



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, D.C. 20350-2000

IN REPLY REFER TO

OPNAVINST 4720.2G
N43
03 MAY 1995

OPNAV INSTRUCTION 4720.2G

From: Chief of Naval Operations

Subj: FLEET MODERNIZATION PROGRAM (FMP) POLICY

Ref: (a) OPNAVINST C3000.5E (NOTAL)
(b) COMNAVSEASYSCOMINST C9210.4 (NOTAL)
(c) FMP Management and Operations Manual
(SL720-AA-MAN-010) (NOTAL)
(d) Public Law 103-189, Sec. 8098 (NOTAL)
(e) OPNAVINST 9640.1 (NOTAL)
(f) OPNAVINST 5100.19C

Encl: (1) Types of Alterations
(2) SHIPALT Categories
(3) FMP Process Outline
(4) FMP Terms Glossary

1. Purpose. To set policy for the modernization of all ships and service craft of the active and reserve fleets. This instruction has been substantially revised and should be reviewed in its entirety.

2. Cancellation. OPNAVINST 4720.2F, OPNAVINST 4700.33B, OPNAVINST 4720.93.

3. Scope. The FMP was established to provide a structure for the orderly identification, approval, design, planning, programming, budgeting, and accomplishment of improvements that increase the capability or reliability of a ship to perform its assigned mission. This instruction covers alterations to commissioned ships and service craft of the U.S. Navy except as noted below:



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7-1-88 2000 12-01-00

OPNAVINST 4720.2G

03 MAY 1995

a. Strategic Systems Program Alterations (SPALTS) affecting the configuration and/or capabilities of systems and equipment are under the cognizance of the Director, Strategic Systems Programs (DIRSSP).

b. Temporary modifications authorized by the Type Commander required for test and evaluation, research and development programs or in support of mission or exercise requirements.

c. Aircraft Launch and Recovery Equipment (ALRE) internal equipment changes are under the cognizance of Commander, Naval Air Systems Command (COMNAVAIRSYSCOM) *also*

d. Alterations affecting configuration of hardware, software and support equipment of the TRIDENT System are under cognizance of Commander, Naval Sea Systems Command (COMNAVSEASYSKOM) (PMS 396).

e. Alterations to nuclear propulsion plants and nuclear support facilities under the cognizance of the Director Naval Nuclear Propulsion Program (Office of the Chief of Naval Operations (OPNAV) Staff NOON/NAVSEA-08). Nuclear Alterations (NUCALTs) under the cognizance of NAVSEA-08 are exempt from the procedures set forth in this instruction. Reference (a) defines the responsibilities within the Navy for the operation of naval nuclear powered ships. Reference (a) specifies, in part, that Commander, Naval Sea Systems Command (COMNAVSEASYSKOM) in cooperation with the Deputy Assistant Secretary for Naval Reactors, Department of Energy (DOE), shall be responsible for:

(1) The design specification, construction, inspection, certification, test, refueling, overhaul and conversion of naval nuclear propulsion plants.

(2) The design, specification, development, procurement, test, installation, maintenance, and disposition of all nuclear systems and components used in naval nuclear propulsion plants, and any special maintenance and service facilities related thereto.

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OPNAVINST 4720.2G
03 MAY 1995

(3) All aspects of reactor plant safety related to nuclear propulsion plants. Reference (a) more specifically assigns, within the Department of the Navy, these and other responsibilities for technical matters pertaining to nuclear propulsion in U.S. naval ships and craft to COMNAVSEASYSKOM, Director Naval Nuclear Propulsion Program, NAVSEA-08. Consistent with this policy, the Director Naval Nuclear Propulsion Program is responsible for all modifications to nuclear portions of naval nuclear propulsion plants (e.g., the reactor plants and the tender nuclear support facilities) for which responsibility has not been transferred by agreement to other COMNAVSEASYSKOM Directorates. The Director Naval Nuclear Propulsion also has responsibility for oversight of modifications to those portions of naval nuclear propulsion plants (e.g., nonreactor plant systems and equipment defined in reference (b)) which affect reactor plant safety or safe and reliable operation of nuclear propulsion plants. This responsibility includes:

(a) Developing, approving, and issuing all alterations to naval nuclear reactor plants and tender nuclear support facilities.

(b) Determining COMNAVSEASYSKOM nuclear ship alteration programming and budget requirements.

(c) Directing the execution of COMNAVSEASYSKOM nuclear ship alteration funds.

(d) Authorizing advance planning and accomplishment of Title K nuclear ship alterations. As necessary, requesting Type Commanders to authorize accomplishment of Title D and Title F nuclear ship alterations.

(e) Planning, programming, budgeting for, and procurement and control of COMNAVSEASYSKOM (NAVSEA-08) managed materiel for nuclear ship alterations.

OPNAVINST 4720.2G

03 MAY 1995

(f) Tasking reactor plant planning yards, reactor plant prime contractors, and other COMNAVSEASYSKOM (NAVSEA-08) design agencies, as required, for design, logistics, materiel procurement and other designated services to support development and accomplishment of nuclear ship alterations.

(g) Managing the development and maintenance of ship alteration procedures for nuclear ship alteration approval status reports, and other alteration documentation as required.

(h) Tasking COMNAVSEASYSKOM Directorates and Ship Program Managers (SPM) responsible for non-nuclear portions of naval nuclear propulsion plants with development and programming of modifications to non-reactor plant systems and equipment where those modifications are necessary for reactor safety or for safe and reliable operation of nuclear propulsion plants or associated reactor safeguards systems and features.

4. Background. Ship alterations are programmed for accomplishment through the FMP. The FMP consists of an integrated multi-year schedule of equipment procurement and installations planned for accomplishment on each ship, drawn from integrated, prioritized lists of ship alterations applicable to each ship class. This integrated plan is developed and programmed by OPNAV resource sponsors. The FMP also includes engineering design services, program design services, and program support required for program execution. Funds for accomplishment of the FMP are programmed by OPNAV resource sponsors based on requirements identified by the appropriate Hardware Systems Command (HSC) Life Cycle Engineering Manager (LCEM) or SPM. The FMP is developed by OPNAV in conjunction with Fleet Commanders-in-Chief (FLTCINCs), Type Commanders (TYCOMs), COMNAVSEASYSKOM, COMNAVAIRSYSKOM, and Commander, Space and Naval Warfare Command (COMSPAWARSYSKOM).

5. Policy

a. The FMP is intended to provide an orderly and reasoned process for the identification, approval, development, funding and execution of characteristic changes to U.S. Navy ships and

OPNAVINST 4720.2G
03 MAY 1995

service craft. Use of the process will prevent unauthorized and unsupported alterations to ships. Unauthorized alterations represent a cost to the Navy in terms of loss of configuration control, inefficiencies due to unexpected interferences, systems and equipment which are not logistically supported, and resources expended for support for items which are no longer required. Therefore, all changes, alterations and arrangement variations from the approved class plans on ships, either in maintenance availabilities or in operation, are prohibited unless they follow the FMP process outlined in this instruction. Specifically:-

(1) No alterations shall be made unless previously approved and authorized for accomplishment by competent authority (FLTCINCs for D, F and TYCOM alterations, HSCs for non-military improvements, OPNAV resource sponsors for all others).

(2) Alterations affecting the military characteristics of a ship may be approved only by CNO, who shall establish the priority for the accomplishment of such alterations.

(3) Non-military improvements may be approved and authorized for accomplishment by the cognizant HSC consistent with assigned responsibilities and with concurrence of the CNO.

(4) Alterations Equivalent to Repairs (AERs) may be approved and authorized for accomplishment by FLTCINCs, after technical approval by COMNAVSEASYSKOM.

(5) In the interest of standardization, approved alterations, including AERs, shall normally be authorized for all ships to which they are applicable. These alterations are not necessarily required, however, to be installed in all ships of the class.

(6) All alterations will be accomplished in compliance with applicable quality assurance, safety and environmental statutes/regulations.

OPNAVINST 4720.2G
03 MAY 1995

b. Ship alterations comprise any change in hull, machinery, equipment, or fittings which involves change in design, material, quantity, location, or relationship of the component parts of an assembly to the ship. Ship alterations are classified by title/type and are described in enclosure (1).

c. The inventory of approved alterations can be larger than that which can be accomplished within schedule availability or resource constraints. The developmental costs of alterations should be considered. If the initial review of a change proposal does not demonstrate cost effectiveness or measurable improvement to the ship or system, developmental costs should not be invested. In order to allow the OPNAV resource sponsor to evaluate the FMP in functional terms, ship alterations are assigned functional categories based on the criteria described in enclosure (2).

d. The general process outline for the FMP is described in enclosure (3). This process is meant to provide general guidance for developing, programming, and executing the FMP. Specific FMP process descriptions are contained in reference (c).

e. Enclosure (4) provides definition of key terms associated with the FMP.

f. No alterations other than category ONE alterations (safety and mandatory requirements as defined in enclosure (2)) will be accomplished on ships within 5 years of decommissioning without specific approval from the Secretary of the Navy. Reference (d) pertains.

6. Responsibilities

a. Deputy Chief of Naval Operations (Resources, Warfare Requirements, and Assessments N8)

(1) Coordinate the overall planning and programming of ship modernization efforts among the OPNAV resource sponsors through all phases of Program Objectives Memorandum (POM) and budget development.

OPNAVINST 4720.2G
03 MAY 1995

(2) Ensure modernization programs are integrated, compatible, and in accordance with the priorities set forth by the Joint Mission Area/Support Area (JMA/SA) Assessments undertaken for the Resources Requirements Review Board (R³B).

(3) Establish, and provide oversight and leadership for, an FMP Working Group under the auspices of the Ships Characteristic Improvement Panel (SCIP) to provide centralized formulation, coordination and monitoring of the FMP.

b. Directors of OPNAV Warfare Divisions (Expeditionary Warfare, Surface Warfare, Undersea Warfare, Air Warfare) (N85.86.87.88)

(1) In accordance with the capability priorities established by the annual JMA/SA assessments prepare a coordinated surface ship, service craft, submarine, and aircraft carrier modernization plan for submission to the SCIP FMP Working Group

(2) Determine requirements, recommend characteristics and serve as the resource sponsor for modernization of surface ships, service craft, aircraft carriers and submarines.

(3) Categorize, prioritize and direct purging of previously accomplished alterations within the FMP Management Information System (FMPMIS) based upon inputs provided from HSCs, FLTCINCs, and TYCOMs.

(4) Plan, program and authorize program changes for cognizant ships.

(5) Coordinate the activities within OPNAV in the development and justification of procurement and installation plans to support FMP requirements for cognizant platforms.

(6) Provide representatives to the SCIP FMP Working Group.

OPNAV 4720.2G ** ■ 6726099 0121311 729 ■

OPNAVINST 4720.2G

03 MAY 1996

c. Director, Supportability, Maintenance, and Modernization Division (N43)

- (1) Develop overall FMP policy for the OPNAV staff.
- (2) During the POM process, ensure maintenance and modernization programs are integrated, compatible, and balanced in relation to overall Navy maintenance planning.
- (3) Act as POM assessment sponsor for the FMP and FMPMIS resource sponsor.
- (4) Maintain current in FMPMIS the CNO depot level availability schedule.

d. Director, Space and Electronic Warfare (N6)

- (1) In accordance with the capability priorities established by the annual JMA/SA assessments prepare a coordinated modernization program for Command, Control, Communications, Computers and Intelligence (C4I-related) alterations to be installed on ship platforms for submission to the SCIP FMP Working Group.
- (2) Act as resource sponsor for C4I-related alterations.
- (3) Categorize, prioritize and direct purging of previously accomplished COMSPAWARSYSCOM, CNO(N6)-sponsored, C4I alterations within FMPMIS based upon inputs provided from Hardware Systems Commands, FLTCINCs, and Type Commanders.
- (4) Plan, program and authorize program changes for cognizant COMSPAWARSYSCOM, CNO(N6) sponsored, C4I alterations.
- (5) Coordinate with the CNO(N8) organization in the development and justification of procurement and installation plans to support FMP requirements.

OPNAVINST 4720.2G

03 MAY 1995

(6) Provide representatives to the SCIP FMP Working Group.

e. Deputy Chief of Naval Operations (Manpower and Personnel (N1)). Use alterations programmed in FMPMIS as a planning document for manpower and training requirements. In conjunction with OPNAV resource sponsors (N6,85,86,87,88), determine the manpower and training changes required by planned modernization.

f. Commander, Naval Sea Systems Command

(1) Act as central technical authority for all ship and submarine platforms and provide technical advice on FMP matters to OPNAV, FLTCINCs, TYCOMs and other Systems Commands (SYSCOMs) as required.

(2) Coordinate, as the technical and integration focal point for ship and submarine platforms, necessary actions for the proposal, development, approval and accomplishment of those alterations under the cognizance of COMNAVAIRSYSCOM, COMSPAWARSYSCOM, FLTCINCs and TYCOMs.

(3) Issue implementing instructions within COMNAVSEASYSYSCOM.

(4) Prepare, submit and execute the FMP budget for cognizant Title K SHIPALTs, Ordnance Alterations (ORDALTs), Machinery Alterations (MACHALTs), and applicable field changes and engineering changes.

(5) Execute the COMNAVSEASYSYSCOM FMP ship alteration installation plan for CNO. Develop, justify and administer the COMNAVSEASYSYSCOM portion of the FMP installation budget.

(6) Initiate and approve all technical improvements under COMNAVSEASYSYSCOM cognizance.

OPNAVINST 4720.2G

03 MAY 1986

(7) Develop class modernization plans if required by Resource Sponsors to ensure an orderly achievable modernization program.

(8) Develop and provide manday rates, manday estimates, incidental materiel estimates and related cost estimates. Alteration cost estimates will be continually updated in FMPMIS to reflect latest available cost data. ✓

(9) Provide technical support for for the development and accomplishment of cognizant alterations, including required documentation and Integrated Logistics Support (ILS). Proper technical documentation and ILS is required as part of the alteration installation.

(10) Provide support and participation as necessary in OPNAV convened fleet modernization conferences.

(11) Act as material manager for systems and equipment under COMNAVSEASYSKOM cognizance and procure the centrally provided materiel for the FMP. Ensure correlation of COMNAVSEASYSKOM FMP materiel procurement with installation program and maintain the current materiel requirements and status for all programmed alterations in FMPMIS.

(12) Conduct Cost and Feasibility (C&F) studies as directed by OPNAV resource sponsors.

(13) Plan, implement, manage and administer the information systems required to support the full range of FMP process support. ✓

(14) Coordinate the planned accomplishment of alterations to ships with appropriate SPM/LCEM to ensure that each ship availability package is executable, and issues such as electromagnetic interference (EMI) and stability are considered.

(15) Identify all alterations that remove or directly relieve a condition that (1) affects the structural or operational capability of a ship such that non-accomplishment

OPNAVINST 4720.2G

03 MAY 1995

would result in loss of sea worthiness, stability, steering control, propulsion or submarine water tight integrity, or (2) represents a danger to life, major health hazard or serious injury, as well as alterations that improve ship sea worthiness, stability, steering control propulsion or submarine water tight integrity or improve personnel safety, provide a healthier environment or reduce the risk of injury as SAFETY alterations. For those alterations identified as SAFETY alterations, determine the Hazard Severity Category, Mishap Subcategory and Risk Assessment Code, as defined in reference (f), and enter the information in FMPMIS ✓

g. Commander, Space and Naval Warfare Systems Command and Commander, Naval Air Systems Command

(1) Designate a central point of contact for all matters related to the FMP. (COMSPAWARSSYSCOM/COMNAVAIRSSYSCOM)

(2) Act as materiel manager for systems and equipment under respective SYSCOM cognizance and procure the centrally provided materiel for the FMP. Ensure correlation of respective SYSCOM FMP materiel procurement with installation program and maintain the current materiel requirements and status for all programmed alterations in FMPMIS. ✓

(3) Initiate and approve all systems/equipment-level technical improvements under COMSPAWARSSYSCOM/COMNAVAIRSSYSCOM cognizance.

(4) Provide technical support for development and accomplishment of cognizant alterations, including required documentation and ILS. Proper technical documentation and ILS is required as part of the alteration installation.

(5) Coordinate planning, design, scheduling and installation requirements with cognizant COMNAVSEASYSYSCOM SPMS to ensure that each ship availability is executable, and issues such as EMI and stability are considered. Coordinate installation planning and scheduling with the applicable naval supervising

OPNAVINST 4720.2G
03 MAY 1995

activity (NSA) or local industrial activity (Supervisor of Shipbuilding, Conversion and Repair (SUPSHIP) office, Naval Shipyard, Ship Repair Facility (SRF), etc.).

(6) Prepare, submit and execute the FMP budget for cognizant Title K shipalts.

(7) Provide support and participation as necessary in OPNAV convened fleet modernization conferences.

(8) Conduct C&F studies as directed by OPNAV resource sponsors.

h. Fleet Commanders-in-Chief

(1) Endorse requests for alterations affecting military/survivability characteristics when submitted by TYCOMs.

(2) Endorse TYCOM recommendations for Title K alteration priorities and forward to OPNAV sponsors for consideration by the SCIP FMP Working Group.

(3) Budget for design and installation of Title D and F alterations.

i. Type Commanders

(1) Submit requests through FLTCINCs to CNO to change FMP plans.

(2) Submit recommendations for Title K alteration categories and priorities to OPNAV resource sponsors through FLTCINCs.

(3) Routinely categorize and prioritize Title D and F alterations. Recommend to OPNAV resource sponsors cancellation or elimination of those alterations that are no longer desired or required.

OPNAVINST 4720.2G

03 MAY 1985

(4) Participate in fleet modernization conferences to review status of materiel, current manday estimates, design support and integrated logistics for Title D and F alterations. Proper technical documentation and ILS are required prior to completing alteration installation.

(5) Enter TYCOM authorization and completion status codes for all Title D and F alterations in FMPMIS. ✓

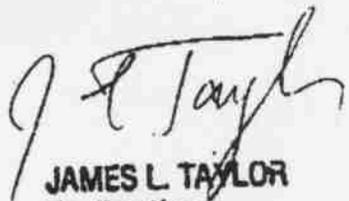
(6) Enter data into FMPMIS for TYCOM-budgeted Title D and Title F alterations, subject to the following policies: ✓

(a) Allow time to support timely execution of design, materiel process, and ILS delivery.

(b) Review material requirements and authorize materiel procurement and design through scheduling in FMPMIS. ✓

(7) Coordinate availability scheduling with the HSCs to plan for and schedule the accomplishment of alterations.

7. Dissemination. Wide dissemination of this instruction is directed to insure that all concerned are thoroughly acquainted with and adhere to revised FMP policies.


JAMES L. TAYLOR
By direction

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(see next page)

OPNAVINST 4720.2G

03 MAY 1985

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OPNAVINST 4720.2G

03 MAY 1985

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OPNAVINST 4720.2G

03 MAY 1995

TYPES OF ALTERATIONS

1. Ship Alteration (SHIPALT). Any change in hull, machinery, equipment, or fittings which involves change in design, material, quantity, location, or relationship of the component parts of an assembly. SHIPALTs are classified by title.

a. Title D SHIPALT - A permanent alteration that is equivalent to a repair, does not affect the military characteristics of a ship, and may require Centrally Provided Materiel (CPM) but does not require Headquarters CPM (HCPM) for accomplishment. Title D alterations generally include more efficient, cost effective designs that improve ship maintainability. Title D alterations are technically approved by COMNAVSEASYSKOM and authorized for accomplishment by the FLTCINC.

b. Title F SHIPALT - A permanent alteration that does not affect the military characteristics of a ship, does not require CPM, and is within the capabilities of ship's force for accomplishment. Title F alterations are technically approved by COMNAVSEASYSKOM and authorized for accomplishment by the FLTCINC.

c. Title K SHIPALT - A permanent alteration to provide a military characteristic or additional capability not previously held by a ship affecting configuration controlled areas or systems of a ship or which otherwise requires the installation of HCPM. These SHIPALTs are approved for development and authorized for accomplishment by the CNO (military improvements) or the HSC (non-military improvements). The technical approval for Title K SHIPALTs is provided by COMNAVSEASYSKOM.

d. Title K-P SHIPALT - A Title K SHIPALT which is within forces afloat or Alteration Installation Team (AIT) capability

Enclosure (1)

Information Handling Services.

OPNAVINST 4720.2G
03 MAY 1995

for accomplishment and which special program and centrally provided materials required for accomplishment of these alterations are provided as a package by the cognizant HSC.

2. Machinery Alteration (MACHALT). Any change to hull, mechanical, electrical (HM&E) equipment or systems where the changes are contained within boundaries of the individual equipment or systems and have limited system ramification. MACHALTs may be accomplished outside of an industrial availability.

3. Ordnance Alteration (ORDALT). An ORDALT is a change made to ordnance equipment or their computer programs by the addition, deletion, rework, or replacement of parts, assemblies, or equipment by a change in assembly procedures.

4. Type Commander Alterations (TYCOMALTs). TYCOMs are authorized to approve temporary changes to compartments of ships, other than nuclear powered ships, ship nuclear support facilities or compartments adjacent to ship nuclear support facilities, through use of TYCOMALTs subject to the following requirements and criteria:

a. Military characteristics of the ships must not be affected (for the purposes of this instruction, changing the number of berths is not considered to be a change in military characteristics).

b. Only those temporary changes necessary to meet the requirements of higher authority shall be proposed for accomplishment.

c. All proposed TYCOMALTs must be submitted formally to Naval Sea Systems Command for review and technical approval. COMNAVSEASYS COM review shall consider safety, damage control coordination and effectiveness, ship stability, traffic flow, materials and installation methods.

Enclosure (1)

OPNAVINST 4720.2G
03 MAY 1995

- d. Watertight integrity or the ability to establish damage control condition must not be affected.
- e. Operation or maintenance of installed equipment must not be interfered with.
- f. Fluid, electrical, heating cooling ventilation, plumbing or electrical systems must not be involved.
- g. Changes must not require additional ILS.
- h. Compartments or areas covered by non-deviation drawings must not be involved.
- i. Installed equipment must not be modified.
- j. Materials must meet approved MILSPEC or industry standards.
- k. Installation must be accomplished in accordance with approved methods and procedures.
- l. All changes should be limited to compartments reserved for future growth whenever possible.
- m. All accomplished changes must be formally documented at the TYCOM level, copy to the cognizant COMNAVSEASYS COM SPM and planning yard, including actions necessary to restore compartment to original configuration.
- n. No habitability self-help improvements shall be accomplished unless contained in class habitability improvement plans developed in accordance with reference (c). If specific class habitability improvement plans have been previously approved by COMNAVSEASYS COM, items contained there do need not be resubmitted to COMNAVSEASYS COM for TYCOMALT approval.

Enclosure (1)

OPNAVINST 4720.2G

03 MAY 1995

o. Ship's force (with or without IMA assistance) must be able to restore compartment to its original configuration within 72 hours, if so directed.

p. All costs, including restoration of the space or compartment to its original configuration, are to be funded by the TYCOM.

Enclosure (1)

OPNAVINST 4720.2G

03 MAY 1995

SHIPALT CATEGORIES1. Category ONE. (Safety and Mandatory)

a. Description. Includes alterations required to provide a ship which is safe, mobile and capable of supporting future modernization. That level also includes those mandatory requirements imposed upon the Navy by outside agencies.

b. Criteria. For an alteration to be in category ONE, it must accomplish one of the following:

(1) Fulfill safety requirements. Safety alterations which remove or directly relieve a condition that:

(a) affects the structural or operational capability of a ship such that non-accomplishment would result in loss of sea-worthiness, stability, steering control, propulsion or submarine water-tight integrity, or

(b) represents a danger to life, major health hazard or serious injury.

(2) Safety improvements. Alterations that improve ship sea-worthiness, stability, steering control, propulsion or submarine water-tight integrity or improve personnel safety, provide healthier environment or reduce the risk of injury.

(3) Fulfill requirements for safe and reliable nuclear propulsion plant operation. Non-nuclear ship alterations to the propulsion plants in nuclear powered ships for this purpose are mandatory.

(4) Increase basic services required to perform another category ONE alteration (e.g., chilled water, electricity).

(5) Fulfill legal requirements imposed by outside agencies (e.g., Environmental Protection Agency (EPA), Occupational Safety and Health Agency (OSHA), etc. standards).

Enclosure (2)

OPNAVINST 4720.2G

03 MAY 1995

2. Category TWO. (Reliability and Maintainability: Primary Mission Area)

a. Description. Includes alterations which provide significant increases in reliability and maintainability of installed primary mission area systems/equipment.

b. Criteria. For an alteration to be in category TWO, it must accomplish both of the following:

(1) Significantly improve reliability and maintainability.

(2) Provide operating, preventive maintenance and repair cost savings which will outweigh the installation cost.

3. Category THREE. (Primary Mission System Modernization)

a. Description. Includes alterations which provide increased capability in combat mission (combatant ships), primary mission (non-combatant ships), ship survivability and self-protection areas.

b. Criteria. For an alteration to be in category THREE, it must increase a capability which is required to:

(1) Counter a present or future threat; or,

(2) Fulfill present or future assigned operational tasks in primary mission areas.

4. Category FOUR. (Reliability and Maintainability: Secondary Mission Area)

a. Description. Includes alterations which provide significant increases in the reliability and maintainability of installed secondary mission area systems/equipment.

Enclosure (2)

OPNAVINST 4720.2G
03 MAY 1985

FMP PROCESS OUTLINE

The Hardware Systems Commands (COMNAVSEASYSKOM, COMSPAWARISYSKOM, and COMNAVAIRISYSKOM) are responsible for managing, budgeting, and executing the FMP as directed by CNO, including equipment procurement (as required), design development, alteration accomplishment and ILS. FLTCINCs and TYCOMs are responsible for various aspects of the accomplishment of Title D and F alterations. The following process is meant as a guideline for alteration development, planning, programming and execution of the FMP:

a. Alteration Proposal and Development

(1) Proposed changes to approved ships configurations including space rearrangements, the addition, removal, replacement or relocation of equipment, deviations from approved ship configuration baselines, and improvements to equipment require formal review and approval through the alteration proposal and development process.

(2) A proposed improvement to ships and their equipment/ systems may originate from sources inside and outside the Navy. Upon receipt, proposed improvements will be categorized and evaluated for possible inclusion in the FMP.

(3) There are three types of ship improvements: military, survivability, and technical.

(4) MACHALTs, field changes and engineering changes are developed and programmed separately from SHIPALTs. ORDALTs which are conjunctive with a SHIPALT will be covered within the SHIPALT. Non-SHIPALT alterations are detailed in reference (c).

b. Planning and Programming

(1) The FMP planning and programming process starts with the deliberations and decisions of the JMA/SA assessments of capability requirements. Shortfalls in capability requiring

Enclosure (3)

Information Handling Services.

OPNAVINST 4720.2G

03 MAY 1995

future modernization efforts for ship platforms will be identified in this forum.

(2) Based on macro modernization requirements identified in the JMA/SA assessments, the individual resource sponsors (N6, N85, N86, N87, and N88) will identify individual and groups of alterations which will meet the modernization requirements.

(3) Each resource sponsor will present its modernization plans to the SCIP FMP Working Group, under the auspices of the SCIP for approval and integration into an overall OPNAV priority of ship modernization. Based on approval and level of priority assigned by this group, the resource sponsors will proceed to program alterations during the POM process.

(4) The FMP programming process will be accomplished by each OPNAV resource sponsor for the ships or equipment under their cognizance. Programming of resources will be in accordance with programming guidance issued by CNO (N80). CNO N8 will provide overall coordination of all resource sponsors FMP program development. The end product of this process is an integrated program of equipment procurement, authorized alterations, design and logistics support which install the authorized system and equipment improvements to the Navy's ships and service craft. A balanced program requires coordination of funding, alteration design development, equipment procurement (as required) and accomplishment.

(5) The OPNAV resource sponsors will review the SHIPALT categories/priorities at least annually. HSCs, FLTCINCs, and TYCOMS will provide input on the assignment of category, priority and the validity of alterations. Categories will be assigned in accordance with the framework outlined in enclosure (2) to this instruction.

(6) FMP management functions will be supported by the FMP Management Information System (FMPMIS) which contains planning, programming and material status information required for timely and accurate decision making. FMPMIS interfaces with the Ship

Enclosure (3)

OPNAVINST 4720.2G

03 MAY 1995

Alteration Budget Reporting and Evaluation System (SABRES), the Ship Alteration Financial Execution System (SAFE) and other alteration installation management information systems supporting other alteration programs (i.e., ORDALTs, MACHALTs, etc.). FMPMIS is the only sanctioned authoritative source of information for all activities to use in carrying out their responsibilities under this instruction, and therefore must reflect the most current and complete modernization information.

(7) The OPNAV resource sponsors program resources for the accomplishment of alterations (including equipment and design) to be accomplished on an individual hull during a specific maintenance availability as part of Sponsor Program Proposals (SPPs) during the POM process. This resourcing action will be based upon priorities established by the SCIP FMP Working Group and consistent with availability schedules, Initial Operational Capability (IOC) of new equipment, hardware procurement lead times, available industrial mandays, installation durations and expected funding levels. They will also program resources for alteration design and ILS as required to support installation plans. In order to assure proper resource allocations, once assigned to a specific availability for accomplishment, alterations shall not be rescheduled without approval of the appropriate resource sponsor and N43.

(8) The FMP funded portion of the budget will include only approved alterations, design, and logistics support.

(9) ILS must be available to support the installation and checkout of systems and equipment. Technical documentation and logistics support must be on board by the end of the availability in which the alteration is installed.

(10) Unless an alteration has been incrementalized and numbered separately, partial accomplishment of individual alterations will not normally be programmed or authorized. However, if operational requirements dictate, partial alterations

Enclosure (3)

OPNAVINST 4720.2G
03 MAY 1995

may be authorized by the OPNAV resource sponsor on a case-by-case basis.

(11) No alteration shall be scheduled for accomplishment as an emergent requirement in the budget execution year unless funds, design, material and ILS are available for installation.

(12) Quick Reaction Capability (QRC) requirements, regardless of the source, are requirements which require rapid entry of high priority Secretary of Defense (SECDEF), Secretary of the Navy (SECNAV), CNO, national interest items or vital technical changes into the FMP process. QRC requirements necessitate rapid SHIPALT development and close coordination between OPNAV resource sponsors and the HSCs. The cognizant HSC will be notified of QRC requirements in writing by OPNAV and will be directed to proceed with the rapid development of the SHIPALT following the normal SHIPALT development process as closely as possible.

(13) Alterations will be periodically reviewed to ensure ability to execute as planned. In the review, emphasis is placed on identifying high risk alterations as a result of design, material or ILS deficiencies and to determine whether to defer such alterations or whether actions can be initiated to reduce risk to an acceptable level.

(14) Ship Selected Records (SSR) must be fully updated to reflect the actual ship configuration.

Enclosure (3)

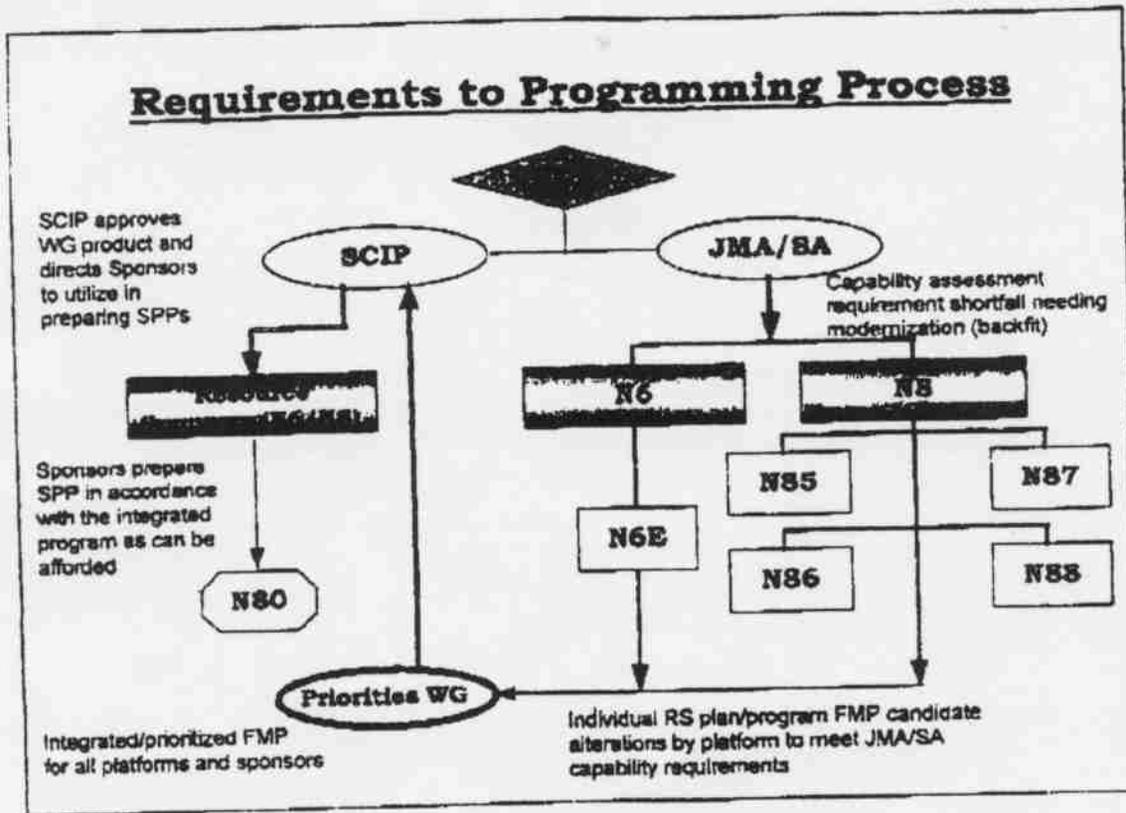


Figure 1

c. Program Execution

(1) The HSCs, in consultation with OPNAV resource sponsors will execute the approved FMP ship alteration installations in accordance with this instruction. COMNAVSEASYS COM serves as the execution coordinator for FMP ship alteration installation plan and has overall responsibility for the technical development and approval of alterations.

(2) The HSCs will inform the cognizant OPNAV Sponsors, as it becomes apparent, of the inability to execute any part of approved program. The FLTCINC and TYCOM should also be informed.

Enclosure (3)

OPNAVINST 4720.2G
03 MAY 1995

(3) When a HSC determines deferral or cancellation of SHIPALTs is necessary or that circumstances allow additions to CNO-approved programs, the following sequence will be followed:

(a) The HSC will recommend specific SHIPALTs to the cognizant resource sponsor.

(b) The OPNAV resource sponsor will approve specific deletions and/or additions to the program. Any changes to the program (additions/deletions) for a specific availability will be forwarded, along with detailed justifications, by the HSC to the appropriate OPNAV resource sponsor for approval.

(4) Use of FMP installation funds, including advance planning funds, is authorized to accomplish only that work defined in the execution year installation program as approved by OPNAV.

(5) Accomplishment of unauthorized alterations and rearrangement of equipment and spaces which deviate from approved configuration baselines is prohibited.

(6) Modernization requirements which are identified out of phase with the normal programming and budgeting cycle (emergent requirements) will be reviewed by the appropriate resource sponsor. If the OPNAV resource sponsor determines that out-of-phase installation will be funded, the alteration will be authorized by OPNAV for accomplishment.

(7) FLTCINC/TYCOM maintenance funding can be used to install Title K ship alterations that do not install HCPM if approved by the OPNAV resource sponsor. The alteration material availability, logistics, and design must support scheduled installation.

(8) Cognizant TYCOMs will be responsible for executing Title D and F alterations.

Enclosure (3)

03 MAY 1995

(9) For HSC material items, the determination whether non-standard, non-stocked materiel will be procured by field contracting activities will be made by SYSCOM technical Life Cycle Managers (LCMs). Whenever this determination is made, the LCM will provide either detailed justification for sole source procurement to support the Federal Acquisition Regulation guidelines or specifications and other technical data to support full competitive procurement. The HSC will provide this data to the field contracting activity.

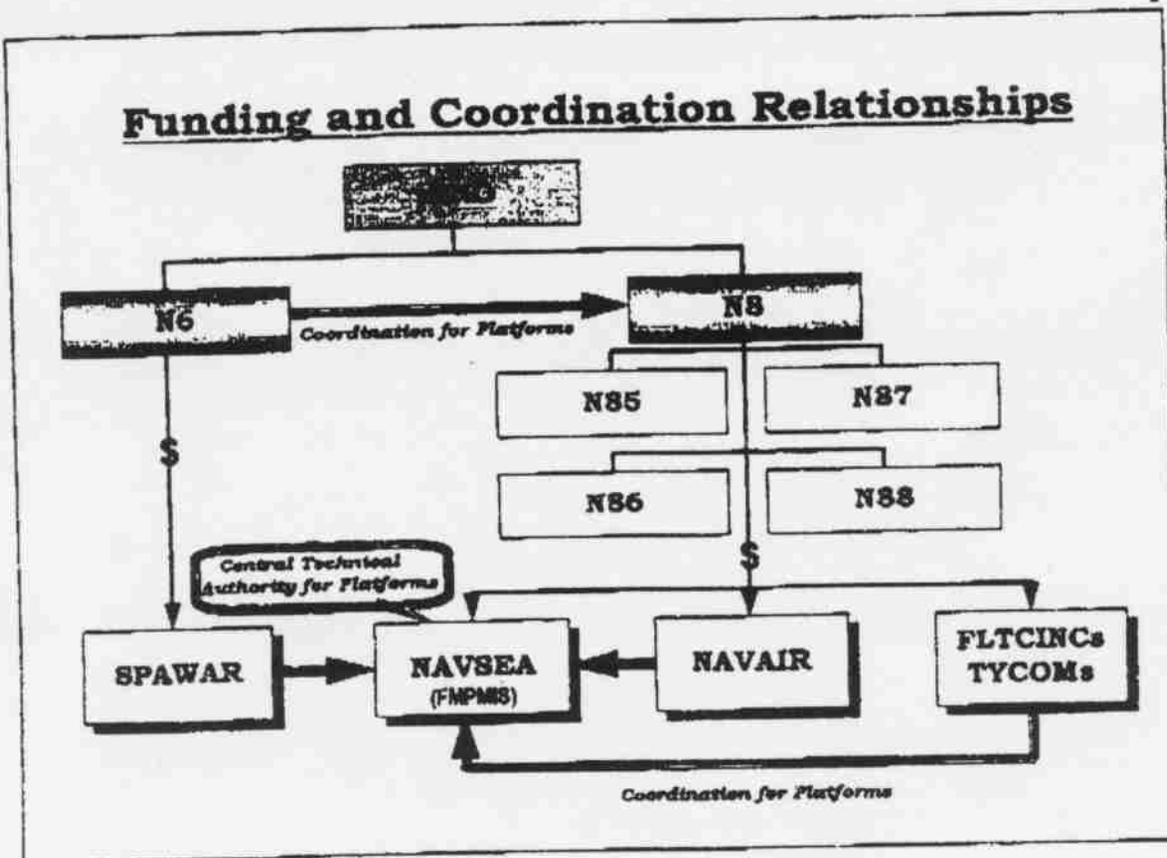


Figure 2

Enclosure (3)

OPNAVINST 4720.2G
03 MAY 1995,**FMP DEFINITIONS**

1. **Alteration.** Any change in the hull, machinery, equipment or fittings of a ship which involves a change in design, materials, number, location or relationship of the component parts of an assembly regardless of whether it is undertaken separately from, incidental to or in conjunction with repairs.
2. **ALTERATION EQUIVALENT TO A REPAIR (AER).** An alteration which has one or more of the following attributes:
 - a. The use of different material which has been approved for like or similar use and such materials are available from standard stock.
 - b. The replacement of obsolete, worn-out or damaged parts, assemblies, or equipment, requiring renewal by that of later and more efficient design previously approved by the SYSCOMs concerned providing such replacement does not cause a change to the existing system design and does not effect a change to the systems or equipment normally associated with the military characteristics of the ship.
 - c. The strengthening of parts which require repair or replacement in order to improve reliability of the parts and of the unit, provided no other change in design is involved.
 - d. Minor modifications involving no significant changes in design or functioning of equipment but considered essential to prevent recurrence of unsatisfactory conditions.
 - e. The replacement of parts, assemblies, or equipment with like items of later or more efficient design where it can be demonstrated that the cost of installation and maintenance of the new parts, assemblies or components is less than the cost of maintaining the installed parts, assemblies, or components, and such replacement does not cause a change to the existing system design or affect any interfacing system design and does not

Enclosure (4)

OPNAVINST 4720.2G

03 MAY 1995

effect a change to the system or equipment normally associated with the military characteristics of the ship.

f. Only the SYSCOM exercising technical control over the article, or the authority to whom such technical control has been delegated by that command, shall designate an alteration as an AER and approve it for accomplishment.

3. Alteration Installation Team (AIT). A unit (military, civilian, or contractor) that is trained and equipped to accomplish specific alterations and temporary modifications on specified ships.
4. Approved Alteration. A permanent change to a ship or an equipment that has been determined to be desirable and technically feasible.
5. Authorized Alteration. A SHIPALT programmed or budgeted for accomplishment with funding and year of accomplishment identified and formally scheduled for accomplishment for specific ships in a specific fiscal year which is reflected in FPMIS.
6. Centrally Provided Material (CPM). CPM is provided to the installing activity by the cognizant material manager or other central activity as determined by the HSC. Factors considered in designating CPM are technical and quality constraints, logistics support requirements, and material criticality. Activities designated to procure CPM will be responsible for the material control and management functions including full logistics support.
7. Cost and Feasibility Study (C&F). A detailed study of a proposed improvement which provides additional technical information and installation cost estimates. It is tasked by OPNAV resource sponsors and used to decide whether or not to proceed with the development of the proposed improvement.

Enclosure (4)

OPNAVINST 4720.2G
03 MAY 1995

8. Emergent Requirements. A requirement to accomplish an alteration, alteration design, or other program support which arises during execution. Any changes recommended during execution should be thoroughly studied to ensure that design, material, and ILS is available, feasibility has been established, and any interface problems with other ship systems have been identified and resolved. Required funding compensation should also be identified.

9. Fleet Modernization Program (FMP). A formal process which provides the management structure by which the characteristics of ships and service craft are improved. Changes to ship characteristics are accomplished by SHIPALTs, MACHALTs, ORDALTs, or field changes and are developed and installed when safety, survivability, technical, or military characteristic considerations dictate ship configuration changes.

10. FMP Management Information System (FMPMIS). The official automated system supporting the information and decision support requirements of FMP managers Navy-wide. The FMPMIS data base contains data related to: ships and their availability schedules; alterations applicability; alteration material requirements and procurement status; and material, installation and outfitting costs. The FMPMIS data base is the only sanctioned authoritative planning baseline for FMP operations.

11. Headquarters Centrally Provided Material (HCPM). Equipment provided by the Systems Commands. Material Managers provide status of material requirements in FMPMIS. This material is provided at no cost to the shipbuilding/installing activity and is considered Government Furnished Material (GFM).

12. Integrated Logistics Support (ILS). All maintenance planning, manpower and personnel, supply support, support equipment, technical data, training and training support, computer resources support, facilities, packaging, handling, storage and transportation and design interface are necessary to

Enclosure (4)

OPNAVINST 4720.2G

03 MAY 1995

ensure the effective and economical support of systems and equipment during their life cycle.

13. Military Improvement. Improvement changing a ship's military or operational characteristics, qualities, and or features resulting in increased capabilities to perform its approved mission and tasks.

14. Quick Reaction Capability (ORC) Requirements. Emergent requirements which require rapid entry of high priority SECDEF, SECNAV, CNO, national interest items or vital technical changes into the FMP process. ORC requirements necessitate rapid SHIPALT development and close coordination between OPNAV resource sponsors and the HSCs.

15. Repair. The restoration of a ship, equipment, assembly or article to serviceable condition without change in design, materials, number, location or relationship of the component parts.

16. Ship Alteration (SHIPALT). An approved permanent change to the configuration of a ship which is documented as a SHIPALT Record (SAR) and implemented through the FMP process.

17. Ship Alteration Budget Reporting and Evaluation System (SABRES). SABRES is a OPNAV computer gaming system used for the development and execution of ship modernization plans. Successful utilization of this gaming system is predicated upon the extraction of current and accurate ship modernization information from FMPMIS.

18. Ship Alteration Financial Execution (SAFE). A COMNAVSEASYS COM management information system which provides summaries of funds availability and funds expenditure, establishes program tracking, and records authorization files used for obligations established at the budget line item level.

Enclosure (4)

4

Information Handling Services.

03 MAY 1985

19. Survivability Improvement. An alteration which provides a naval surface ship with increased ability to sustain its warfighting capability, as well as peacetime operational requirements. Survivability alterations are generally improvements in passive fire protection, firefighting, electromagnetic protection (EMP), chemical/biological/radiological (CBR) warfare protection, shock resistance, personnel protection, damage control and carrier ASCM side protection.

20. Technical Improvement. An alteration which provides improvement to the safety of the ship or its personnel or equipment, provides compliance with legally mandated requirements (EPA, OSHA, etc.), provides improvement to the reliability, maintainability or efficiency of installed equipment, or provides improvement to habitability.

Enclosure (4)