



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
WASHINGTON, DC 20362-5101

IN REPLY REFER TO

NAVSEAINST 4160.3A
OPR CEL-TD
3 OCT 89

NAVSEA INSTRUCTION 4160.3A

From: Commander, Naval Sea Systems Command

Subj: TECHNICAL MANUAL MANAGEMENT PROGRAM (TMMP)

Ref: (a) DODI 4151.9
(b) SECNAVINST 5219.2A
(c) NAVAIRINST 4160.2
(d) NAVSEA S0005-AA-PRO-010/TMMP

1. Purpose. To revise and update policies, responsibilities, and required actions for the life cycle management and control of technical manuals. This is a major revision to the current instruction and should be read in its entirety. Major program changes are listed in paragraph 5.

2. Cancellation

Instructions

NAVSEAINST 4160.1 of 17 Mar 1981
NAVSEAINST 4160.3 of 7 Aug 1982
NAVSEAINST 5600.5 of 4 Nov 1975

Notices

NAVSEANOTE 4160 of 25 Sep 1982
NAVSEANOTE 9086 of 22 May 1984
NAVSEANOTE 9086 of 28 Feb 1985
NAVSEANOTE 9086 of 17 Sep 1985
NAVSEANOTE 9086 of 30 Sep 1985
NAVSEANOTE 9086 of 26 Mar 1987

3. Background

a. The requirements of references (a), (b), and (c) are incorporated and implemented by this instruction. Reference (d) is the new procedures manual required for program operation in support of this instruction.

b. Issues identified by the Navy Inspector General have been addressed in this revised instruction.

c. The terms and acronyms used in this instruction are defined in reference (d).

4. Scope. The Technical Manual Management Program (TMMP) encompasses planning, budgeting, acquisition, approval, distribution, maintenance, and disposition of technical manuals issued by the Naval Sea Systems Command. The TMMP:

a. Applies to all phases and aspects of the life cycle management of technical manuals.



3 OCT 89

b. Applies to all technical publications or technical data that furnish information on the description, installation, operation, test, maintenance, repair, and overhaul of a ship, system, equipment, or component.

c. Excludes technical manuals and publications under the technical cognizance of the Deputy Commander for Nuclear Propulsion (NAVSEA 08) and Navy Special Weapons Ordnance Publications (SWOPs).

5. Program Changes. The following major TMMP initiatives being implemented by this revision are in the areas of management and quality control. These new initiatives require that:

a. A technical manual Point of Contact be assigned in activities involved with technical manuals.

b. Certified printing management activities be used to insure adequate quality and proper distribution of technical manuals.

c. Each new technical manual, revision, and change have a certification sheet.

d. An individual Technical Manual Maintenance Activity (TMMA) be designated for each technical manual.

e. Technical manuals be procured either by a separate Contract Line Item Number (CLIN) or by the separate collection of actual technical manual costs.

f. Technical manual data in digital media and format be acquired starting in FY 90 (when specified).

g. Procedures promulgated by reference (d) are mandatory for execution.

h. New technical manuals be designed to facilitate their use in training as well as for equipment installation, operation, test, maintenance, repair, and overhaul.

6. Waivers and Deviations. Deviations or waivers shall be in writing and shall be for a specific period of time and for a specific program element and function. Obtain waivers or deviations from the provisions of this instruction from Naval Sea Systems Command, Chief Engineer for Logistics (SEA CEL-1D).



M. MACKINNON III
Vice Commander

Distribution: (see page 3)

Distribution:

SNDL	C84B	PERA, SUBMEPP and NAVMATDATASYSGRU
	C84C	NAVSEACENLANT and NAVSEACENPAC
	C84D	NAVUSEAWARENGSTA DET
	C84E	WPNSTA DET
	FKM13	SPCC
	FKM19	NPPS
	FKM20	NAVILCO
	FKM22	NAVPUBFORMCEN (300)
	FKP	COMNAVSEASYSKOM Shore Activities
	FKQ6C	NAVOCEANSYSKON
	FKQ6F	NAVSWC
	FKQ6G	NUSC
	FT1	CNET

Copy to:

SNDL	A3	CNO
	A5	Bureaus
	21A1	CINCLANTFLT
	21A2	CINCPACFLT
	22A	Fleet Commanders
	24	Type Commanders (less 24J)
	26F1	COMOPIEVFOR
	26MM1	FLITILOTEAM LANT
	26MM2	FLITILOTEAM PAC
	FF8	PRESINSURV
	FKA1	SYSTEMS COMMANDS (less FKA1G)
	FKM27	NPPSMO
	FKP1G	NAVSHIPWPNSYSENGSTA (Code 5H00) (50)
	FKP7	NAVSHIPYD (30)
	FKP8	SUPSHIP (30)
	FKP16	NAVSSK (20)
	FT88	EDOSCOL

Naval Publications and Printing Service Office, NDW

NAVSEA Special List Y3

Stocked:

Commanding Officer
Naval Publications and Forms Center
5801 Tabor Avenue
Philadelphia, PA 19120-5099

3 OCT 89

LOCATOR CROSS-REFERENCE SHEET

Subj: The Naval Sea Systems Command Technical Manual Management
Program (TMMP)

See: _____
(Recipient enters information as to where this instruction
is maintained)

NAVSEAINST 4160.3A
3 OCT 89

RECORD OF CHANGES

CHANGE NO.	DATE OF CHANGE	DATE ENTERED	SIGNATURE OF PERSON MAKING CHANGE

TABLE OF CONTENTS

<u>Chapter</u>	<u>Subject</u>	<u>Page</u>
SECTION 1		
Policy and Responsibility		
1.1	Policy	1-1
1.2	Responsibility	1-6
1.2.1	Deputy Chief Engineer for Logistics (CHENG-L)	1-6
1.2.2	Technical Data Division (SEA CEL-TD)	1-6
1.2.3	Headquarters and Command Shore Activities	1-6
1.2.4	Naval Ship Weapon Systems Engineering Station (NSWSES), Naval Sea Data Support Activity (NSDSA)	1-7
SECTION 2		
Management Action and Operations		
2.1	Technical Data Division (SEA CEL-TD)	2-1
2.2	Acquisition Management Activities	2-3
2.3	Engineering Technical Codes	2-6
2.4	Technical Manual Maintenance Activities (TMMA)	2-6
2.5	Printing Management Activities	2-7
2.6	Planning Yards	2-8
2.7	Chief of Naval Education and Training (CNET)	2-8
2.8	Manpower Personnel and Training Division (SEA CEL-MP)	2-9
2.9	Naval Sea Logistics Center (NAVSEALOGCEN)	2-9
2.10	Navy Publishing and Printing Service (NPPS)	2-10
2.11	Naval Publications and Forms Center (NAVPUBFORMCEN)	2-10
2.12	Fleet and Other Technical Manual Users	2-11
2.13	Navy International Logistics Control Office (NAVILCO)	2-12
2.14	Naval Ship Weapon Systems Engineering Station (NSWSES), Naval Sea Data Support Activity (NSDSA)	2-12

3 OCT 89

SECTION 1
POLICY AND RESPONSIBILITY

1.1 Policy

a. Technical manuals shall be managed and controlled through a central Technical Manual Management Program (TMMP). Per references (b) and (c), a single activity at Command headquarters shall exercise authority and responsibility for the policies, procedures, and programs applicable to technical manual management. The TMMP shall be maintained as a formal and effective program to ensure that technical manual, change, and revision products are of a high quality and are under adequate management control at all times. The TMMP shall be coordinated and integrated with the Command Integrated Logistics Support (ILS) and related technical programs.

b. Activities involved in acquiring, maintaining, or managing technical manuals to support new or modified equipment, systems, or ships shall: (1) implement the policies of this instruction; (2) coordinate all technical manual implementing policies and procedures with the Command program manager for the TMMP; and (3) assign an individual as a Point of Contact to provide coordination and disseminate technical manual information.

c. Procedures issued in reference (d) are mandatory and shall be followed by all activities relative to the management of technical manuals. NAVSEA shore activities shall prepare local procedures tailored to unique activity requirements but compatible with this instruction and reference (d).

d. Acquisition activities shall be responsible for the procurement of new and updated technical manuals required for support of ships, systems, and equipment. These manuals shall be funded by the same appropriation that funds the hardware or hardware modification. Technical manuals that are required to be outfitted on ships funded by the Shipbuilding and Conversion, Navy (SCN) shall be free of technical deficiencies.

e. The update of Selected Record Data (SRD) and systems and equipment technical manuals incident to an overhaul/availability shall be funded using Fleet Modernization Program (FMP)/Design Services Allocation (DSA) resources.

f. Technical manual specifications, standards, and requirements documents shall be consolidated, simplified, standardized, and maintained current.

g. Technical manual acquisition requirements documents (e.g., specifications, standards, handbooks, data item descriptions) shall be upgraded to ensure they include sufficient technical data requirements to support both training curricula development and training implementation.

h. A plan for technical manual acquisition is required for each ship and major weapon system procurement. Technical manual requirements and milestones, including quality assurance, should be established as early as

3 OCT 89

feasible in each program, identified in acquisition plans, and incorporated in Integrated Logistics Support Plans (ILSP) and Navy Training Plans. The milestones shall support hardware delivery schedules, training, and operational requirements.

i. Ship and major weapon system acquisition managers shall procure all technical manuals and technical manual data required to support the ship or system as part of the basic hardware acquisition contracts. Procurement shall be accomplished early in the ship design/construction, or system full scale engineering development phase. Technical manual updates and revisions shall be procured in follow-on or production phase contracts.

j. A comprehensive technical manual or set of manuals supporting installation, operation, testing, maintenance, repair, and overhaul shall be procured with each ship, weapon system, equipment, or major component.

k. Technical manuals shall be acquired by a separate, priced contract line item (CLIN) or subline items per the procedures established in the Department of Defense (DoD) Federal Acquisition Regulation (DFAR) Supplement, subpart 204.71. In cases where the Program Manager (PM) deems that a separate priced technical manual CLIN is not feasible, alternative contracting methods may be used as long as technical manuals are procured in a manner that their costs are known to the PM.

l. Technical manuals shall be acquired in accordance with a Technical Manual Contract Requirement (TMCR). The TMCR is mandatory for use in all procurements of technical manuals, changes, and revisions, and shall be an attachment to the Contract Data Requirements List (CDRL). For internal development of technical manuals, the Command shall use a Technical Manual SEATASK Requirement (TMSR) in lieu of a TMCR.

m. A deferred ordering clause shall be included in contracts per the DFAR Supplement (DFAR 252.227-7027). Deferred ordering is used only to procure manuals that are within the scope of hardware specifications but not identified by title or reference in the CDRL.

n. All procurement requests (PRs), solicitations, and contracts requiring the delivery of technical manuals shall include the DFAR Supplement clause for Technical Data - Withholding of Payment (DFAR 252.227-7030). Payments shall be withheld when the technical manual is either late in delivery (through no fault of the Government) or delivered but contractually unacceptable to the Government.

o. Commercial manuals shall be acquired whenever possible. They must: (1) currently exist (off-the-shelf); (2) describe the installation, operation, and maintenance of the commercial off-the-shelf system or equipment; (3) meet the acceptance criteria of MIL-M-7298 as specified in the applicable TMCR; and (4) be obtainable with unlimited rights for Government use. The Government shall not pay for the development of commercial manuals. If a commercial manual does not exist, or is unacceptable for operation and training or cannot be economically modified to be acceptable, a technical manual shall be developed in accordance with a military specification and not to "best commercial practices."

p. The final technical manual shall be acquired and delivered as a final reproducible copy (FRC). In addition to FRC, photolithographic negatives shall be procured for all Functionally Oriented Maintenance Manuals (FOMM). The Joint Committee on Printing authorization 23383, as required by Public Law 44 of the U.S. Code, shall be cited as the justification to procure photolithographic negatives for FOMM manuals. For all other types of technical manuals, photolithographic negatives shall not be procured from contractors. However, when it is necessary to minimize technical manual printing time to meet short delivery schedules for hardware-related procurements, requests to procure individual technical manual negatives on an exception basis shall be submitted to and approved by SEA CEL-TD, or its designated representative.

q. Where possible, new technical manuals will be acquired, produced, and delivered in a digital form standardized throughout the Command. PRs, solicitations, and contracts for new technical manuals shall provide for automated transmission and storage of technical data by electronic means in addition to the delivery of FRC, if required. Contract provisions, invoking the above, shall be applied only after the medium and format specifications and standards for data digitization, transcription, and quality assurance have been developed and authorized by the DoD and Department of Navy (DON) in accordance with the Computer-Aided Acquisition and Logistics Support (CALs) initiative.

r. Technical manuals shall be the primary source of technical training information, and shall be: (1) designed and written to facilitate their use in the operation, maintenance, repair, training, and logistic support of weapon systems or equipment; (2) used as the basic technical data for training; (3) available at the same time as the first production system or equipment; (4) matched to the education, training, and comprehensibility levels of the intended user; and (5) available for the development of initial training material.

s. Each ship, system, and equipment acquisition or modification program shall ensure there is no duplication in the acquisition of data/documents for Planned Maintenance System (PMS), Logistics Support Analysis (LSA), Provisioning Technical Data (PTD), training material, and technical manuals. LSA data (LSA Reports, PTD data, tools and test equipment requirements, maintenance plans, and other ILS data), engineering drawings, and configuration management data shall be used to support technical manual development.

t. Configuration management data shall be integrated with technical manual information to improve technical manual accuracy. All technical manual acquisitions shall require current and accurate configuration input and update data as a basis for technical manual development and maintenance.

u. "Foldout-foldup" pages shall not be procured or developed for technical manuals. The use of foldouts, photographs, and color illustrations shall be discouraged and kept to an absolute minimum. Line drawings shall be used instead of photographs. Foldouts shall be limited to those required for frequent reference while reading associated text.

3 OCT 89

Shading, cross hatchings, and patterned lines shall be used instead of color.

v. A unique Navy Technical Manual Identification Number (TMIN) and stock number shall be assigned to and printed on each technical manual, permanent change, and revision. A single Command activity shall exercise the responsibility for the assignment of TMINs and obtaining stock numbers from the Naval Publications and Forms Center, and for the submission of Forms and Publications Status Reports (FPSRs) to the Naval Supply Systems Command (NAVSUP). The stock number shall be bar coded per NAVSUPINST 5600.26.

w. The color, format, and material of covers shall be standardized for all technical manuals. The format for title pages, lists of effective pages, and change sheets shall also be standardized throughout the Command.

x. The date on the title page of published technical manuals, changes, and revisions shall be the copy freeze date.

y. Technical manuals provided to the Fleet and other users shall be technically accurate and of acceptable reproduction quality. Each system and equipment acquisition and modification contract requiring technical manual development work shall include requirements for a technical manual quality assurance program per a TMCR and/or MIL-M-85337A. Acquisition management activities shall determine the range and depth of quality assurance requirements to ensure that the technical manual meets the program technical requirements.

z. All new manuals, permanent changes, and revisions shall be procedurally validated by the contractor and verified by the Government. Only manuals which are technically accurate and adequate, and suitable for quality reproduction prior to distribution, shall be accepted.

a.a. All new technical manuals, permanent changes, and revisions shall be certified by the Government for compliance with acquisition requirements, technical coverage, and printing quality standards. The Command organizations responsible for signing as acquisition or technical activity, or both, shall assign signature authority to senior engineering or management individuals with direct technical manual responsibility. Final technical manuals shall not be released for printing or distribution without a properly executed technical manual certification sheet.

a.b. Centralized control shall be exercised over the management of technical manual printing, distribution, stocking, and FRC storage. Technical manuals, changes, and revisions shall be printed only by the Government per NAVSO P-35. They shall be printed and distributed in accordance with the approved distribution list, and stocked in time and in sufficient quantities (based on anticipated 2 year supply) to satisfy the Fleet, training activities, and other users needs.

a.c. The distribution of technical manuals, changes, and revisions must be controlled to reduce the risk of undesired transfer of critical technology and technical data to unauthorized individuals or countries. A

distribution statement and destruction statement shall be used per OPNAVINST 5510.1H in marking all technical manuals to denote the conditions of availability for distribution, release, disclosure, and destruction. The distribution of restricted unclassified technical manuals, changes, and revisions shall be limited to those U.S. Government activities and contractors listed on the approved distribution list, unless release of such material is approved by the technical manual sponsor and Command Security Division. The distribution and marking of classified technical manuals shall be per OPNAVINST 5510.1H. A single Command activity shall exercise the responsibility for the development and maintenance of approved distribution lists. Distribution lists shall be an integral part of the centralized Command technical manual management information system.

a.d. When directed by the acquisition manager, validated preliminary manuals shall be used whenever the final manual is unavailable.

a.e. Technical manuals designated for outfitting shall be for shipboard crew use only. Existing technical manuals required by a shipbuilder for installation, testing, and checkout shall be obtained directly from stock.

a.f. Copies of stock numbered technical manuals, changes, and revisions may be requisitioned from the Naval Publications and Forms Center (NAVPUBFORMCEN) or the designated Carrying Point.

a.g. The life cycle maintenance of technical manuals shall be centrally controlled within the Command to ensure that the manuals are current, technically accurate, and reflect the current configuration of the applicable ship, system, and equipment. The Command shall establish technical manual maintenance requirements and shall manage a central NAVSEA technical manual maintenance program. Each technical manual shall be assigned to a single Technical Manual Maintenance Activity (TMMA) to improve life cycle maintenance of the manual.

a.h. Advance change notices (ACNs), permanent changes, and revisions shall be the only authorized documentation issued to correct, update, clarify, amplify, or extend the applicability of a technical manual.

a.i. All modifications in the hardware design, computer software, or hardware installations shall be fully supported by corresponding changes or revisions to the applicable ship, system, or equipment technical manuals. Technical manual changes and revisions shall also correct all outstanding reported deficiencies and shall be available concurrently with the hardware or software modifications and shall be in sufficient time to support the update of training material.

a.j. Technical manuals that are designated as SRD shall be maintained by the ship's Planning Yard throughout the ship's life cycle. The update of SRD technical manuals shall be per the FMP Management and Operations Manual SL720-AA-MAN-010 and appropriate technical manual specifications. Guidance documentation [e.g., FMP manual/Deep Diving General Overhaul Specification (DDGOS)/General Overhaul Specification (GOS)/Procedures] used to update SRD technical manuals shall be per the policies of this instruction and reference (d).

3 OCT 89

a.k. An automated centralized and integrated Command technical manual management information system shall be established and maintained. The system shall identify, track, and distribute information required to manage and control all technical manuals throughout their life cycle. This system, known as Enhanced Ships Technical Publications System (E-STEPS), shall be directly accessible by the user and shall support both the Fleet and the Command with management information. The system shall be compatible with other Navy and DoD logistic information systems.

a.l. Indexes or lists of technical manuals shall be developed for each ship, weapon system, and equipment. The indexes shall be an integral part of the centralized Command technical manual management information system.

a.m. Technical manual assistance and training shall be made available to Fleet and other support activities.

1.2 Responsibility

1.2.1 Deputy Chief Engineer for Logistics (CHENG-L). CHENG-L is responsible for:

a. The executive direction of the TMMP.

b. Representing NAVSEA as a member of the Navy Technical Manual Management Policy Council.

1.2.2 Technical Data Division (SEA CEL-TD). SEA CEL-TD is responsible for:

a. Planning, execution, and appraisal of the TMMP.

b. Participating as a member of the Navy Technical Manual Technical Council.

1.2.3 Headquarters Directorates and Command Shore Activities. All headquarters directorates and Command shore activities involved in technical manual management, acquisition, or maintenance are responsible for:

a. Providing coordination within the directorate or activity for implementing the TMMP.

b. Implementing the TMMP policies and requirements of this instruction in all tasks provided to other activities and in contracts awarded to contractors.

c. Following the procedures specified in reference (d).

d. Designating points of contact for technical manual management and ensure personnel designated have received training in accordance with the TMMP procedures.

e. Issuing and following written local TMMP instructions at the shore activity level.

f. Providing all necessary configuration and logistics technical data in a digital format compatible with E-STEPS.

g. Providing total accountability for the acquisition of quality technical manuals. Deviations and waivers from the TMMP, or the Technical Manual Contract Requirements document, or reference (d) do not relieve the acquisition management activity of the responsibility for the quality of the technical product delivered. Contractual acceptance of a product does not relieve the acquiring activity or directorate from correcting technically deficient products.

1.2.4 Naval Ship Weapon Systems Engineering Station (NSWSES), Naval Sea Data Support Activity (NSDSA). The NSDSA is responsible for performing as the command's technical manual center-of-excellence per SEA CEL-TD direction.

SECTION 2
MANAGEMENT ACTION AND OPERATIONS

2.1 Technical Data Division (SEA CEL-TD)

- a. Manage the Technical Manual Management Program (TMMP). Plan, program, budget, and monitor TMMP operations.
- b. Budget and fund the maintenance of system and equipment technical manuals with deficiencies not incident to hardware modifications.
- c. Develop, publish, and maintain implementing policy, guidelines, and procedures for Command-wide management of technical manuals and operation of the TMMP. Conduct random reviews of technical manual products and management systems for compliance with this instruction and reference (d). Analyze program effectiveness, identify problem areas, and develop program improvements.
- d. Issue and maintain the TMMP Operations and Procedures Manual.
- e. Identify individuals responsible for technical manuals within each NAVSEA headquarters organization and shore activity. Also identify interfacing activities and Points of Contact (POC). Maintain a master technical manual POC listing.
- f. Develop formal, quantifiable criteria for use in contract verification and acceptance (or rejection) of technical manual products and associated data items.
- g. Approve or disapprove local procedures submitted by Command shore activities implementing the TMMP.
- h. Provide technical direction and control workload for the Naval Sea Data Support Activity (NSDSA) in providing support to the TMMP and to technical manual acquisition, maintenance, and life cycle management activities.
- i. Coordinate Command efforts to consolidate, simplify, and standardize the specifications, standards, handbooks, and other requirements documents used in the preparation and procurement of technical manuals. Represent the Command within the Department of Defense (DoD) standardization program for the Technical Manual Specifications and Standards area.
- j. Manage the Command Technical Manual Quality Assurance (TMQA) Program as an integral part of the TMMP.
- k. Establish and promulgate policies and requirements for the maintenance of technical manuals. Develop and implement a maintenance program to resolve technical manual deficiencies and to ensure that manuals are maintained current and accurate at all times. Coordinate the maintenance of Selected Record Data (SRD) technical manuals with the Fleet

3 OCT 89

Modernization Program (FMP). Assign Technical Manual Maintenance Activities (TMMAs) and identify the manuals for which they are responsible. Develop TMA program requirements. Maintain assignment information in the Enhanced Ships Technical Publications System (E-STEPS).

l. Manage the Operation and Maintenance, Navy (O&MN) and Navy material cognizant symbol OI (COG OI) accounts for maintaining, reprinting, and replenishing technical manuals.

m. Develop and implement technical manual certification requirements. Conduct periodic reviews to determine compliance with the requirements for technical manual certification.

n. Develop and manage a printing, distribution, stocking, and final reproducible copy (FRC) storage program to ensure that technical manuals are available when and where they are needed.

o. Manage a program to provide training to Command managers responsible for the acquisition and maintenance of technical manuals.

p. Certify Command organizations and shore activities to perform technical manual printing management. Perform periodic review and evaluation of activities' printing management implementation.

q. Establish procedures with the Navy Publishing and Printing Service Management Office to print and distribute only certified NAVSEA technical manuals.

r. Manage the technical manual management information system, referred to as Enhanced Ships Technical Publications System (E-STEPS).

s. Act as the focal point for technical manual policy matters at headquarters. Perform as the central point of contact for liaison and coordination with higher authorities, other systems commands, and industry in all policy matters relating to technical publications.

t. Manage the Naval Ships' Technical Manual (NSTM) program per reference (b).

u. Manage the shipboard Placards program.

v. Perform technical research and analysis to identify requirements for technical manual automation and digitization methods to meet projected Fleet and Command needs. Develop computer-aided technical manual production system requirements, specifications, and standards. Coordinate those requirements with acquisition and maintenance activities and other Navy and DoD components. Develop and implement an integrated and standardized Command technical manual production system that employs advancing technology to serve the Command.

w. Manage the technical manual deficiency reporting (TMDER) and Advanced Change Notice (ACN) programs.

x. Establish guidelines for technical manual management in support of the Navy 3-M Program. Coordinate TMMP implementation with the Fleet.

y. Establish guidelines for management of technical manuals in Command and shipboard technical libraries. Coordinate guidelines with the Navy Coordinator of Naval Libraries (OPNAV Code OP 09BH).

z. Administer the Navy Standard Technical Manual Identification Numbering System (TMINS) per reference (b).

a.a. Coordinate TMMP with Integrated Logistics Overhaul (ILO) Program.

2.2 Acquisition Management Activities. Activities [including Command directorates, program offices, and Ship Program Managers (SPMs)] acquiring technical manuals to support new or modified equipment, systems, or ships, and involved in correcting deficient technical manuals:

a. Assign a trained technical manual POC for coordinating all matters related to technical manual funding, documentation, management, and information within each Command headquarters organization, shore activity, and other Navy Commands and activities. Provide SEA CEL-TD with the individual's name, code, and telephone (commercial and AUTOVON) numbers, and provide changes to this assignment whenever it occurs.

b. Develop written procedures at the shore activity level that ensure compliance with reference (d) and the policies contained herein. Submit to SEA CEL-TD, via NSDSA, for acceptance.

c. Procure technical manuals, changes, or revisions with the acquisition of hardware or hardware modifications. Fund the technical manuals with the same appropriation that funds ships, systems, and equipment (NAVSEAINST 7000.9 NAVSEA Headquarters Financial Management Manual applies).

d. Update existing deficient technical manuals as follows:

(1) Use acquisition funds [Other Procurement, Navy (OPN), Weapon Procurement, Navy (WPN), etc.] to update existing deficient manuals required to support program, system, and equipment acquisitions/modifications.

(2) Technical manuals to be outfitted on ships funded by SCN envelope shall be reviewed against known deficiencies and updated to clear all technical deficiencies.

(3) Use FMP/Design Services Allocation (DSA) funds to update SRD and systems and equipment technical manuals incident to an overhaul or availability.

e. Ensure that technical manual requirements (including quality assurance, initial distribution, training, and stock) are consistent with

3 OCT 89

the life cycle phase of the hardware and are included in acquisition plans, Integrated Logistics Support Plans (ILSPs), and Navy Training Plans. Coordinate distribution and stock requirements for training with the Naval Education and Training Command (NAVEDTRACOM) and NSDSA.

f. Ensure that acquisition budgets consider all costs related to technical manual acquisition, including engineering development, technical writing, production, quality assurance, initial printing, distribution, and stock.

g. Prepare a life cycle technical manual plan (TMP) for each new ship, major system, and major modification program. Include or reference the TMP in the ILSP. Maintain the TMP in a current status throughout the ship, system, or equipment life cycle.

h. Ensure data delivery schedules allow sufficient time for preparing activity validation and rework, government review, verification, certification, preparation of training material, and printing prior to distribution of technical manuals to users. Validated preliminary manuals may be authorized for use until the final technical manual is available.

i. Task, fund, and coordinate technical review and evaluation requirements with the appropriate technical activity (engineering technical code, TMMA, or other technical review authorities) for support during the technical manual development and maintenance process.

j. Use Technical Manual Contract Requirements (TMCRs) and Technical Manual SEATASK Requirements (TMSRs) obtained per NAVSEA S0701-AA-GYD-010/MSPECS to specify technical manual requirements in all PRs, solicitations, contracts, and tasking documents.

k. Ensure that procurement requests (PRs), solicitations, and contracts include one or more separately-priced technical manual contract line item numbers (CLINs) or Sub-CLINs for the development and delivery of new or revised technical manuals and technical manual changes. In cases where a separate technical manual CLIN or contract is not feasible, use alternative contracting methods to ensure that technical manual costs are collected and provided to the Government. Requirements for technical manuals listed as CLIN items must be described and defined in the Statement of Work and referenced to a Technical Manual Contract Requirement (TMCR) document attached to the Contract Data Requirements Lists (CDRLs). Technical manuals and each of their associated deliverable data products and associated management data items must be listed on DD Form 1423s.

l. Acquire all new (except commercial off-the-shelf technical manuals) or revised Command technical manuals, technical manual change pages, and source data with unlimited Rights In Data.

m. Ensure that technical manual masters [final reproducible copy (FRC)] are acquired and delivered to the Government for all technical manuals (except for commercial manuals).

3 OCT 89

n. Ensure that contracts and tasking documents, for the development of technical manual permanent changes and revisions affected by equipment modifications, include the requirement to incorporate all outstanding TMDERS and ACNs.

o. Acquire an index of technical publications for each ship (ITPs) or major weapon system.

p. Ensure that Logistic Support Analysis Records (LSAR), Provisioning Technical Data (PTD), Configuration Management data, tools and test equipment requirements, maintenance plans, and other Integrated Logistics Support (ILS) data are available and used as source data (to the maximum extent possible) in the development of technical manuals. Use technical manual validation actions to provide updates and corrections to the affected Logistic Support Analysis (LSA) data. Verify that the technical manual listed in the ITP is applicable to the delivered ship.

q. Use the NSDSA to provide the final distribution list and mailing labels. Provide NSDSA with changes or updates to distribution lists.

r. Acquire a Technical Manual Identification Number (TMIN) and a stock number for all new or revised technical manuals and technical manual changes per reference (d). Ensure that the TMIN and bar coded stock numbers are on the cover or title page of commercial off-the-shelf manuals. Ensure that the TMIN, bar coded stock number, distribution statement, and destruction statement are on the paper cover (if applicable) and title page of all other technical manuals, and on the cover sheet of permanent changes prior to printing.

s. Ensure that quality assurance is performed on all new or revised technical manuals and technical manual permanent changes. For existing manuals, coordinate the technical review with the TMMA.

t. Ensure that a certification sheet is prepared and signed for new technical manuals, permanent changes, and revisions per Command policy and signature requirements.

u. Report any change to the publication copy freeze date to NSDSA.

v. Utilize a certified printing management activity for coordination of technical manual printing, distribution, and stocking with the Naval Publishing and Printing Service (NPPS) and the Naval Publications and Forms Center (NAVPUBFORMCEN).

w. Request SEA CEL-TD certification to become a printing management activity, when required. If certified, print and distribute technical manuals per reference (d).

x. Ensure that an adequate number of technical manuals are printed by the Government to support initial distribution, installation, two years of stock, two years of training, per the NSDSA distribution list. Package and ship two copies with each equipment.

3 OCT 89

2.3 Engineering Technical Codes. Activities assigned or tasked with life cycle management or engineering responsibilities for systems, equipment, or components:

a. Perform the acquisition management activity functions described in paragraph 2.2 when acquiring technical manuals, changes, and revisions.

b. Develop written procedures at the shore activity level that ensure compliance with reference (d) and the policies contained herein and submit to SEA CEL-TD, via NSDSA, for acceptance.

c. Ensure that technical manuals supporting assigned hardware items are technically accurate, adequate, comprehensible, usable, and current.

d. Ensure that the updated manuals are available concurrently with the modified hardware and in sufficient time to revise training materials.

e. Ensure that the costs for acquisition, engineering development, technical writing, production, quality assurance, printing, distribution, and stocking of technical manual changes and revisions (caused solely by hardware modifications or alterations) are funded by the appropriation or allocation funding the hardware modification.

f. Review and certify new technical manuals, permanent changes, and revisions to meet program turnaround time, when tasked and funded by the acquisition management activity.

g. Ensure that technical manuals, impacted by technical advisories and notes, are updated by an ACN or change.

h. Review, coordinate and technically certify selected high-interest manuals, permanent changes, and revisions under the technical manual deficiency program.

i. Designate an individual with the responsibility to sign the certification sheet for each assigned technical manual per reference (d).

2.4 Technical Manual Maintenance Activities (TMMA). Activities assigned maintenance responsibility for published Command technical manuals:

a. Assign a trained technical manual POC for technical manual management coordination. Provide SEA CEL-TD with the individual's name, code, and telephone (commercial and AUTOVON) numbers, and provide changes to this assignment whenever it occurs.

b. Develop written procedures at the shore activity level that ensure compliance with reference (d) and the policies contained herein. Submit to SEA CEL-TD, via NSDSA, for acceptance.

c. Manage or coordinate all permanent changes and revisions to assigned technical manuals (including changes resulting from equipment modifications or alterations).

3 OCT 89

- d. Ensure that deficiencies reported via the NAVSEA (User) Technical Manual Deficiency/Evaluation Report (TMDER) are reviewed, analyzed, and corrected per reference (d). Correct urgent deficiencies by preparing an advance change notice (ACN) and routine deficiencies by preparing a permanent change or revision.
- e. Request identification and numbering of permanent changes and revisions from the NSDSA.
- f. Procure or prepare permanent changes and revisions through the use of TMCRs or TMSRs issued by the NSDSA.
- g. Perform quality assurance on all permanent changes, and revisions. Review for adequacy, and ensure that all changes and revisions are technically accurate, certified as correct, and usable prior to acceptance, printing, and distribution.
- h. Technically certify all technical manual changes and revisions except for those manuals certified by engineering technical codes. When required, coordinate changes and revisions with the cognizant engineering technical code.
- i. Designate an individual person with the responsibility to sign the certification sheet for each assigned technical manual per reference (d).
- j. Request SEA CEL-TD certification to become a printing management activity, when required. Perform the action of a printing management activity per paragraph 2.5 below and reference (d). If not required to be a printing management activity, use NSDSA to manage the printing and distribution of technical manuals.
- k. Use only technical manual distribution lists which are derived from the E-STEPS distribution subsystem.
- l. Ensure that all permanent changes and revisions are printed, distributed, and stocked in sufficient quantities to satisfy the Fleet, training activities, and other users needs.
- m. Identify all issued ACNs, changes, and revisions and provide data to NSDSA for entry into E-STEPS.
- n. Store FRC. Report location of FRC to NSDSA.

2.5 Printing Management Activities.

- a. Manage printing and distribution of those technical manuals for which the activity is responsible in accordance with their certified procedures.
- b. Approve the release of technical manuals for printing and distribution.
- c. Direct NPPS in the printing of technical manuals.

3 OCT 89

d. Ensure distribution of technical manuals per the approved final distribution lists.

e. Provide NSDSA with: (1) a copy of changes to the final technical manual distribution lists, (2) final printing cost, and (3) page count.

f. Maintain records of printing and distribution costs.

g. Provide NSDSA with copies of all technical manuals, changes, or revisions for the NAVSEA Technical Manual Repository.

2.6 Planning Yards.

a. Assign a POC for technical manual management coordination. Provide SEA CEL-TD with the individual's name, code, and telephone (commercial and AUTOVON) numbers, and provide changes to this assignment whenever it occurs.

b. Perform the technical manual maintenance management and printing management actions described in paragraphs 2.3 thru 2.5 when performing those functions for assigned technical manuals.

c. Coordinate configuration data with the Configuration Data Manager (CDM). Verify the applicability of technical manual indexes to ships and equipment configurations. Update and maintain the ITP for each assigned ship.

d. Verify the applicability of technical manuals and changes to ships and ship equipment configurations. Verify the manual as it applies to the unique operation or installation of the system or equipment on each assigned ship.

e. Store FRC for all hull related SRD technical manuals and other assigned technical manuals.

f. When designated as a Carrying Point, stock SRD manuals.

2.7 Chief of Naval Education and Training (CNET)

a. Assign a POC for technical manual management coordination. Provide NAVSEA CEL-TD with the individual's name, code, and telephone (commercial and AUTOVON) numbers, and provide changes to this assignment whenever it occurs.

b. Provide NAVSEA TMMP interface, usage and inventory data, and coordination in accordance with agreements established within the framework of the NAVSEA/CNET technical manual management improvement program.

c. Ensure CNET instructions and procedures identify NAVSEA TMMP interface requirements as prescribed by this instruction and reference (d).

d. Identify essential training requirements that must be addressed in technical manual specifications and standards to ensure that manuals are suitable and usable for the development of training material and for use in training courses.

e. Develop and implement a procedure for determining Forecast of Procurements (FOPs) within the NAVEDITRACOM to ensure that large quantities of technical manual reprint requirements can be identified in a timely manner and stock replenished to meet CNET requisition demands.

f. Develop and implement a procedure for maintaining the indexes of NAVSEA technical manuals provided for selected training activities, and for verifying the accuracy and completeness of the indexes in respect to the activities technical publications inventory records. Provide discrepancies between the indexes and inventory records to Naval Sea Logistics Center (NAVSEALOGCEN) for review and reconciliation.

g. Provide training on the use, maintenance, and management of technical manuals aboard ship in appropriate training courses.

h. Critique selected outline/book plans, manuscripts, preliminary, and final manuals for: (1) training adequacy and accuracy, (2) use in future courses, and (3) impact on existing courses. When tasked and funded by the NAVSEA acquisition management activity, perform technical manual reviews and participate in technical manual review conferences. Specific critique requirements and arrangements for review conferences will be mutually agreed upon between CNET and the NAVSEA acquisition management activity.

i. Provide written comments to NAVSEA acquisition activities or TMDERS to NSDSA for manuals containing inadequate training data or an insufficient range and depth of subject matter for use in training.

2.8 Manpower Personnel and Training Division (SEA CEL-MP).

a. Review technical manual acquisition plans, documents, and related specifications, standards, data item descriptions, etc. to ensure that unnecessary duplication of training/technical manual data is avoided. In addition, conduct a random review of technical manual products to ensure that they meet training requirements, training development schedules, and are suitable for training course use.

b. Maintain liaison with CNET in performing reviews of technical manual acquisition documents and other technical manual related requirements.

2.9 Naval Sea Logistics Support Center (NAVSEALOGCEN).

a. Verify the applicability of NAVSEA technical manuals, changes, and indexes to equipment configurations at each training activity.

b. Update and maintain the indexes of NAVSEA technical manuals for selected training activities, and provide the index update data to NSDSA.

3 OCT 89

2.10 Navy Publishing and Printing Service (NPPS)

a. Assign a POC for NAVSEA technical manual management coordination. Provide SEA CEL-TD with the individual's name, code, and telephone (commercial and AUTOVON) numbers, and provide changes to this assignment whenever it occurs.

b. Manufacture or acquire, and affix bar coded stock numbers to all NAVSEA FRC/replenishment masters, as necessary.

c. Print technical manuals in accordance with Naval Supply Systems Command (NAVSUP) and NAVSEA printing agreements. As tasked, distribute printed technical manuals to authorized activities per approved distribution lists.

d. Establish, maintain, and provide NAVSEA technical manual printing cost accounting data routinely to each activity funding technical manual printing using NAVCOMPT Form 2193 (Status of Reimbursable Orders).

e. Ensure disposition of NAVSEA technical manual FRC in accordance with NAVSUP and NAVSEA printing agreements. Return the FRC to the cognizant TMMMA as requested.

f. Report technical manual printing problems to the NSDSA, as necessary.

g. Ensure that NAVSEA technical manuals printed by NPPS are packaged, labeled, and shipped properly to preclude receipt problems by NAVPUBFORMCEN and other recipients.

2.11 Naval Publications and Forms Center (NAVPUBFORMCEN)

a. Assign a POC for NAVSEA technical manual management coordination. Provide SEA CEL-TD with the individual's name, code, and telephone (commercial and AUTOVON) numbers, and provide changes to this assignment whenever it occurs.

b. Develop and follow written procedures regarding any unique NAVSEA COG OI technical publication operations at NAVPUBFORMCEN.

c. Stock an initial two-year supply of NAVSEA COG OI technical manuals, changes, and revisions. Maintain quantities sufficient to fill all requests for copies.

d. Forward requisitions to appropriate carrying points for copies of NAVSEA technical manuals not stocked at NAVPUBFORMCEN.

e. Issue copies only to authorized activities.

f. Coordinate all NAVSEA reprint requirements and FOP requirements with NSDSA. As directed by NAVSEA, initiate reprinting of technical manuals with NPPS. Support NAVSEA reprint and restock program.

- g. Report NAVSEA stocking and usage information and statistics to the NSDSA.
- h. Provide technical manuals in support of Navy foreign military sales (FMS) and military assistance programs. Enter the sale cost for FMS technical manuals in the master data file (MDF).
- i. Catalog in NAVSUP Publication 2002 all current NAVSEA technical manuals and associated changes that are stock numbered.
- j. Assign stock numbers to all NAVSEA technical manuals, changes, and revisions, as requested by NSDSA.
- k. Coordinate an electronic interface for digital data transfer between the NAVPUBFORMCEN Management Information System and E-STEPS.
- l. Coordinate with NSDSA regarding unique technical manual reprint quantities required by the training community.
- m. Manage and provide quantity restriction override codes for requisitioning activities as approved by NAVSEA.
- n. Resolve NAVSEA technical manual Reports of Discrepancy (RODs).

2.12 Fleet and Other Technical Manual Users

- a. Report deficiencies/problems in NAVSEA technical manuals using the TMDER form as prescribed in reference (d). Forward all TMDERs to the NSDSA. Use Manual Change Requests (MCRs) for selected submarine related technical manuals, as described in T0005-AA-GYD-010.
- b. Send a copy to the NSDSA of any other reports or messages identifying NAVSEA technical manual problems or equipment problems potentially impacting technical manuals.
- c. Incorporate all published changes into NAVSEA technical manuals. Replace and destroy superseded and cancelled technical manuals in accordance with applicable security directives.
- d. Establish and document technical manual management control procedures for ships or shore activities. Maintain ship or shore activity ITP.
- e. Request NAVSEA TMMP, TMQA, and other technical manual management training or other technical manual support from SEA CEL-TD as necessary.
- f. Use the provisions of NAVSUPINST 4235.3A and NAVSUP Publications 409, 437, 485, and 2002 in requisitioning technical manuals, changes, and revisions.
- g. Utilize local supply department to requisition NAVSEA technical manuals.

h. Submit ROD via the supply department to NAVPUBFORMCEN if an incorrect technical manual or incorrect quantities are received.

2.13 Navy International Logistics Control Office (NAVILCO). NAVILCO shall reimburse the NAVSEA account for FMS technical manual requisitioned and issued to foreign countries.

2.14 Naval Ship Weapon Systems Engineering Station (NSWSES), Naval Sea Data Support Activity (NSDSA)

a. Provide support for centralized technical manual operations as directed by CEL-TD.

(1) Assure that detailed written procedures are prepared and maintained by all TMMP activities.

(2) Manage and operate the TMQA program.

(3) Operate and maintain the Modular Specification System (M-SPECS), an automated system described in NAVSEA S0701-AA-GYD-010/M-SPECS for generating TMCRs tailored to specific procurements using only standardized and authorized specifications. Update TMCR data base to match current Government specifications and standards. Make recommendations to CEL-TD on requests for deviations or waivers from current requirements. Provide TMCRs/TMSRs to requestors in a timely manner.

(4) Manage and operate the Technical Manual Identification Numbering System (TMINS) to control all Command technical manuals.

(5) Plan, coordinate, and operate the NAVSEA technical manual maintenance program.

(6) Operate the Command technical manual deficiency reporting system. Provide coordination and control over the deficiency review and analysis system. Provide support to TMMAs in the publication and distribution of changes related to TMDEF and deficiency correction. Coordinate, track, and monitor the development of technical manual changes and revisions. Manage and coordinate the ACN program.

(7) Interface with NPPS on technical manual printing, printing priority, and implementation of printing policies and procedures.

(8) Maintain baseline and master distribution lists for Command technical manuals to facilitate future requirements for distribution of new manuals, as well as automated distribution of changes and revisions. Provide distribution information to requestors. Manage technical manual distribution control, releasability, and destruction requirements.

(9) Continually evaluate NAVSEA field activities TMMP procedures and printing management procedures and submit recommendations to SEA CEL-TD for required changes in the system.

(10) Provide guidance and assistance to activities in meeting TMMP and printing certification requirements, as requested.

(11) Issue Forms and Publications Status Reports (FPSRs) to the NAVPUBFORMCEN for all Command technical manual stocking actions. When assigned by the NAVPUBFORMCEN, issue stock numbers for all new technical manuals, changes, and revisions.

(12) Act as central point of contact between NAVSEA and NAVPUBFORMCEN for all matters related to stock numbering, reprinting, issuing, and stocking of technical manuals.

(13) Store and maintain technical manual FRC as requested by TMMAs. Maintain information about storage locations of FRC not held at NSDSA.

(14) Operate and maintain the master repository of all Command technical manuals and all other manuals required aboard ships to perform their mission.

(15) Manage the Command technical manual disposal program.

(16) Design, develop, document, operate, and maintain the automated data processing based centralized and integrated Command Enhanced Ships Technical Publications System (E-STEPS) management information system. Coordinate, collect, develop, and ensure accurate technical manual data for E-STEPS. Provide automated technical manual data interfaces with automated configuration, logistics, and maintenance information systems. Provide users with access to E-STEPS as well as data base information and reports to users.

(17) Issue Index of Technical Publications (IIP) for ships and selected shore and training activities based on data from configuration activities, acquisition management activities, planning yards, and TMMAs.

(18) Act as the stock control point for TMMP implementation handbooks, guides, and other documents that do not have stock numbers. Develop and distribute a list of all handbooks, guides, instructions, and other documents applicable to TMMP.

b. For activities not requiring their own printing management authority, perform printing management per paragraph 2.5 of this instruction and reference (d).

c. Integrate, within NSDSA, TMMP tasks, functions, and services assigned by SEA CEL-TD and those tasked and funded by other activities.

d. Provide training to Command technical manual POCs and other personnel involved in TMMP and TMQA.

e. Support the Integrated Logistics Overhaul (ILO) Program with technical manual guidance, technical assistance, and E-STEPS management information.

NAVSEAINST 4160.3A

3 OCT 89

f. As tasked and funded by acquisition and maintenance management activities, and approved by SEA CEL-TD, provide technical manual services including the following:

- (1) Support to Planning Yards, maintenance management activities, and TMMAs in evaluating requirements and developing technical manual changes and revisions.
- (2) Initial technical manual outfitting.
- (3) Government Furnished Information management.
- (4) Specialized training to personnel involved in technical manual acquisition, maintenance, printing, and distribution.