OPNAV INSTRUCTION 4790.4F

From: Chief of Naval Operations

Subj: SHIP'S MAINTENANCE AND MATERIAL MANAGEMENT SYSTEM POLICY

Ref: (a) OPNAVINST 4700.7L
(b) NAVSEAINST 4790.8C
(c) MIL-STD-3034A
(d) OPNAVINST 4790.16A

1. Purpose

   a. To establish policy and assign responsibilities for the ship's maintenance and material management (3M) system, per references (a) and (b).

   b. This instruction has been revised to address changes in responsibilities based on Office of the Chief of Naval Operations (OPNAV) reorganization. This instruction is a complete revision and should be reviewed in its entirety.

2. Cancellation. OPNAVINST 4790.4E.

3. Background. This instruction provides the current Navy 3M system policy; reference (b) provides implementation guidance.

4. Scope

   a. The ship's 3M system applies to all ships, service craft, small boats, selected shore station equipment, and non-aviation fleet test and support equipment, with the exceptions as noted in subparagraph 4c.

   b. Common support equipment used by both ship's force and naval aviation units shall have planned maintenance system (PMS) support provided under reference (b). Scheduling of this maintenance by naval aviation units may be done under the Naval Aviation Maintenance Program to avoid duplicative and redundant schedules.
c. The ship's 3M system does not apply to nuclear propulsion plants and associated test equipment under the cognizance of Naval Sea Systems Command (NAVSEASYSCOM) Nuclear Propulsion (NAVSEA 08), fleet ballistic missile systems, or aeronautical support equipment covered in the Naval Aviation Maintenance Program. Also excluded are civilian operated and maintained ships, small boats, and service craft, unless specifically included as a requirement in a base operating contract or other similar document.

d. All reference (a) activities providing maintenance to ships and other applicable activities shall report their efforts in the maintenance data system (MDS) as described in references (a) and (b).

e. Shore activity level of participation in the ship's 3M system shall be at the request of the shore activity's senior command and should be provided on a cost reimbursable basis. Equipment used ashore which is functionally identical to shipboard installed equipment with ship's 3M support shall be maintained using existing 3M coverage.

5. Discussion

a. The ship's 3M system is the nucleus for managing afloat and applicable shore station equipment. This system provides maintenance and material managers throughout the Navy with a process for planning, acquiring, organizing, directing, controlling, and evaluating the manpower and material resources used to support maintenance.

b. The ship's 3M system is designed to provide for managing maintenance and maintenance support to achieve maximum equipment operational readiness. The ship's 3M system shall provide for:

(1) Standardization – achievement of uniform maintenance standards and criteria.

(2) Efficiency – effective use of available manpower and material resources in maintenance and maintenance support efforts.
(3) Documentation - recording maintenance and maintenance support actions to establish a material history.

(4) Analysis - used to improve reliability and maintainability of systems and equipment, and to reduce cost of material ownership.

(5) Configuration status accounting - reporting and recording changes to installed equipment, equipment configuration specifications, and shipboard location.

(6) Scheduling - standardized method for planning, managing, executing and tracking maintenance requirements and accomplishments. This includes component requirements from the class maintenance plans.

6. Policy

a. PMS is a standardized method for planning, scheduling, and accomplishing preventive maintenance by ship's force. PMS maintenance procedures shall be developed under reliability-centered maintenance concepts as specified in references (c) and (d). The procedures are to be developed by the activities of the systems commands (SYSCOM) responsible for the development and procurement of the systems or equipment for active, new construction; and major conversion and activation of ships, boats, and crafts. The procedures are to be the minimum required to maintain equipment in a fully operable condition within specifications. PMS supersedes all organizational level planned or preventive maintenance systems or programs. Where a difference between the requirements and or procedures of PMS and other technical publications or systems exists, PMS requirements shall prevail. Differences shall be reported using PMS feedback reporting procedures outlined in reference (b).

b. To reduce PMS requirements while in extended maintenance periods and other times when equipment or systems are not operated, reference (c) shall be used to develop an inactive equipment maintenance PMS procedure.

c. MDS is the means by which maintenance personnel can report applicable maintenance requirements and configuration changes on all categories of equipment. MDS shall be set up so that maintenance personnel record maintenance data only once.
d. Configuration status accounting, or the ability to accurately document, track and maintain the configuration of systems and equipment is a critical factor in maintaining proper logistics support. NAVSUPSYSCOM maintains a central database with the ships' configuration data for NAVSEASYSCOM.

(1) For each ship class, a single activity called a configuration data manager has been designated the control authority for accuracy and completeness of the configuration information. Prior to ship delivery, the SYSCOM and the delivering activity are responsible for the initial accuracy and completeness of the central database. After delivery, it is imperative that the ship maintains and updates its configuration data in the ship's equipment file through the submission of configuration change reports.

(2) An item is considered to be a configuration worthy item if one or more of the following criteria are met:

(a) Any item that is bought from an outside activity;

(b) Any item, including software that has a separate specification (e.g., software version, build number);

(c) Any item that has a separate drawing;

(d) Any item that is a separate line item or sub-line item on a purchase order or contract;

(e) Any item that has or requires any form of separate technical or logistics document (e.g., supply support, test equipment requirement, calibration standard requirement, technical manuals and or repair standards, PMS, etc.), maintenance assist modules, intermediate and or depot level maintenance plans or drawings, installation or configuration control drawings and or selected records; or

(f) Any item needed to support software tracking.

e. Alteration installation activities are required to provide configuration change data to the ship upon completion of equipment installation. Configuration changes made by the ship
are reported through the ship's 3M system. For nuclear aircraft carriers with maintenance support centers (MSC), the MSC shall research and approve all configuration change requests.

7. Responsibilities

   a. Overall. Commands of the operating forces are responsible for the proper implementation of the ship's 3M system in the fleet, and are responsible for informing appropriate seniors in the chain of command of those conditions that affect material readiness. The development of management tools at the command level is encouraged.

   b. Deputy Chief of Naval Operations for Warfare Systems (CNO (N9)). Serve as resource sponsor for the ship's 3M system.

   c. Deputy Chief of Naval Operations Fleet, Readiness and Logistics, Fleet Readiness Division (OPNAV (N43))

      (1) Implement the overall policy governing management of the ship's 3M system, its development, coordination, and maintenance.

      (2) Review the resources requested for the operation, improvement, and support of the 3M system by all levels of leadership afloat and ashore; review supporting requirements in the budget effort. The program requirements shall be submitted by NAVSEASYSCOM; Commander, U.S. Fleet Forces Command; and Commander, U.S. Pacific Fleet to OPNAV (N43) for review.

      (3) Submit validated resource requirements for the ship’s 3M system to CNO (N9).

      (4) Approve management applications of the MDS and PMS.

   d. NAVSEASYSCOM

      (1) Manage and direct the development, implementation, operational maintenance, and improvements of all aspects of the ship's 3M system throughout the Navy, both PMS and MDS.

      (2) Submit the program requirements to OPNAV (N43) for review and validation.
e. **SYSCOMs and Bureau of Medicine and Surgery**

   (1) Ensure appropriate PMS packages are delivered simultaneously with equipment.

   (2) Ensure that PMS packages are delivered to Naval Sea Logistics Center Detachment Norfolk for inclusion in the master data file.

f. **Naval Education and Training Command**

   (1) Ensure training efforts in support of the ship's 3M system meet established training requirements and the necessary follow-on training is provided to fleet personnel.

   (2) Maintain shipboard applicable training equipment per reference (b).

g. **Commander, U.S. Fleet Forces Command and Commander, U.S. Pacific Fleet**

   (1) Implement, manage, coordinate and maintain the ship's 3M system program for all ships and commands under their cognizance.

   (2) Submit the program functional requirements to OPNAV (N43) for review and validation.

h. **Type Commanders (TYCOM).** Exercise primary responsibility for the effective operation and support of the ship's 3M system under their claimancy. This responsibility includes shore activities under their cognizance where the ship's 3M system is applicable. The commanding officer of naval bases, naval stations, and other activities that do not report directly to a TYCOM, shall exercise TYCOM 3M system responsibilities.

8. **Records Management.** Records created as a result of this instruction, regardless of media and format, shall be managed per Secretary of the Navy (SECNAV) Manual 5210.1 of January 2012.
9. **Reports Control.** Reporting requirements contained within this instruction are exempt from reports control per SECNAV Manual 5214.1 of December 2005, part IV, paragraph 7j.

P. H. CULLOM  
Deputy Chief of Naval Operations  
(Fleet Readiness and Logistics)

Distribution:  
Electronic only, via Department of the Navy Issuances Web site [http://doni.documentservices.dla.mil/](http://doni.documentservices.dla.mil/)