMS MANAGEMENT COLLEGE

PROGRAM MANAGEMENT COURSE
INDIVIDUAL STUDY PROGRAM

PLANNING FOR THE ACQUISITION CYCLE
WITHIN THE
NAVAL ELECTRONICS SYSTEMS COMMAND

STUDY PROJECT REPORT
PMC 77-2

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FORT BELVOIR, VIRGINIA 22060

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

DEFENSE SYSTEMS MANAGEMENT COLLEGE

STUDY TITLE: Planning for the Acquisition Cycle within the Naval Electronics Systems Command

STUDY PROJECT GOALS: The purpose of this report is to provide guidance to the NAVELEX Project Engineer in planning the acquisition process, specifically, guidance is provided in the requirements for Approval for Service Use, the TEMP, the Procurement Plan, and the ILS Plan.

STUDY REPORT ABSTRACT: The report starts with a description of the requirements for obtaining Approval for Service Use and the planning necessary throughout the acquisition cycle to insure that the system will meet the requirements. Three of the essential documents to planning the acquisition process are then discussed in the following format: the use or purpose of each document, basic references to be used as guidance in the development of these documents, points of contact for coordination and assistance, and finally guidance in the actual preparation of the documents. The report concludes with a recommendation that the work of this report be expanded upon in order to create an acquisition manual that would cover the acquisition process within the Naval Electronics Systems Command. Specific areas are described for additional work.

SUBJECT DESCRIPTORS: Acquisition Planning, Approval for Service Use, Test and Evaluation Planning, TEMP, Procurement Plan, ILS Plan.

Acquisition Planning (No. 10.01 and 02.01.00), approval for Service use (10.02.01.00), Test and Evaluation (10.08.00.00), ILS Plan (10.05.04.00), Procurement Plan (10.07.03).

NAME, RANK, SERVICE	CLASS	DATE
GORDON L. SMITH, LCDR, US NAVY	PMC 77-2	November 1977

PLANNING FOR THE ACQUISITION CYCLE WITHIN THE NAVAL ELECTRONICS SYSTEMS COMMAND

Individual Study Program

Study Project Report

Prepared as a Formal Report

Defense Systems Management College

Program Management Course

Class 77-2

by

Gordon Lee Smith
LCDR USN

November 1977

Study Project Advisor
CDR J. Russell, USN

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The planning for the acquisition process in the Naval Electronic Systems Command is discussed. Guidance is provided to assist the Project Engineer and Acquisition Manager in planning the acquisition. The primary objective of a successful program is receiving approval for Service use. The requirements for reaching this goal are discussed.

The three primary documents in the planning process - the Test and Evaluation Master Plan, the Procurement Plan, and the Integrated Logistic Support Plan - are discussed with guidance provided for their preparation.

In conclusion, several recommendations are made on areas that need further research and guidance. From this, an acquisition manual could be developed for the Naval Electronic Systems Command.

ACKNOWLEDGEMENTS

Appreciation is expressed to the following individuals for their critical review of the paper and their many helpful suggestions: Dr. J. S. Lawson (ELEX 00B), Mr. D. Bailey (ELEX 03A), Mr. O. Sorghardt (ELEX 4042), Ms. J. Moore (ELEX 201), Mr. E. Sedlock (ELEX 2011), Mr. T. Hobart (ELEX 05A), Mr. J. Rieaaer (ELEX 05E).

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Last, but not least, thanks to CDR Joe Russell for his guidance and to Ms. Suzy Boucher for her typing.

SECTION I

INTRODUCTION

Purpose

This paper was written to provide the Project Engineer and Acquisition Manager at the Naval Electronic Systems Command (NAVELEX) with a guide to the necessary planning in the acquisition process. Three critical documents to a well planned project are the Test and Evaluation Master Plan, the Integrated Logistic Support Plan, and the Procurement Plan. In addition, the goal of a successful project is to receive Approval for Service Use. This paper is to provide guidance in developing these three plans, and to gain Approval for Service Use. It is not intended that this paper, in itself, provide all the required information. Rather, information currently available to the Project Engineer and Acquisition Manager is merely referenced. It is recommended that the Project Engineer and Acquisition Manager obtain the instructions plus this paper which will provide the needed guidance.

A secondary purpose of this paper is to establish the foundation on which a complete acquisition manual could be developed. This paper covers a portion of the process; the recommendations to this paper will list other areas that could contribute to a total acquisition manual. It is hoped that this paper will stimulate the work necessary to develop an acquisition manual. This could serve the entire Naval Material Command.

A final purpose is to relate the training received at the Defense Systems Management College to the work I will be doing at NAVELEX, namely working in the RDT&E acquisition process.

Scope

The project management team consists of many more people than those included in the Project Office. Included are people from the functional codes at NAVELEX, personnel at NAVMAT, OPNAV, COMOPTEVFOR, private contractors, support contractors, etc. The success of a project to a large part depends on the liaison and coordination established and maintained between the personnel of the Project Office or Acquisition Manager and the remaining personnel on the project management team. To this end, each section contains a listing of key points for coordination and assistance.

Although this paper lays out the requirements for Approval for Service Use and provides guidance for three plans critical to the success of the project, there is no intent to establish these three plans as the most important functions of the acquisition cycle. However, it is considered appropriate to devote the paper to these three plans because the current trends in OSD toward life cycle cost control and budget constraint render it absolutely mandatory that the processes and planning required to develop these three documents be thoroughly understood. And, with the austere manning at all levels in DOD, the ability to coordinate becomes an ever-increasing requirement. The theme underlying all OSD actions now with regard to system development is to design the essential performance necessary to meet the projected threat, filling the mission need, and plan the logistics for the best possible life cycle performance all within a cost effective envelope. Logistic planning is equal with performance.

The Program Manager and Acquisition Manager today must strike a balance between performance, cost, and schedule. Cost includes development, procurement, operation, and support costs. Without the required performance, a

program is certain to be cancelled. However, one of the primary reasons for cancelling the B-1 was cost. Heavy Congressional pressure is now on to reduce the acquisition cycle time.

In order to provide a better basis for this paper, a lead-off section is included which provides some background information regarding the acquisition process. It is recommended that the instructions referenced in each section be obtained.

SECTION II

BACKGROUND

Acquisition Categories (OPNAVINST 5000.42A)

There are four acquisition categories that define the control, planning, and responsibilities within the acquisition process:

a. ACAT I - Those programs designated by SECDEF as major programs, or programs with RDT&E costs exceeding $75 million, or programs with procurement costs exceeding $300 million.

b. ACAT II - Those programs designated by OSD Defense Acquisition Executive, or programs with RDT&E costs exceeding $20 million, or programs with procurement costs exceeding $50 million, or designated by SECNAV.

c. ACAT III - Those programs so designated by CNO/OPNAV or programs with RDT&E costs exceeding $5 million, or procurement costs exceeding $20 million.

d. ACAT IV - Those programs not ACAT I, II, or III.

The separation into categories is largely done on the basis of cost. This paper is aimed at the planning required to accomplish a program in any category; however, the additional steps required of an ACAT I program are not covered (reference DOD Instruction 5000.1/5000.2).

Funding Process (NAVELEXINST 7300.32)

The DoD is under the Planning, Programming, and Budget System (PPBS). Within the PPBS the key events for a program are:

a. Submission of the POM (Program Objective Memorandum) by the Navy in May of each year. This is the Service request for funding. Each program requirement should be in the POM. Within NAVELEX specific POM guidance is issued each year with the call for POM submittal.

b. In August SECDEF issues his Program Decision Memorandum (PDM) which establishes the SECDEF position with regard to the POM.

c. In October budget estimates are submitted by each Service for the funding required.

d. In December OSD issues the Program Budget Decision (PBD).

These four steps then provide SECDEF with the budget for the President. These are also the four steps a project must go through in the PPBS cycle. The budget is then submitted by the President to Congress for approval.

The status of funds currently assigned to each project within the Navy is kept in the Five Year Defense Plan (FYDP). The official funding is that funding listed in the FYDP.

Operational Requirements (OR) (OPNAVINST 5000.42A)

The performance requirements for a system are established in a formal document, the Operational Requirements (OR). This represents the CNO desired operational requirements to be fulfilled. The OR is issued to the Material Command. The Material Command then makes a Development Proposal (DP) for OPNAV which lays out the development process planned to fulfill the requirements of the OR. These two documents are then used to write the Navy Decision Coordinating Paper (NDCP). Approval of the NDCP authorizes the commencing of the acquisition process.

Costs

There are numerous costs assigned to a program throughout the acquisition cycle. These are:

a. Development Costs - Those costs associated with transforming a mission requirement into hardware tested and ready for production.

b. Procurement Costs - The cost to produce the hardware and deploy to the fleet.

c. Operation and Support Costs - The cost to maintain the equipment while in the fleet.

d. Life Cycle Costs - The total cost of ownership of a system. It includes development, procurement, operation, and support.

e. Design-to-Cost - A management tool used to design a system that will cost a predetermined amount. An amount is established and the system designed up to that amount.

SECTION III

APPROVAL FOR SERVICE USE

References: (a) OPNAVINST 4720.9D
(b) NAVMATINST 4720.1
(c) NAVELEXINST 4000.9B

Background

In accordance with OPNAVINST 4720.9D, "The production decision or decision to commit substantial resources for production is one of the key milestones which receives maximum visibility at top levels within the Department of Defense and in Congress. Of special interest at this decision milestone is the operational suitability and logistic supportability of the weapon system." The main reason for the importance of this decision rests in the fact that less than 20% of the life cycle cost of the system has been spent by the time this decision milestone is reached. Also of major importance is that at this point the development is essentially complete and the decision must be made as to whether the performance of the system fulfills the Operational Requirement and whether the system can be logistically supported. Logistics supportability and operational suitability are essentially of equal importance because ships in the execution of their mission are often deployed for several months and the performance of the system must continue throughout the deployment. The amount of time the equipment is available to perform its mission is dependent directly on the logistic supportability.

In recent years the cost of supporting the system has been increasing in importance on the decision to enter production. The portion of the total life cycle costs devoted to operation and support of the system after installed in the fleet runs between 60% - 75% (based on OSD studies).

Program planning should, from initiation, be to complete all the requirements to gain Approval for Service Use. The references listed in the front of this section should be carefully reviewed to insure the program planning includes all factors that will be required. Throughout the progress of the program through the acquisition cycle, close coordination should be maintained with those codes within NAVELEX and all outside activities that will be involved in the review of the system for determining if the requirements have been fulfilled.

There are several terms defined in the instruction that are important. The two most important definitions are: (OPNAVINST 4720.9D)

a. Approval for Service Use (ASU): That determination made by the Chief of Naval Operations, or other delegated authority, that new systems or equipments or significant alterations to existing systems or equipments have undergone appropriate test and evaluation, to the extent that there has been:

(1) Demonstrated reliable performance, in accordance with design specifications, in the intended or existing operational environment.

(2) Demonstrated ability to be operated and maintained by personnel with the level of skill anticipated to be available under Navy Service conditions.

(3) Sufficient evidence that the equipment can be supported logistically in a deployed status.

b. Provisional Approval for Service Use (PASU): That determination made by the Chief of Naval Operations, or other delegated authority, that new systems or equipments, or significant alterations to existing equipments,

have undergone early phases of appropriate test and evaluation, to the extent that:

(1) Performs the functions required by the Operational Requirement.

(2) Reliable performance, in accordance with design specifications, in the intended or existing operational environment is indicated.

(3) Ability to be operated and maintained by personnel with the level of skill anticipated to be available under Navy Service conditions is indicated.

(4) Logistic support in a deployed status is assessed as feasible.

No system can enter full production without full ASU. PASU is sufficient only for limited production and requires full ASU before entering full production lines. Whenever PASU is granted, there is a listing of conditions and deficiencies on which the decision for full ASU will be based. Retest and reevaluation will then be required on the pilot production models manufactured during full-scale development or on the initial production units after they are installed.

The determination of whether a system should or should not receive full ASU is a relatively more objective decision, at least on the first two requirements. Not all involved in the review will agree on the meaning and significance of the data. However, the decision for PASU is extremely subjective. The same interpretation of data applies to a PASU determination, but in addition, the decision as to whether the requirements have been "indicated" is extremely subjective on the interpretation of what is sufficient to "indicate". Additionally, considerable subjectivity is involved in deciding on what issues will further test and evaluation be required before

making the decision for full ASU. The full intent of the project and all planning should be to obtain full ASU.

Systems that are ACAT I and II will be submitted to CNO for Service approval. ACAT III programs will be submitted to the OPNAV sponsor for Approval for Service Use. ACAT IV programs are approved for Service use by NAVMAT (MAT042) (per CHNAVMAT letter ser 0421 of 30 June 76 to COMNAVELEX). (See Background for definitions of ACAT I, II, III, and IV.)

Once ASU has been granted, this is effective throughout the life cycle unless:

a. the system proves to be deficient for intended use;

b. the operational environment is drastically changed; or

c. significant alteration to the system takes place.

Guidance

The general objectives to be satisfied in developing a system and to receive full ASU are:

a. Design and develop a system that performs a function required in the fleet and not now being performed, or is being performed in a manner inferior to the threat requirements; and

b. Design the system for minimum Design to Unit Production Costs (Flyaway), less than current systems cost if possible; and

c. Design the system for minimum Operating and Support costs, less than current systems cost if possible; and

d. Design the logistic supportability to insure the system can be maintained in the fleet; and finally

e. Demonstrate these design features in Operational Testing, particularly OPEVAL.

All of the planning and direction throughout the acquisition cycle should be in pursuit of the above general objectives. A large measure of how successful a system will be in gaining ASU is determined by the action and planning accomplished before Full Scale Development. During the Conceptual and Demonstration/Validation phases, how well a system accomplishes the general objectives listed above is determined when the general system design is selected and the support and maintenance concepts determined.

Three important documents are the TEMP, the Procurement Plan (PP), and the Integrated Logistic Support Plan (ILSP). Separate sections on each of these documents is contained herein. The TEMP is the document in which the Development Testing will be planned, which will enable NAVELEX to evaluate the progress of the system, and the Operational Testing planned, which will provide to the CNO an independent test and evaluation from the fleet standpoint on the operational and logistic suitability. The PP is the document in which the total acquisition strategy will be planned with major emphasis on the procurement plans. The ILSP is the document in which will be defined all the logistic requirements, training requirements, maintenance concept, and plans for meeting these requirements. During the formulation of these three documents and the updating of each document, close coordination should be maintained with all NAVELEX codes and outside activities which contribute to the review of these documents. The best way to assure

success in obtaining ASU is to maintain close coordination.

Specific objectives to be satisfied in order to obtain ASU are:

a. Successful completion of OPEVAL (recommendation by COMOPTEVFOR for ASU) and plans to correct any deficiencies reported.

b. Demonstration of the required reliability and maintainability and installation of the PMS.

c. Integrated Logistic Support planning complete and adequate to insure proper support of the system.

d. Demonstration of technical documentation. Final form of the technical manuals should be installed at the time of OPEVAL.

e. Assure that training plans are adequate to supply the properly trained personnel to operate and maintain the equipment.

f. Establish the Configuration Product Base Line and institute strict change control procedures.

g. Insure that a safety program in accordance with MIL-STD-882 has been completed and that no major safety violations are present.

h. Insure the electromagnetic compatibility/vulnerability testing is complete and that any problem existing will be corrected by delivery of production items to the fleet.

i. Assure that test planning for OPEVAL is structured to test the system for the performance required by the Operational Requirement, that the criteria by which both the operational and logistic suitability is to

be judged is clearly defined, and that these factors are thoroughly tested during Development Testing so that any deficiencies will be discovered and corrected prior to OPEVAL. The manner in which this is accomplished is through careful planning and coordination of the TEMP.

Specific points of contact within NAVELEXSYSCOM for assistance and coordination in planning for and carrying out the action to accomplish each of the specific objectives are:

a. Test and Evaluation - ELEX-05E

b. Reliability and Maintainability - ELEX-460/470

c. ILS Planning - ELEX-490

d. Technical Documentation - ELEX-490

e. Training Plans -

(1) Training Personnel assigned to Program Office

(2) ELEX-04C

(3) ELEX-04F (located at NAVELEX, San Diego)

f. Configuration - ELEX-460

g. Safety - ELEX-470

h. Electromagnetic Compatibility/Vulnerability - ELEX-095/5102

i. ELEX-05E can also provide valuable assistance in the overall process of planning for and obtaining Service approval.

Once OPEVAL has been completed, the OPEVAL report received, the Program

Manager has the responsibility for initiating the request for Service approval. The format of the request is given in NAVELEXINST 4000.9. After the request has been completed, it should be submitted to ELEX-05E.

SECTION IV

PROCUREMENT PLAN

Purpose

The purpose of the Procurement Plan is to set down the Acquisition Strategy including the business plans, procurement plans, and important technical milestones. The major emphasis is on the procurement planning and should lay out the planning for the entire Acquisition Cycle. This document will be utilized by all personnel reviewing the program and certain aspects of a program, such as DSARC reviews, approval for D&F, sole-source approvals, funding reviews, etc. The plan must lay out clearly how each planned procurement action fits into the total procurement strategy so that when each procurement action is being reviewed, it will be clear as to the significance of the action and its rationale.

References

The basic references for preparing a Procurement Plan are:

(a) ASPR 1-2100, Procurement Planning

(b) NAVELEXINST 4200.6B of 8 May 1973

(c) NAVELEX 02 Memo, ELEX 2011 ser 88-2011 of 4 August 1977

(d) NAVELEX 02 Memo, ELEX 2011 ser 116-2011 of 17 October 1977

The section out of reference (a) containing an outline of the Procurement Plan is included at the end of this section. Reference (b) is currently in the process of being updated and revised. The best assistance for guidance in the preparation of the Procurement Plan is contained in references (c) and (d). Both references should be reviewed thoroughly

if there is any question about whether a Procurement Plan may be required and both references should be followed closely in the preparation of the Procurement Plan. To insure the availability of these references they are included in this report in Appendix A.

Coordination

Within NAVELEXSYSCOM. ELEX-2011, are the procurement planners who can provide assistance in preparing the Procurement Plan. ELEX-2011 will also review the plan once it is completed. In addition, both the preparation of the plan and review of the plan should be coordinated with the Planning Council. The Planning Council is composed of the Program Manager or his representative, the Contracting Negotiator, Integrated Logistics Support Manager, R&M Specialist, Acquisition Manager, and other cognizant personnel as appropriate. This usually consists of coordinating with a representative from Code 260 for Contracts and Code 460 for Integrated Logistics Support.

Guidance

Since it is this document that will be used to review how each planned procurement action contributes to the Acquisition Cycle, its accuracy is important. This document will chart the course for the entire acquisition process. It is, therefore, paramount that the document reflect the best planning known at the time. The document must be consistent with the program direction given, including the Operational Requirement, Development Plan, Project Master Plan, Five Year Defense Plan (FYDP), the Navy Decision Coordinating Paper, and current DoD policies and directives. Procurement Plans may be used to support a Determination and Findings.

To find out if a project requires a Procurement Plan, refer to reference (c) and (d) basically, if the RDT&E costs exceed $2,000,000 or production costs exceed $5,000,000 for any fiscal year or $15,000,000 in all fiscal years.

As soon as it becomes known that a Procurement Plan is required for a project, ELEX-2011 should be notified. The preparation of the plan should start immediately. It must be completed and approved before any procurement action can be initiated.

The plan should include, in addition to the procurement planning, all significant milestones, decision points, and technical requirements. A matrix should be included which relates key people to each event.

The Procurement Plan should be updated annually or whenever significant change occur.

Approval of the Procurement Plan includes the following:

a. NAVELEXSYSCOM

(1) Planning Council

(2) Program Manager

(3) Non-Competitive Review Board (see NAVELEXINST 4270.1)

(4) Deputy Commander for Contracts

(5) Commander, NAVELEXSYSCOM

(6) NAVMAT 08C3

Specific guidance as to the format for the Procurement Plan is given in ASPR 1-2100 included at the end of this chapter, and in references (c)

and (d) included in Appendix A.

In most Acquisition Cycles there are several procurement alternatives available. The Procurement Plan should discuss each of these alternatives and clearly show why the selected alternative is the one best for the government. In planning for each procurement action, some of the alternatives to examine might include:

a. Method of Solicitation
   (1) Formal Advertising
   (2) 2-Step Formal Advertising
   (3) Negotiated

b. Type of Contract
   (1) Cost Type
   (2) Fixed Price
   (3) Incentives
   (4) Award Fees

c. Competitive, Sole-Source, Small Business, and Minority

d. Number of Contractors in Competition

e. How Far through the Process to Carry Competition

The following is a list of items currently receiving considerable visibility and those which should be addressed in the Procurement Plan:

a. Design-to-Cost Factors
   (1) Contract Clauses/Provisions
   (2) Incentives

(3) Award Fees

b. Life Cycle Cost (LCC)

(1) Contract Clauses/Provisions

(2) Plan for Modeling and Reducing LCC

(3) Incentives

(4) Award Fees

c. Reliability and Maintainability Requirements

d. Logistic Requirements

(1) Methods to Reduce LCC

(2) Training and Support Plans

e. Funding Requirements and Cost Performance Measurement

(1) Cost/Schedule Control System Criteria (C/SCSC) Provisions and Requirements.

ARMED SERVICES PROCUREMENT MANUAL

ILLUSTRATIVE PROCUREMENT PLAN FORMAT

PROCUREMENT PLAN NO.

PROGRAM.....

PROGRAM MANAGER.....

DESCRIPTION OF PROGRAM/SYSTEM/COMMOCITY, ETC.

....

....

....

APPROVED: Procurement Representative ....., date.....

Program Manager ....., date.....

(NARRATIVE PORTION)

1. A description of the program, item or system. Include the customary military nomenclature, a brief nontechnical description and statement of general application, and a description of associated materials and services. Discuss related in-house effort.

2. Program Funding (R&D and Production) including a summary of monies in the FYDP/Budget Submissions. Include specific references to budget line items and program elements, where applicable, estimated production unit cost, and total cost for remaining production. Describe the estimated cost for the contracts and how the cost was derived.

3. Delivery Requirements, both R&D and Production Contracts. Describe the basis for establishing the delivery requirement and justification for such urgency if it results in concurrency of development/production or is a basis for justification for sole source procurement.

4. Applicability of a Decision Coordinating Paper (DCP) or Program Memorandum Defense System Acquisition Review Council (DSARC) or Internal Service Reviews. Describe the options set forth in the DCP/Program Memorandum and delineate which option the Procurement Plan (PP) supports. Delineate the DSARC/Internal Reviews on the milestone chart.

5. Background and Procurement History (a brief factual summary). Provide a brief statement of the technical and contractual history of the material or services being procured.

6. Discussion of Program Risk, Including Technical, Cost, and Schedule Risk. Provide a discussion of major areas of technical risk, and describe what efforts are planned or underway to reduce risk and provide a comparison of any test results with the goals established for the item or program at its inception. If concurrency is planned, discuss its effects on cost and schedule risk. As appropriate, discuss effect of business base changes of major contractors' workload on program cost.

7. Integrated Logistics Support Planning Concept. Describe the extent of integrated logistic support planning to date including references to approved plans. Discuss the assumptions determining contractor or service support, both initially and over the program life cycle.

8. Application of Design-to-Cost. Describe the design-to-cost objective and the assumptions underlining the objective including the rationale for quantity, learning curve, and economic adjustment factors. Indicate specific solicitation and contractual requirements to be imposed.

9. Application of Life Cycle Cost (LCC). Discuss how life cycle costing

will be considered or indicate reasons why it is not being applied. If appropriate, discuss the cost model used to develop LCC estimates.

10. Reliability and Maintainability (R&M) Objective, Including Warranties. Discuss the mission profile, R&M predictions, redundancy, qualified parts lists, parts and material qualification, R&M requirements imposed on vendors, failure analysis, corrective action and feedback, and R&M design reviews and trade-off studies.

11. Test and Evaluation Approach. Describe the test program for each major phase, both of the contractor and of the Government. If concurrency is planned, discuss the extent of testing accomplished prior to production release.

12. Management Information/Program Control Requirements. Discuss as appropriate, what management system will be used by the Government to monitor the Contractor's effort.

13. Approval for Operational Use. Indicate the date Approval for Operational Use has been/will be obtained. If waivers are requested, describe the need for the waiver.

14. Government Furnished Material/Facilities/Component Breakout. Indicate material and facilities that will be furnished to contractors and any problems associated therewith. Discuss component breakout for competition, if applicable.

15. Application of Should Cost. Describe the application of should cost studies to the program.

16. Milestone Chart Attachment Depicting the Objectives of the Acquisition. Provide a chart in general accordance with the sample milestone chart.

17. Milestones for Updating the Procurement Plan. Indicate when the plan will be updated. Update should be scheduled to coincide with DSARC reviews and the transition from one phase to another (full-scale development to production).

18. Identification of Participants in the PP Preparation.

19. Procurement Approach for each Proposed Contract.

a. Item description.

b. Estimated cost.

c. Proposed sources and basis for selection. If sole source is recommended, discuss why competition cannot be used.

d. Source selection procedures. If formal source selection procedures will be used, discuss milestones for development of the plan and provide a general overview of how the selection is to be conducted.

e. Contract type. Provide rationale for recommendation of contract type.

f. Negotiation authority recommended. Discuss basis for recommendation of negotiation exception. If the PP is used to support a Secretarial D&F, provide appropriate information required by Appendix J, if not already provided elsewhere.

g. Reprocurement data. Provide a complete discussion of use of reprocurement data to increase competition, including funding available for reprocurement data and the contractual approach to acquiring such data, including proprietary rights and patent considerations.

h. Other considerations, as applicable. Discuss application of Small Business, Labor Surplus Area, the Industrial Readiness Program, The Defense Production Act, energy conservation measures, standardization concepts, foreign sales implications, special contractual clauses and ASPR deviations.

i. Alternative procurement approaches considered. Briefly discuss the merits and shortcomings of other approaches including contingency plans.

j. Milestones for the procurement cycle. Address the following subjects and any others, as appropriate:

PP Approval

D&F Approval

Completion of preparation of procurement package

- Statement of Work
- Specifications
- Data requirements
- Purchase request

Issuance of Solicitation

Evaluation of proposals, audits, and field reports

Beginning and completion of negotiations

Contract preparation, review, and clearance

Contract award

SECTION V

TEST AND EVALUATION MASTER PLAN (TEMP)

Purpose

The TEMP is a management document that is utilized to control and plan the test and evaluation program. The OPNAV Program Coordinator, the Project Manager, Op-98, Op-96, COMOPTEVFOR (Commander, Operational Test and Evaluation Force - the independent test agency which will conduct the Operational Testing and make recommendations on readiness of systems for acceptance by the fleet), CHNAVMAT, and the OPNAV Program Sponsor will all use this document in planning for testing on the project. Such planning will include availability of services, sites, funding, and COMOPTEVFOR availability. This document should, as accurately as possible, depict the program schedule, major milestones, and test objectives. And, finally, if properly prepared and maintained, the TEMP serves as a useful planning document for the Project Engineer and Acquisition Manager in preparing for Development and Operational Listing.

References

(a) NAVELEXINST 3960.3

(b) NAVMATINST 3960.6A

(c) OPNAVINST 5440.47D

(d) OPNAVINST 3960.10

Coordination

Coordination of TEMPs within NAVELEX is done by ELEX-05E. As soon as

it has been determined that a TEMP will be required (or probably required), ELEX-05E should be notified. In addition, the following NAVELEX codes should be contacted for coordination of inputs which will satisfy their requirements:

a. ELEX-470 - Reliability and Maintainability

b. ELEX-095 - Electromagnetic Compatibility/Vulnerability, Electromagnetic Interference, and RADHAZ

c. Others concerned with safety, the use of test resources, and logistic requirements (contact ELEX-05E for specific codes)

The second major coordination point is with COMOPTEVFOR. The coordination point at COMOPTEVFOR is with the Project Officer who is assigned to the specific project. COMOPTEVFOR prepares the input for Chapter 5 of the TEMP. COMOPTEVFOR participates in the Development Testing in order to insure the testing is meaningful from a fleet standpoint and for indoctrination of their own personnel in the system. COMOPTEVFOR conducts the Operational Testing. The major areas requiring close coordination with the COMOPTEVFOR Project Officer are:

a. Project schedule, specifically the test dates

b. Test services required

c. Project objectives, test criteria, and test objectives

d. Technical performance

The third major point of coordination is with the OPNAV Program Sponsor. The sponsor will establish the test criteria/objectives, define the project objectives and requirements, obtain the required project funding including the T&E funding, approve the TEMP, and finally, as a result of

testing, make recommendations to CNO on the suitability of the system for fleet use. The major points requiring close coordination witn the OPNAV Sponsor are:

a. Project schedule, specifically the technical and test milestones
b. Test services and cost
c. Project objectives, test criteria, and test objectives
d. Project performance, risks, and progress
e. Test results to date
f. Anticipated problems, if any, and alternative solutions

Other points where coordination of test requirements, objectives, and plans include those activities that review the TEMP enroute to the OPNAV Sponsor. These include:

a. NAVMAT: MAT-015, 08C, 08TL, 08EL, 042, 08E
b. OPNAV: Op-98, -983

In many instances there exists considerable controversy concerning the conduct of the test and evaluation program. The controversy is usually centered around any, some, or all of the following: test objectives, program objectives, system performance requirements, system performance capabilities, test services required, the scope of the tests, and test results. It is, therefore, critical to the success of the program that close coordination be established as outlined above and maintained through the course of the program.

If agreement on the conduct of the test cannot be reached with COMOPTEVFOR, the position of COMOPTEVFOR and that of NAVELEX must be written and submitted

with the TEMP. This written report must clearly identify all areas in which agreement could not be reached and the rationale for the NAVELEX position. Clearly, the NAVELEX position should be very explicitly stated, insuring that the rationale for that position is fully explained and justified. A copy of this written report will also be sent to COMOPTEVFOR. COMOPTEVFOR will submit, in writing, his view to Op-98. If agreement cannot be reached between Op-98 and the OPNAV sponsor, the dispute will be referred to Op-090 and if required to the VCNO for resolution.

Guidance

a. A TEMP will be required for all programs within NAVELEX unless all of the following conditions exist in which case only a TEP will be required:

(1) RDT&E costs less than $5M

(2) Procurements costs less than $20M

(3) Do not affect the military characteristics of the platform

(4) Require no OT&E Fleet RDT&E Support

If it is considered that all of the above conditions do exist this should be checked with 05E. If a TEP is required, instead of a TEMP, see NAVELEXINST 3960.3

b. There are two major types of testing. Development Testing (DT) is that testing conducted by the Development Agency (DA) (NAVELEX), planned by the DA, and reported on by the DA. The purpose of DT is to verify the design is complete and satisfactory and that the program is ready for Operational Testing or to move on to the next phase of the acquisition cycle.

Operational Testing (OT) is planned, directed, and reported on by COMOPTEVFOR. Its purpose is to provide to CNO an independent assessment of the program on which to base a decision for moving to the next phase. COMOPTEVFOR monitors the conduct of DT as well as coordinating the services. Specific testing by acquisition phases is:

a. Conceptual Phase

(1) DT I - usually never conducted

b. Demonstration/Validation Phase

(1) DT II - conducted to support full-scale development decision and to demonstrate that design risks have been identified and minimized. When competitive development is occuring the results from DT II may be included in the source selection for full scale development.

(2) OT II - often this is not conducted. When conducted it is for the purpose of providing an independent assessment for the full scale development decision; provide an early assessment of operational effectiveness, operational suitability, and program progress; identify operational issues for OT III; and initiate the development of tactics.

c. Full Scale Development

(1) DT III - conducted to support the decision for production. DT III demonstrates that the design meets its required specification, reliability, maintainability, supportability, survivability, safety, electromagnetic compatability/vulnerability, and that the system is ready for Operational Evaluation (OPEVAL). The final and most important phase in the DT III is the Technical Evaluation (TECHEVAL). This is a formal test conducted

planned, and directed by NAVELEX for the purpose of documenting the results of the DT III testing and readiness of the system for OPEVAL. TECHEVAL should be conducted under a similiar scenario as OPEVAL will be conducted. COMOPTEVFOR will usually desire three months before OPEVAL is scheduled but as a minimum must be completed thirty days before the start of OPEVAL.

(2) OT III - conducted by COMOPTEVFOR to present an independent assessment of those items checked during DT III. The final and most important phase of OT III is the Operational Evaluation (OPEVAL). OPEVAL should be scheduled for completion at least three months prior to the initial production decision. COMOPTEVFOR represents the user, the fleet, and will be primarily concerned with whether the system meets its performance specifications, whether it fulfills the required operating characteristics, if it is maintainable and useable by the fleet, and displays the required reliability. To reduce the controversy over test results the test criteria of OPEVAL, as well as the system performance standards, should be clearly set down in the TEMP. The results of OPEVAL are the most important input to a determination of whether the system will be approved for service use.

d. Production

(1) DT IV and OT IV - conducted on the pilot production models to verify correction of deficiencies that may have been reported during DT III/ OT III.

(2) OT V - conducted on production systems when available to verify system objectives have been fully met and to test in a new environment. All testing DT I through IV and OT I through IV are funded by the developing agency; however OT V is funded by the fleet, the user. Usually the developing agency is not involved in any formal way with OT V testing, if it is

conducted at all.

e. Production Acceptance Testing and Evaluation (PAT&E)

(1) Production Acceptance Testing should be defined in the TEMP and is that testing on production items to insure that system specifications have been met. NAVELEX is responsible for the PAT&E. In conducting this testing close coordination should be established with the government's representatives at the plant, the DCAS, AFPRO, or NAVPRO.

f. Upon approval the TEMP constitutes the CNO directed test and evaluation program. The TEMP constitutes a commitment of Fleet RDT&E Support. The services required by NAVELEX for the Development Testing are requested as they are laid out in the TEMP. The test plans developed for each test will be based on the TEMP. Minor revisions to the TEMP may be made by NAVELEX; however, all major revisions must be approved by CNO. Minor changes are those changes which update data contained in the TEMP but in no way affect the test objectives or Fleet RDT&E Support required. The TEMP will be reviewed annually and updated as required. This should be coordinated with ELEX 05E.

g. Each TEMP is assigned an identification number. This number can be obtained from ELEX 05E.

h. When preparing a TEMP the format of NAVELEXINST 3960.3 should be followed. Clear guidance is provided in this instruction. COMOPTEVFOR will provide the input for Chapter V. The TEMP should be less than 20 pages in length. Specific guidance on the TEMP is provided as follows:

(1) Part I

a. The funding included should be that funding from the latest FYDP. This may not, and often isn't, be the same funding requirements as submitted in the NAVELEX POM; however, the FYDP data will be included. After each RDT&E entry the amount that will be allocated to T&E should be indicated in brackets.

b. The delivery schedule should be that schedule in the P-1 budget sheets and reflected in the FYDP funding. The installation schedule is taken from the Fleet Modernization Plan (FMP).

(2) Part II

a. Part II should be based on the Operational Requirement (OR) and the Navy Decision Coordinating Paper (NDCP).

(3) Part VII

a. Under the resources summary all services required for DT and OT are requested. Once approved by CNO the service requirements from this section of the TEMP are provided to the Fleet Service Scheduling Conference.

i. The TEMP should be prepared early in the Conceptual Phase and submitted for approval. At this time many of the specifics required of the TEMP will be unknown, but they can be added as updates. The TEMP when originally submitted should as a minimum contain that planning necessary for any DT I/OT I testing to be conducted.

j. Once made up the TEMP should be given to NAVELEX Codes -04/-095/-05E, and other codes as recommended by -05E, for review. Comments from this review will be utilized in making up a draft for submission to NAVMAT

and OPTEVFOR for review. NAVMAT codes reviewing the TEMP include 042, 08E, 08EL, 08C, and 08TL. Upon receipt of comments from tnis review a smooth is prepared and submitted to CNO for approval. A copy of a sample forwarding letter is included in NAVELEX 3960.3. The time for review can be reduced by providing separate copies to each code. ELEX-05E will assist and coordinate the review and submission of the TEMP.

k. The TEMP must be very clear, definite, and specific in those areas where possible conflict exists, especially between NAVELEX and OPTEVFOR, when submitted to OPNAV for approval. Areas of possible conflict include: test objectives, program requirements, system performance requirements, test services required, scope of the tests, test schedule, evaluation criteria, etc. The OR and NDCP should be used to define the requirements. The better definitized the TEMP the more objective will be the evaluation.

SECTION VI

INTEGRATED LOGISTICS SUPPORT PLAN

Purpose

The Integrated Logistic Support Plan (ILSP) is utilized in planning for the design of the support for the system after deployment. Certainly an important aspect of any system is the performance of the system and assurance that the equipment will continue to perform the required functions. Whether a system can be produced that meets the performance requirements is a function of engineering and cost. However, it is equally important that a system will continue to perform its required functions after it has been deployed. This is solely a function of the logistic planning; how well the system has been designed for support. The ILSP coordinates and plans the accomplishment of this function.

In the current environment within DoD it is imperative that the cost of weapons systems be well defined, held to a minimum, and reduced in total life cycle costs. For most systems about 70% of the total life cycle costs is in operation and support of the system. Therefore, the greatest reduction in life cycle costs can be gained from reducing the operations and support costs. In the future there will continue to be increased review of design plans to reduce life cycle costs and operation and support costs. The success of a program is critically tied to the development of a sound ILSP.

In DoD Instruction 4100.35 it is stated that "the policy of the Department of Defense to encourage innovation, inventiveness and exercise of technical and managerial judgment in designing and producing systems and their logistic support to meet operational requirements . . . . shall be a major

factor in the evaluation of his performance of the contract as a whole."

References

(a) DoDINST 4100.35

(b) NAVMATINST 4000.20

(c) NAVELEXINST 4000.10

(d) NAVELEXINST 4858.1

(e) NAVELEXINST 4855.2

(f) NAVELEXINST 4858.2

(g) NAVELEXINST 4858.3

(h) NAVELEXINST 4858.4

(i) NAVELEXINST 5100.5A

Coordination

Points of contact within NAVELEX for assistance in each of the logistic areas can be obtained from ELEX-404, the logistic planners. In addition, each project has assigned logistics managers.

Guidance

The logistic support planning is divided into nine general areas as follows:

a. The Maintenance Plan - The maintenance plan lays down the specifics of how the system will be maintained throughout its employment and the design features necessary for that maintenance. The maintenance planning starts in the conceptual phase when the general maintenance philosophy is established. Maintenance is accomplished at three levels, organization

level (maintenance performed aboard ship), intermediate level (maintenance done, usually inport, through the assistance of specialized maintenance personnel such as a tender, etc.), and depot level (performed in a shipyard or at the factory). Both intermediate and depot maintenance generally involve removing the equipment, or some part of the equipment, from the ship for repair. Two of the principle factors in the development of the maintenance plan are the required maintainability and reliability. Maintainability is the design characteristic which enables the returning of a system to proper operating condition. It is usually expressed as the Mean Time to Repair (MTTR) the equipment and is a measure of the active maintenance time. The better designed for maintainability the shorter the time to repair. Reliability is a measure of an equipment's resistance to failure. It is usually expressed as the Mean Time Between Failure (MTBF). The higher the MTBF the less failures that will occur and the higher the probability that a mission will be successfully completed. Demonstration of maintainability and reliability will be required during the test and evaluation phases. The maintenance plan should be complete during the Full Scale Development Phase.

b. Support and Test Equipment - The ability of the personnel at the various maintenance levels to perform their assigned maintenance is dependent on their having the proper support and test equipment. Additionally, this equipment itself must be properly supported. The preferred maintenance concept is to require no peculiar support or test equipment. In any event, peculiar equipment is harder and more costly to obtain and considerably more costly to maintain and, therefore, it should be held to the absolute minimum. System designers should consider test equipment already in the inventory for carrying out maintenance. Large proportions of this test

equipment are government furnished and must be scheduled to insure it is in place before delivery of the first system for testing.

c. Supply Support - Planning for supply support includes plans for provisioning (providing spares at the organizational level), plans for stocking supplies within the supply system, and distribution of spares to various supply points. The amount of provisioning is dependent on the maintenance concept and the reliability. Plans must also be made as to the supply support concept; what is governmental supported, contractor supported, and/or jointly supported and how spares will be replenished. The higher the reliability, the less spares that will be required in provisioning. An additional factor is that the higher proportion of common parts used in the design reduces the provisioning problems. Interim support, that support between first installation of the pilot production equipment and full supply system readiness, must also be planned. This support is critical for the Operational Testing and the reliability and maintainability assessments. During this phase, if an error is to be made it should be in favor of installing the spares.

d. Transportation and Handling - This planning should include any special provision that may be required (safety, security, sensitivity, fragile, environment, etc.) during handling and transportation as well as any special equipment required.

e. Technical Documentation - The technical manuals explain to the maintenance personnel at the various levels the action required to perform the equipment maintenance and provide an understanding of how the equipment was designed to function. The main points to remember for the technical manuals

is that they are complete, accurate, and understandable. They should be delivered concurrent with the equipment.

f. Facilities - Facilities are those government properties utilized in the maintenance concept. It is rare that any facilities will have to be constructed, however, plans may be required to utilize some existing facilities.

g. Personnel and Training - This phase of planning includes human factors engineering, training requirements, training facilities and equipment required, the level of training required of each of the people assigned, the number of people required, and the function to be performed by each person assigned. This includes the operators and maintenance personnel at all three levels of maintenance. Certainly it is clear that the lower the personnel requirements the lower the operational and support costs, but it is also true that in general the lower the complexity and scope of repair at the organizational level, the lower the operational and support costs. The simpler the maintenance concept, especially the fault isolation, at all levels of maintenance the lower operational and support costs.

h. Logistic Support Resource Funding - This involves the funding of those actions that are required for logistic support. Within DoD, at present, the interest in logistic support is equal to interest in performance. This is especially true as interest grows in monitoring and reducing the life cycle costs of weapons systems. Traditionally, interest in funding the logistics requirements have been secondary because the program manager does not fund the operating and support costs, they are almost entirely funded by the fleet. In fact, the developing agencies (NAVELEXSYSCOM) do not fund much

of the operating and support costs. Also true is the fact that program reviews and assessments were mainly concerned with system performance and RDT&E and Procurement costs. However, with logistic interest equal to performance and continual growth of concern over life cycle costs the funding of logistic elements becomes absolutely essential. A forthcoming revision to DoD Instruction 4100.35 will require program managers of major programs to specifically identify funding for logistic items.

i. Logistic Support Management Information - This is the data collection, analysis, and providing of essential data to support the overall accomplishment of logistics support.

In order to assist in organizing the information necessary to develop the ILSP, enclosure (1) to NAVELEXINST 4000.10 contains a guide to be completed. All information required by this guide should be completed in the outline form to the maximum extent possible. Most of the information is available in the Project Office. ILSP begins with their outline which should be started early in the conceptual phase. While it is recognized that much of the information at this point in time is very general in nature, it is fully intended that the ILSP will be an iterative process requiring frequent updating as additional information becomes available and plans are established. During the process of completing the information for the outline, close liason should be maintained with ELEX-404 (there should be an ELEX-404 representative assigned to each project to assist in all phases of ILSP development).

Once the information necessary to develop the ILSP has been collected into the outline, there are several alternatives available for writing the ILSP:

(a) Contact ELEX-404, provide them with the outline developed as well as other information specifically requested by ELEX-404, and request that they develop the ILSP. The major drawback to this alternative is that ELEX-404 does not have the manpower to write all of the ILSP's for NAVELEX. Additionally, since manpower is a critical problem for ELEX-404 it will be difficult for them to respond in the time frame required. When manpower constraints do permit this alternative, this is extremely desirable in that a high level of expertise, training, and experience in the ILS area can be applied to the development of a sound ILSP.

(b) A second alternative would be to write the ILSP in the Project Office, maintaining close liaison with ELEX-404 and then having ELEX-404 review the draft ILSP for completeness and soundness of the planning. This alternative retains most of the value of alternative one, but places the manpower requirements on the Project Office. If the manpower can be made available, this is a desirable alternative. An advantage of this alternative over alternative one is that the ILSP is developed strictly in line with the philosophy of the Project Office. This is the alternative that I recommend. The extreme importance of the ILSP warrants the time spent by the Project Officer in developing a good ILSP. Close coordination should be maintained with and assistance obtained from ELEX-404.

(c) A third alternative, similiar to the first alternative is to request ELEX-404 to prepare the ILSP and have ELEX-404 in turn contract this task out to a private contractor. There are numerous private contractors in the Washington area fully capable of preparing an ILSP. ELEX-404 would generally have their private contractor establish liaison with the project office.

(d) The fourth alternative is similiar to the second alternative in that the Project Office makes up the ILSP by contracting the job out to a private contractor. In most cases alternative three is preferred over four, in fact it is COMNAVELEX policy that ELEX-404 should contract for the ILSP if it is to be contracted in private industry. If alternative four is being considered it should be discussed with ELEX-404, ELEX-04, and ELEX-09.

There has been a tendancy to exclude ELEX-04 from ILS planning in projects in the past. This has probably been due in a large part to undermanning in ELEX-04 which has resulted in delays in responding to requirements, perceived lack of time in the project to indoctrinate ELEX-04 personnel, general disconcern on the part of the Program Manager in the ILSP, and general distrust by both parties. The essential ingredient to solve all of the problems is establishing early liaison between the project and ELEX-04 and maintaining close coordination throughout the acquisition cycle. This mutual cooperation is absolutely essential to the Project Office and becoming more so each day as the emphasis turns more and more to monitoring the life cycle costs, particularly the operating and support costs.

The best manner in which to initiate the entire process is to hold a meeting of all personnel involved early in the Conceptual Phase, even before commencing the ILSP planning. The purpose of this meeting would be to explain to all codes concerned the initiation of the project, the goals of the project, funding available, urgency, major milestones, and performance required. All codes would be brought up to date with the project. Periodically throughout the acquisition process meetings should be scheduled for the same personnel to update them in project events, progress, changes, and problems. It would be far preferable if the personnel attending these meetings

are those personnel in each code who will work with the subject project. This group, in as far as is possible, should remain intact throughout the acquisition cycle. As a minimum the following codes should be included in this meeting ELEX-102, -201, -260, -404, -460, -470, -490, -05E, -095, and other codes that may be involved in working on the project. There may very well be occasion where it would be beneficial to include the OPNAV program sponsor and the COMOPTEVFOR project officer in these meetings.

SECTION VII

RECOMMENDATIONS

The intent of this paper was to provide guidance to the project engineer in NAVELEX in formulating three of the principal documents in the planning process of acquisition thus to guide in the planning for a successful program. This paper in no way provides all the information that the project engineer requires to carry out an entire program, namely, how to execute the plan. It is therefore recommended that further papers be compiled on additional areas in the acquisition process and that all the papers be combined into an acquisition notebook. Each paper should be carefully reviewed by the cognizant codes within NAVELEX to insure conformance with current policy.

The additional recommended areas for study include:

A. Procurement - This would include a description of the procurement cycle within Navelex, the required documents and guidance on their completion, data management, preparation of the statement of work and specifications, review boards, and contracting strategy. Contracting strategy would include the types, incentives, award fees, source selection, negotiations, solicitation, and administration.

B. Financial Management - This would include budget formulation, the PPBS cycle, management of funds in the project office, cost control, cost estimating, and cost performance monitoring.

C. The Naval Acquisition Organization - This would include the responsibilities, duties, and contributions of the various organizations interfacing with the acquisition process. Organizations that should be included

are: the Laboratories, Naval Material Command, other Systems Commands, OPNAV (many different codes should be included), Test agencies, Office of Secretary of Defense, Secretary of Navy, Plant Representatives, Congress, Executive Branch, and the Users.

D. Program Initiation - This would include the Operations Requirement, the Development Plan, the Navy Decision Coordinating Paper, the CEB, the DNSARC, the DSARC, the Decision Coordinating Paper, and the acquisition phases.

E. Software Acquisition

F. Management Information Systems

G. Production Phase

H. Change Management

I. Test and Evaluation

J. Glossary of Terms

K. Taxonomy and Inventory of official acquisition management documents for NAVELEX (such a document has already been prepared for the defense acquisition process by the Defense Systems Management College and merely requires tailoring to NAVELEX).

Appendix A: NAVELEX Memorandums on the Procurement Plan

Contents: (a) ELEX 02 Memo ser 88-2011 of 4 August 1977

(b) ELEX 02 Memo ser 116-2011 of 17 October 1977

DEPARTMENT OF THE NAVY

Memorandum

ELEX 2011:CWC
Ser 88-2011
DATE: AUG 4 1977

FROM: ELEX 02

TO: Distribution List

SUBJ: Data on Procurement Plans

Encl: (1) Requirements for Procurement Plans
(2) Outline for NAVELEX Procurement Plans
(3) Informal Guide to Preparing Procurement Plans in NAVELEX

1. In accordance with commitments made during the Charlottesville meeting, I am forwarding herewith information regarding requirements for and preparation of Procurement Plans. The Procurement Planning Branch, ELEX 2011, phone 692-6047, should be contacted for additional advice on preparation of Procurement Plans.

V. J. PISTOLESSI
CAPT, SC, USN
Deputy Commander for Contracts

Distribution:

ELEX 03	PME 107-1
04	PME 107-2
05	PME 107-5
510	PME 107-6
520	PME 108
540	PME 108-1
550	PME 108-2
570	PME 108-3
PME 106	PME 108-4
PME 106-1	PME 117
PME 106-4	PME 117-10
PME 106-5	PME 124
PME 107	PME 124-10

REQUIREMENTS FOR PROCUREMENT PLANS

Procurement Plans are required to be made several months in advance of the first major Procurement and submitted to higher headquarters for a program/project/system/equipment when the future procurements will total:

(i) $2,000,000.00 of R&D effort; or

(ii) $5,000,000.00 of negotiated hardware and software procurements in one fiscal year or $15,000,000.00 of negotiated hardware and software procurements for all years; or

(iii) When demanded by higher headquarters

Exemptions:

Procurements which represent the last procurement (of an item) or are absolutely a one-time only buy do not require a procurement plan.

INFORMAL GUIDE TO PREPARING PROCUREMENT PLANS IN NAVELEX

If you are thinking of doing it alone, or of copying what is in last year's PP--don't. A PP is, or should be, a team effort. Remember several people must sign-off on it, and many of them want to give you advice--free. They don't want to be presented with a strange document that they have made no input to, along with a reque that it be signed within 48 hours.

Don't go get a contractor to do the PP. NAVMAT regulations specify in essence "no contractor personnel shall help with, prepare, type, read, or store Procurement Plans."

Each page of the PP should either be Classified or marked "FOR OFFICIAL USE ONLY."

Cover Page

Try to say, in 150 words or less, whatever you think you should say. Use eighth grade language. Watch the FOG count.

Paragraph 1 (Item or System)

As a general rule, this should be rather simple, but if you are not satisfied with the 150 word limitation on page 1, do your thing right here. Remember eighth grade simple words and sentences.

Paragraph 2

You should show fiscal data to the best of your knowledge, at least to the end of the Five-Year Defense Plan. Please don't include O&MN monies, except those being included in future planned production or service contracts.

Enclosure (3)

Paragraph 3

List known R&D and production delivery requirements, but don't strain to invent them.

Paragraph 4

In text or plain listing, give the DCP, if any; SOR, R&D budget line item, OPN budget page no., etc. If CNO; Commandant, USMC; or JCS has expressed an interest or need, list the letter here, and do the expansion of the letter/memo in Paragraph 5 of the PP.

Paragraph 5

Give the basis for the need for your program, item, etc. Explain past procurements (contracts or in-house work) that has contributed to the program. Tell where you are, in regards to your hope of going into the next contract, i.e., "A performance specification and statement of work have been prepared for the Advanced Development Contract."

Paragraph 6

a. Technical risks. If there were any or if they have been solved, tell about it. Also, tell about any specific controls to be imposed to limit that risk--i.e., "The breadboard model fabricated by NELC was tested in a submarine dive to 800 ft. and proved conclusively that the _____ could communicate at that depth," or "The technical risks are considered minimal and consist of meeting weight, size and power limitations. No special controls or milestones are to be imposed on the proposed contractor."

b. Cost. Discuss such areas, if applicable, of added scope, inflation, unrealistic estimates. The use of a price incentive, or of economic adjustment clauses, may further reduce this risk.

c. Schedule. Describe efforts to minimize, such as concurrency of procurement actions, utilization of letter contracts, priced options. As appropriate, discuss effect of business base changes of major contractor's workload on program cost and schedule.

Paragraph 7

Discuss the whole PP with your assigned Logistics Manager from and/or approved by ELEX 4042 and have him or her prepare this paragraph. The Logistics Manager also should want to give you a BAR CHART for ILS events for incorporation in the PP.

Paragraph 8

Consult with a contracts person from 260, 270 or 2011 and obtain their assistance.

Paragraph 9

Get in touch with your assigned System Effectiveness expert from ELEX 470 and have about two conferences with him. ELEX 470 should provide this paragraph as about 7 subparagraphs in written text. NAVELEX instructions specify that 470 shall "chop" every ELEX PP.

Paragraph 10

ELEX 05E will be glad to assist you in evaluating your need for tests, their length and duration, etc. The PP should show if Approval for Service Use is required and when and how it will be obtained. If any production procurements in Paragraph 20 are to be awarded prior to ASU, and ASU is required, the PP should state that a waiver of ASU requirements will be obtained.

Paragraph 11

Discuss, as appropriate what management system will be used by the Government to monitor the contractors effort. See DOD Instruction 7000.2 if your Program is a DSARC sized Program.

Paragraph 12

This paragraph may: (i) say none, (ii) say please see Paragraph 20 ( ) ( ), or (III) may say what will be furnished to the contractor other than information. If GFE/GFM is furnished, be specific like "one each 10 meter Whip Antenna for each

AN/SRC-22 being purchased under the contracts proposed in Paragraph 20I, 20II and 20III will be furnished to the contractor as GFM. Also promise that the GFE/GFM will be there on time and identify the code or person who is responsible for acquisition storage and transportation of that GFE/GFM. (This is a CNM rice bowl.)

Paragraph 13

It takes an engineer to do this one. Draw MIL STD 1378 unless you know it by heart and review it against your program. (This used to be called STANDARD HARDWARE PROGRAM (SHP). Warning--This is one of Adm Michaelis' pets.)

Paragraph 15

This PP should be revised and submitted to CNM for approval consistent with the need. You have to look the complete program over and make a promise: The date probably should be 10 months prior to your next planned major procurement.

Paragraph 16

I hate to be pessimistic, but frequency approval is required for most deals--

(a) Ironclad exceptions

Sound in water
Antennas
Test equipments
Computers.

(b) All instruments that receive Hertzian Waves (including EW gear) require Frequency Approval. My subparagraph (b) doesn't make sense, but that is the way it is. If you don't have frequency approval and it is applicable, you need to take off 30 minutes and talk to the Frequency Approval Branch, ELEX 51012, before you continue with PP.

Paragraph 17

Your friendly Small Business specialist will be glad to assist you.

Paragraph 18

This is a DOD rice bowl. DOD wants you who are drafting this PP to know and to admit that you know that the metric system is coming. DOD wants you to make the decision about when you will start using metrics and probably will not challenge your decision. ELEX 5045, John Shenk (x23928), is the NAVELEX Coordinator of the DOD Metric Coordinating Panel.

Paragraph 19

This is a NAVMAT rice bowl. The Configuration Management specialist in NAVELEX is 4604, William Kipperman (x27474).

Paragraph 20

Every contract* action over $100,000 and every contract action required to be reviewed by NAVELEX Inst 4270.1C of 3 May 1977 should be in the PP in Paragraph 20.

Those laboratory jobs that are large or that are needed to produce a consistent picture probably should be in here, but in reduced form. If laboratory and NAFI deals are in the PP, show what business form will be used to send the work to the field activity. Recent inquiries from CNM have been to the effect: Has Executive Order A-76 been properly applied to your Program.

Paragraph 21

Keep members as few as possible. The following members are required:

The Program Manager (either on the first page or this page)
The Acquisition Logistician
470
A Procurement Analyst
A Contracting Officer or Contracts Negotiator

260 or 270 for Acquisition CAT II DSARC/Higher

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* A Contract is an agreement between two parties, i.e., the U.S. Government and a business firm, an educational institution, a trust, a Federal Research Center, another government, etc.

(Footnote continued on next page)

* (Continued)

An Agreement between NAVELEX and FAA is not a contract because they are both limbs of one U.S. Federal Government. The same applies to NAVELEX/NAFI, NAVELEX/SBA.

An Agreement between NAVFAC and the North Carolina State Ports Authority would be a contract because there are two separate governments (legal entities) involved. A definition of procurement ranges from a midnight requisition, to work order placed on NAFI, to a contract to several contracts placed at almost the same time by the same agency, or under control of one agency where all contracts contribute to one low level, easily defined common goal.

Examples:

3 contracts with separate firms each for 2 service test models of the AN/TPN-99 XN-3 when the equipment will be used for testing and a competitive production procurement decision. 3 contracts, but one procurement.

A contract with ZYX for 40 AN/SRC-20's and a contract with ABC for 40 antennas for the AN/SRC-20's when the equipments are to be matched and installed. 2 contracts--one procurement.

For Paragraph 20, you should absolutely rely upon ELEX 2011 who will, if advisable, shift you to 260X and 270X because: (1) it is their job, and (2) they are not likely to chop unless they are satisfied with the product.

PROCUREMENT PLAN NO. NAVELEX

PROJECT or PROGRAM or EQUIPMENT:

PROJECT or PROGRAM or ACQUISITION MANAGER:

DESCRIPTION OF PROJECT
(or Program or Equipment)

APPROVED: _____ _____

DEPUTY COMMANDER FOR CONTRACTS — DATE

_____ _____

PROJECT or PROGRAM or ACQUISITION MANAGER — DATE

_____ _____

COMMANDER, NAVAL ELECTRONIC SYSTEMS COMMAND — DATE

Questions concerning this PP should be referred to _____, ELEX ____, X26046.

The cut-off date for inputting information into this document was _____.

Follows (2)

PROCUREMENT PLAN NO. NAVELEX

1. ITEM or SYSTEM:

2. PLANNED FUNDING:

	R&D		OTHER	
	IN-HOUSE	CONTRACTS	IN-HOUSE	CONTRACTS
FY 76 & Prior				
FY 7T				
FY 77				
FY 78				
FY 79				
FY 80				
FY 81				

3. DELIVERY REQUIREMENTS:

a. R&D

b. Production

4. APPLICABILITY OF DECISION COORDINATING PAPER (DCP) AND OTHER PROGRAM INFORMATION:

5. BACKGROUND AND PROCUREMENT HISTORY:

6. DISCUSSION OF PROGRAM RISKS:

a. Technical

b. Cost

c. Schedule

7. INTEGRATED LOGISTICS SUPPORT PLANNING CONCEPT:

8. APPLICATION OF DESIGN TO COST (DTC), LIFE CYCLE COST (LCC) AND SHOULD COST:

9. RELIABILITY AND MAINTAINABILITY (R&M) PROGRAM INFORMATION:

10. TEST AND EVALUATION APPROACH/APPROVAL FOR SERVICE USE (ASU):

11. MANAGEMENT INFORMATION/PROGRAM CONTROL REQUIREMENTS:

12. GOVERNMENT FURNISHED MATERIAL/FACILITIES/EQUIPMENT AND COMPONENT BREAKOUT:

13. USE OF STANDARD ELECTRONIC MODULES (SEM):

14. MILESTONE CHART:

The attached milestone chart is a graphic presentation of objectives stated in the narrative and of the timing of milestones leading to the meeting of the objectives.

15. MILESTONE FOR UPDATING THIS PP:

16. FREQUENCY APPROVAL:

17. SMALL BUSINESS AND LABOR SURPLUS AREA CONSIDERATIONS:

18. USE OF INTERNATIONAL SYSTEM OF WEIGHTS AND MEASURES:

19. CONFIGURATION MANAGEMENT:

20. NAVELEX PROCUREMENT PLAN:

a. Scope:

b. Estimated Cost:

c. Source(s) and Basis for Selection:

d. Procurement Plan/Contract Type:

e. Contemplated Negotiation Authority and Justification Thereof:

f. Technical Data Considerations:

g. Procurement Alternatives:

h. Other Considerations:

Put titles on them if there are any

NOTE: 20 Should be repeated several times as 20II, 20III, 20IV, etc. to give a complete system procurement picture. 20 Should be complete, factual, etc. as we expect in many cases to send the PP to Asst Sec Nav in lieu of other documents.

21. MEMBERS OF THE PLANNING COUNCIL:

PROCUREMENT PLAN No. NAVELEX

L E G E N D

o	ISSUANCE OF PURCHASE REQUEST
A	AWARD OF A CONTRACT
L/C	AWARD OF A LETTER CONTRACT
D/C	DEFINITIZATION OF A LETTER CONTRACT
E/O	EXERCISE OF AN OPTION
//////////	ANY DESIGN OR MANUFACTURING ACTIVITY PRIOR TO AND INCLUDING PRODUCTION OF PREPRODUCTION MODELS/FIRST ARTICLES
XXX	ANY TESTING PROCEDURES
XXXXXX	ANY PRODUCTION EFFORT AFTER PRE PRODUCTION MODEL APPROVAL AND PRIOR TO DELIVERIES OF PRODUCTION EQUIPMENT
▭▭▭	DELIVERIES, WITH ANY FIGURE ABOVE THE BAR REPRESENTING THE AMOUNT PER MONTH OR PER QUARTER
◊	DELIVERY OF TECHNICAL DATA FOR REPROCUREMENT PURPOSES
◈	TECHNICAL DATA EITHER GOVERNMENT PREPARED OR CONTRACTOR DATA THAT HAS BEEN VERIFIED BY A SECOND PARTY

MILESTONE CHART

EQUIPMENT OR SYSTEM

PROCUREMENT PLAN NAVELEX

MAJOR MILESTONES	CY 76				CY 77				CY 78				CY 79				CY 80				CY 81				CY 82				CY 83				CY 84			
	J A J O				J A J O				J A J O				J A J O				J A J O				J A J O				J A J O				J A J O				J A J O			
	FY 76		FY		FY 77				FY 78				FY 79				FY 80				FY 81				FY 82				FY 83				FY 84			
	3Q	4Q	1Q		2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
FUNDING																																				
REQUIRED DELIVERY SCHEDULE																																				

NAVELEX 4270/13 (Rev 1-76)

OPNAV 5216/144 (REV. 6-70)
S/N 0107-LF-778-8099

DEPARTMENT OF THE NAVY

Memorandum

ELEX 2011:CWC
Ser 116-2011

DATE OCT 17 1977

FROM: ELEX 02

TO: Distribution List

SUBJ: New Procedures and Standards for Preparing and Approving Procurement Plans (PP)

REF: (a) Memo 01X:LAD Ser 117-01X of 1 Aug 1977; subj: Actions Resulting from ZBM Retreat
(b) Memo ELEX 2011 ser 88-2011 of 4 Aug 1977; subj: Data on Procurement Plans

ENCL: (1) Procedures and Standards for Preparing and Approving Procurement Plans
(2) Milestone Chart - "Preparation, Review and Approval of Procurement Plans"
(3) Copy of Concurrent Routing Letter

1. Reference (a) calls for a new standard of 45 working days for the preparation, review and approval of PP's, and for a condensation of data related to PP's so that non-contracts persons will not have to research the ASPR, NPD and other CNM directives related thereto. Reference (b) was a quick reaction memorandum to satisfy the ZBM retreat goal of making data concerning PP's readily available to all NAVELEX acquisition personnel, and will be reissued in FY 78.

2. Enclosures (1) through (3) constitute a guide for realization of the 45 day milestone standard. It should be noted that, for purposes of clarification, the new acquisition team concept being promulgated for FY 79 procurement actions, will alter the point at which planning commences. Therefore, supplemental instructions may be forthcoming.

V. J. PISTOLESSI
CAPT, SC, USN
Deputy Commander for Contracts

Distribution List: w/encls
ELEX 09
03
04
05
All PME's
List 5

PROCEDURES AND STANDARDS FOR PREPARING AND APPROVING PROCUREMENT PLANS (PP's)

1. Identifying the Need for a Procurement Plan:

It is the responsibility of all NAVELEX personnel to identify, early in the program the need for a PP and to ensure that a PP is prepared well in advance of the first major procurement for that program. Facing up to all the problems entailed in the PP will reduce delays at a later date. The thresholds criteria for determining the need for a PP was contained in enclosure (1) to reference (b) and changes from time to time. When there is a doubt concerning the need for a PP, the matter should be referred to ELEX 2011 (X26046). ELEX 2011 shall have access to all command program and financial data not requiring special compartmented access.

2. Maintaining Records and Files Concerning PP's:

ELEX 2011 is responsible for keeping records for: all cases where it has been determined that a PP is needed; all PP's in process and all approved PP's. When it is determined that a PP is needed, such fact should be reported to ELEX 2011. This paragraph applies to all programs assigned to NAVELEX, i.e., includes field activities.

3. Content of PP's:

ELEX 02 will be responsible for the content of PP's. The "Outline for NAVELEX Procurement Plans" and a "Guide to Preparing Procurement Plans in NAVELEX" was promulgated as enclosures (2) and (3) of reference (b). ELEX 2011 will stock a limited supply of these documents or subsequent revisions thereof. An acquisition engineer/manager should request a fresh copy of these documents at the time that he or she reports a need for a PP to ELEX 2011.

4. Actual Preparation and Coordination of PP's:

Eleven of the following subtitles are keyed to the attached milestone chart. The time allowed on the chart is the NAVELEX Standard.

a. First Interview. As soon as practicable after identifying the need for a PP, ELEX 2011 personnel will schedule a meeting of the personnel most involved in the process. Experience has proved that there are few days when an agreement can be secured from more than three people to meet at a specific place and time. Therefore, persons who can not be present at one of these meetings when invited should send an alternate and should endeavour to abide by the decisions made at the meeting. Program managers should be present during these conferences. An acquisition or program manager, or both will meet with 470, 4042, the Contracting Officer and 2011 personnel.

Data is exchanged, a general overall scheme and tenor is determined. The writing of the PP is assigned, i.e., preparation may be divided between two or three persons with one person being the coordinator. A subsequent conference is scheduled. A letter is written to all concerned calling for a second conference. The conference will be scheduled as soon as it is reasonably certain that discussion paper draft will be ready for the conference (there is no numerical standard for this effort).

b. The discussion paper draft is prepared.
(There is no numerical standard for this effort)

c. Procurement Planning Conference. The 45 days begins here. It is essential that all the following be present:

Contract Negotiator
ILS Representative
R&M Specialist
Acquisition Manager
Program Manager or his representative

It may also be necessary for 260/270 and/or the PCO to be present.

In the event some of these persons can not be present, they should send alternates and should check with their alternates after the conference, and if they have any problems, with ELEX 2011. The discussion paper draft is distributed, reviewed and discussed. ELEX 4042 and 470 are given 10 days in which to complete their sections of the PP.

d. Receipt of Final Inputs. Inputs from 4042, 470 and any other changes are received. Completion of final draft.

e. Typing of final draft.

f. Distribution of PP for review. Please see the concurrent routing letter attached. CNM-PM's will be included on this review when advisable.

g. Final Conference/Final Revisions. Please see the concurrent routing letter attached. It is important that any person having a substantive comment, and the Contract Negotiator, be present and be ready to resolve final differences.

h. Typing (if necessary).

i. Review by Purchase Division Directors. The PP will be reviewed by the applicable Division Director unless the ELEX 2011 Analyst and the Contracting Officer or Contract Negotiator agree that there were no substantive changes.

j. Finished PP to Program Manager for signature.

k. Finished PP to 201 for review.

l. Finished PP to 02 for signature.

m. Finished PP to 00 for signature.
(The 45 days ends here)

n. Finished PP to CNM-PM (applies to SPECOM, TRIDENT, and ASW PP's). There is no standard.

o. Finished PP reproduced and mailed to CNM for review. The standard is two (2) days.

p. Review by CNM. There is no NAVELEX standard.

5. Development of PP's when ELEX 02 Will Not Have the Contracting Responsibility:

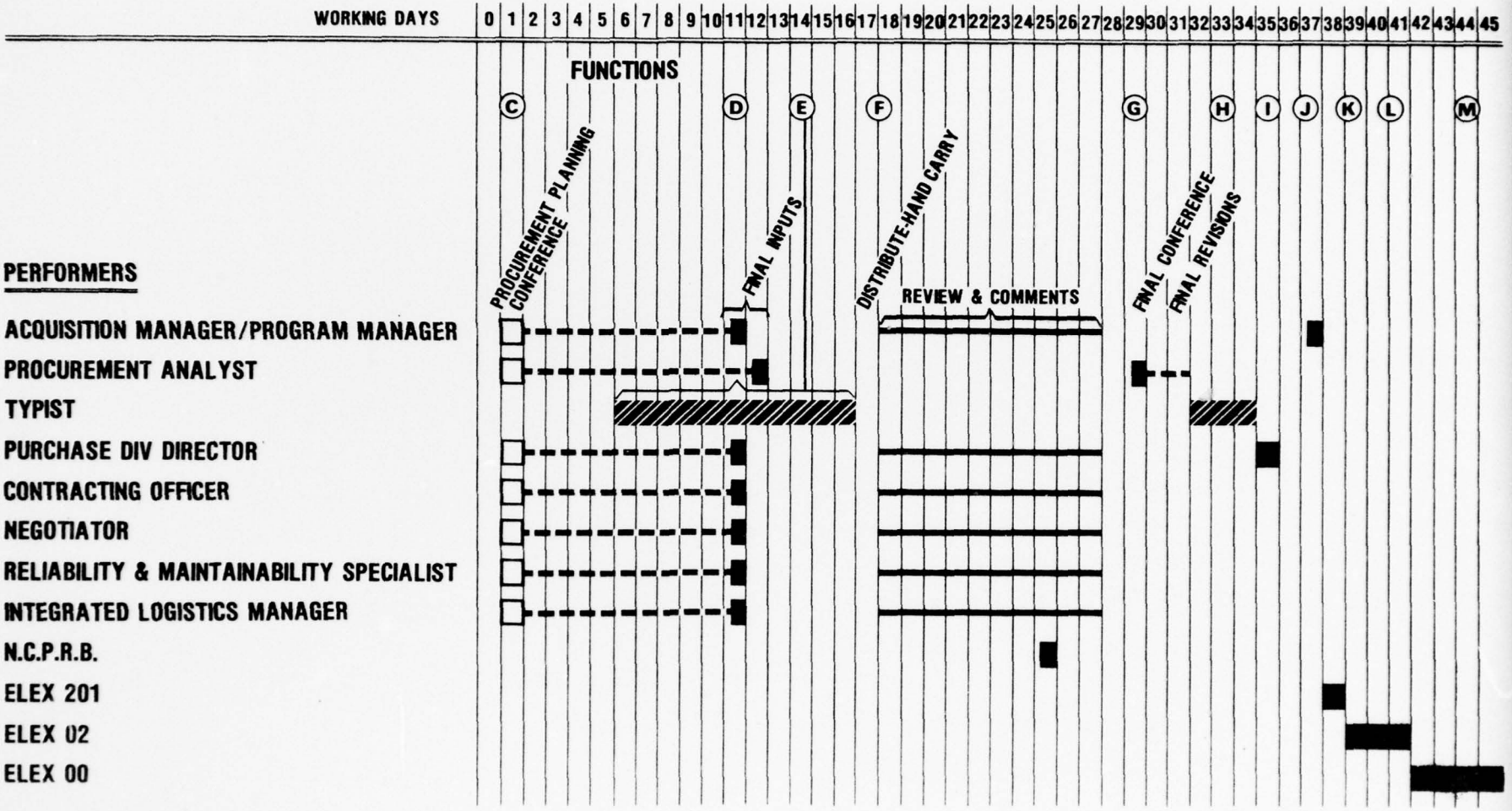
a. In any case where a development which appears to merit a PP is being assigned to NAVSEA, or to a field activity; and ELEX 02's assent to transfer of funds, issuance of work orders, etc., is required, it will not be given unless 02 has positive assurance that a PP will be issued.

b. ELEX 2011 personnel are available for the review of and preparation of PP's for work being performed in the field to the same extent as contracting work being performed in ELEX 02.

ENCLOSURE 2 TO MEMO
SER 116-2011

MILESTONE CHART

PREPARATION REVIEW AND APPROVAL OF PROCUREMENT PLANS



OPNAV 5216/144 (REV. 6-70)
S/N 0107-LF-778-8099

DEPARTMENT OF THE NAVY

Memorandum

DATE:

FROM: ELEX 2011

TO: Distribution List

SUBJ: Procurement Plan No. 78-

ENCL: (1) Copy of Propsed Final Draft, PP 78-# (title)

1. Enclosure (1) is forwarded for your review and concurrence. Command policy now dictates that Procurement Plans will be approved within NAVELEX and forwarded to NAVMAT within forty-five (45) days of commencement of preparation. In order to accomplish this, it is imperative that enclosure (1) receive your immediate attention.

2. Please indicate your approval by endorsement to this memorandum. Minor changes, i.e., typographical errors, misspelled words, etc. may be annotated on the PP. For substantive changes it is recommended that you furnish your comments by memorandum or route sheet. Storage space is limited and only the proposed substantive changes will be retained.

3. There will be a meeting at _____* in room _____, for the purpose of having a final discussion of the PP. Your approval or comments may be delivered at that meeting. If there are substantive issues they must be resolved at that meeting. You are requested to attend.

4. A copy of the Procurement Plan will be sent to all members of the Planning Council at the time it is forwarded to NAVMAT.

CLAUD W. CARAWAN, JR.

Distribution List:
ELEX 2--
2--
4042
470
05E

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*Usually 10 working days

Enclosure (3) to ELEX 2011
Memo Ser 116-2011

BIBLIOGRAPHY

1. DOD Directive 4100.35, Development of ILS for Systems, 1 Oct 1970
2. DOD Directive 5000.1, Major System Acquisitions, 18 Jan 1977
3. DOD Directive 5000.2, Major System Acquisition Process, 18 Jan 1977
4. OPNAV INST 3960.10, Test and Evaluation, 22 Oct 1975
5. OPNAVINST 4720.90, Approval of Systems for Service Use, 22 Aug 1974
6. OPNAVINST 5000.42A, Weapons Systems Selection and Planning, 3 Mar 1976
7. OPNAVINST 5440.47D, Mission and Functions of OPTEVFOR, 6 Mar 1973
8. NAVMATINST 3960.6A, Test and Evaluation, 3 May 1976
9. NAVMATINST 4720.1, Approval of Systems for Service Use, 13 Dec 1974
10. NAVELEXINST 2410.1A, Electromagnetic Compatibility, 1 Dec 1976
11. NAVELEXINST 3960.3, Test and Evaluation, 18 May 1976
12. NAVELEXINST 4000.9B, Approval of Systems for Service Use, 7 June 1976
13. NAVELEXINST 4000.10, ILS Support Plans for Electronics Systems, 12 Oct 1973
14. NAVELEXINST 4200.68, Advance Procurement Planning, 8 May 1973
15. NAVELEXINST 4855.2A, Quality Assurance Program, 27 Jan 1977
16. NAVELEXINST 4858.1B, Systems Effectiveness Engineering Program, 7 July 1976
17. NAVELEXINST 4858.2, Command Reliability Program, 27 May 1977
18. NAVELEXINST 4858.3, Maintainability Program, 31 May 1977
19. NAVELEXINST 4858.4, Human Engineering Program, 31 May 1977
20. NAVELEXINST 5100.5A, System Safety Program, 8 Dec 1976