



COMDTINST 4790.3

SEP 17 2009

COMMANDANT INSTRUCTION 4790.3

Subj: MAINTENANCE MANAGEMENT POLICY

1. PURPOSE. To set policy and establish responsibility for the maintenance of U.S. Coast Guard (USCG) materiel. This instruction sets forth the requirements for a comprehensive maintenance program establishing policy for the performance of maintenance of USCG materiel assets. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document supersedes applicable laws and regulations.
2. ACTION. Area, district, and sector commanders, commanders of maintenance and logistics commands, Commander Deployable Operations Group, commanding officers of headquarters units, deputy/assistant commandants for directorates, Judge Advocate General, and special staff offices at Headquarters shall ensure that the provisions of this Instruction are followed. Internet Release Authorized.
3. DIRECTIVES AFFECTED. Listed in Appendix B.
4. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATION. Per the National Environmental Policy Act (NEPA) Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1D, Figure 2-1, (#1), the Coast Guard has determined that the development and issuance of the Maintenance Management Policy is categorically excluded from further NEPA documentation and a written CED (Categorical Exclusion Determination) is not required.
5. BACKGROUND. 14 USC states the USCG shall be a military service and a branch of the armed forces of the United States at all times. The USCG shall be a service in the Department of Homeland Security (DHS), except when operating as a service in the Navy. It is in the national interest for the USCG to maintain a logistics capability, including personnel, equipment, and facilities, to provide a ready and controlled source of technical competence and resources necessary to ensure the effective and timely performance of USCG missions. The USCG maintenance policy was originally designed to support a decentralized program with both regional and area

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characteristics where business processes were very localized and flexible. Numerous studies have highlighted the need for more comprehensive, integrated and standardized policies and processes. This Instruction contains the procedures required for uniform and effective management of maintenance resources.

6. DISCUSSION. Maintenance is a significant element of a successful logistics program. The USCG is undergoing a transformation to a bi-level maintenance model consisting of Organizational and Depot capabilities. Designation of a maintenance task as an organizational or depot capability does not direct assignment of activity responsibility. Allocation of a maintenance task responsibility to an organizational or depot activity is a separate decision considering issues of activity capability, capacity, and delivery effectiveness. Standardized maintenance improves overall maintenance quality, capability, and reliability. The required level of standardization will be achieved through this policy.
7. POLICY.
 - a. General. Maintenance programs for USCG materiel shall be structured and managed to realize the inherent performance, safety, and reliability levels of the materiel. Maintenance tasks restore safety and reliability to their inherent levels when deterioration has occurred. The maintenance system objective is to ensure, in the most cost-effective manner, that assigned materiel is serviceable (safe and operable), maintained in authorized configuration and properly configured to meet mission requirements. The system shall integrate both hardware and software maintenance activities for each asset. This is accomplished by performing maintenance, including but not limited to, inspection, repair, and overhaul, modification, preservation, testing, and condition or performance analysis. Emphasis shall be placed on comprehensive planning, resourcing, and scheduling these tasks to allow timely accomplishment through the efficient use of personnel, facilities, and equipment. Proper planning and execution reduces unscheduled maintenance events, increases asset availability, and allows for an orderly progression of maintenance actions toward sustaining materiel in a safe and operable condition. In addition, maintenance systems shall:
 - (1) Be clearly linked to strategic and contingency planning.
 - (2) Minimize the total cost of ownership throughout the system life cycle.
 - (3) Address all maintenance requirements whether afloat, at a fixed base, deployed site, Logistics Center/Service Center (LC/SC), Depot maintenance activity, in storage, or en route and define the responsibility/capability of unit and depot so there is total transparency throughout the system.
 - (4) Minimize the footprint of maintenance capabilities employed in an area of operation.
 - (5) Adopt government and industry best practices, including quality management processes, to continuously improve effective maintenance operations and maintenance production, achieve cost savings and cost avoidance, and realize process cycle time reduction.
 - (6) Employ the full spectrum of maintenance support structures available to sustain materiel, including inherently governmental organic capabilities, performance-based logistics arrangements, contracted support, and intergovernmental agency partnering, as applicable.
 - (7) Minimize and prevent Environmental, Safety, and Occupational Health hazards in maintenance activities. Environmental regulations must be taken into consideration when

implementing or modifying maintenance tasks. The frequency of a maintenance task involving a hazardous material or pollutant emission may result in legal ramifications including violations of the NEPA, the Clean Air Act, the Clean Water Act, Aerospace National Emission Standards for Hazardous Air Pollutants (NESHAPS), and various other State, National, or International environmental laws/regulations. Maintenance related materials that are regulated include but are not limited to: solvents, sealants, coatings (chromated conversion coating and hexavalent coating), petroleum, oil and lubrications (POL), Non Destruct Inspection materials, strip media, brush cadmium plating, and corrosion control materials. Establishing or expanding maintenance capability at facilities where such operations were not previously performed could affect NEPA and may require environmental assessments/environmental impact statements as well as changes to permits.

- (8) Minimize the use, generation, storage, and disposal of hazardous materiel.
 - (9) Consider occupational environment and human factors to allow for safe, efficient, and effective task accomplishment in the design of maintenance tasks and processes.
 - (10) Comply with federal, state, and local reporting requirements.
 - (11) Provide a complete audit trail of design modifications including the decisions leading to the modification. Configuration Management (CM) is a process for establishing and maintaining consistency of a product's performance and functional and physical attributes with its requirements, design, and operational information throughout its life. The CM effort includes identifying, documenting, and verifying the functional and physical characteristics of an item, then recording the configuration of an item, and finally controlling changes to an item and its documentation.
- b. Life Cycle Management. Throughout the life cycle of the system, including Acquisition, Sustainment, and Disposal, the maintenance program shall:
- (1) Be developed concurrently with materiel design, beginning with an analysis of failure modes and effects. The programs shall consist of applicable and effective tasks for addressing the failure modes and effects using reliability-centered maintenance analysis, and shall allocate tasks to appropriate levels of maintenance (i.e., organization and depot) based on criteria derived from customer requirements and cost-effectiveness analysis. Task development shall include determination of initial compliance thresholds and task repetition intervals as well as a plan for providing feedback to the design process if effective maintenance tasks cannot adequately address a failure mode or effect. Promulgation of maintenance task lists, procedure cards and applicable manuals is a primary input to training development for maintainers.
 - (2) Be structured to provide information necessary for design improvement of USCG materiel when inherent performance or reliability levels prove inadequate. Maintenance programs shall be adjusted periodically using the "Backfit" Reliability Centered Maintenance (RCM) methodology to improve maintenance agility, increase operational availability, and reduce life-cycle total ownership costs.
 - (3) Minimize requirements for support equipment including test, measurement, and diagnostic equipment. When the use of support equipment may not be eliminated, standardize support equipment design for the broadest possible range of applications, consistent with maintenance concepts.

- (4) Require standardization in technical manuals, operator and maintainer interfaces, and data systems to reduce specialized training and enable broader use of basic rating skills.
- (5) Ensure that during the requirements development process when developing availability and readiness, maintenance requirements to achieve those objectives are established and planned.
- (6) Use maintenance engineering practices to identify the most cost-effective combination of organic, contract, and inter-service sources of repair.
- (7) Maximize the use of diagnostic, prognostic and health management technology in embedded and off-equipment applications when feasible and cost-effective. Where appropriate, provide the maintenance workforce with the range of technological tools necessary to enhance capabilities (e.g., interactive technical manuals, portable maintenance aids, and access to technical information), properly equip the workforce and provide adequate technical and managerial training.
- (8) Identify depot core capability requirements as early as possible in the acquisition life cycle and ensure depot level maintenance facilities are resourced to support them. The capabilities to support these core requirements shall be in place no later than 4 years after Initial Operational Capability (IOC) of the asset. Core capabilities and associated workloads shall be adjusted periodically, and reviewed formally on a biennial basis, for force structure changes, introduction of new systems, and changes in doctrine to counter emerging threats.
- (9) Process guides will be developed to better define, provide greater detail, and clarify specific policy requirements. Each process guide shall be assigned a lead LC/SC to be the Current Document Control Authority (CDCA) to maintain configuration management of the document enterprise wide.
- (10) Employ public-private partnering and other collaborative arrangements for depot maintenance operations whenever feasible and beneficial.
- (11) Periodically review field and depot maintenance workloads to identify opportunities for consolidation, regionalization, public-private partnerships, or other types of integrated support arrangements that yield significant economies of operation while sustaining or improving responsiveness. Inter-Service Support and Depot Maintenance Inter-Service Support Agreements shall be employed to establish consolidated and inter-service maintenance capabilities.
- (12) Facilitate, collect, and analyze maintenance-related reliability data. The programs shall include sufficient analytic capability for identifying needed adjustments based on operating experience, materiel condition, and requirements for reliability, maintainability and supportability modifications, and inputs to established performance support including training evaluations and analysis. The programs shall provide maintenance activities the means for assessing information generated by prognostic and diagnostic capabilities and for taking appropriate maintenance actions. The programs shall also establish and evaluate performance indicators that promote continuous improvement in maintenance, ensuring responsiveness and best value to operating forces.
- (13) Operate programs for the effective storage, lay-up (retention and non-retention), and disposition of materiel. Such programs shall be structured to reduce maintenance requirements while preserving materiel capability. Demilitarization and salvage operations must conform to applicable environmental and industrial safety standards.

- (14) Invest in the development of new technologies to improve the reliability, maintainability, and supportability of USCG materiel.
- (15) Ensure access to support and support-related technical information is consistent with the planned support concept throughout the asset's life cycle.
- (16) Provide for the following areas of special emphasis and process improvement. These areas may require development of unique process guides.
 - (a) Cannibalization. Cannibalization, while undesirable, may be necessary as a last resort, to meet mission requirements. Cannibalization is a costly practice in terms of time, labor-hours, documentation, and damaged equipment. It increases man hours expended, risk of damage to equipment, and increases the chance that the component will break down prematurely and decreases the fidelity of end item wear-out estimates. The programs must ensure that requisite direction and discipline are applied to minimize detrimental effects on materiel readiness and the workforce. Approval authority and documentation procedures for cannibalization events shall be clearly delineated. All cannibalization actions shall be closely controlled and monitored and authorized by the Engineering Officer or their designated representative.
 - (b) Corrosion Control/Prevention. Corrosion prevention programs shall be established to minimize costs associated with material deterioration throughout the system life cycle. Reporting systems shall be established and maintained for data collection and feedback, and shall be used to address readiness issues and logistics considerations associated with corrosion control and prevention.
 - (c) Calibration. Periodic calibration of general test equipment and special tools is necessary to ensure that accurate measurements are obtained. This equipment is provided for maintenance and trouble shooting, and shall be maintained at optimum performance levels. Calibration is mandatory for support equipment, general test and special tools used to make quantitative measurement or to provide a reference quantity of known value. Periodic calibration on or before the calibration due date recorded on the applied calibration label ensures an acceptable level of measurement reliability is achieved when these assets are called upon for use. Assets are left in service on the condition they continue to meet performance standards. Maintenance and calibration shall be performed at the maintenance level that can best ensure proper accomplishment, taking in to consideration applicable laws, urgency, priority, crew impact, capability, capacity, and total cost of ownership.
 - (d) Quality Assurance (QA). The QA concept is fundamentally the prevention of the occurrence of defects. This principle extends to safety of personnel, maintenance of equipment, and virtually every aspect of the total maintenance effort. Prevention is about regulating events rather than being regulated by them. The concept embraces all events from the start of the maintenance operation to its completion and is the responsibility of all maintenance personnel. The achievement of QA depends on prevention, knowledge, and special skills. A QA program shall provide inspection and evaluation objective sampling of both the quality of equipment and the qualifications of maintenance personnel with a goal of identifying underlying causes of poor quality in the maintenance effort. The evaluation and analysis of deficiencies and problem areas shall be key functions of the QA program.

- (e) Tool Control Program (TCP). A TCP shall provide instant inventory capability through internally configured tool containers with each tool positioned in an individually tailored location. The primary objectives of the TCP are the enhancement of safety by eliminating accidents and equipment damage attributed to uncontrolled tools and minimizing tool replacement costs. Instructions and procedures shall be developed and implemented for a tool control program ensuring safe operations by precluding completion of any maintenance action without accounting for all tools. An effective TCP is the responsibility of all maintenance personnel and all levels of the chain of command.
 - (f) Weight Handling Equipment (WHE). Programs shall establish policies for their WHE. The Coast Guard (CG) recognizes that WHE operating from afloat assets will require increased maintenance, inspections, and testing due to the corrosive environment in which the equipment operates. Whenever possible, uniformity shall be maintained in all other areas. At a minimum all programs shall address in their policy the management, maintenance, inspection, testing, certification, alteration, repair, and operation of WHE. Its purpose is to ensure that all WHE is safe to operate, weight handling operations are conducted safely and efficiently, and to ensure optimum service life.
 - (g) Safety Related Items. Programs shall establish policies for their safety related and personnel protective equipment, ensuring compliance with all applicable CG Safety directives. Policies shall clearly articulate maintenance requirements and provide direction regarding removing equipment from use if maintenance is not performed.
 - (h) Non-CG Owned Equipment. Any equipment or system in use by the CG that is owned and/or funded for maintenance by another agency/company shall be maintained in accordance with the agency/companies maintenance policy, procedures, and practices or the existing Memorandum of Agreement (MOA)/Memorandum of Understanding (MOU). Examples: Navy Type, Navy Owned, leased copy machines, leased vehicles, and etc. Any MOU/MOA established shall specifically address responsibilities and funding for maintenance.
- c. Information Management. USCG maintenance activities will be enabled and supported by fully integrated information technology, where appropriate, to achieve logistics program objectives. These program objectives include but are not limited to total asset visibility, total life cycle support, planning, scheduling, execution, production and cost control, tracking workload consumption, correlating maintenance task responsibility, configuration management based, maintenance driven supply chain management, integrated technical data management integration, financial management integration and reporting, operational availability, materiel performance, materiel operational status, materiel maintenance status, and materiel disposition. The choice and implementation of information technology shall conform to the policies of the USCG CIO and Enterprise Architecture standards. Records generated by CG maintenance activities will be kept in accordance with the Information and Life Cycle Management Manual, COMDTINST M5212.12 (series).

8. FORMS/REPORTS. None.

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Encl: (1) Appendix A - Glossary
(2) Appendix B - References
(3) Appendix C - Acronyms
(4) Appendix D - Resources

GLOSSARY

Acquisition – a single uniform system whereby all equipment, facilities, and services are planned, developed, acquired, maintained, and disposed of by the USCG. The system includes research, development, test and evaluation, production, procurement, and operations and support.

Age Degradation – a reduction of the item’s operating reliability caused by reduction of the item’s resistance to failure as it is used.

Aids to Navigation (ATON) – are devices external to a vessel specifically intended to assist navigators in determining their position or safe course or to warn them of dangers or obstructions to navigation. The navigable waters of the United States are marked in a manner consistent with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Buoyage System. These aids include lighted and unlighted beacons, ranges, leading lights, lighthouse, buoys, structures, as well as sound signals associated with these aids. It also includes RACONs, Loran C, and DGPS.

Alterative Maintenance – action by maintenance personnel to alter the configuration of an item in accordance with an approved Time Compliance Technical Order (TCTO)

Bi-Level Maintenance Concept – the planned or envisioned methods that will be employed to sustain the system/equipment at a defined level of readiness or in a specified condition in support of the operational requirement. This includes significant system/equipment characteristics, for example, built-in test, compatibility with existing or planned testing and SE, and a generalization of logistics support element requirements (manpower, equipment, facilities, and workload distribution throughout the defined maintenance level). The maintenance concept is initially stated by the government for design and support planning purposes and provides the basis or point of departure for development of the plan to maintain. The maintenance concept may be influenced or modified by economic, technical, or logistics considerations as the design development of the system/equipment proceeds.

Calibrate – to determine and make required corrections in established standards or Precision Measuring Equipment. It consists of the comparison of two instruments, one of which is a certified calibration standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the other instrument or PME being compared with the certified calibration standard.

Calibration – the process by which instrumentation is compared to a standard or PME with a standard of higher accuracy to ensure the former is within specified limits throughout its entire range. The calibration process involves the use of approved instrument calibration procedures.

Calibration Interval – the maximum length of time between calibrations that calibration standards or PME are expected to maintain reliable measurement capability.

Calibration Procedure – a document that outlines the steps and operations to be followed by calibration personnel in calibrating an instrument.

Cannibalize – to remove serviceable parts from one item of equipment in order to install them on another item of equipment. Includes terms such as controlled exchange, controlled substitution, transfers, and selective interchange.

Capacity – the amount of workload, expressed in actual direct labor hours, that a facility can effectively produce annually in a single shift, 40-hour week, while producing the product mix that the facility is designed to accommodate.

Commercial Items – articles that have been sold or leased in substantial quantities to the general public and are purchased without modification in the same form they are sold in the commercial marketplace, or with minor modifications to meet USCG requirements.

Configuration Management (CM) – applies appropriate processes and tools to establish and maintain consistency between the product and the product requirements and attributes defined in product configuration information. A disciplined CM process ensures that products conform to their requirements and are identified and documented in sufficient detail to support the product life cycle. CM assures accurate product configuration information and enables product interchangeability and safe product operation and maintenance to be achieved. CM includes four basic elements: configuration identification, configuration control, configuration status accounting, and configuration audits. CM policies and definitions are in COMDTINST 4130 series, Coast Guard Configuration Management and are applicable to SE. Baselines and Technical Data issues are also critical parts of a good CM program.

Core Depot Maintenance Capability – organic depot maintenance capabilities that are necessary to maintain and repair the systems and assets to enable the USCG components to fulfill strategic and contingency plans, unless excluded by law. Core depot maintenance capabilities shall comprise the personnel, facilities, and equipment that can be applied to provide effective and timely response to surge demands, ensure competitive capabilities, and sustain institutional expertise.

Corrective Maintenance – to restore lost or degraded functions by correcting unsatisfactory conditions.

Current Document Control Authority (CDCA) – applies to the LC/SC that will maintain configuration management of a document enterprise wide.

Deployed – the relocation of forces and materiel to desired operational areas.

Depot Maintenance – the term “depot maintenance and repair” means material maintenance or repair requiring the overhaul, upgrading, or rebuilding of an asset or its components, assemblies, or subassemblies. Depot maintenance also encompasses the testing and reclamation of equipment as necessary. These activities are categorized as depot-level maintenance regardless of the source of funds for the maintenance or repair or the location at which the maintenance or repair is performed. In essence, depot maintenance is work performed in support of another entity.

Depot Maintenance Activity – an industrial-type facility designated by the USCG to perform maintenance on systems, equipment, and repairable items.

Disposal – the act of getting rid of excess, surplus, scraps, or salvages property under proper authority. Disposal may be accomplished by, but not limited to, transfer, donation, sale, declaration, abandonment, or destruction.

Disposition – assets may be transferred, retired, sold, lost, destroyed, or modified.

Footprint – the amount of personnel, spares, resources, and capabilities physically present and occupying space at a deployed location.

Function – any action or operation, which an item is intended to perform.

Hazardous Material – any substance that, due to its chemical, physical, or biological nature, causes safety, public health, or environmental concerns that would require an elevated level of effort to manage.

Initial Operating Capability (IOC) – attained when some units and/or organizations in the force structure scheduled to receive a system 1) have received it, and 2) have the ability to employ and maintain it.

Inspect – to compare the characteristics of an item with established standards.

Inspection – visual examination of the item (hardware and software) and associated descriptive documentation which compares appropriate characteristics with predetermined standards to determine conformance to requirements without the use of special laboratory equipment or procedures.

Layup – initial activities or preparations require placing an asset into retention or non-retention.

Maintainability – the ease with which maintenance of a functional unit can be performed in accordance with prescribed requirements.

Maintenance – all action taken to retain materiel in a serviceable condition or to restore it to serviceability. It includes inspection, testing, servicing, and classification as to serviceability, repair, rebuilding, and reclamation. All repair action taken to keep a force in condition to carry out its mission.

Maintenance Engineering – the discipline and profession of applying engineering concepts to the optimization of equipment, procedures, and departmental budgets to achieve better maintainability, reliability, and availability of equipment. This is accomplished by the application of techniques and engineering skills organized to ensure that the design and development of systems and equipment provide adequately for their effective and economical maintenance.

Materiel - real property and personal property; e. g., hardware, equipment, software, or any combination thereof, associated with USCG systems (aircraft, automotive equipment, construction equipment, electronics, communications systems, ships, ordnance, weapons, munitions, and general purpose equipment) and their related spares, repair parts, and support necessary to equip, operate, maintain, and support activities for administrative, support, or combat purposes.

Modification – a configuration change to a produced Configuration Item (CI).

Non-Retention – the classification of an asset intended for eventual disposal, not requiring preservation. The decision to increase inspections or add additional preservation will be made on a case by case basis.

Organic – assigned to or forming an essential part of a public sector military organization.

Organizational Maintenance – maintenance normally performed in the field in support of operational capabilities. The organizational maintenance mission is to maintain assigned equipment in a full mission-capable status. Organizational maintenance tasks can be grouped under the categories of inspections, servicing, adjusting, and preventive and corrective maintenance. Designation of a maintenance task as an organizational or depot capability does not direct assignment of activity responsibility. Allocation of an organizational maintenance task to a unit or depot level activity is a separate decision. Conditions to be met for operational units to conduct preventive and corrective maintenance are 1) capability; authorized to perform, trained to perform, equipped to perform the maintenance task, and 2) capacity; possessing the available man hours required to perform the task.

Overhaul – the restoration of an item to a completely serviceable condition as prescribed by maintenance serviceability standards.

Performance Indicators – a set of metrics designed to assess the adequacy of the maintenance program in two fundamental areas are (1) the effectiveness of the maintenance program in supporting the achievement of design, operational, and reliability goals for USCG materiel, and (2) the efficiency of the maintenance process itself.

Preventative Maintenance – to minimize conditions that cause unacceptable degradation of functions.

Quality Assurance (QA) – a planned and systematic pattern of all the actions necessary to provide adequate confidence that the item or product conforms to established technical requirements.

Reliability – the ability of a system or component to perform its required functions under stated conditions for a specified period of time.

Reliability Centered Maintenance (RCM) – a methodology to develop or revise a maintenance approach with the objective of maintaining the inherent reliability of a system or equipment, recognizing that changes in inherent reliability may be achieved only through design changes.

Repair – the restoration of an item to serviceable condition through correction of a specific failure or unserviceable condition.

Retention – the classification of an asset kept in a state of preservation for the purpose of future use. The degree of preservation may vary from a minimum of simple periodic inspections to minor maintenance.

Safety – freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment; protection from threats to life or limb.

Serialized Item Management (SIM) – the process of identifying populations of select items of USCG materiel, marking all items in the population with a universally unique identification number; and enabling the generation, collection, and analysis of maintenance data about each specific item.

Software Maintenance – those activities after Initial Operating Capability (IOC) necessary to (1) correct errors in the software, (2) add incremental capability improvements (or delete unneeded features) through software changes, and (3) adapt software to retain compatibility with hardware or with other systems with which the software interfaces. Depot-level software maintenance consists of changes made to operational software resident in materiel (e.g., systems and their components, and their associated automated test equipment and test program sets).

Standardization – the process by which the CG achieves the closest practicable cooperation among the services and agencies for the most efficient use of research, development, and production resources. Additionally, from the perspective of sparing resources, configuration control, re-acquisition of replacements, and training, it provides the means for services and agencies to agree on the adoption of using: (1) common or compatible operational administrative and logistics procedures, (2) common or compatible technical procedures and criteria, (3) common, compatible, or interchangeable supplies, components, weapons and/or equipment.

Storage – depositing in a warehouse or other designated space for the purpose of keeping or laying aside for future use. For the purpose of this instruction, specifically any spare part; especially deep insurance spares, in “A” usable condition.

Support Equipment – all equipment (mobile and fixed) required to support the operation and maintenance of a materiel system. This includes associated multi-use support items, ground handling and maintenance equipment, tools, metrology and calibration equipment, and manual and automatic test equipment. It includes the acquisition of logistics support for the support equipment itself.

Sustainment – involves the supportability of fielded systems and their subsequent life cycle product support from initial procurement to supply chain management (including maintenance) to reutilization and disposal. It includes initial provisioning, cataloging, inventory management and warehousing, and depot and field level maintenance.

System – a combination of two or more interrelated pieces of equipment (sets) arranged in a functional package to perform an operational function or to satisfy a requirement.

System Safety – the application of engineering and management principles, criteria, and techniques to achieve acceptable mishap risk, within the constraints of operational effectiveness and suitability, time, and cost, throughout all phases of the system life cycle.

Technical Data – scientific or technical information recorded in any form or medium (such as manuals and drawings) necessary to operate and maintain a system. Documentation of computer programs and related software are TD. Computer programs and related software are not TD. Also excluded are financial data or other information related to contract administration.

Technical Information – information, including scientific information that relates to research, development, engineering, test, evaluation, production, operation, use, and maintenance of USCG materiel; recorded or accessible in any form or medium (such as manuals, drawings, or digital formats). Includes documentation for computer programs and related software, but not the actual computer programs and related software.

Test, Measurement, and Diagnostic Equipment (TMDE) – any system or device used to evaluate the operating condition of a system or equipment to identify or isolate any actual or potential malfunction. TMDE also includes Automatic Test Equipment (ATE) and Test Program Set (TPS).

Testing – subjecting an item to prescribed conditions to determine if it will function per predetermined requirements.

Weight Handling Equipment (WHE) – equipment used for lifting or moving weights which provide a mechanical advantage for lifting, moving, excavating, or placing materials or objects. Included are cranes, davits, derricks, hoists, gin poles, elevators, winch trucks, capstans, winches, and straddle carriers. WHE also consist of rigging gear (e.g., slings & shackles), and associated equipment (e.g., chainfalls, dynamometers).

REFERENCES

The References listed should be reviewed to comply with the requirements of Maintenance Management Policy Instruction, COMDTINST 4790.3.

COMDTINST 3120.4 Coast Guard Standard Operational Planning Process
COMDTINST 4000.5 (series) Coast Guard Logistics Doctrine
COMDTINST 4080.1 (series) Logistics Support for Deployed Units
COMDTINST 4105.4 (series) Long Range Planning of Logistics Support for Operational U.S. Coast Guard Cutters
COMDTINST 4130.6 Coast Guard Configuration Management
COMDTINST 4200.38 (series) Coast Guard Standardization Program
COMDTINST 4400.22 (series) Federal Logistics Data (FED LOG) Program for the U. S. Coast Guard
COMDTINST 5240.5 (series) Coast Guard Industrial Management Program
COMDTINST 7100.2 (series) Support of Navy Type, Navy Owned (NTNO) Electronics Equipment
COMDTINST 7100.3 (series) Financial Resources Management Manual (FRMM)
COMDTINST 13020.1 (series) Aeronautical Engineering Maintenance Management Manual
COMDTINST 13640.1 (series) Calibration Tracking
COMDTINST M4000.2 (series) U. S. Coast Guard Logistics Handbook
COMDTINST M4105.8 (series) Systems Integrated Logistics Support (SILS) Policy Manual
COMDTINST M4130.8 (series) Coast Guard Configuration Management for Acquisitions and Major Modifications
COMDTINST M4130.9 (series) Coast Guard Configuration Management during Sustainment
COMDTINST M4500.5 (series) Property Management Manual (PMM)
COMDTINST M5000.10 (series) Major Systems Acquisition Manual (MSAM)
COMDTINST M5212.12 (series) Information and Life Cycle Management Manual
COMDTINST M5215.6 (series) The Coast Guard Directives System
COMDTINST M9000.6 (series) Naval Engineering Manual
COMDTINST M11000.11 (series) Civil Engineering Manual
COMDTINST M11000.4 (series) Tower Manual
COMDTINST M11001.13 (series) Coast Guard Housing Manual
COMDTINST M11240.9 (series) Motor Vehicle Manual
COMDTINST M16114.4 (series) Boat Management Manual
COMDTINST M16475.1 (series) National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts
COMDTINST M16478.1 (series) Hazardous Waste Management Manual
COMDTINST M16500.3 (series) Aids to Navigation Manual - Technical
COMDTINST M16500.6 (series) Lighthouse Maintenance Management Manual
COMDTINST M16500.7 (series) Aids to Navigation Manual - Administration
COMDTINST M16500.10 (series) Aids to Navigation Preventative Maintenance System Guide
COMDTINST M16500.17 (series) Alternating Current Aids to Navigation Servicing Guide
COMDTINST M16500.19 (series) Short Range Aids to Navigation Servicing Guide
COMDTINST M16500.25 Aids to Navigation Manual - Structures
CGTO PG-85-00-150 Aeronautical Support Equipment Process Guide

ACRONYMS

ATE	Automatic Test Equipment
ATON	Aids to Navigation
ATS	Automatic Test Systems
CFO	Chief Financial Officers
CFR	Code of Federal Regulations
CI	Configuration Item
CIO	Chief Information Officer
CM	Configuration Management
CDCA	Current Document Control Authority
DGPS	Differential Global Positioning System
DHS	Department of Homeland Security
FRMM	Financial Resource Management Manual
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IOC	Initial Operational Capability
LC/SC	Logistics Center/Support Center
Loran C	Long Range Navigation C (current version)
METCAL	Metrology and Calibration
MHE	Material Handling Equipment
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NDI	Non Destruct Inspection
NEPA	National Environmental Policy Act
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NTNO	Navy Type, Navy Owned

Appendix C to COMDTINST 4790.3

OMB	Office of Management and Budget
PME	Precision Measuring Equipment
POL	Petroleum, Oil and Lubrications
QA	Quality Assurance
RACON	Radar Beacon
RCM	Reliability Centered Maintenance
SIM	Serialized Item Management
SMSE	Shipboard Mobile Support Equipment
TCP	Tool Control Program
TD	Technical Data
TMDE	Test, Measurement, and Diagnostic Equipment
TPS	Test Program Set
USC	U.S. Code
USCG	U.S. Coast Guard
WHE	Weight Handling Equipment

RESOURCES

The Resources listed are the Statutory, Regulatory, and Directives used in drafting the Maintenance Management Policy Instruction, COMDTINST 4790.3.

United States Code Title 10 – Armed Forces

United States Code Title 14 – Coast Guard

United States Code Title 32 – National Guard, Chapter 9 Homeland Defense Activities

United States Code Title 33 – Navigation and Navigable Waters

United States Code Title 41 – Public Contracts

United States Code Title 46 – Shipping

Code of Federal Regulations 14 – Aeronautics and Space

Code of Federal Regulations 29 – Occupational Safety and Health

Code of Federal Regulations 32 – National Defense

Code of Federal Regulations 33 – Navigation and Navigable Waters

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