

SECTION 1 INTRODUCTION AND FMP PROCESS OVERVIEW TABLE OF CONTENTS

SUBSECTION 1-1 FLEET MODERNIZATION PROGRAM (FMP) INTRODUCTION.

SUBSECTION 1-2 FMP BACKGROUND

- 1-2.1 References for Section 1
- 1-2.2 Exceptions to FMP
- 1-2.3 Responsibility for Content and Update Requirements

SUBSECTION 1-3 FMP ALTERATIONS DEFINITIONS

- 1-3.1 Ship Alteration (SHIPALT)
- 1-3.2 Equipment Alteration
 - 1-3.2.1 Machinery Alteration (MACHALT)
 - 1-3.2.2 Ordnance Alteration (ORDALT)
 - 1-3.2.3 Field Change (FC)
 - 1-3.2.4 Engineering Change (EC)
- 1-3.3 Type Commander (TYCOM) Alterations
 - 1-3.3.1 Alteration Equivalent to Repair (AER)
- 1-3.4 Temporary Alteration (TEMPALT)

SUBSECTION 1-4 FMP PROCESS OVERVIEW

- 1-4.1 Define Alteration Content
 - 1-4.1.1 Justification/Cost Form (JCF)
 - 1-4.1.2 Ship Alteration Record (SAR)
- 1-4.2 Programming and Budgeting
 - 1-4.2.1 Budget Finalization
 - 1-4.2.2 Budget Review and Adjustment
- 1-4.3 SHIPALT Installation Planning
 - 1-4.3.1 Drawing Preparation
 - 1-4.3.2 Material Procurement
 - 1-4.3.3 Programming and Authorization of Material
 - 1-4.3.4 Integrated Logistics Support (ILS) Certification Form
- 1-4.4 SHIPALT Implementation
 - 1-4.4.1 SHIPALT Accomplishment
- 1-4.5 Equipment Alteration Process Overview

SUBSECTION 1-5 FLEET MODERNIZATION PROGRAM MANAGEMENT INFORMATION SYSTEM (FMPMIS)/NAVY DATA ENVIRONMENT-NAVY MODERNIZATION (NDE-NM)

- 1-5.1 Background
- 1-5.2 NDE-NM (Logistics Application) (formerly FMPMIS Logistics Module)
 - 1-5.2.1 Program Module
 - 1-5.2.2 Execution Module

**SUBSECTION 1-6 SECNAV WAIVER PROCESS; STATUTE GOVERNING
MODIFICATIONS WITHIN FIVE YEARS OF DECOMMISSIONING**

- 1-6.1 Policy
- 1-6.2 Background
- 1-6.3 Guidance on Application of the Law
- 1-6.4 Procedures
- 1-6.5 Administrative Waiver Process

SUBSECTION 1-7 FMP MANAGEMENT AND OPERATIONS MANUAL CONTENTS

FIGURES

- Figure S1-1 Alteration Decision Tree
- Figure S1-2 FMP Milestones
- Figure S1-3 Fleet Modernization Program Process

SUBSECTION 1-1 INTRODUCTION

The Fleet Modernization Program (FMP) mission is to provide a disciplined process to deliver operational and technical modifications to the Fleet in the most operationally effective and cost efficient way. It defines a standard methodology to plan, budget, engineer, and install timely, effective, and affordable shipboard improvements while maintaining configuration management and supportability. It is the means by which we leverage technology and innovation to:

- Keep the war-fighting edge
- Fix systemic and safety problems
- Improve Battle Force Interoperability (BFI)
- Improve platform reliability and maintainability
- Reduce the burden on the sailor

Reference S1(a) instituted the FMP process. Chief of Naval Operations (OPNAV) N43 sponsors the FMP and Naval Sea Systems Command (NAVSEA) 04M3 serves as the FMP Policy Implementation Office and Program Manager for the Navy Data Environment-Navy Modernization (NDE-NM) database (formerly the Fleet Modernization Program Management Information System (FMPMIS)) which is the official database in support of the FMP. Modernization includes all changes, alterations and arrangement variations from the approved class plans on ships, accomplished either in maintenance/modernization availabilities or operation. This includes, but is not limited to, Title “K”, “K-P”, “D” and “F” Ship Alterations (SHIPALTs), Alterations Equivalent to Repair (AERs), Ordnance Alterations (ORDALTs), Machinery Alterations (MACHALTs), Field Changes (FCs) and Engineering Changes (ECs).

Use of the FMP process prevents unauthorized and nonsupported alterations from being installed on ships. Unauthorized alterations represent a substantial cost to the Navy in terms of the loss of configuration control, inefficiencies due to unexpected installation interference, systems and equipment which are not logistically supported, and resources expended to support items which are no longer required. Unauthorized and unsupported alterations adversely impact the interoperability of highly computerized and integrated combat systems. This equates to a loss of combat effectiveness due to a reduction in Battle Group/Amphibious Ready Group (BG/ARG) interoperability and individual ship capabilities.

This manual defines policy, processes and procedures for accomplishing all changes, modifications, and alterations to ships and equipment in the Fleet, in accordance with reference S1(a).

SUBSECTION 1-2 FMP BACKGROUND

The FMP has undergone significant changes over the last several years. This revision incorporates the following FMP process improvements:

- A streamlined set of Planning Milestones that support the D-30 process, technology insertion and accomplishment of all SHIPALTs during Chief of Naval Operations (CNO) scheduled availabilities
- Reduced FMP Cycle Time to 16 months. Cycle time for alterations ranges from 16 months to 4 months depending on scope and complexity of the alteration.
- NAVSEA 04 migration of legacy FMPMIS to Navy Data Environment-Navy Modernization (NDE-NM), which will be completed in calendar year 2002. Once completed, NDE-NM will be the "authoritative" national database in support of the FMP.
- A new Integrated Logistics Support (ILS) Certification Form, which standardizes Ship Program Manager (SPM) supportability requirements and milestones for SHIPALTs.
- Initiated improvements with respect to the policy relating to *Alterations to Ships Accomplished by Alteration Installation Teams (AITs)*.
 - Technical Specification 9090-310D updated to reflect changes in AIT policy and guidance over the last 3-5 years.
 - Standardized AIT Checklist and AIT requirements across Systems Commands (SYSCOMs), Fleets and SPMs.
 - Technical Specification 9090-310D incorporates the Regional Maintenance and Modernization Coordination Office (RMMCO) process that brings the document into alignment with on-going changes in policies/procedures.
- Revised Justification/Cost Form (JCF) and Ship Alteration Record (SAR) technical specifications, which standardizes information necessary for processing by all SPMs and reduced information required for SAR signature authority.
- Revised definition of what elements are to be included in the Design Services Allocation (DSA) for use across the SYSCOMs.
- Added TEMPALT Policy applicable to Surface Ships, similar to existing submarine TEMPALT Policy.

1-2.1 References for Section 1

S1(a) OPNAVINST 4720. 2 (Series); Fleet Modernization Program (FMP) Policy for U.S. Navy Ships

1-2.2 Exceptions to FMP

The Deputy Commander for Nuclear Propulsion, NAVSEA 08, is responsible for all technical matters pertaining to nuclear propulsion of US Navy ships and craft, including all aspects of integration of the nuclear plant into the ship system. Nothing in this manual detracts in any way from these responsibilities. Accordingly, NAVSEA 08 will be consulted in all matters relating to or affecting the nuclear propulsion plant and associated nuclear support facilities. In addition, the procedures and requirements in this section are not applicable to alterations under the cognizance of NAVSEA 08. 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). Alterations affecting configuration of

hardware, software, firmware and support equipment of the TRIDENT System (including the SSBN 726 Class submarines) are under the cognizance of NAVSEA PMS392 and are exempt from this manual.

1-2.3 Responsibility for Content and Update Requirements

All proposed changes to the Sections and Appendices of this manual shall be reviewed by NAVSEA 04M. NAVSEA 04M is also responsible for overall content and maintenance of this manual.

SUBSECTION 1-3 FMP ALTERATIONS DEFINITIONS

The alterations approved for the FMP are defined below. No other types of alterations to equipment/systems are authorized for installation on operational Fleet ships and support facilities. Figure S1-1 identifies the key factors used to categorize the different types of FMP alterations: military characteristics; funding; material requirements; impacts to weight and moment, distributive systems; and installation complexity.

1-3.1 Ship Alteration (SHIPALT)

A SHIPALT is an approved permanent change to the configuration of a ship that is documented in a SAR and implemented through the FMP Process. SHIPALTs are classified by title/type and comprise any change in hull, machinery, equipment, or fittings, which involves changes in design, material, quantity, location, or relationship of the component parts of an assembly. The title assigned to a SHIPALT identifies the approving authority and responsibility for funding. SHIPALT titles are:

a. Title "K" SHIPALT - A permanent alteration to provide a military characteristic, upgrade existing systems or provide additional capability not previously held by a ship, which affects configuration controlled areas or systems of a ship or which otherwise requires the installation of Headquarters Centrally Provided Material (HCPM). These SHIPALTs are approved for development and authorized for accomplishment by the CNO (military improvements) or the Hardware Systems Commands (HSCs) (non-military improvements). The technical approval for Title "K" SHIPALTs is provided by the SPM.

b. Title "D" SHIPALT - A permanent alteration that does not affect the military characteristics of a ship. It is technically approved by the SPM in the form of a JCF and SAR, and authorized for accomplishment by the Fleet Commander in Chief (FLTCINC) or Type Commander (TYCOM). It may require Centrally Provided Material (CPM), but it does not require HCPM. A Title "D" SHIPALT may specify whether it should only be accomplished by a depot level maintenance facility.

c. Title "F" SHIPALT - A permanent alteration that is technically approved by the SPM in the form of a JCF and SAR, and authorized for accomplishment by the FLTCINC or TYCOM. It does not require HCPM or CPM and is within ship's force capability for accomplishment; however, an Intermediate Maintenance Activity (IMA) may accomplish it.

d. Title "K-P" SHIPALT - A submarine Title "K" SHIPALT that is within ship's forces or AIT capability for accomplishment, and for which required special program and CPM are provided as a package by the cognizant HSC.

1-3.2 Equipment Alteration

An Equipment Alteration is any alteration, other than a SHIPALT, to the configuration of an equipment or system (including embedded equipment, computer programs and expendable ordnance) after establishment of the product baseline. An Equipment Alteration involves a change in design, type of material, quantity, installed location, logistics, supportability or the relationship of the component parts of an assembly within the ship. Equipment Alterations include the addition, deletion, rework or replacement of parts, assemblies or equipment; or changes in assembly procedures. Alterations to associated computer programs include the incorporation of different computer program versions and approved modifications or corrections

to both operational test and maintenance programs. Equipment Alterations are authorized by approved Class I Engineering Change Proposals (ECPs). Equipment Alterations apply equally to changes installed in delivered systems and equipment, and changes installed in systems and equipment in production to identify differences from an established product baseline. Equipment Alterations may be initiated to correct a design defect, to change equipment operational capability, to eliminate safety hazards, to update obsolete components or for any combination of these reasons. There are four types of Equipment Alterations; Machinery Alteration, Ordnance Alteration, Engineering Change, and Field Change that are each defined below.

1-3.2.1 Machinery Alteration (MACHALT)

A MACHALT is a planned change, modification or alteration of any Hull, Mechanical and Electrical (HM&E) equipment/systems where changes are contained within the boundaries of the individual equipment/system and have limited system ramifications. It is a planned change, modification or alteration of any HM&E equipment/system in service (shipboard or shore activities) that the MACHALT Configuration Control Board (CCB) determines meets all of the following conditions:

- Can be accomplished without changing an interface external to the equipment or system.
- Is a modification made within the equipment boundary or is a direct replacement of the original equipment design.
- Can be accomplished without the ship being in an industrial activity.
- Can be accomplished individually, not conjunctively with a SHIPALT or other MACHALT.

1-3.2.2 Ordnance Alteration (ORDALT)

An ORDALT is any modification, other than a SHIPALT, in the configuration of ordnance equipment/systems (including embedded equipment and computer programs) after establishment of the product baseline. An ORDALT involves a change in design, material, quantity, installed location, ILS, or the relationship of the component parts of an assembly within the ship or shore installation. ORDALTs include the addition, deletion, rework or replacement of parts, assemblies or equipment; or changes in assembly procedures.

1-3.2.3 Field Change (FC)

A FC is a mechanical, electronic or electrical change, modification or alteration made to electronic equipment after establishment of the product baseline and delivery to the government, including software changes, which do not impact interfaces to other equipment within the ship, change the footprint, form or fit, change power, weight, or air conditioning requirements. FCs are initiated and approved by the cognizant HSC and are implemented by FC Bulletins (FCBs). AITs or ship's force can accomplish FCs.

1-3.2.4 Engineering Change (EC)

An EC is a modification, usually to Anti-Submarine Warfare (ASW) or Combat System (CS) equipment/systems after the establishment of the product baseline and delivery to the Navy.

1-3.3 Type Commander (TYCOM) Alterations

TYCOM alterations are permanent alterations that are technically approved by the SPM for accomplishment as a Title "D" or "F" SHIPALT or AER depending on the scope and effects of

the change. TYCOM alterations are programmed for installation by the TYCOM, as well as funded for accomplishment by the TYCOM or other organization as agreed upon. TYCOM alterations are maintenance alterations normally accomplished to improve reliability or maintainability. A TYCOM alteration is a technical alteration that has one or more of the following attributes:

- The use of different materials that have been approved for similar use and such materials are available from standard stock.
- The replacement of obsolete, worn-out or damaged parts, assemblies or components requiring renewal by those of later and more efficient design which has been previously approved by the SPM and such replacement does not cause a change to the systems or equipments normally associated with the military characteristics of the ship.
- The strengthening of parts that requires repair or replacement in order to improve reliability of the parts and of the unit provided no other change in design is involved.
- Minor modifications involving no significant changes in design or functioning of equipment but considered essential to prevent recurrence of unsatisfactory conditions.
- 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 the 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 effect a change to the systems or equipment normally associated with the military or technical characteristics of the ship.
- The proposed alteration is an inspection or documentation change requiring no equipment modification, but requires a vehicle to monitor accomplishment.

1-3.3.1 Alteration Equivalent to Repair (AER)

An AER (formerly known as a Letter AER for Surface Ships, an Alteration and Improvement (A&I) for Submarines, and an Alteration Request (AR) for Aircraft Carriers) is a permanent alteration technically approved by the SPM, typically via letter, and programmed for installation by the TYCOM. AERs must meet one or more of the above-described TYCOM alterations attributes and all of the following criteria:

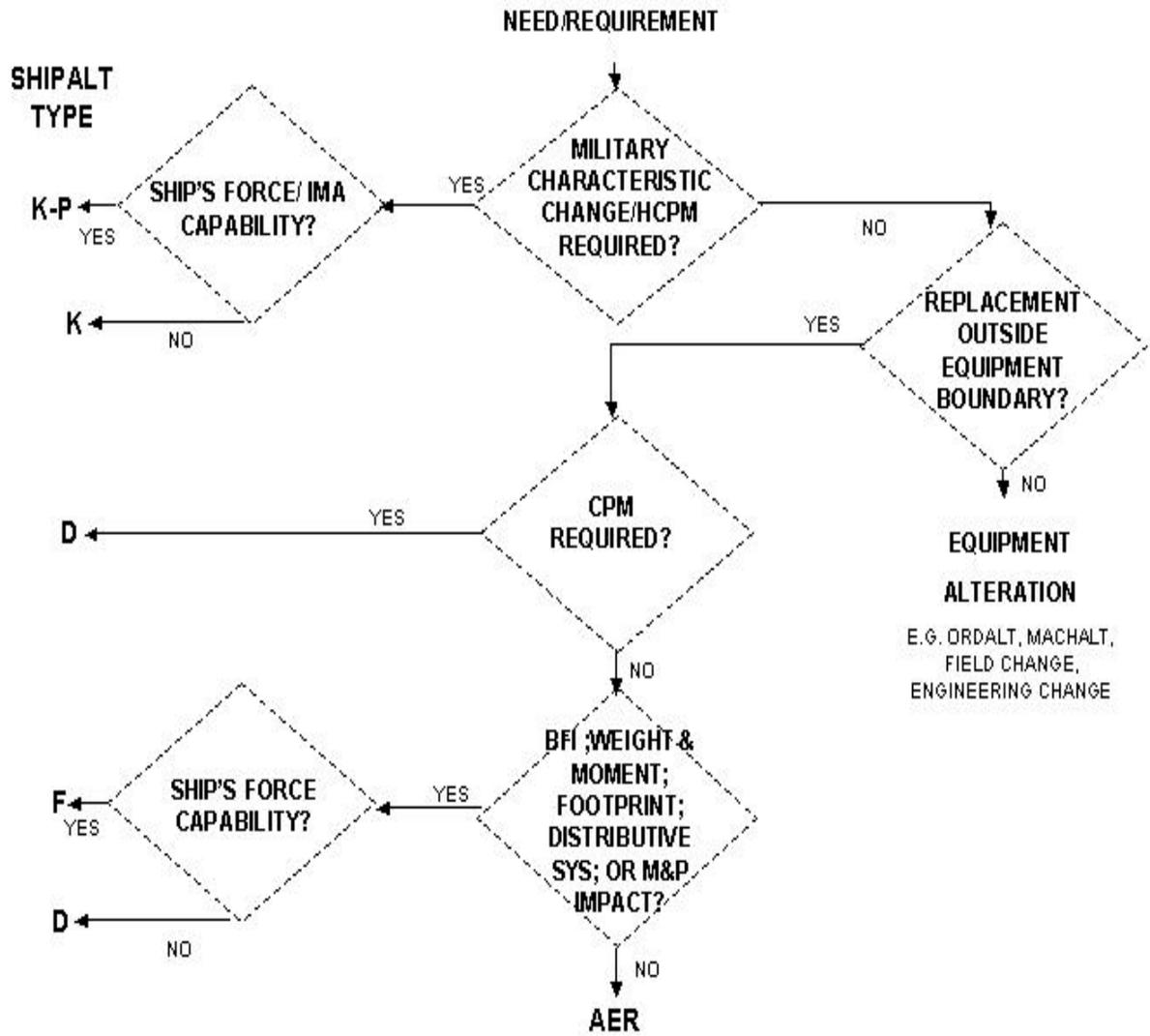
- It does not impact BFI.
- It does not impact the ship's stability records (weight and moment).
- It does not impact or alter the 3-dimensional footprint of the equipment it is replacing.
- It does not impact shipboard distributive systems (i.e. water, ventilation, electrical, power), their Ship Selected Records (SSRs) or interfacing equipment or systems; compartmental arrangement records; or Damage Control records.
- It does not impact Manpower and Personnel.

1-3.4 Temporary Alteration (TEMPALT)

A TEMPALT is any alteration that provides given capabilities on a temporary basis (not to exceed one year or one operational deployment in duration) in support of Research, Development, Test and Evaluation (RDT&E) or exercise or mission requirements. TEMPALTs are reviewed and technically approved by the cognizant SPM and authorized for accomplishment by the cognizant TYCOM. The SPM review considers safety, technical adequacy, impact on

ship stability, operational characteristics including warfare capability, damage control, ship structure, ship services, ships interfaces, and habitability. Alterations that are intended to be installed for a period in excess of one year or one operational deployment shall be considered a permanent change to a ship's configuration and shall be accomplished as a SHIPALT accordingly. After completion of testing requirements, mission or exercise support requirements or one year, whichever comes first, TEMPALTs must be removed and the ship restored to its previous configuration. The activity sponsoring the accomplishment of the TEMPALT shall be responsible for funding the removal of the TEMPALT and the restoration of the ship.

FIGURE S1-1 ALTERATION DECISION TREE



SUBSECTION 1-4 FMP PROCESS OVERVIEW

Modifications to ships evolve from ideas to accomplishment of alterations through a complex process involving many separate actions and participants. The following subsections provide an overview of that process of alteration definition, development, and installation. Figure S1-2 identifies the SHIPALT milestones for these actions and their responsible activities. Figure S1-3 presents the milestones in a notional timeline.

1-4.1 Define Alteration Content

The preparation of the JCF and the SHIPALT requirement packages is included in this phase.

1-4.1.1 Justification/Cost Forms (JCF)

The JCF is the point of entry into the FMP process. It provides justification for the SHIPALT, known technical and material information applicable to the alteration, initial installation cost estimates, and ship classes to which the concept is applicable. Once approved through the SPM CCB, the JCF is assigned a SHIPALT number and entered into NDE-NM. An approved JCF is a prerequisite for expenditure of funds for development of the SAR.

1-4.1.2 Ship Alteration Record (SAR)

Preparation of the SAR follows approval of the JCF. The SAR, usually prepared by the Planning Yard (PY), updates and documents or references the technical requirements and specifications that define the alteration. This information forms the basis for SHIPALT installation design efforts and provides data on which SHIPALT programming decisions can be made.

1-4.2 Programming and Budgeting

The Planning, Programming and Budgeting System (PPBS) Process is the vehicle for establishing the FMP financial requirements and their execution. Approved SHIPALTs proceed through the programming and budget cycles.

1-4.2.1 Budget Finalization

The annual Program Objectives Memorandum (POM)/Program Review (PR) process is used to establish the FMP budget for SHIPALTs to be installed.

1-4.2.2 Budget Review and Adjustment

Office of the Comptroller of the Navy (NAVCOMPT) conducts formal budget hearings to ensure that activity budget estimates are within guidance, contain valid costs and pricing, and are financially feasible. After completion of the reviews, a proposed budget decision is issued that may revise the identified funding requirements.

1-4.3 SHIPALT Installation Planning

Each Fiscal Year the SYSCOMs' Comptrollers establish FMP charts of accounts by SPM programs in the Standard Accounting and Reporting System (STARS)/Headquarters Claimant Module (HCM) based on their approved budgets. The FMP budget execution process guides advance planning assignments for material procurement, design development, and ILS products impacts.

1-4.3.1 Drawing Preparation

SHIPALT Installation Drawings (SIDs) are used by the Installing Activity (IA), including ship's force, for the accomplishment of all non-nuclear SHIPALT work. SIDs are approved by PYs for all Title "K", "K-P", "D" and "F" SHIPALTs. These drawings shall include, as required, system drawings, structural drawings, arrangement drawings, manufacturing drawings, ripout drawings, assembly and detail drawings, diagrams, and cabling sheets. Completion of SIDs is to be accomplished No Later Than (NLT) A-6 and A-4 for AIT installations with agreement from the applicable Naval Supervising Activity (NSA).

1-4.3.2 Material Procurement

There are six general categories into which the SHIPALT material is sorted in the SAR. These are HCPM, CPM, NSA Provided Material; Short Lead Time Material (SLTM); Long Lead Time Material (LLTM) and IA Provided Material (IAPM).

- HCPM is budgeted and procured by a SPM once a SHIPALT has been entered into NDE-NM and programmed and budgeted by CNO for Title "K" and "K-P" SHIPALTs.
- CPM is obtained by the NSA from the HSC; Naval Inventory Control Point- Mechanicsburg (NAVICP-M); NAVICP-Philadelphia (NAVICP-P); Defense Logistics Agency (DLA); Ship Availability Planning and Engineering Center (SHAPEC); Submarine Maintenance, Engineering, Planning and Procurement (SUBMEPP); In-Service Engineering Agent (ISEA); or PY.
- NSA Provided Material is material procured or requisitioned by the NSA using SHIPALT funds.
- SLTM is material with procurement lead time of 30 days or less.
- LLTM is a lead-time greater than 30 days. The fact that material problems are anticipated dictates identification of this category of material early in the alteration development process. LLTM may be categorized as HCPM, NSA Provided Material, or CPM.
- IAPM is other industrial material used by the IA in the course of SHIPALT installation. IAPM is not identified in the SAR.

1-4.3.3 Programming and Authorization of Material

HCPM/CPM procurement begins with the programming of a SHIPALT in NDE-NM. Alteration programming and budgeting by the CNO for Title "K" and "K-P" SHIPALTs or programming by the TYCOM for Title "D" SHIPALTs establishes the material item as a planned requirement to be budgeted and procured. The NDE-NM SHIPALT Bill Of Material (BOM) identifies HCPM, CPM and NSA Provided Material. LLTM is identified in the BOM and designated for procurement in the Advance Planning Letter. IAPM is identified in the SIDs and procured by the NSA. SHIPALT material is not procured for Title "K" and "K-P" SHIPALTs that are not programmed or budgeted or for Title "D" SHIPALTs that are not programmed.

1-4.3.4 Integrated Logistics Support (ILS) Certification Form

The equipment/system Life Cycle Manager (LCM) identifies to the SPM the requisite ILS products as well as a plan of action and milestones to obtain those ILS products on the ILS Certification Form. As such, the SPM can evaluate the ILS readiness and resolve logistics issues prior to approving platform configuration changes. ILS Certification occurs NLT A-4. The

impacted ILS products are identified and developed concurrently with development of the alteration to ensure delivery of all requisite ILS products by End Of Availability (EOA)/End Of Installation (EOI).

1-4.4 SHIPALT Implementation

This is the final process for the preparation and installation and support of a SHIPALT. The process involves final installation drawings, material fabrication and assembly, all required ILS products provided to the ship, and establishment of new configuration baseline records and drawings, and SSR updates.

1-4.4.1 SHIPALT Accomplishment

Based on the CNO-approved SHIPALT Program, the SPM issues a SHIPALT Authorization Letter for Title “K”, “K-P”, “D” and “F” SHIPALTs, AERs, and equipment alterations, including the required material information. This letter is sent to the NSA to arrive by A-12 or as late as A-6 with agreement from the applicable NSA. The tasking and its associated funding, coupled with the advance planning efforts and LLTM, allow the NSA to plan and accomplish designated SHIPALTs during a scheduled availability. The TYCOMs authorize, fund and schedule Title “D” and “F” SHIPALTs and AERs. Ship’s forces accomplishment may be directed by the TYCOM via tasking letters, NDE-NM, and for submarines the TYCOM Alteration Management System (TAMS).

1-4.5 Equipment Alteration Process Overview

Fleet modernization is not limited to the SHIPALT process. Equipment Alterations such as ORDALTs and MACHALTs are modifications to systems or equipments that were either part of the new construction baseline or previously introduced through the SHIPALT process. Equipment alterations are self-contained; they do not impact ship’s distribution systems, e.g. Therefore, SPM involvement with the equipment alteration process is limited. The timeline and processes for equipment alterations differ. Major types of documentation include Class I ECPs, Configuration Control Board Directive (CCBD) and the specific equipment alteration type instruction as opposed to the JCF, SAR, and SID for SHIPALTs. Another distinguishing factor is that Equipment Alterations are typically packaged by the LCM with all installation material and instructions, test and checkout material, and ILS products all provided prior to the start of installation of the alteration. Although the same logistics elements apply to both SHIPALTs and Equipment Alterations, LCMs perform the logistics certification process rather than the SPM.

FMP MILESTONES

Note: Milestone dates shown **reflect latest acceptable dates** to ensure inclusion into a CNO availability. All stakeholders are strongly encouraged to accelerate SHIPALT Planning milestones whenever possible.

MILESTONE	DATE	COMMENTS
JCF Submitted	A-16	
JCF Approved	A-14	The SPM shall adjudicate JCFs within 2 months of submittal
Task/Fund Development of SAR Data	A-14	The SPM shall designate the activity responsible for the development of SAR data, normally the Planning Yard (PY)
ICDs Delivered to SAR Developer/PY	A-14	
PARM Developed SAR Information Submitted to SAR Developer	A-13	The cognizant PARM shall submit required SAR data within one month of JCF approval by the SPM
Complete Development of SAR Data	A-12	The SAR developer shall complete the development of SAR data within two months of tasking/funding
SPM Authorization Letter	A-12	Authorization to proceed with planning for Availability may include non-mature/currently non-funded SHIPALTs at SPM option.
Task/Fund SID Development	A-12	
Approval of SAR	A-11	The SAR shall be approved by the SPM or other activity designated at JCF approval within one month of SAR data completion
Issue Drawings	A-12 to A-6 (AIT DWGs NLT A-4)	<p>1) Drawings for AIT installations do not need to be delivered to the NSA at A-6. Drawings shall be delivered NLT A-4.</p> <p>2) Drawings shall be delivered incrementally from the PY to the NSA. In cases where a contract award is required prior to A-3, a drawing delivery schedule shall be negotiated between the PY and NSA.</p> <p>3) In cases where drawing concurrence/approval is required (SPAWAR, RPPY, etc.), either a note shall be placed on the drawing indicating that production work may not commence without concurrence/approval or the drawings shall be clearly marked as preliminary and provided to the NSA NLT A-6. Final drawings and/or drawing revisions with the necessary concurrences/approvals shall be issued NLT A-4.</p>
Final NDE-NM Material Reconciliation	A-6	Update NDE-NM based on drawing Bill of Material
Identification of AIT Support Services Requirements	A-4.5	A-135 days as defined by NSTS 9090-310 – “The AIT Manager is responsible for providing advance notification of alteration accomplishment requirements/impacts and making arrangements (including funding) for any required support services not being provided by the AIT.”
Delivery of Drawings to the NSA	A-4	Delivery of all drawings to NSA.
ILS Cert Plan approved by SPM	A-4	SPM reviews and provides final approval of ILS plan
Start of Availability	SOA	

Figure S1-2

SUBSECTION 1-5

FLEET MODERNIZATION PROGRAM MANAGEMENT INFORMATION SYSTEM (FMPMIS)/NAVY DATA ENVIRONMENT-NAVY MODERNIZATION (NDE-NM)

1-5.1 Background.

FMPMIS was designated by reference S1(a) as the official US Navy authoritative database to provide automated and timely information to the FMP community. NAVSEA is in the process of transitioning from FMPMIS to NDE-NM. NDE-NM is a web enabled enterprise model that will integrate and merge existing modernization, maintenance and logistics structures into a single architecture system that provides timely FMP information that supports planning, programming, budgeting, management and execution of the FMP.

FMPMIS consists of three subsystem modules tied together into one federated system with the Logistics module being the key subsystem. FMPMIS has combined the three separate functions, Logistics, Program, and Execution into one system built on a single unified database. Substantial efficiencies and increased effectiveness have been realized through combining the three databases and upgrading the management tools to better meet the information requirements of the US Navy. FMPMIS Logistics Module has been integrated into the NDE-NM enterprise data architecture to improve the coordination and visibility of FMP planning data. As a result of Navy reorganizations and changes adopted in the FMPMIS redesign, some or all the subsystems may be subsequently renamed, or absorbed into the redesigned database. These changes will not affect the fact that FMPMIS is the official, authoritative repository for FMP planning information and that access to FMP data shall be exercised using approved and secure access methods or intersystem interfaces.

1-5.2 NDE-NM (Logistics Application) (formerly FMPMIS Logistics Module)

NDE-NM (Logistics application) is a tool that tracks and maintains logistical data for modernizing ships in the Navy. The purpose of NDE-NM (Logistics application) is to store all the engineering information, materials, equipment and management support required to perform modernizations to the right place at the right time. This includes alteration information, automated tracking of materials usage and requirements, alterations scheduling and completion status and detailed shipyard scheduling.

1-5.2.1 Program Module

The Program module of FMPMIS is a tool that produces detailed financial compilation data required for FMP budget submissions; provides automated program/fiscal scenarios used to adjust program budgets to remain within controls by utilizing current planning information incorporated in NDE-NM (Logistics application). The Program module allows planners to explore various combinations for assigning allocated funds, comparing projects for greatest overall effectiveness, and conducting "what-if" projections to balance identified needs.

1-5.2.2 Execution Module

The Execution module provides an electronic workflow environment that processes approximately 5000 funding documents each year. The module supports financial planning,

funding document preparation, cash management, budget change and tracking, and reporting. It promotes the accuracy of funding by validating funding documents against remaining budget, and promotes the timeliness of funding for availabilities through the systematic production of the funding documents.

The Execution module is comprised of six major subsystems, which correspond to primary FMP budget execution functions as follows:

- The Document subsystem supports the processing of the funding documents, and allows users to create, approve, and transmit funding documents.
- The Plan subsystem allows users to enter the Obligation Plan for the fiscal year.
- The Cash subsystem supports the FMP offices entry of the cash (apportionment) received, and tracks financial status by automatically debiting/crediting the Sponsor/SPM account when documents are issued.
- The Control subsystem supports the entry of budget control data.
- The Program subsystem allows users to enter current estimates for availabilities, and view the Shipsheet and SFL Summaries.
- The reports subsystem allows users to report information in the Execution module.

SUBSECTION 1-6 FMP SECRETARIAL WAIVER PROCESS; STATUTE GOVERNING MODIFICATIONS WITHIN FIVE YEARS OF DECOMMISSIONING

1-6.1 Policy

The decommissioning status of Navy ships shall be evaluated as an integral part of the modification request. Modifications to be installed on ships within five calendar years of the ship's decommissioning have unique requirements, mandated by law, which must be followed before any appropriated funds can be obligated or expended for such purpose. To meet these requirements and to ensure vital modifications are expeditiously installed, all activities requesting modifications on ships within five calendar years of decommissioning will submit the required information, in accordance with the procedures outlined in this subsection.

1-6.2 Background

Since 1991, there has been a statutory prohibition on the use of funds to modify a weapons platform within five years of its decommissioning, unless the Secretary of the Navy (SECNAV) waives this restriction on the basis of national security. Safety modifications are excluded from this statute. The Fiscal Year (FY) 98 Department of Defense (DoD) Appropriations Act is the permanent statutory prohibition. Public Law 105-56, Title VIII, Sec. 8053, Oct 8, 1997, 111 Stat. 1232, (hereinafter referred to as "Section 8053") provides that:

"None of the funds provided in this Act and hereafter shall be available for use by a military department to modify an aircraft, weapon, ship or other item of equipment, that the military department concerned plans to retire or otherwise dispose of within five years after completion of the modifications:

Provided, that this prohibition shall not apply to safety modifications;

Provided further, That this prohibition may be waived by the Secretary of a military department if the Secretary determines it is in the best national security interest of the United States to provide such waiver and so notifies the congressional defense committees in writing."

The SECNAV has delegated to the Assistant Secretary of the Navy (ASN) (Research, Development and Acquisition) (RDA) the authority to waive the restrictions of Section 8053.

1-6.3 Guidance on Application of the Law

Section 8053 governs all modifications that upgrade or enhance the ship or other weapons system's performance, regardless of:

- Dollar amount;
- Extent of physical modifications to the weapons platform;
- Temporary nature of the installation; or Reusability of the equipment.
- Safety Modifications. If the modification falls within the "safety modification" exemption from Section 8503, the following procedures apply:
 - Document determination of a safety modification via a Memorandum For the Record

(MFR), detailing the rationale supporting its safety features. Such MFR shall be coordinated with legal counsel.

- All other existing documentation for the safety modification shall be consistent with a MFR determination that it is a safety modification – for example, existing documentation should classify the modification as “safety” rather than another category of modification.
- Application of Section 8053 depends on the facts and circumstances known to the Navy at the moment of obligation of the funds.
- Section 8053 covers modification of a ship or other piece of tangible equipment that is decommissioned. Thus, Section 8053 would not cover modifications of software that do not also involve an associated hardware installation on a weapons system platform.
- Obligation of funds to prepare for the modification, such as ship checks and preparation of drawing packages, come under Section 8053 if taken in order to modify the ship, etc, within the five-year window.
- Modifications of prototype equipment, or other Research and Development (R&D) funded modifications must comply with Section 8053.
- Section 8053 does not cover modifications that are 100% funded by non-appropriated funds. However, if any portion of the alteration is funded by appropriated funds then Section 8053 applies.

1-6.4 Procedures

Waiver requirements and information shall be submitted as soon as it is apparent that completion of the modification will be completed within the five-year window. This can be as early as submission of the original modification request (Proposed Military Improvement (PMI), Proposed Survivability Improvement (PSI) or Proposed Technical Improvement (PTI)) or when programming an older modification for installation. The current Ships and Aircraft Supplemental Data Tables (SASDT) shall be utilized to determine the five-year window. Because the planned decommissioning date is not usually known until the year prior to decommissioning, the last day of the fiscal year in which SASDT shows the ship being decommissioned will be used for planning. For example, if SASDT shows a ship to be decommissioned in FY 07, then the ship decommissions the last day of FY 07 (30 September 2007) and enters the window requiring a waiver on 1 October 2002.

The following minimum information is required when requesting a waiver:

- The fiscal year and type of appropriations to be used for the modifications.
- The total estimated cost to perform the modifications (equipment purchase costs, installation costs, and removal costs (if equipment is reusable). (Note: Each category must be identified by fiscal year and appropriation.)
- A detailed description of the modification work e.g., explanation of the specific work to be done; identification of any new equipment to be procured; identification of any equipment to be modernized (performance capabilities to be enhanced).
- The planned date of disposal or decommissioning of the platform.
- The planned date the installation will complete.
- If equipment is to be installed on a platform that is to be disposed of within five years, is the equipment separable and useable after disposal of the platform?
- A detailed description of the need for, and purpose of, the modifications.

- Describe the impact to the Navy if the modifications are not done.
- Date waiver approval is required by to allow for advance planning i.e. ship check, material procurement, etc.

1-6.5 Administrative Waiver Process

Once the requirement for a waiver is identified, the waiver shall be processed as follows:

- Initiation of the waiver shall be via Navy message to the cognizant TYCOM. Message request should come from the ship, equipment/system program manager, NAVSEA SPM or Program Executive Officer (PEO). SYSCOMs should attempt to identify specific modification that will be installed fleet-wide (regardless of individual ship decommissioning status) to Commander in Chief U.S. Atlantic Fleet/Commander in Chief U.S. Pacific Fleet (CINCLANTFLT/CINCPACFLT) for consideration for a “consolidated waiver” to cover all ships anticipated to need the SECNAV waiver for that specific modification. (Such as all ships within a Battle Group that may receive the same modification.) Copies shall be provided to all activities that may be involved in installation of the modification.
- The TYCOM shall then provide the waiver request to CINCLANTFLT or CINCPACFLT for endorsement.
- CINCLANTFLT/CINCPACFLT/COMFLTFORCOM shall then request the waiver from the appropriate OPNAV Program and Requirements Sponsor: N60 and N2 for Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance and Targeting (C4/ISRT) Systems; N42, N75, N76, N77, or N78 for ship HM&E and Combat Systems.
- The Program Sponsor shall then prepare the formal waiver request package including the minimum information described above and coordinate concurrence within OPNAV. Once required concurrence is obtained, the Program Sponsor shall forward the waiver request package to ASN (RDA) for further processing and approval.

SUBSECTION 1-7 FMP MANAGEMENT AND OPERATIONS MANUAL CONTENTS

The FMP Management and Operations Manual is divided into two volumes. Volume 1 contains 12 sections, two of which are blank. Volume 2 contains Appendix A through H of which three are blank. The two volumes collectively provide the objectives, policy, processes and procedures of the FMP. The following is a synopsis of each section and appendix of the this manual:

Volume 1

- **Section 2: General Policies and Responsibilities** - Describes overall top level policies and responsibilities governing planning and execution of ship alterations through the FMP.
- **Section 3: Intentionally blank (deleted).**
- **Section 4: SHIPALT Design and Development Process** - Describes the policies for all design, development, and documentation associated with the alteration of ships, beginning with identification of proposed improvements and concluding with the update and delivery of ILS products.
- **Section 5: Intentionally blank (incorporated into Section 4).**
- **Section 6: Financial Management** - Describes policies, procedures, and responsibility for budgeting, funding, and financial management of SHIPALT installations.
- **Section 7: Material Management** - Describes the policies, procedures and responsibilities for ensuring that material for SHIPALT installation is available when required.
- **Section 8: Configuration and Logistics Management** - Describes responsibilities for procuring, updating, and tracking key ILS elements to ensure availability of ILS products to support SHIPALTs when installed. This section also indicates responsibility for the preparation of various ILS and Configuration Management End Of Availability (EOA)/End Of Installation (EOI) Status/Verification Reports.
- **Section 9: Special Alteration Programs** - Describes policy, procedures, and guidance for the preparation, submission and approval of Machinery Alterations (MACHALTs), Ordnance Alterations (ORDALTs) as well as Combat Systems (CSs) and Electronic Equipment and Systems Field Changes (FCs), Anti-Submarine Warfare (ASW)/Combat Systems (CSs) Engineering Changes (ECs), the Submarine SHIPALT Package Program, the U.S. Coast Guard (USCG) SHIPALT Program, the Military Sealift Command (MSC) Alteration Program, the Marine Gas Turbine (MGT) Technical Directive (TD) Program, the Space and Naval Warfare Systems Command (SPAWAR) FC Implementation Program (FCIP) and Temporary Alterations (TEMPALTs).
- **Section 10: Advance Planning and SHIPALT Authorization Letters** - Includes requirements for drafting, releasing, and changing Advance Planning Letters and SHIPALT Authorization Letters.
- **Section 11: Fleet Modernization Program Management Information System (FMPMIS)/NAVY Data Environment-Navy Modernization (NDE-NM)** - Describes content, capabilities, and management of the FMPMIS database, the official repository of all non-financial planning data relating to the FMP. It also describes the FMPMIS Logistics

Module, Program Module and Execution Module subsystems of FMPMIS and their transitioning to NDE-NM.

- **Section 12: Type Commander (TYCOM) Alteration Program** - Describes the processes by which the TYCOMs manage their responsibilities in the planning, programming and installation of Title “D” and “F” SHIPALTs, and Alterations Equivalent to a Repair (AERs).

Volume 2

- **Appendix A: Technical Specifications** - Includes the following Technical Specifications pertinent to the SHIPALT Design and Development process: SHIPALT Liaison Action Record (LAR), Justification/Cost Form (JCF), Ship Alteration Record (SAR), SHIPALT Installation Drawing (SID) Preparation, Ship Selected Record Drawing (SRD) Preparation, and Alteration To Ships Accomplished By Alteration Installation Teams (AITs).
- **Appendix B: Planning Yard Assignment Matrix** - Lists the Planning Yard for every US Navy ship by hull and reactor plant.
- **Appendix C: Ship Selected Records (SSRs)** - Details policies, procedures, and responsibilities for the preparation and distribution of Selected Record Drawings (SRDs), Selected Record Data, and Allowance Lists.
- **Appendix D:** Appendix D has been deleted. SHIPALT reports are no longer being developed.
- **Appendix E:** Appendix E has been deleted and will be used as reference material.
- **Appendix F:** Appendix F has been incorporated into Section 8: Configuration and Logistics Management.
- **Appendix G: Alteration Functional Identification Numbers (FINs)** - Contains the listing of FINs for use in the preparation of SARs.
- **Appendix H: SAR Alteration Material List (AML) Preparation Guide** - Contains guidance on how to prepare SAR material lists and provides guidelines for Quality Assurance (QA) of the data.