

NAVAL SHIPS' TECHNICAL MANUAL

CHAPTER 001

GENERAL - NSTM

PUBLICATIONS INDEX AND

USER GUIDE

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1 DEC 2001

TABLE OF CONTENTS

Chapter/Paragraph	Page
001 GENERAL - NSTM PUBLICATIONS INDEX AND USER GUIDE	1-1
SECTION 1. INTRODUCTION	1-1
001-1.1 PURPOSE	1-1
001-1.2 AUTHORIZATION	1-1
001-1.3 SCOPE	1-1
SECTION 2. RESPONSIBILITIES, MAINTENANCE AND UTILIZATION	1-2
001-2.1 AVAILABILITY	1-2
001-2.2 TECHNICAL INFORMATION NEED	1-2
001-2.3 ORDERING HARD COPY	1-2
001-2.4 DISTRIBUTION	1-2
001-2.5 ORDERING COMPACT DISK (CD-ROM)	1-3
001-2.6 DISPOSAL/ACTIVATION/DEACTIVATION	1-3
001-2.7 FORMAL REVISIONS	1-3
001-2.8 FEEDBACK	1-3
001-2.9 LIFE CYCLE MANAGER	1-4
SECTION 3. NAVAL SHIPS' TECHNICAL MANUAL STRUCTURE	1-7
001-3.1 INTRODUCTION	1-7
001-3.2 CHAPTER NUMBERING	1-7
001-3.3 TMINS	1-7
001-3.4 ADVANCE CHANGE NOTICES	1-7
001-3.5 TABLES IN THIS INDEX	1-7
A Technical Manual Deficiency/Evaluation Report (TMDER)	A-1

LIST OF TABLES

Table	Title	Page
001-2-1.	LCM POC List	1-4
001-3-1.	NSTM DOCUMENTATION	1-8
001-3-2.	ALPHABETICAL LIST OF CHAPTER TITLES	1-16

CHAPTER 001

GENERAL - NSTM PUBLICATIONS INDEX AND USER GUIDE

SECTION 1. INTRODUCTION

001-1.1 PURPOSE

001-1.1.1 The purpose of the **Naval Ships' Technical Manual (NSTM)**, is to provide technical information to personnel engaged in the supervision, operation, or maintenance of ships of the United States Navy. The various chapters and volumes of the NSTM contain detailed administrative and technical instructions that amplify U.S. Navy Regulations and other authoritative documents. These instructions are designed to assist afloat personnel in the satisfactory management of ships and shipboard machinery and equipment in order to achieve optimum performance throughout each ship's life cycle and to ensure readiness for any assigned mission. **The NSTM is not intended to be a compendium of design and engineering information, nor an all-encompassing document covering all ramifications of shipboard equipment.**

001-1.1.2 When conflict exists between the NSTM and any other related document, such conflict shall be forwarded by TMDER for resolution (see paragraph [001-2.8](#)). Pending resolution, the document related to a specific equipment/system normally will take precedence.

001-1.2 AUTHORIZATION

001-1.2.1 This manual is issued under the authority of Article 0105, **United States Navy Regulations**.

001-1.3 SCOPE

001-1.3.1 Unique procedures and requirements for ship systems and equipment are contained in technical manuals for those systems and equipment. A listing of these documents can be found in the ship Index of Technical Publications, formerly known as the Publication Applicability List.

001-1.3.2 The NSTM also provides information for industrial activities involved in ship and equipment repair and overhaul.

001-1.3.3 The chapters, volumes, and sections of this manual contain preventive and corrective maintenance information of a general nature, but are not intended to take precedence over the **Planned Maintenance System (PMS)** procedures that are in effect.

SECTION 2.

RESPONSIBILITIES, MAINTENANCE AND UTILIZATION

001-2.1 AVAILABILITY

001-2.1.1 The NSTM, N4667800038, is available on compact disk (CD-ROM), secure internet site JCALS (Joint Computer-aided Acquisition and Logistic Support) <https://nvss1web.navsses.navy.mil/> and print-on-demand from Naval Logistics Library (NLL) <http://www.nll.navsup.navy.mil/>. The complete manual is often referred to as a set of NSTM because of its multichapter composition. However, each chapter (or volume of a chapter) has a different title (topic) and bears a unique publication ordering number, since individual chapters are also requested. Distribution of formal changes (updates), chapter/volume revisions, and new chapters/volumes is made according to separate distribution lists maintained for each chapter, and requires no action on the part of activities already on the lists. A complete list of chapters is in [Table 001-3-1](#).

001-2.2 TECHNICAL INFORMATION NEED

001-2.2.1 Users having a pressing need for reference copy are encouraged to consult technical libraries of activities or installations involved in the support of fleet maintenance and modernization.

001-2.3 ORDERING HARD COPY

001-2.3.1 To order individual NSTM chapters, the following procedures should be used:

1. Using the stock number, order your NSTM chapter from the on line site at the Naval Logistics Library (NLL) at <http://nll.navsup.navy.mil>. Chapters can also be ordered by submitting an AUTODIN requisition to Naval Inventory Control Point, 700 Robbins Ave, Philadelphia, PA 19111-5098.
2. If your NSTM chapter has not arrived within 2 weeks and you have not received supply status via MILSTRIP from NAVICP, you should follow up on your requisition by contacting NAVICP Customer Service at (215) 697-2267 or DSN 442-2267.
3. If your unit identification code (UIC) (or OPFAC code for Coast Guard customers) is not recognized by NAVICP, you should contact NAVICP by writing, or phone (215) 697-2266 (DSN 442-2266) for assistance. Defense Contractors should submit their request in writing, with justification, to:

COMMANDER
SEA 09T3
NAVSEASYSCOM
1333 Isaac Hull Avenue S. E.
Washington Navy Yard, D.C. 20376
Phone: (202) 781-0000

001-2.4 DISTRIBUTION

001-2.4.1 NSDSA maintains the NSTM distribution lists and will evaluate, verify, and validate all requests for the NSTM. Activities requesting addition to or removal from the distribution lists, or reduction in current allowance need only contact the NSDSA or submit NSTM automatic distribution requirements list to:

COMMANDER
 Code 5E30 (Distribution)
 NAVSURFWARCENDIV
 4363 Missile Way
 Port Hueneme, CA 93043-4307
 FAX: (805) 228-0351

001-2.5 ORDERING COMPACT DISK (CD-ROM)

001-2.5.1 In consonance with NAVSEA direction for paper reduction aboard ship, US Navy and Coast Guard Ships are encouraged to request deletion from hard copy distribution and addition to NSTM on Compact Disk - Read Only Memory (CD-ROM) distribution when that form is compatible with their needs. The entire NSTM is contained on one CD-ROM. The retrieval software{ Adobe Acrobat Reader} requires Windows. All software and files needed to view the NSTMs are installed on the CD-ROM. Because of printing costs, it is desired activities select CD-ROM in place of hard copy whenever feasible. Distribution of CD-ROM updates is made to activities on the CD-ROM distribution lists. Order CD-ROM sets by submitting a requisition to NAVICP per procedure in paragraph [001-2.3.1](#) using stock number 0901-LP-101-0985 .

NOTE

Advance Change Notices (ACN's) are now incorporated into the revised chapters on the CD-ROM. ACN's not incorporated are available on TDMIS.

001-2.6 DISPOSAL/ACTIVATION/DEACTIVATION

001-2.6.1 Dispose of cancelled, obsolete, and superseded NSTM documentation promptly, according to SEC-NAVINST 5720.42C. Accounting is not required.

001-2.7 FORMAL REVISIONS

001-2.7.1 A formal revision is a superseding issue of an entire chapter or volume. All changes are incorporated into the revised chapters on the CD-ROM. Change pages are no longer produced. Holders on record for hard copy and CD-ROM will receive these updates without further action.

001-2.7.2 Since all chapters are superseding revisions, NO change bars are included to identify information that changed.

001-2.7.3 Due to the digitization program, all chapters are superseding revisions. Thereafter, all requisitions will be filled with a package that will replace your entire volume or chapter.

001-2.8 FEEDBACK

001-2.8.1 To facilitate feedback commentary, copies of NAVSEA Form 4160/1, Technical Manual Deficiency/Evaluation Report (TMDER), are included at the end of each newly published and revised chapter or volume. The completed form may be printed, folded and taped, revealing the pre-addressed franked cover. The TMDER is also available online at <http://nsdsda.phdnswc.navy.mil/tmder/tmder-generate.asp?lvl=1> and can be completed

online. No further address is required. All feedback comments will be thoroughly investigated and originators will be advised of any action resulting therefrom. Additional copies of NAVSEA Form 4160/1 may be requisitioned from NAVICP, see paragraph [001-2.3.1](#).

001-2.9 LIFE CYCLE MANAGER

001-2.9.1 A Life Cycle Manager (LCM) is assigned for each individual NSTM Chapter. The LCM is responsible for the technical content of the chapter. LCM's will periodically issue changes and revisions to keep technical information current. However, LCM's are not normally available as an information "hot line". Instead, refer urgent technical problems to the In-Service Engineering Agent (ISEA) assigned to the equipment. The ISEA for answering technical questions concerning Hull, Mechanical and Electrical Equipment comprising most of the NSTM is located at the CARDEROCK DIVISION, NAVAL SURFACE WARFARE CENTER, PHILADELPHIA NAVAL BUSINESS CENTER 5001 SOUTH BROAD ST, PHILADELPHIA PA 19112-1403, commercial (215) 897-7000, or DSN 443-7000. LCM's for each chapter are listed below and in the Technical Data Management Information System (TDMIS) data base under the Publication Number for the chapter.

Table 001-2-1. LCM POC List

NSTM TMIN/CHAPTER	LCM CODE	POC	PHONE
BA-001/034	PMS308	Mary Ann Gerberick	202 781-0598
BS-000/050	PMS308	Lowell Himmller	202 781-0639
CD-010/070	05L4	Sandy Fountain	202 781-3625
CH-010/074V1	05M2	Al Grubowski	202 781-3663
CH-020/074V2	05ME	Jon Fallick	202 781-3662
CH-030/074V3	00TS	Robin Yost	757 396-7231x101
CJ-010/075	05P7	Brandon Shea	202 781-3714
CL-010/077	05L4	Hank Kuzma	202 781-3634
CM-010/078V1	05P6	Tom Carroll	202 781-3679
CM-020/078V2	05M3	Rich Dempsey	202 781-3660
CN-010/079V1	05P5	Robin White	202 781-3772
CN-020/079V2	05L4	Hank Kuzma	202 781-3634
CN-030/079V3	SSES9431	John Buckley	215 897-1342
CN-040/079V4	05L4	Hank Kuzma	202 781-3634
CQ-010/081	00C55	Tom McCue	202 781-0742
CV-010/086	NSDSA	John Jones	805 228-0378
CZ-010/090	91T6	Eddy Lee	202 781-0704
C1-000/091	05P2	John Kallinikos	202 781-3729
C4-000/094	05Z14	Hasan Pehlivan	202 781-3801
C6-010/096	05P5	Dominick Cimino	202 781-3681
DA-000/100	05P2	Daniel Nichols	202 781-3702
GX-010/220V1	SSES6243	Bob Dausel	215 897-7502
GX-020/220V2	SSES6243	Bob Dausel	215 897-7502
GX-030/220V3	SSES6243	Bob Dausel	215 897-7502
GY-010/221	SSES9226	Larry Halvorsen	215 897-7175
G1-010/223V1	05Z41	Jim Davison	202 781-3773
G1-020/223V2	05Z41	Jim Davison	202 781-3773
G3-010/225	SSES925	Ken Kiesel	215 897-1166
G9-010/231	05Z22	Gary Edlind	202 781-3775

Table 001-2-1. LCM POC List - Continued

NSTM TMIN/CHAPTER	LCM CODE	POC	PHONE
HB-010/233	SSES932	Ken McColligan	215 879-7278
HC-000/234	SSES93	Tom Roche	215 897-7291
HD-010/235	05Z71	.	
HK-010/241	05Z23	Karen Miller	215 897-8507
HM-010/243	05Z12	Rick Kaminsky	202 781-3788
HN-010/244	05Z24	Quoc Nguyen	202 781-3798
HP-010/245	05Z51	.	
HW-000/254	05Z43	Matt Baas	202 781-3610
HZ-010/255V1	05L32	Mike Felde	202 781-3624
HZ-020/255V2	05Z43	Matt Baas	202 781-3610
H7-010/262	SSES622	Vicki Larimore	215 897-8505
KC-010/300	SSES9342	Mike Simunek	215 897-1590
KE-000/302	05Z44	Roger Szabo	202 781-3811
KN-010/310	05Z44	Roger Szabo	202 781-3811
KR-010/313	05Z41	Jim Davison	202 781-3773
KY-010/320	SSES934	Andrew Bigley	215 897-1190
K9-000/330	05Z43	Chuk Eng	202 781-3776
ND-000/400	53C6	Don Cross	202 781-3495
PF-010/408	DAHLG53	Charles Courchaine	540 653-8554
NZ-010/420	PMS307	Jim Davey	202 781-0525
N2-010/422	05Z43	Chuk Eng	202 781-3776
PA-000/430	05K43	.	
QH-010/470	05L4	Sandy Fountain	202 781-3625
QN-010/475	05T3	Michael Riley	602-0923x226
QX-010/484	DAHL G71	Sheldon Zimmerman	540 653-1060 B x
Q5-000/491	05Z71	Donald Strawser	202 781-3808
RG-010/502	05L31	.	
RH-010/503	SSES 92	Jim Hill	215 897-7865
RJ-000/504	05Z44	Fred Theisz	202 781-3813
RK-010/505	PNSY260.1	Charles Sacrison	360 476-4619
RQ-010/510	SSES9213	William Sorg	215 897-7215
RS-010/512	SSES9213	William Sorg	215 897-7215
RW-010/516	05L22	Richard Hagar	202 781-3628
SC-010/531V1	05Z43	.	
SC-010/531V2	05Z43	.	
SC-010/531V3	05Z43	.	
SD-010/532	05L32	Fred Tsao	202 781-3654
SE-010/533	05L32	Fred Tsao	202 781-3654
SN-010/541	SSES 92	Tim Donnelly	215 897-7948
SP-010/542	SSES 92	Tim Donnelly	215 897-7948
SX-010/550	SSES9212	Ray Bauer	215 897-7222
SY-010/551	SSES9214	Jeff Craighead	215 897-7273
S2-000/554	SSES92	Veryl Williams	215 897-7219
S3-010/555V1	05L4	Dave Satterfield	202 781-3647
S3-020/555V2	05L4	Dave Satterfield	202 781-3647
S4-010/556	05P6	.	

Table 001-2-1. LCM POC List - Continued

NSTM TMIN/CHAP-TER	LCM CODE	POC	PHONE
S9-000/561	05P6	Tom Carroll	202 781-3679
TA-010/562	05J1	.	
TD-010/565	05J1	.	
TG-010/568	05J1	.	
TK-010/571	05P8	Ed Matthews	202 781-3695
TL-000/572	05P8	Mike Royle	202 781-3710
TM-000/573	05P8	Mike Royle	202 781-3710
TP-010/575	05P8	Bob Jones	202 781-0668
TV-010/581	05P8	Don Neuman	202 781-3701
TW-010/582	05P8	Don Neuman	202 781-3701
TX-010/583	PMS308	Joe Guite	202 781-0614
TY-010/584	05P8	Bob Jones	202 781-0668
T3-010/588	05P7	Tom Nodeen	202 781-3703
T4-010/589	05P7	Ken Brayton	202 781-3678
T8-010/593	05L1	Brad Smith	202 781-3650
T9-010/594	05P6	Branden Shea	202 781-3714
UF-010/600	05P7	Ken Brayton	202 781-3678
UK-010/604	05P7	Ken Brayton	202 781-3678
US-010/611	05P8	Don Neuman	202 781-3701
UU-010/613	05P8	Don Neuman	202 781-3701
VD-010/631V1	05M1	Fred Berry	202 781-3658
VD-020/631V2	05M1	Fred Berry	202 781-3658
VD-030/631V3	05M1	Fred Berry	202 781-3658
VF-010/633	05M1	Andrew Seelinger	202 781-3670
VG-010/634	05M1	Fred Berry	202 781-3658
VH-010/635	05M3	Rich Dempsey	202 781-3660
VZ-010/651	SSES9873	Jim Brechka	215 897-7311
V4-010/655	SSES974E	Joe Bowen	215 897-7925
WK-010/670	SSES	Bob Dausuel	215 897-7502
XG-010/700	05P7	Ken Brayton	202 781-3678
ZN-010/772	05P7	Ken Brayton	202 781-3678
1A-000/793	05P7	Jim Williams	202 781-3724
7G-010/997	04XQ2	Rick Weiser	202 781-1845

SECTION 3.

NAVAL SHIPS' TECHNICAL MANUAL STRUCTURE

001-3.1 INTRODUCTION

001-3.1.1 The NSTM consists of a set of approximately 100 chapters numbered between 001 and 999 in non-consecutive sequence, see [Table 001-3-1](#).

001-3.2 CHAPTER NUMBERING

001-3.2.1 Under the Naval Sea Systems Command (NAVSEA) current practice, the NSTM chapter numbers are structured into a three-digit system. Under the Naval Ship Systems Command before 1976, NSTM chapters were numbered according to a four-digit system. The four-digit chapter numbers are being replaced by three digit numbers.

001-3.3 TMINS

001-3.3.1 Conversion of the National Stock Numbers (NSN's) to the Technical Manual Identification Number System (TMINS) is according to NAVSEA N0000-00-IDX-000/TMINS, **Application Guide and Index for the Navy Standard Technical Manual Identification Numbering System (TMINS)** . The NSN for a four-digit chapter is assigned a TMIN upon revision and publication as a three-digit chapter.

001-3.4 ADVANCE CHANGE NOTICES

001-3.4.1 An Advance Change Notice (ACN) is prepared as an addendum to a chapter of the NSTM when there is insufficient time to prepare and publish a permanent (formal) revision. ACN's are distributed to NSTM holders on record having a need for the information. The ACN's are incorporated into the text in each applicable chapter. Formal chapter revisions incorporate outstanding ACN's. The assigned ACN number provides dual information: a number capable of serialization, separated by a slash, and the prospective change level to a chapter. For example, the first ACN issued to an NSTM Chapter after change B is designated ACN 1/C. ACN number assignment and distribution are controlled by NAVSEA. Copies of NSTM ACN's are available upon request by contacting the NSDSA, (805) 228-0468 or DSN 296-0468.

001-3.5 TABLES IN THIS INDEX

001-3.5.1 [Table 001-3-1](#) is a compilation of currently available NSTM documentation (chapters, volumes, sections, revisions, changes, and amendments). Periodically, a revision to this chapter will be issued to update text and tables. Documentation previously issued, but retired from the current [Table 001-3-1](#), has been superseded or cancelled. Users may obtain current status information on any NSTM publication from NSDSA, (805) 228-0378, or DSN 296-0378.

001-3.5.2 [Table 001-3-2](#) is an alphabetical list of current chapter titles, with corresponding chapter numbers.

Table 001-3-1. NSTM DOCUMENTATION

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
001	S9086-AA-STM-010 0901-LP-101-0826 General-NSTM Publications Index and User Guide	47	12/1/01
034	S9086-BA-STM-010 0901-LP-015-2380 Service Craft	1	9/1/99
050	S9086-BS-STM-010 0901-LP-020-0520 Readiness and Care of Inactive Ships	2	12/18/98
070	S9086-CD-STM-010 0901-LP-017-5310 Nuclear Defense at Sea and Radiological Recovery of Ships After Nuclear Weapons Explosion	2	7/30/98
074(V1)	S9086-CH-STM-010 0901-LP-015-2610 Welding and Allied Processes	4	8/23/99
074(V2)	S9086-CH-STM-020 0901-LP-101-0827 Nondestructive Testing of Metals, Qualification and Certification Requirements for Naval Personnel (Non-Nuclear)	3	12/1/01
074(V3)	S9086-CH-STM-030 0901-LP-020-2680 Gas Free Engineering	3	4/23/98
075	S9086-CJ-STM-010 0901-LP-017-4410 Fasteners	2	12/1/97
077	S9086-CL-STM-010 0901-LP-019-7180 Personnel Protection Equipment	3	3/26/98
078(V1)	S9086-CM-STM-010 0901-LP-017-7190 Seals	2	3/10/98
078(V2)	S9086-CM-STM-020 0901-LP-078-0020 Gaskets and Packing	0	9/17/98
079(V1)	S9086-CN-STM-010 0901-LP-017-7200 Damage Control-Stability and Buoyancy	1	11/12/97
079(V2)	S9086-CN-STM-020 0901-LP-079-0060 Damage Control-Practical Damage Control	2	8/3/98

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
079(V3)	S9086-CN-STM-030 0901-LP-015-2620 Damage Control-Engineering Casualty Control	2	12/31/00
079(V4) (Super 9880)	S9086-CN-STM-040 0901-LP-668-2263 Damage Control - Compartment Testing and Inspection	0	11/25/98
081	S9086-CQ-STM-010 0901-LP-081-0030 Waterborne Underwater Hull Cleaning of Navy Ships	4	8/4/97
086	S9086-CV-STM-010 0901-LP-086-0000 Command Technical Manual Management (TMM)	0	10/1/95
090	S9086-CZ-STM-010 0901-LP-015-2450 Inspections, Tests, Records and Reports	2	9/1/99
091	S9086-C1-STM-010 0901-LP-1446 Submarine Hull Inspection	2	12/1/01
094	S9086-C4-STM-010 0901-LP-014-9530 Trials	2	8/28/98
096	S9086-C6-STM-010 0901-LP-641-0452 Weights and Stability	1	8/2/96
100	S9086-DA-STM-010 0901-LP-015-2430 Hull Structures	1	9/1/99
220(V1)	S9086-GX-STM-010 0901-LP-015-2410 Boiler Water/Feedwater-Water Chemistry	2	9/1/99
220(V2)	S9086-GX-STM-020 0901-LP-100-2838 Boiler Water/Feedwater-Test and Treatment	8	12/31/00
220(V3)	S9086-GX-STM-030 0901-LP-015-2390 Corrosion and Contamination Control for Diesel Engine Cooling Water Systems	1	9/1/99
221	S9086-GY-STM-010 0901-LP-100-2839 Boilers	4	12/31/00

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
223(V1)	S9086-G1-STM-010 0901-LP-100-2837 Submarine Storage Batteries-Lead Acid Batteries	3	12/31/00
223(V2)	S9086-G1-STM-020 0901-LP-017-7210 Submarine Storage Batteries-Silver-Zinc Batteries	1	9/1/99
225	S9086-G3-STM-010 0901-LP-011-9880 Steam Machinery Control Systems	1	2/26/97
231	S9086-G9-STM-010 0901-LP-017-7220 Propulsion and SSTG Steam Turbines	4	11/97
233	S9086-HB-STM-010 0901-LP-020-3650 Diesel Engines	2	8/31/98
234	S9086-HC-STM-010 0901-LP-101-0831 Marine Gas Turbines	2	12/1/01
235	S9086-HD-STM-010 0901-LP-017-7230 Electric Propulsion Installations	2	9/1/99
241	S9086-HK-STM-010 0901-LP-641-0462 Propulsion Reduction Gears, Couplings, Clutches, and Associated Components	0	8/29/97
243	S9086-HM-STM-010 0901-LP-641-0467 Propulsion Shafting	0	12/4/96
244	S9086-HN-STM-010 0901-LP-017-4420 Propulsion Bearings and Seals	6	12/11/97
245	S9086-HP-STM-010 0901-LP-101-0834 Propellers	4	12/1/01
254	S9086-HY-STM-010 0901-LP-254-0020 Condensers, Heat Exchangers, and Air Ejectors	2	10/7/96
255(V1)	S9086-HZ-STM-010 0901-LP-017-7240 Feedwater System and Apparatus, Feed and Condensate Systems	1	2/13/98

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
255(V2)	S9086-HZ-STM-020 0901-LP-017-7260 Feedwater Systems and Apparatus-Deaerating Feed Tanks	1	9/4/97
262	S9086-H7-STM-010 0901-LP-101-0829 Lubricating Oils, Greases, Specialty Lubricants, and Lubrication Systems	6	12/1/01
300	S9086-KC-STM-010 0901-LP-100-2843 Electric Plant-General	5	12/31/00
302	S9086-KE-STM-010 0901-LP-015-2470 Electric Motors and Controllers	1	9/1/99
310	S9086-KN-STM-010 0901-LP-017-7270 Electric Power Generators and Conversion Equipment	2	9/1/99
313	S9086-KR-STM-010 0901-LP-017-7280 Portable Storage and Dry Batteries	2	9/1/99
320	S9086-KY-STM-010 0901-LP-100-2844 Electric Power Distribution Systems	3	12/31/00
330	S9086-K9-STM-010 0901-LP-015-2570 Lighting	2	9/1/99
400	S9086-ND-STM-010 0901-LP-015-2540 Electronics	1	9/1/99
408	S9086-PF-STM-010 0901-LP-641-0442 Fiber Optic Topology Operation Maintenance and Repair	1	8/5/96
420	S9086-NZ-STM-010 0901-LP-015-2480 Navigation Systems, Equipment and Aids	1	9/1/99
422	S9086-N2-STM-010 0901-LP-017-7310 Navigation and Signal Lights	3	6/4/99
430	S9086-PA-STM-010 0901-LP-015-2490 Interior Communication Installations	1	9/1/99

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
434	S9086-PE-STM-010 0901-LP-434-0020 Motion Picture Equipment	1	11/15/80
470	S9086-QH-STM-010 0901-LP-017-5450 Shipboard BW/CW Defense and Countermeasures	3	8/6/98
475	S9086-QN-STM-010 0901-LP-475-0030 Magnetic Silencing	2	12/7/98
484	S9086-QX-STM-010 0901-LP-015-2680 Laser Safety	1	9/1/99
491	S9086-Q5-STM-010 0901-LP-015-2710 Electrical Measuring and Test Instruments	1	9/1/99
502	S9086-RG-STM-010 0901-LP-502-0020 Auxiliary Steam Turbines	1	9/25/96
503	S9086-RH-STM-010 0901-LP-100-2845 Pumps	3	12/31/00
504	S9086-RJ-STM-010 0901-LP-101-1059 Pressure, Temperature, and Other Mechanical and Electromechanical Measuring Instruments	2	12/1/01
505	S9086-RK-STM-010 0901-LP-011-9930 Piping Systems 9/1/99	2	12/1/01
510	S9086-RQ-STM-010 0901-LP-100-7787 Heating, Ventilating, and Air Conditioning Systems for Surface Ships	4	12/1/01
512	S9086-RS-STM-010 0901-LP-015-2660 Fans	2	9/1/99
516	S9086-RW-STM-010 0901-LP-017-4430 Refrigeration Systems	5	12/10/97
531(V1)	S9086-SC-STM-010 0901-LP-015-2650 Desalination Low-Pressure Distilling Plants	2	9/1/99

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
531(V2)	S9086-SC-STM-020 0901-LP-015-2640 Desalination Vapor Compression Distilling Plants	2	9/1/99
531(V3)	S9086-SC-STM-030 0901-LP-017-7330 Desalination Reverse Osmosis Desalination Plants	2	9/1/99
532	S9086-SD-STM-010 0901-LP-017-7340 Liquid Cooling Systems for Electronic Equipment	2	9/1/99
533	S9086-SE-STM-010 0901-LP-533-0030 Potable Water Systems	3	3/15/95
541	S9086-SN-STM-010 0901-LP-541-0050 Ship Fuel and Fuel Systems	2	3/11/97
542	S9086-SP-STM-010 0901-LP-020-0050 Gasoline and JP-5 Fuel Systems	3	12/1/01
550	S9086-SX-STM-010 0901-LP-101-1062 Industrial Gases; Generating, Handling and Storage	3	12/1/01
551	S9086-SY-STM-010 0901-LP-551-0020 Compressed Air Plants and Systems	2	11/12/97
554	S9086-S2-STM-010 0901-LP-015-2530 Forced Draft Blowers	1	9/1/99
555 (V1)	S9086-S3-STM-010 0901-LP-100-7788 Surface Ship Firefighting	9	12/1/01
555 (V2)	S9086-S3-STM-020 0901-LP-100-7789 Submarine Firefighting	8	12/1/01
556	S9086-S4-STM-010 0901-LP-100-2880 Hydraulic Equipment (Power Transmission and Control)	4	12/31/00
561	S9086-S9-STM-010 0901-LP-100-2881 Submarine Steering and Diving Systems	4	12/31/00

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
562	S9086-TA-STM-010 0901-LP-015-2720 Surface Ship Steering Systems	2	9/1/99
565	S9086-TD-STM-010 0901-LP-017-7360 Surface Ship Stabilizing Systems	1	9/1/99
571	S9086-TK-STM-010 0901-LP-101-1065 Underway Replenishment	3	12/1/01
572	S9086-TL-STM-010 0901-LP-020-0820 Shipboard Stores and Provision Handling	1	11/13/98
573	S9086-TM-STM-010 0901-LP-020-0960 Booms	1	11/13/98
581	S9086-TV-STM-010 0901-LP-017-4190 Archoring	3	11/24/97
582	S9086-TW-STM-010 0901-LP-101-1069 Mooring and Towing	2	12/1/01
583	S9086-TX-STM-010 0901-LP-101-1070 Boats and Small Craft	4	12/1/01
584	S9086-TY-STM-010 0901-LP-641-0482 Landing Craft and Amphibious Assault Vehicle Handling, Stowage and Support Systems	1	9/1/99
588	S9086-T3-STM-010 0901-LP-101-1063 AIRCRAFT ELEVATORS AND DECK EDGE ELEVATOR & HANGAR DIVISION DOORS	2	12/1/01
589	S9086-T4-STM-010 0901-LP-101-1355 Cranes	5	12/1/01
593	S9086-T8-STM-010 0901-LP-017-7380 Pollution Control	5	9/1/99
594	S9086-T9-STM-010 0901-LP-594-0020 Salvage-Submarine Safety Escape and Rescue Devices	2	1/31/95
600	S9086-UF-STM-010 0901-LP-017-8830 Hull Fittings, Lashing Gear, and Access Closures	0	9/1/99

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
604	S9086-UK-STM-010 0901-LP-020-1140 LOCKS, KEYS, AND HASPS	3	12/16/98
611	S9086-US-STM-010 0901-LP-017-7410 Fenders and Separators	2	9/1/99
613	S9086-UU-STM-010 0901-LP-015-2510 Wire and Fiber Rope and Rigging	3	8/30/99
631(V1)	S9086-VD-STM-010 0901-LP-101-1073 Preservation of Ships in Service - General	2	12/1/01
631(V2)	S9086-VD-STM-020 0901-LP-003-6440 Preservation of Ships in Service - Surface Preparation and Painting	1	12/19/96
631(V3)	S9086-VD-STM-030 0901-LP-101-1075 Preservation of Ships in Service - Surface Ship/Submarine Applications	2	12/1/01
633	S9086-VF-STM-010 0901-LP-633-0040 Cathodic Protection	2	9/1/99
634	S9086-VG-STM-010 0901-LP-101-1076 Deck Coverings	3	12/1/01
635	S9086-VH-STM-010 0901-LP-635-0020 Thermal, Fire, and Acoustic Insulation	2	7/28/98
651	S9086-VZ-STM-010 0901-LP-015-2560 Commissary Equipment	0	9/1/99
655	S9086-V4-STM-010 0901-LP-100-2884 Laundry and Dry Cleaning	2	12/31/00
670	S9086-WK-STM-010 0901-LP-100-2885 Stowage, Handling, and Disposal of Hazardous General Use Consumables	4	12/31/00
700	S9086-XG-STM-010 0901-LP-015-2670 Shipboard Ammunition Handling and Stowage	4	9/1/99

Table 001-3-1. NSTM DOCUMENTATION - Continued

CHAPTER NUMBER (VOL)	PUB NUMBER, STOCK NUMBER, TITLE OF BASIC	LATEST REVISION LEVEL	
		REV	DATE
772	S9086-ZN-STM-010 0901-LP-100-2886 Cargo and Weapons Elevators	3	12/31/00
793	S9086-1A-STM-010 0901-LP-015-2690 Security of Stowed Nuclear Weapons	1	9/1/99
997	S9086-7G-STM-010 0901-LP-997-0030 Docking Instructions and Routine Work in Dry Dock	3	11/25/96

Table 001-3-2. ALPHABETICAL LIST OF CHAPTER TITLES

CHAPTER TITLE	CHAPTER NUMBER
Aircraft Elevators	588
Anchors and Anchoring	581
Auxiliary Steam Turbines	502
Boats and Small Craft	583
Boiler Water/Feedwater	
Test and Treatment	220(V2)
Water Chemistry	220(V1)
Boilers	221
Booms	573
Cargo and Weapons Elevators	772
Cathodic Protection	633
Command Technical Manual Management	086
Commissary Equipment	651
Compressed Air Plants and Systems	551
Condensers, Heat Exchangers, and Air Ejectors	254
Corrosion and Contamination Control for Diesel Engine Cooling Water Systems	220(V3)
Cranes	589
Damage Control	
Compartment Testing and Inspection	079(V4)
Engineering Casualty Control	079(V3)
Practical Damage Control	079(V2)
Stability and Buoyancy	079(V1)
Deck Coverings	634
Desalination	
Low-Pressure Distilling Plants	531(V1)
Reverse Osmosis Desalination Plants	531(V3)
Vapor Compression Distilling Plants	531(V2)
Diesel Engines	233
Docking Instructions and Routine Work in Dry Dock	997
Electric Motors and Controllers	302
Electric Plant - General	300

Table 001-3-2. ALPHABETICAL LIST OF CHAPTER TITLES - Continued

CHAPTER TITLE	CHAPTER NUMBER
Electric Power Distribution Systems	320
Electric Power Generators and Conversion Equipment	310
Electric Propulsion Installations	235
Electrical Measuring and Test Instruments	491
Electronics	400
Fans	512
Feedwater Systems and Apparatus -	
Deaerating Feed Tanks	255(V2)
Feed and Condensate Systems	255(V1)
Fenders and Separators	611
Fiber Optic Topology Operation Maintenance and Repair	408
Firefighting, Surface Ship	555(V1)
Firefighting, Submarine	555(V2)
Forced-Draft Blowers	554
Fuel Systems, Ship Fuel and	541
Gas Free Engineering	074(V3)
Gaskets and Packing	078(V2)
Gasoline and JP-5 Fuel Systems	542
General-NSTM Publications Index and Users Guide	001
Heating, Ventilating, and Air Conditioning Systems for Surface Ships	510
Hull Fittings, Lashing Gear, and Access Closures	600
Hull Structures	100
Hydraulic Equipment (Power Transmission and Control)	556
Industrial Gases; Generating, Handling and Storage	550
Inspections, Tests, Records and Reports	090
Interior Communication Installations	430
Laser Safety	484
Laundry and Dry Cleaning	655
Lighting	330
Liquid Cooling Systems for Electronic Equipment	532
Locks, Keys and Hasps	604
Lubricating Oils, Greases, Speciality Lubricants, and Lubricating Systems	262
Magnetic Silencing	475
Marine Gas Turbines	234
Mooring and Towing	582
Motion Picture Equipment	434
Navigation and Signal Lights	422
Navigation Systems, Equipment and Aids	420
Nondestructive Testing of Metals, Qualification and Certification Requirements for Naval Personnel (Non-Nuclear)	074 (V2)
Nuclear Defense at Sea and Radiological Recovery of Ships After Nuclear Weapons Explosion	070
Personnel Protection Equipment	077
Piping Systems	505
Pollution Control	593

Table 001-3-2. ALPHABETICAL LIST OF CHAPTER TITLES - Continued

CHAPTER TITLE	CHAPTER NUMBER
Portable Storage and Dry Batteries	313
Potable Water Systems	533
Preservation of Ships in Service	
General	631(V1)
Surface Preparation and Painting	631(V2)
Surface Ship/Submarine Applications	631(V3)
Pressure, Temperature, and Other Mechanical and Electromechanical Measuring Instruments	504
Propellers	245
Propulsion and SSTG Steam Turbines	231
Propulsion Bearings and Seals	244
Propulsion Reduction Gears, Couplings and Associated Components	241
Propulsion Shafting	243
Pumps	503
Readiness and Care of Inactive Ships	050
Refrigeration Systems	516
Salvage - Submarine Safety Escape and Rescue Devices	594
Seals	078(V1)
Security of Stowed Nuclear Weapons	793
Service Craft	034
Ship Fuel and Fuel Systems	541
Shipboard Ammunition Handling and Stowage	700
Shipboard BW/CW Defense and Countermeasures	470
Surface Ship Firefighting	555(V1)
Shipboard Stores and Provision Handling	572
Steam Machinery Control Systems	225
Landing Craft and Amphibious Assault Vehicle Handling, Stowage and Support Systems	584
Stowage, Handling and Disposal of Hazardous General Use consumables	670
Submarine Firefighting	555(V2)
Submarine Hull Inspection	091
Submarine Steering and Diving systems	561
Submarine Storage Batteries	
Lead Acid Batteries	223(V1)
Silver-Zinc Batteries	223(V2)
Surface Ship Stabilizing Systems	565
Surface Ship Steering Systems	562
Thermal, Fire, and Acoustic Insulation	635
Threaded Fasteners	075
Trials	094
Underway Replenishment	571
Waterborne Underwater Hull Cleaning of Navy Ships	081
Weights and Stability	096
Welding and Allied Processes	074(V1)
Wire and Fiber Rope and Rigging	613

APPENDIX A**TECHNICAL MANUAL DEFICIENCY/EVALUATION REPORT (TMDER)****NOTE**

Ships, training activities, supply points, depots, Naval Shipyards, and Supervisors of Shipbuilding are requested to arrange for the maximum practical use and evaluation of NAVSEA technical manuals. All errors, omissions, discrepancies, and suggestions for improvement to NAVSEA technical manuals shall be reported to the Commander, NAVSURFWARCENDIV, 4363 Missile Way, Port Hueneme, CA 93043-4307 on NAVSEA/ SPAWAR Technical Manual Deficiency/Evaluation Report (TMDER), NAVSEA Form 4160/1. To facilitate such reporting, print, complete, and mail NAVSEA Form 4160/1 below or submit TMDERS at web site <http://nsdsa.phdnswc.navy.mil/tmder/tmder.htm>. All feedback comments shall be thoroughly investigated and originators will be advised of action resulting therefrom. Extra copies of NAVSEA Form 4160/1 may be requisitioned from DDSP Susquehanna Pennsylvania, 05 E Street, Mechanicsburg, PA 17055-5003. (S/N 0116-LP-019-5300)

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