



# U.S. Coast Guard Boat Operations and Training (BOAT) Manual

## Volume I



*“Train, Maintain, Operate”*

COMDTINST M16114.32A







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JAN 18 2005

COMMANDANT INSTRUCTION M16114.32A

Subj: U.S. COAST GUARD BOAT OPERATIONS AND TRAINING (BOAT) MANUAL,  
VOLUME I

1. PURPOSE.

- a. This Manual prescribes policy, doctrine, and training requirements for Coast Guard boat unit operations and is intended for use by all personnel engaged in or supervising boat operations and training.
- b. Every effort has been made to make this Manual useful and applicable to all aspects of boat operations and training. In situations where this Manual does not address a specific organization construct or relationship and the application of a particular provision is unclear, users should seek clarification from their reporting senior and advise Commandant (G-OCS) of the need to clarify the provision in question.
- c. The diverse nature of operations at Coast Guard boat units also means that this Manual cannot and is not intended to cover every contingency that may arise. Ultimately operational success depends on good safety practices, sound judgment, and common sense.

2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of headquarters units, assistant commandants for directorates, Chief Counsel, special staff offices at Headquarters, operational commanders, boat unit commanding officers and officers-in-charge shall ensure compliance with the provisions of this Manual. Internet release authorized.

3. DIRECTIVES AFFECTED. The following directive is cancelled:

- a. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I, COMDTINST M16114.32.

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4. DISCUSSION. This Manual provides doctrinal guidance to all types of Coast Guard boat units. It contains old and new policy that is based on best practices. This Manual shall be used as a guide for operational mission planning and training requirements. No provision in this Manual relieves personnel of their duty to use sound judgment or to take such emergency action as the situation may demand. When the need arises, Commandant (G-OCS) may issue special instructions or waivers. The operational environment or mission demands may require on-scene deviation from prescribed instructions. Deviations are authorized, when, in the judgment of the commanding officer, officer-in-charge or coxswain, they are necessary to ensure the safety of the crew or passengers or the saving of a life. Such deviations should not be taken lightly and must be tempered by maturity, sound judgment, and a complete understanding of the situation, the mission, and the capabilities of the boats and crew.
  
5. PROCEDURES. Personnel assigned to a unit with boats, and already certified in any crewmember position, need not re-certify using this Manual. Any questions should be resolved through discussion with Commandant (G-OCS-1). Changes to Proficiency Requirements (currency maintenance) listed in Part 5, Chapter 5, Section B will begin 1 July 2005 in conjunction with the AOPS/TMT cycle. Due to the number of changes, modifications, additions, etc. to this revision, personnel engaged in or supervising boat operations and training shall ensure they are familiar with the changes contained in this revision. Major areas of change are:
  - a. Part 2, Chapter 4, Section B: Hours of Crew Rest
  - b. Part 2, Chapter 4, Section B: Maximum Underway Hours
  - c. Part 2, Chapter 4, Section C: Minimum Crew Requirements
  - d. Part 2, Chapter 4, Section F: Jewelry
  - e. Part 2, Chapter 5, Section E: Position and Operations Normal Reports
  - f. Part 2, Chapter 5, Section G: Crew Preparedness
  - g. Part 2, Chapter 5, Section I: Operational Limits for Auxiliary Vessels
  - h. Part 2, Chapter 5, Section K: Trailing Boats
  - i. Part 2, Chapter 7: Boat Force Operations Insignia Criteria
  - j. Part 3, Chapter 3: Heavy Weather Stations
  - k. Part 4: Readiness and Standardization Assessments
  - l. Part 5, Chapter 1, Section A: Currency/Proficiency Maintenance
  - m. Part 5, Chapter 4, Section B: Completion of the Qualification Tasks
  - n. Part 5, Chapter 5, Section B: Proficiency Requirements
  - o. Part 5, Chapter 5, Section C: Requirements for Night Operations
  - p. Part 5, Chapter 6, Section A: Record of Trainee Underway Operations and Drills
  - q. Part 5, Chapter 6, Section B: Qualification Codes
  - r. Appendix A, Glossary: Operational Commander
  
6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental considerations were examined in the development of this Manual and have been determined not to be applicable.

7. FORMS AVAILABILITY. USCG Training Record, CG-5285, SN 7530-01-GF2-9880, Unit of Issue: Each, Unit Description: Folder, maybe obtained from Engineering Logistics Center (ELC), Baltimore. All other forms referenced in this Manual are available in USCG Electronic Forms on Standard Work Station III or on the Internet at <http://www.uscg.mil/ccs/cit/cim/forms1/welcome.htm> or the Intranet at <http://cgweb.uscg.mil/g-c/g-ccs/g-cit/g-cim/forms1/main.asp>.

A handwritten signature in black ink, appearing to read "R. D. Sirosis". The signature is fluid and cursive, with a large initial "R" and "S".

R. D. SIROIS

Assistant Commandant for Operations







U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



# Table of Contents

<b>PART 1 INTRODUCTION .....</b>	<b>1-1</b>
<b>Section A. Purpose of this Manual.....</b>	<b>1-1</b>
Procedures.....	1-1
Deviation.....	1-1
<b>Section B. How to Use this Manual.....</b>	<b>1-2</b>
Part Layout.....	1-2
Warnings, Cautions, and Notes.....	1-2
Generalization.....	1-2
<b>PART 2 OPERATIONS AND MISSIONS.....</b>	<b>2-1</b>
<b>CHAPTER 1. BOAT UNITS AND BOAT TYPES.....</b>	<b>2-3</b>
<b>Section A. Coast Guard Boat Units .....</b>	<b>2-4</b>
A.1. Definitions.....	2-4
A.2. Elements.....	2-5
<b>Section B. Coast Guard Boat Types .....</b>	<b>2-6</b>
B.1. Standard Boats.....	2-6
B.2. Non-Standard Boats .....	2-7
<b>CHAPTER 2. MISSION TYPES.....</b>	<b>2-9</b>
Mission Types and Employment Categories.....	2-9
<b>Section A. Search and Rescue (SAR).....</b>	<b>2-11</b>
Description and Authority .....	2-12
A.1. Description.....	2-12
A.2. Authority .....	2-12
SAR System, Program Objectives, and Program Standards .....	2-12
A.3. SAR System.....	2-12
A.4. Program Objectives.....	2-13
A.5. Program Standards.....	2-13
SAR Mission Organization.....	2-13
A.6. SAR Coordinator (SC) .....	2-13
SAR Communications.....	2-14
A.7. Objective.....	2-14
A.8. SAR Communications Coordination.....	2-14
A.9. Communications Searches .....	2-15
Initial Action.....	2-15
A.10. Unit Initial Action .....	2-15
SAR Planning.....	2-16
A.11. Procedures.....	2-16
SAR Operations.....	2-16
A.12. Procedures.....	2-16
Public Relations.....	2-17
A.13. Procedures.....	2-17
<b>Section B. Enforcement of Laws and Treaties (ELT).....</b>	<b>2-18</b>
Description and Authority .....	2-19
B.1. Description .....	2-19
B.2. Authority .....	2-19
ELT Response .....	2-19
B.3. Procedures.....	2-19
ELT Patrols .....	2-20
B.4. Conducting Patrols.....	2-20
B.5. Planning.....	2-20
B.6. Questions to Ask .....	2-20
B.7. Vessel Safety and Related Law Enforcement Patrols.....	2-20
B.8. Drug Law Enforcement Patrols.....	2-21
B.9. Immigration Law Enforcement Patrols.....	2-21
B.10. Fisheries Law Enforcement Patrols.....	2-21



ELT Boarding.....	2-22
B.11. Conducting Boardings.....	2-22
Coordinating ELT Activity.....	2-22
B.12. Working with other Law Enforcement Agencies.....	2-22
B.13. Involving Other Federal Agencies in Maritime Law Enforcement Operations.....	2-22
<b>Section C. Recreational Boating Safety (RBS).....</b>	<b>2-23</b>
Description and Authority.....	2-24
C.1. Description.....	2-24
C.2. Authority.....	2-24
RBS Patrols and Boardings.....	2-24
C.3. RBS Patrols.....	2-24
C.4. RBS Boardings.....	2-24
Education and Support.....	2-25
C.5. Community Education.....	2-25
C.6. Support of Auxiliary RBS Programs.....	2-25
<b>Section D. Marine Safety (MS).....</b>	<b>2-25</b>
Description and Authority.....	2-26
D.1. Description.....	2-26
D.2. Authority.....	2-26
Marine Safety Program.....	2-26
D.3. Unit Requirements.....	2-26
Ports and Waterways.....	2-26
D.4. Mission Purpose.....	2-26
D.5. Unit Responsibilities.....	2-27
<b>Section E. Military Operations (MILOPS).....</b>	<b>2-27</b>
Description and Authority.....	2-28
E.1. Description.....	2-28
E.2. Authority.....	2-28
MILOPS Support and Planning.....	2-28
E.3. MILOPS Support.....	2-28
E.4. MILOPS Planning.....	2-28
Port Operations.....	2-29
E.5. Security and Defense Role.....	2-29
E.6. Unit Requirements.....	2-29
<b>Section F. Short Range Aids to Navigation (SRA).....</b>	<b>2-29</b>
Description and Authority.....	2-30
F.1. Description.....	2-30
F.2. Authority.....	2-30
Aids to Navigation.....	2-30
F.3. Unit Responsibilities.....	2-30
<b>Section G. Marine Environmental Protection (MEP).....</b>	<b>2-31</b>
Description and Authority.....	2-31
G.1. Description.....	2-31
G.2. Authority.....	2-31
MEP Program Objectives and Response.....	2-32
G.3. MEP Program Objectives.....	2-32
G.4. Pollution Response.....	2-32
<b>CHAPTER 3. MISSION AUTHORIZATION.....</b>	<b>2-33</b>
<b>Section A. Authorization of Resources.....</b>	<b>2-33</b>
A.1. Authorized Uses of Coast Guard Boats and Personnel.....	2-33
A.2. Personnel Authorized to Operate Coast Guard Boats.....	2-34
A.3. Authority to Approve, Direct, Initiate, and Cease Coast Guard Boat Deployments.....	2-34
A.4. Authorized Use of Coast Guard Reservists and Auxiliarists.....	2-34
A.5. Authority to Approve, Direct, Initiate, and Cease Coast Guard Personnel Deployments Onboard other than Coast Guard Boats.....	2-35
<b>Section B. Authority and Responsibilities.....</b>	<b>2-35</b>
B.1. CO/OIC.....	2-35
B.2. Executive Officer (XO)/Executive Petty Officer (XPO).....	2-36
B.3. Engineering Petty Officer (EPO).....	2-36
B.4. Officer-of-the-Day (OOD).....	2-36



B.5. Coxswain.....	2-37
<b>CHAPTER 4. MISSION PLANNING .....</b>	<b>2-39</b>
<b>Section A. Underway Mission Planning .....</b>	<b>2-40</b>
Team Coordination Training .....	2-41
A.1. Principles and Concepts .....	2-41
Risk Assessment.....	2-41
A.2. Risk Factors.....	2-41
A.3. Risk Management.....	2-41
A.4. National Defense.....	2-41
A.5. Search and Rescue (SAR) and Law Enforcement (LE).....	2-42
A.6. Logistics and Other Missions.....	2-42
Boat Considerations.....	2-43
A.7. Boat Selection .....	2-43
A.8. Mission Planning.....	2-43
Auxiliary Platform Considerations .....	2-44
A.9. Auxiliary Facilities.....	2-44
Personnel Considerations .....	2-44
A.10. Alcohol Consumption .....	2-44
A.11. Drugs and Medication .....	2-44
A.12. Auxiliary Personnel.....	2-44
Other Agencies.....	2-45
A.13. Other Resources .....	2-45
Emergencies .....	2-45
A.14. Emergency Planning .....	2-45
<b>Section B. Crew Rest and Utilization .....</b>	<b>2-46</b>
B.1. Fatigued Personnel .....	2-46
B.2. Crew Endurance Management (CEM) .....	2-46
B.3. Review Practices .....	2-47
B.4. Maximum Underway Hours .....	2-47
B.5. Urgent Operations .....	2-47
B.6. Billet Requests.....	2-48
B.7. Boat Crew Scheduling Standards .....	2-48
B.8. Crew Rest and Utilization Policies.....	2-48
B.9. Duty Rotation .....	2-48
B.10. Duty Section Watch Relief.....	2-48
B.11. Station Work for Duty Crews (Assuming Afternoon Relief) .....	2-49
B.12. Station Work for Duty Crews (Assuming Morning Relief).....	2-49
B.13. Underway Limits.....	2-49
B.14. Sleep Debt .....	2-50
B.15. Maximum Underway Limits .....	2-50
B.16. Example Message Formats.....	2-51
<b>Section C. Minimum Crew Requirements .....</b>	<b>2-53</b>
C.1. Policy.....	2-53
C.2. Procedures.....	2-53
C.3. Minimum Crew Requirements .....	2-53
<b>Section D. Specific Operations .....</b>	<b>2-55</b>
D.1. Medical Evacuations .....	2-55
D.2. Fire Suppression.....	2-55
D.3. Rescue and Assistance .....	2-56
D.4. Marine Protected Species .....	2-56
<b>Section E. Natural Disaster and Civil Preparedness.....</b>	<b>2-58</b>
E.1. Description .....	2-58
E.2. Authority .....	2-58
E.3. Natural Disaster Planning and Preparation .....	2-59
E.4. Natural Disaster Assumptions .....	2-59
E.5. Leave/Liberty Policy .....	2-60
E.6. Natural Disaster Effects.....	2-60
E.7. Natural Disaster Evacuation Preparedness.....	2-61
<b>Section F. Environmental Health and Safety Programs.....</b>	<b>2-62</b>



F.1. Unit Responsibilities..... 2-63  
F.2. Electrical Safety..... 2-63  
F.3. Hearing Conservation..... 2-63  
F.4. Hazard Communications..... 2-63  
F.5. Heat Stress..... 2-64  
F.6. Respiratory Protection..... 2-64  
F.7. Pre-MISHAP Plan..... 2-64  
F.8. Boat Safety Program..... 2-65  
F.9. Confined Space Entry Program..... 2-65  
F.10. Jewelry..... 2-65

**CHAPTER 5. STANDARDS OF BOAT OPERATIONS .....2-67**

**Section A. Introduction.....2-67**  
A.1. Operation of the Boat..... 2-67  
A.2. Underway Time Use..... 2-68

**Section B. Readiness .....2-68**  
B.1. Checklists..... 2-68  
B.2. Discrepancies..... 2-68

**Section C. Minimum Equipment for Operation.....2-68**  
C.1. Other Factors to Consider..... 2-69  
C.2. NSB Outfit..... 2-69

**Section D. Passengers and Guests.....2-69**  
D.1. Guidelines..... 2-69  
D.2. Coxswain Responsibilities..... 2-69  
D.3. Public Affairs Operations..... 2-69  
D.4. Emergent Mission Requirements..... 2-69

**Section E. Position and Operations Normal Reports.....2-70**  
E.1. Policy..... 2-70  
E.2. Lost Communications..... 2-71  
E.3. Report Exceptions..... 2-71  
E.4. Radio Log..... 2-71

**Section F. Float Plan.....2-72**  
F.1. Parts of a Float Plan..... 2-72  
F.2. Emergent Situation..... 2-72

**Section G. Underway Rules, Emergencies, and Maneuvers .....2-72**  
G.1. Underway Rules..... 2-72  
G.2. Underway Emergencies/ MISHAP Reports..... 2-72  
G.3. Maneuvers..... 2-73

**Section H. Vessel MISHAPs .....2-73**  
H.1. Vessel MISHAPs..... 2-73

**Section I. Offshore Operations .....2-74**  
I.1. Operational Limits..... 2-74  
I.2. Operational Limits for Auxiliary Vessels..... 2-74  
I.3. Waiver and Final Decision..... 2-74

**Section J. Public Affairs Operations.....2-75**  
J.1. Guidelines..... 2-75  
J.2. Underway or Static Displays..... 2-75

**Section K. Trailered/Beach Operations.....2-75**  
K.1. Trailering Boats..... 2-75  
K.2. Vehicle Emergency Lights/Sirens..... 2-76  
K.3. Beach Rescue..... 2-76  
Use of Personal Watercraft (PWC)..... 2-76  
K.4. Definition..... 2-76  
K.5. Policy..... 2-76

**Section L. Night Vision.....2-77**  
L.1. Types of Night Vision..... 2-77  
L.2. Limitations..... 2-77  
L.3. Restrictions..... 2-78

**CHAPTER 6. TRAINING AND QUALIFICATION .....2-79**

**Section A. Training .....2-80**



A.1. Training Teams .....	2-80
A.2. Standardization Teams .....	2-80
A.3. Exportable Training .....	2-80
A.4. Additional Training Sources .....	2-80
<b>Section B. Organization .....</b>	<b>2-81</b>
B.1. G-OCS Responsibilities.....	2-81
B.2. G-WTT Responsibilities.....	2-82
B.3. TQC Responsibilities .....	2-83
B.4. District Commander Responsibilities.....	2-83
B.5. Sector/Group, Air Station Responsibilities.....	2-84
<b>Section C. Unit Training Program.....</b>	<b>2-84</b>
Unit Training Program .....	2-85
C.1. Written Guidance .....	2-85
C.2. Training Board .....	2-85
C.3. Unit Training Plan.....	2-85
Dutystander Qualification Training Program .....	2-86
C.4. Training Programs.....	2-86
C.5. Local Area Knowledge and Geographic Points.....	2-87
C.6. Qualification Examining Board (QEB) .....	2-87
C.7. Checklists .....	2-88
C.8. Evaluators.....	2-88
Indoctrination Program.....	2-88
C.9. Purpose.....	2-88
C.10. Structure.....	2-88
Training Records .....	2-89
C.11. Electronic Files.....	2-89
C.12. Individual Training Records.....	2-89
C.13. Structure .....	2-89
C.14. Handling.....	2-89
<b>Section D. Duties and Responsibilities.....</b>	<b>2-90</b>
Command .....	2-90
D.1. CO/OIC Responsibilities.....	2-90
D.2. XO/XPO Responsibilities .....	2-90
Training Board .....	2-91
D.3. Membership .....	2-91
D.4. Responsibilities .....	2-91
Training Petty Officer and Assistant Training Petty Officers .....	2-91
D.5. Unit Training Officer/Petty Officer Responsibilities.....	2-91
D.6. Assistant Training Officer Responsibilities.....	2-92
Educational Services Officer .....	2-92
D.7. Authority and Coordination.....	2-92
<b>Section E. Personnel Qualification Standards (PQS).....</b>	<b>2-93</b>
E.1. Command Responsibilities .....	2-93
E.2. Certifications .....	2-93
E.3. Trainee Status .....	2-94
E.4. Qualification Codes and Loss of Certification.....	2-94
E.5. Surface Swimmer Qualification Requirements.....	2-94
E.6. Officer-of-the-Day Qualification Requirements .....	2-95
E.7. Communications Watchstander Qualification Requirements .....	2-95
E.8. Boarding Team Training Program Requirements.....	2-95
E.9. Boarding Team Member Qualification Requirements.....	2-96
E.10. Boarding Officer Qualification Requirements.....	2-96
<b>Section F. Certification/Lapse and Recertification .....</b>	<b>2-97</b>
F.1. Dutystander Certification.....	2-97
F.2. Auxiliarist Certification .....	2-97
F.3. Revoking Certifications .....	2-97
F.4. Documentation Requirements.....	2-98
<b>Section G. Currency Maintenance.....</b>	<b>2-98</b>
G.1. Requirements .....	2-98
<b>Section H. Formal Schools .....</b>	<b>2-98</b>



H.1. Tracking Formal School Records.....	2-99
H.2. Forms .....	2-99
H.3. Training Policies .....	2-99
H.4. Formal School Quota Management.....	2-99
H.5. Formal School Quota Procedures.....	2-99
H.6. Master Training Lists (MTLs).....	2-100
H.7. Equivalent Training.....	2-100
<b>Section I. General Military Training.....</b>	<b>2-108</b>
I.1. Scheduling and Planning .....	2-108
I.2. Lesson Plans .....	2-109
I.3. Documentation.....	2-109
<b>CHAPTER 7. BOAT FORCE OPERATIONS INSIGNIA CRITERIA.....</b>	<b>2-113</b>
Description and Design.....	2-113
Entitlement.....	2-113
<b>Section A. Pewter-Tone Insignia.....</b>	<b>2-114</b>
A.1. Service Requirements.....	2-114
A.2. Qualification Requirements.....	2-115
A.3. Command Endorsement .....	2-115
A.4. Temporary Entitlements.....	2-115
A.5. Administration .....	2-115
A.6. Forms Availability .....	2-115
A.7. Certificates .....	2-115
<b>Section B. Gold- and Pewter-Tone Insignia.....</b>	<b>2-116</b>
B.1. Service Requirements.....	2-116
B.2. Qualification Requirements.....	2-116
B.3. Command Endorsement .....	2-116
B.4. Prior Qualification Criteria.....	2-117
B.5. Administration.....	2-117
B.6. Forms Availability.....	2-117
B.7. Certificates .....	2-117
<b>PART 3 STATION OPERATIONS.....</b>	<b>3-1</b>
<b>CHAPTER 1. STATION ORGANIZATION AND WATCHSTANDING .....</b>	<b>3-3</b>
<b>Section A. Station Organization.....</b>	<b>3-4</b>
A.1. Unit Functions.....	3-4
A.2. Standard Unit Organization.....	3-4
A.3. Unit .....	3-5
A.4. Station (Small) .....	3-7
<b>Section B. Mission Requirements and Limitations .....</b>	<b>3-8</b>
B.1. Mission Requirements.....	3-8
B.2. Mission Limitations.....	3-9
B.3. Self-Imposed Requirements to Avoid .....	3-9
<b>Section C. Command Cadre.....</b>	<b>3-9</b>
C.1. Unit Command Cadre.....	3-9
C.2. Non-Pooled Station (Small), Command Cadre.....	3-10
C.3. Department Heads .....	3-10
<b>Section D. Duties and Responsibilities.....</b>	<b>3-11</b>
Command Cadre.....	3-11
D.1. CO and OIC .....	3-11
D.2. XO and XPO .....	3-11
D.3. EPO .....	3-12
Support .....	3-13
D.4. Support Petty Officer .....	3-13
D.5. Food Services Officer.....	3-14
Engineering Department.....	3-15
D.6. Assistant Engineering Petty Officer (AEPO) .....	3-15
Deck Department.....	3-15
D.7. Department Head .....	3-15
D.8. Rescue and Survival Systems Petty Officer .....	3-16
Boat Keepers .....	3-17



D.9. Deck.....	3-17
D.10. Engineering.....	3-17
Collateral Duties.....	3-17
D.11. Assignment.....	3-17
D.12. Training Petty Officer.....	3-17
D.13. Administration Officer.....	3-18
D.14. Educational Services Officer.....	3-18
<b>Section E. Unit Watch Organization.....</b>	<b>3-19</b>
E.1. Duty Section.....	3-19
E.2. Response Boat Readiness.....	3-20
E.3. Watchstander Designation Training.....	3-20
<b>Section F. Duty Section Organization.....</b>	<b>3-20</b>
F.1. Requirements.....	3-20
F.2. Certifications.....	3-21
F.3. OOD Position.....	3-21
F.4. OOD Responsibilities.....	3-21
F.5. Communications Watchstander Position.....	3-22
F.6. Communications Watchstander Responsibilities.....	3-22
F.7. Duty Boat Crew.....	3-22
<b>Section G. Duty Section Rotation.....</b>	<b>3-23</b>
G.1. One-in-Four (1-in-4).....	3-23
G.2. One-in-Three (1-in-3).....	3-24
G.3. Modified One-in-Three (1-in-3).....	3-25
G.4. Port and Starboard (1-in-2).....	3-26
G.5. Reduced Readiness Port and Starboard (1-in-2).....	3-27
G.6. Firefighter One-in-Three (1-in-3).....	3-28
<b>CHAPTER 2. STATION (SMALL) STANDARD OPERATING PROCEDURES.....</b>	<b>3-29</b>
<b>Section A. Station (Small) Operation.....</b>	<b>3-30</b>
A.1. Mission Limitations.....	3-30
A.2. Readiness Response Standards.....	3-30
A.3. Procedures for Modifying Station (Small) Alert Postures.....	3-30
A.4. Boat and Facility Maintenance.....	3-31
<b>Section B. Station (Small) Duties and Responsibilities.....</b>	<b>3-31</b>
District Commanders and Sector/Group Commanders.....	3-32
B.1. District Commander’s Responsibilities.....	3-32
B.2. Sector/Group Commanders.....	3-33
Parent Units.....	3-33
B.3. CO/OIC Responsibilities.....	3-33
B.4. Financial Management Responsibilities.....	3-33
B.5. Personnel Administration Responsibilities.....	3-34
B.6. Operations and Engineering Management Responsibilities.....	3-34
Parent Units with a Pooled Station (Small).....	3-35
B.7. CO/OIC Responsibilities.....	3-35
B.8. Management Responsibilities.....	3-35
Non-Pooled Station (Small) OICs.....	3-36
B.9. OIC Responsibilities.....	3-36
<b>CHAPTER 3. HEAVY WEATHER STATIONS.....</b>	<b>3-37</b>
<b>Section A. Criteria for Coast Guard Heavy Weather [MLB/SPC (HWX)] Stations.....</b>	<b>3-37</b>
A.1. Heavy Weather (HWX) Station Criteria.....	3-37
A.2. Responsibility.....	3-38
A.3. Heavy Weather Waivers.....	3-38
A.4. Operational Guidelines for MLB and SPC (HWX) Coxswains.....	3-38
<b>Section B. Heavy Weather Training Doctrine.....</b>	<b>3-38</b>
B.1. Minimum Requirements.....	3-39
B.2. HWX Training.....	3-39
<b>CHAPTER 4. SURF STATIONS.....</b>	<b>3-41</b>
<b>Section A. Criteria and Requirements for Coast Guard Surf Stations.....</b>	<b>3-42</b>
A.1. Surf Station Criteria.....	3-42
A.2. List of Coast Guard Surf Stations.....	3-43
A.3. Boat Requirements.....	3-43



A.4. Surfman Staffing Requirements .....	3-44
A.5. Surf Log .....	3-45
A.6. Sample Log .....	3-45
A.7. Surf Station – Surf Log .....	3-47
<b>Section B. Motor Lifeboat (MLB) Surf Training Doctrine .....</b>	<b>3-48</b>
B.1. Minimum Requirements .....	3-48
B.2. Dual MLB Surf Training .....	3-48
B.3. Single MLB Surf Training .....	3-49
<b>PART 4 READINESS AND STANDARDIZATION .....</b>	<b>4-1</b>
<b>CHAPTER 1. INTRODUCTION .....</b>	<b>4-3</b>
<b>Section A. Purpose .....</b>	<b>4-4</b>
A.1. Goals .....	4-4
A.2. Standard and Non-Standard Boats .....	4-4
<b>Section B. Responsibilities .....</b>	<b>4-5</b>
B.1. Commandant (G-OCS) .....	4-5
B.2. Commandant (G-SEN) .....	4-5
B.3. Engineering Logistics Center (ELC) .....	4-6
B.4. Maintenance and Logistics Commands (MLCs) .....	4-6
B.5. District Commanders .....	4-6
B.6. Operational Commanders .....	4-7
B.7. Unit Commanders .....	4-7
B.8. Ready for Operations Teams .....	4-8
B.9. Standardization Teams .....	4-8
<b>CHAPTER 2. UNIT AND OPCON READINESS EVALUATIONS .....</b>	<b>4-11</b>
<b>Section A. Unit Evaluation Requirements .....</b>	<b>4-12</b>
A.1. Self-Audits .....	4-12
A.2. Reports .....	4-12
<b>Section B. Operational Commander Evaluation Requirements .....</b>	<b>4-12</b>
B.1. Preparation .....	4-13
B.2. Training Program Evaluation .....	4-13
B.3. Rescue and Survival Systems Program .....	4-13
B.4. Personal Protective Equipment Program .....	4-13
B.5. Materiel Inspection .....	4-13
B.6. Underway Exercise Evaluations .....	4-13
B.7. RFO Evaluation Report .....	4-14
<b>Section C. Evaluation Team Composition .....</b>	<b>4-14</b>
C.1. Team Leader .....	4-14
C.2. Senior Boatswain’s Mate .....	4-14
C.3. Naval Engineer .....	4-15
<b>Section D. Safety .....</b>	<b>4-15</b>
D.1. Coxswain Responsibilities .....	4-15
D.2. Evaluator Responsibilities .....	4-15
<b>CHAPTER 3. READINESS AND STANDARDIZATION ASSESSMENTS .....</b>	<b>4-17</b>
<b>Section A. Goals and Procedures .....</b>	<b>4-17</b>
A.1. Goals .....	4-17
A.2. Procedures .....	4-18
<b>Section B. General Timeline .....</b>	<b>4-18</b>
B.1. Schedule Development .....	4-18
B.2. Publication .....	4-19
B.3. Unit Notification .....	4-19
B.4. Visit .....	4-20
B.5. Reports .....	4-22
<b>CHAPTER 4. MATERIEL INSPECTIONS .....</b>	<b>4-27</b>
<b>Section A. Formal and Unit Materiel Inspections .....</b>	<b>4-27</b>
A.1. Formal Materiel Inspections .....	4-27
A.2. Unit Materiel Inspections .....	4-27
<b>Section B. Guidelines/References .....</b>	<b>4-28</b>
B.1. Personnel Requirements .....	4-28
B.2. Discrepancy Classification .....	4-28



<b>Section C. Discrepancy Classifications and Required Actions</b> .....	<b>4-28</b>
C.1. Disabling Casualties .....	4-28
C.2. Restrictive Discrepancies .....	4-29
C.3. Major Discrepancies.....	4-30
C.4. Minor Discrepancies.....	4-30
<b>Section D. Readiness Rating</b> .....	<b>4-30</b>
D.1. Upon Arrival .....	4-30
D.2. Upon Departure.....	4-31
<b>CHAPTER 5. BOAT CREW QUALIFICATIONS AND PERFORMANCE EVALUATIONS</b> .....	<b>4-33</b>
<b>Section A. Procedures</b> .....	<b>4-34</b>
A.1. Knowledge-Based Testing .....	4-34
A.2. Training Program Evaluation .....	4-34
A.3. Exercises .....	4-34
<b>Section B. Underway Exercise Evaluations and Required and Optional Exercises</b> .....	<b>4-35</b>
B.1. Evaluation Prerequisites .....	4-35
B.2. Required Exercises (Core Drills).....	4-35
B.3. Optional Exercises.....	4-36
<b>Section C. Evaluation Procedures</b> .....	<b>4-37</b>
C.1. Pre-Brief.....	4-37
C.2. Evaluation Criteria .....	4-37
C.3. Debrief.....	4-37
C.4. Additional Assessment Requirements .....	4-37
<b>CHAPTER 6. RESCUE AND SURVIVAL AND PERSONAL PROTECTIVE EQUIPMENT PROGRAM EVALUATION</b> ....	<b>4-39</b>
<b>Section A. R&amp;S and PPE Program</b> .....	<b>4-39</b>
A.1. Formal Materiel Inspections.....	4-39
<b>Section B. Procedures</b> .....	<b>4-40</b>
B.1. Documentation .....	4-40
B.2. Issuance .....	4-40
B.3. PMS.....	4-40
B.4. Materiel Condition .....	4-40
<b>Section C. Evaluation Criteria</b> .....	<b>4-41</b>
C.1. Basic and Cold Weather Equipment.....	4-41
C.2. Defective PPE .....	4-41
<b>CHAPTER 7. SUMMARY OF DIRECTIVES</b> .....	<b>4-43</b>
<b>Section A. Training, Operations, and General Information</b> .....	<b>4-44</b>
<b>Section B. Naval Engineering</b> .....	<b>4-45</b>
<b>Section C. Management</b> .....	<b>4-45</b>
<b>Section D. Supply Support</b> .....	<b>4-46</b>
<b>Section E. STAN Team Web Sites</b> .....	<b>4-46</b>
<b>PART 5 BOAT CREW TRAINING</b> .....	<b>5-1</b>
<b>CHAPTER 1. INTRODUCTION</b> .....	<b>5-3</b>
<b>Section A. Program Overview</b> .....	<b>5-4</b>
A.1. Underway Boat Operations .....	5-4
A.2. Five Boat Crew Positions.....	5-4
A.3. Master and Apprenticeship System .....	5-4
<b>Section B. Training and Certification Process</b> .....	<b>5-5</b>
B.1. Qualification.....	5-5
B.2. Certification.....	5-5
B.3. Currency/ Proficiency Maintenance .....	5-5
B.4. References.....	5-6
<b>Section C. Description of Qualification</b> .....	<b>5-7</b>
<b>CHAPTER 2. SYSTEM COMPONENTS</b> .....	<b>5-9</b>
<b>Section A. Program Managers</b> .....	<b>5-9</b>
A.1. Commandant (G-OCS).....	5-9
A.2. Specific Needs.....	5-9
<b>Section B. District and Operational Commanders</b> .....	<b>5-10</b>
B.1. District Commanders.....	5-10
B.2. Operational Commanders.....	5-10



- Section C. Unit COs and OICs.....5-10**
  - Responsibilities and Duties ..... 5-11
    - C.1. Unit Commanders..... 5-11
    - C.2. Local Knowledge Criteria ..... 5-11
    - C.3. Boat Crew Certification..... 5-11
    - C.4. Reserve Training ..... 5-11
    - C.5. Coast Guard Auxiliary..... 5-11
    - C.6. Improvements..... 5-11
  - Boat Crew Certification Requirements ..... 5-11
    - C.7. Command Cadre..... 5-11
    - C.8. Certifications ..... 5-11
    - C.9. Previously Qualified Command Personnel..... 5-12
    - C.10. CO/OIC Initial Recertification ..... 5-12
    - C.11. Maintenance Applicability ..... 5-12
    - C.12. Inability of Unit Crew to Qualify for Boat Crew Duties ..... 5-12
    - C.13. Inability of a Coxswain to Qualify ..... 5-12
- Section D. Unit Training Petty Officers .....5-13**
  - D.1. Maintaining Records ..... 5-13
  - D.2. Supervising..... 5-13
  - D.3. Updating the Unit Commander ..... 5-13
  - D.4. Interviewing and Recommending Assignments ..... 5-13
  - D.5. Monitoring Trainee Progress..... 5-14
  - D.6. Coordinating Certification Procedures ..... 5-14
  - D.7. Scheduling..... 5-14
  - D.8. Monitoring Currency/ Proficiency Maintenance ..... 5-14
- Section E. Boat Crew Examination Board (BCEB) .....5-15**
  - E.1. Designation..... 5-15
  - E.2. Members..... 5-15
  - E.3. Representation ..... 5-15
  - E.4. Chairman of the Board..... 5-15
  - E.5. Underway Check-Rides ..... 5-15
  - E.6. Oral Boards and Reports..... 5-19
- Section F. Instructors and Trainees .....5-20**
  - F.1. Instructor Selection ..... 5-20
  - F.2. Trainees ..... 5-21
- CHAPTER 3. QUALIFICATION .....5-23**
  - Section A. Trainee Selection and Instructor Assignment .....5-23**
    - A.1. Trainee Selection..... 5-23
    - A.2. Certified in Lower Crew Position..... 5-23
    - A.3. Maturity to Take on New Responsibilities ..... 5-24
    - A.4. Willingness and Ability to Act as the Coast Guard’s Direct Representative ..... 5-24
    - A.5. Trainee/ Instructor Relationship ..... 5-24
    - A.6. Physical Fitness ..... 5-24
  - Section B. Completion of the Qualification Tasks.....5-28**
    - B.1. Steps..... 5-28
    - B.2. Qualification ..... 5-28
    - B.3. Purpose of the Qualification Tasks ..... 5-29
    - B.4. Record of the Training..... 5-29
    - B.5. Changes to Qualification Requirements ..... 5-29
    - B.6. Completion of the Qualification Process ..... 5-29
- CHAPTER 4. CERTIFICATION.....5-31**
  - Section A. Authority and Exceptions.....5-31**
    - A.1. Authority ..... 5-31
    - A.2. Exceptions ..... 5-31
    - A.3. Certification Lapse ..... 5-33
  - Section B. Specific Requirements .....5-33**
    - B.1. Completion of the Qualification Tasks ..... 5-33
    - B.2. Comprehensive Check-Ride ..... 5-33
    - B.3. Oral Examination ..... 5-33
  - Section C. Recertification .....5-35**



C.1. Physical Fitness Test .....	5-35
C.2. Underway Area Familiarization Exercise .....	5-35
C.3. Comprehensive Underway Check-Ride .....	5-35
C.4. Interview .....	5-35
C.5. Documentation .....	5-35
<b>Section D. Unit Commander’s Certification .....</b>	<b>5-36</b>
D.1. Written Certification .....	5-36
D.2. Further Information .....	5-36
<b>CHAPTER 5. CURRENCY MAINTENANCE .....</b>	<b>5-37</b>
<b>Section A. Currency Requirements .....</b>	<b>5-37</b>
A.1. CO/OIC Responsibilities .....	5-37
Sample Boat Crew Status Board .....	5-38
A.2. Formal Documentation .....	5-38
A.3. Failure to Meet Requirements .....	5-38
<b>Section B. Proficiency Requirements .....</b>	<b>5-39</b>
B.1. Minimum Proficiency Requirements .....	5-39
<b>Section C. Specific Requirements .....</b>	<b>5-43</b>
C.1. Area of Responsibility (AOR) .....	5-43
C.2. Requirement for Night Operations .....	5-44
C.3. Tests and Exams .....	5-44
C.4. Team Coordination Training (TCT) Requirement .....	5-44
C.5. Water Survival Exercise .....	5-44
<b>CHAPTER 6. DOCUMENTATION .....</b>	<b>5-45</b>
<b>Section A. Qualification .....</b>	<b>5-45</b>
Record of Trainee Progress .....	5-45
A.1. Two Parts of Trainee Progress Record .....	5-45
A.2. Record of Trainee Underway Operations and Drills .....	5-46
A.3. Record of Completed Tasks .....	5-46
Responsibilities .....	5-46
A.4. Record Maintenance .....	5-46
A.5. Unit Training Petty Officer .....	5-46
A.6. Instructor .....	5-46
A.7. Member / Trainee .....	5-46
A.8. Disposition of Records .....	5-46
<b>Section B. Certification, Recertification, and Currency .....</b>	<b>5-47</b>
Certification .....	5-47
B.1. Letter of Certification .....	5-47
B.2. Enlisted Qualification Codes .....	5-48
Recertification and Currency .....	5-50
B.3. Recertification .....	5-50
<b>Section C. Boat Crew Certificates .....</b>	<b>5-50</b>
C.1. Boat Crew Certificates .....	5-50
C.2. Authorization .....	5-50
<b>CHAPTER 7. SAMPLES OF CONSOLIDATED LETTERS OF CERTIFICATION, RECERTIFICATION, OR CURRENCY MAINTENANCE .....</b>	<b>5-51</b>
<b>Section A. Sample Boat Crew Currency Maintenance .....</b>	<b>5-52</b>
<b>Section B. Sample Letter of Certification, Recertification, and Currency .....</b>	<b>5-53</b>
<b>Section C. Sample Record of Currency Maintenance .....</b>	<b>5-54</b>
<b>Section D. Sample Letter of Certification and Currency Maintenance .....</b>	<b>5-55</b>
<b>Section E. Sample Letter of Certification for Coxswain, Heavy Weather Coxswain, or Surfman .....</b>	<b>5-56</b>
<b>APPENDIX A. 41' UTB READINESS AND STANDARDIZATION DRILLS .....</b>	<b>A-1</b>
<b>CHAPTER 1. REQUIRED UNDERWAY DRILL CHECKLISTS .....</b>	<b>A-3</b>
Day/Night Navigation and Piloting .....	A-5
Towing .....	A-9
Dewatering .....	A-13
Man Overboard (MOB) Recovery .....	A-17
<b>CHAPTER 2. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR NAVIGATION, PILOTING, AND SEARCH PATTERNS .....</b>	<b>A-19</b>



Reduced Visibility Navigation.....	A-21
Crewmember Piloting Proficiency.....	A-23
Search Patterns (Precision Navigation Patterns).....	A-25
Search Patterns (Drifting Patterns).....	A-29
<b>CHAPTER 3. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR BASIC ENGINEERING CASUALTY CONTROL</b>	
<b>EXERCISES .....</b>	<b>A-33</b>
Fire in the Engine Room.....	A-35
Loss of Steering (Cable/Hydraulics).....	A-37
Loss of Steering (Jammed Rudder).....	A-39
Collision With Submerged Object.....	A-41
Loss of Main Engine Lube Oil Pressure.....	A-43
Main Engine High Water Temperature.....	A-45
<b>APPENDIX B. 47' MLB READINESS AND STANDARDIZATION DRILLS .....</b>	<b>B-1</b>
<b>CHAPTER 1. REQUIRED UNDERWAY DRILL CHECKLISTS.....</b>	<b>B-3</b>
Day/Night Navigation and Piloting.....	B-5
Towing.....	B-9
Dewatering.....	B-13
Man Overboard (MOB) Recovery.....	B-17
<b>CHAPTER 2. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR NAVIGATION, PILOTING, AND SEARCH</b>	
<b>PATTERNS.....</b>	<b>B-19</b>
Reduced Visibility Navigation.....	B-21
Crewmember Piloting Proficiency.....	B-23
Search Patterns (Precision Navigation Patterns).....	B-25
Search Patterns (Drifting Patterns).....	B-29
<b>CHAPTER 3. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR BASIC ENGINEERING CASUALTY CONTROL</b>	
<b>EXERCISES .....</b>	<b>B-33</b>
Fire in the Engine Room.....	B-35
Loss of Steering (Hydraulics).....	B-37
Loss of Steering (Electrical).....	B-39
Collision With Submerged Object (or Bottom).....	B-41
Hard Grounding.....	B-43
Loss of Main Engine Lube Oil Pressure.....	B-47
Main Engine High Water Temperature.....	B-49
Reduction Gear Failure.....	B-51
Loss of Fuel Oil Pressure.....	B-53
Loss of Control of Engine RPMs.....	B-55
Low Voltage Alarm/Loss of Electrical Charging System.....	B-57
<b>APPENDIX C. 49' BUSL READINESS AND STANDARDIZATION DRILLS.....</b>	<b>C-1</b>
<b>CHAPTER 1. REQUIRED UNDERWAY DRILL CHECKLISTS.....</b>	<b>C-3</b>
Day/Night Navigation and Piloting.....	C-5
Buoy Operations – Mooring Pull.....	C-9
Man Overboard (MOB) Recovery.....	C-11
<b>CHAPTER 2. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR NAVIGATION, PILOTING, AND SEARCH</b>	
<b>PATTERNS.....</b>	<b>C-13</b>
Reduced Visibility Navigation.....	C-15
Crewmember Piloting Proficiency.....	C-17
Search Patterns (Precision Navigation Patterns).....	C-19
Search Patterns (Drifting Patterns).....	C-23
<b>CHAPTER 3. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR BASIC ENGINEERING CASUALTY CONTROL</b>	
<b>EXERCISES .....</b>	<b>C-27</b>
Fire in the Engine Room.....	C-29
Loss of Steering (Cable/Hydraulics).....	C-31
Collision With Submerged Object.....	C-33
Loss of Main Engine Lube Oil Pressure.....	C-35
Main Engine High Water Temperature.....	C-37
Loss of Control of Engine RPMs.....	C-39
Loss of Fuel Oil Pressure.....	C-41
<b>APPENDIX D. RB-S/RB-HS READINESS AND STANDARDIZATION DRILLS.....</b>	<b>D-1</b>



<b>CHAPTER 1. REQUIRED UNDERWAY DRILL CHECKLISTS.....</b>	<b>D-3</b>
Day/Night Navigation and Piloting.....	D-5
Towing.....	D-9
Dewatering.....	D-13
Man Overboard (MOB) Recovery.....	D-17
<b>CHAPTER 2. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR NAVIGATION, PILOTING, AND SEARCH</b>	
<b>PATTERNS.....</b>	<b>D-19</b>
Reduced Visibility Navigation.....	D-21
Crewmember Piloting Proficiency.....	D-25
Search Patterns (Precision Navigation Patterns).....	D-27
Search Patterns (Drifting Patterns).....	D-31
<b>CHAPTER 3. OPTIONAL UNDERWAY DRILL CHECKLISTS FOR BASIC ENGINEERING CASUALTY CONTROL</b>	
<b>EXERCISES .....</b>	<b>D-35</b>
Outboard Engine Fire.....	D-37
Loss of Steering (Hydraulics).....	D-39
Collision with Submerged Object.....	D-41
Loss of Outboard Engine Lube Oil Pressure.....	D-43
Outboard Engine High Water Temperature.....	D-45
Loss of Fuel Pressure.....	D-47
<b>APPENDIX E. NON-STANDARD BOAT MATERIAL CHECKLISTS.....</b>	<b>E-1</b>
55' ANB Material Checklist (recommended).....	E-3
TANB/Other NSB & Trailer Material Checklist (recommended).....	E-11
64' ANB Material Checklist.....	E-15
<b>APPENDIX F. UNIT AND RFO AIDS TO NAVIGATION TEAM CHECKLISTS.....</b>	<b>F-1</b>
Buoy Operations - Mooring Pull and Aid Positioning.....	F-3
Service Minor Lighted Fixed Aid.....	F-9
ANT RFO General Information.....	F-11
Unit Training.....	F-13
Engineering Administration.....	F-15
Aids to Navigation Administration.....	F-17
Completion Worksheet.....	F-21
<b>APPENDIX G. GLOSSARY.....</b>	<b>G-1</b>
<b>APPENDIX H. LIST OF ACRONYMS .....</b>	<b>H-1</b>
<b>INDEX.....</b>	<b>Index-1</b>



## Table of Contents



## List of Figures

Figure 2-1 Pewter-Tone Insignia .....	2-114
Figure 2-2 Gold- and Pewter-Tone Insignia .....	2-116
Figure 3-1 Station .....	3-6
Figure 3-2 Station (small), Non-Pooled.....	3-7
Figure 4-1 Pre-Assessment Visit Timeline .....	4-18
Figure 4-2 Assessment Visit Timeline.....	4-20
Figure 5-1 Boat Crew Training, Qualification, and Certification System .....	5-6
Figure 5-2 Completion of Boat Crew Qualification Tasks .....	5-28



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



## List of Tables

Table 2-1 Formal School Requirements Non-Billet Specific - All Stations .....	2-101
Table 2-2 Formal Schools - UTB/RB Stations .....	2-102
Table 2-3 Formal Schools - MLB Stations .....	2-104
Table 2-4 Formal Schools - Non-Pooled Stations (small) .....	2-107
Table 2-5 Commandant Mandated Training Requirements All-Hands .....	2-109
Table 2-6 Commandant Mandated Training Selected Personnel - General Requirements.....	2-109
Table 2-7 Commandant Mandated Training - Boarding Team Requirements.....	2-110
Table 2-8 Commandant Recommended (Not Required) Training.....	2-111
Table 5-1 Physical Fitness Standards .....	5-24
Table 5-2 Qualification Codes.....	5-49



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



# Part 1

## Introduction

### Section A. Purpose of this Manual

---

#### Introduction

This Manual prescribes policy, doctrine, techniques, standardization, and training requirements pertinent to U.S. Coast Guard boat unit operations and is intended for use by Operational Commanders, boat unit Commanding Officers/Officers-in-Charge (COs/OICs), boat unit personnel, as well as Coast Guard Boat Force customers.

This Manual is a culmination of doctrine and policy documented in numerous sources. It was produced in an effort to ease field reference burden. Due to recent changes in Coast Guard Boat Force policy, all Coast Guard personnel who shall be guided by this Manual are highly encouraged to become familiar with its contents.

The Parts in and Appendices to this Manual provide guidance for the management of boat operations in general, and unit operations in particular.

The procedures and guidance contained in this Manual are derived from existing directives where available.

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#### Procedures

This Manual is not intended to cover every contingency that may arise, nor every rule of unit or boat operations. Successful operations require the exercise of good safety practices, sound judgment and common sense at all levels of command.

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#### Deviation

When the need arises, special instructions or waivers may be issued by Commandant (G-OCS). The operational environment or mission demands may require on-scene deviation from prescribed instructions or procedures when, in the judgment of the CO, OIC, or coxswain, such deviation is necessary for safety or the saving of life.

Such deviation must not be taken lightly and must be tempered by maturity, sound judgment, and a complete understanding of the capabilities of the unit, its boats, mission, and crew.

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## Section B. How to Use this Manual

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<b>Introduction</b>	Each Part of this Manual includes its own table of contents and is divided into Chapters. A glossary and list of acronyms are located at the end of this Manual.
<b>References for this Section</b>	Commandant Instructions and other official reference documents are included here.
<b>Part Layout</b>	<p>The first page of each Part includes an <i>Introduction</i> and an <i>In this Part</i> (which lists each Chapter title).</p> <p>The first page of each Chapter includes an <i>Introduction</i>, an <i>In this Chapter</i>, and <i>References for this Chapter</i>, as applicable.</p> <p>The first page of each Section includes an <i>Introduction</i>, an <i>In this Section</i>, and <i>References for this Section</i>, as applicable.</p> <p>In the left column of each page is the block title, which provides a descriptive word or phrase for the corresponding block of text across from it.</p>
<b>Warnings, Cautions, and Notes</b>	The following definitions apply to Warnings, Cautions, and Notes found throughout the Manual.
Warning	<b>WARNING</b>  Operating procedures or techniques that must be carefully followed to avoid personal injury or loss of life.
Caution	<b>CAUTION!</b>  Operating procedures or techniques that must be carefully followed to avoid equipment damage.
Note	<b>NOTE</b>  An operating procedure or technique essential to emphasize.
<b>Generalization</b>	Because of the need to generalize, wording such as “normally,” “etc.,” “usually,” and “such as” is employed throughout this Manual. Words or clauses of this nature shall not be used as loopholes, nor shall they be expanded to include a maneuver, situation, or circumstances that should not be performed or encountered.

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# Part 2 Operations and Missions

**Introduction** This Part prescribes policy, standards, instructions, and capabilities pertinent to Coast Guard unit operations.

**In this Part** This Part contains the following Chapters:

Chapter	Title	See Page
1	Boat Units and Boat Types	2-3
2	Mission Types	2-9
3	Mission Authorization	2-33
4	Mission Planning	2-39
5	Standards of Boat Operations	2-67
6	Training and Qualification	2-79
7	Boat Force Operations Insignia Criteria	2-113






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## Chapter 1. Boat Units and Boat Types

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**Introduction** This Chapter provides an overview of the various types, locations, and missions of Coast Guard boat units, as well as the types of boats used in the execution of assigned missions. It prescribes general operating procedures for Coast Guard units that are applicable to all boat operations. Units operate a variety of boats because of the variety of missions and operating areas.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Coast Guard Boat Units	2-4
B	Coast Guard Boat Types	2-6

**References for this Chapter**

- a. *Boat Management Manual*, COMDTINST M16114.4 (series)
  - b. *Operating Facilities (OPFAC) of the U. S. Coast Guard*, COMDTINST M5440.2 (series)
  - c. *Response Boats 2010 – The Shore-Based Response Boat Strategic Vision and Transition Plan*, COMDTINST 16114.20 (series)
  - d. *Staffing Standards Manual*, COMDTINST M5312.11 (series)
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## Section A. Coast Guard Boat Units

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**Introduction** This Section defines the following eleven types of Coast Guard boat units and discusses their functions and elements.

- Station
- Non-Pooled Station (small)
- Pooled Station (small)
- Auxiliary-Operated Station (small)
- Aids to Navigation Team
- Station Aids to Navigation Team (STANT)
- Cutter
- Maritime Safety Security Team (MSST)
- Marine Safety Office (MSO)
- Port Security Unit (PSU)
- Air Station

**NOTE** 

The eleven Coast Guard Boat Units have been **bolded** throughout this Manual for emphasis.

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**A.1. Definitions**

The eleven Coast Guard boat units for the purpose/applicability of this Manual are defined as follows:

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A.1.a. Station

A **Station** is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.

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A.1.b. Station (Small)

A **Station (small)** is a minimally staffed and resource constrained unit that receives operational direction, command, and support from its parent unit.

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A.1.b.1. Non-Pooled Station (Small)

A **Non-Pooled Station (small)** is a **Station (small)** with permanently assigned personnel. These units will be assigned an Operating Facility (OPFAC) number, unit boat allowance, and Officer-in-Charge (OIC).

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A.1.b.2. Pooled Station (Small)

The **Pooled Station (small)** is essentially a “remote operating location”, formerly known as a detachment.

A **Pooled Station (small)** appears in the *Operating Facilities (OPFAC) of the U. S. Coast Guard*, COMDTINST M5440.2 (series), but will not have a unique assigned OPFAC number, assigned unit boat allowance, personnel, or an OIC. The parent unit for this **Pooled Station (small)** has additional personnel and boat(s) to operate a boat from the physical location of the **Station (small)**.

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A.1.b.3. Auxiliary-Operated Station (Small)

An **Auxiliary-Operated Station (small)** is a **Station (small)** that relies on auxiliary members for its primary duty section staffing for three or more months per year. Auxiliary operated units may or may not have an active duty command cadre (i.e., OIC).

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A.1.c. Aids to Navigation Team	An <b>Aids to Navigation Team</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.
A.1.d. Station Aids to Navigation Team (STANT)	A <b>STANT</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.
A.1.e. Cutter	A <b>Cutter</b> is a Coast Guard facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.
A.1.f. Maritime Safety and Security Team (MSST)	An <b>MSST</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment, which reports to an Area Commander.
A.1.g. Marine Safety Office (MSO)	An <b>MSO</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment, which reports to a District Commander.
A.1.h. Port Security Unit (PSU)	A <b>PSU</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment, which reports to an Area Commander.
A.1.i. Air Station	An <b>Air Station</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment, which reports to a District Commander or an Area Commander.
<b>A.2. Elements</b>	The elements of a boat unit shall include, but are not limited to the following: <ul style="list-style-type: none"><li>• Multi-mission shore facility.<ul style="list-style-type: none"><li>▪ Duty crew berthing</li><li>▪ Vessel moorings and maintenance</li></ul></li><li>• Multi-mission afloat unit (<b>Cutter</b> only).</li><li>• Operate boats in support of designated missions.</li><li>• Authorized boat and personnel allowances.<ul style="list-style-type: none"><li>▪ <b>Auxiliary-Operated Station (small)</b> may, or may not have boats or personnel assigned.</li><li>▪ <b>Non-Pooled Station (small)</b> normally have boat and personnel allowances.</li></ul></li><li>• Boat unit administration.</li><li>• Provide unit-level training and equipment maintenance.</li><li>• Responsible for their own internal supervision.</li><li>• Receive support and services from Commandant, Area, District office, Sector, Group office, Base, Integrated Support Command, <b>Air Station</b> or other host command.</li></ul>
A.2.a. Reserve Augmented Unit	A Reserve Augmented Unit is a unit that relies on reserve personnel for at least one third of its primary duty section staffing for three or more months per year.

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A.2.b. Parent Station

A parent **Station** is a unit with one or more subordinate **Stations (small)**. Its command cadre allowance may be different from that of a typical unit to account for the increased responsibility associated with the assignment of subordinate **Stations (small)**.

## Section B. Coast Guard Boat Types

**Introduction**

This Section provides a current listing of standard and non-standard boat (NSB) types. Where this listing conflicts with other reference documents regarding currently authorized boat types, the *Boat Management Manual*, COMDTINST M16114.4 (series) shall take precedence. Standard boats remain the primary unit response resource. *Response Boats 2010 – The Shore-Based Response Boat Strategic Vision and Transition Plan*, COMDTINST 16114.20 (series) defines the Coast Guard’s boat plan for multi-mission shore units. Deepwater will define the standardized boat plan for ICGS cutters. The Integrated AtoN Platform Modernization AC&I Project will ultimately define the AtoN boat and cutter plan.

**B.1. Standard Boats**

<b>AtoN</b>	
ANB	55' AtoN Boat
BUSL	49' Buoy Utility Stern Loading
<b>Ship-based cutter boats</b>	
CB-L	19' – 23' Cutter Boat - Large assigned onboard WLB, WHEC, WMEC, WIX, WLR, and WAGB
CB-M	17' and 18' Cutter Boat - Medium assigned onboard WMEC, WLM, WPB, and WTGB
CB-S	14' and 15' Cutter Boat - Small assigned onboard WLI, WLIC, WLR, WPB, and WYTL
CB-OTH	23' Cutter Boat - Over the Horizon (Zodiac 733 Interceptor)
MSB	26' Motor Surf Boat
<b>Shore-based response</b>	
MLB	44' and 47' Motor Lifeboat
RB-HS	Response Boat - Homeland Security (25' Safeboat with cabin)
RB-M	Response Boat - Medium



**B.2. Non-Standard Boats**

RB-S	Response Boat - Small
SPC (HWX)	52' Heavy Weather Special Purpose Craft (previously the 52' MLB)
UTB	41' Utility Boat, Big
<b>Training specific</b>	
ATB	41' Aviation Training Boat (same as 41' UTB)
<b>Miscellaneous</b>	
TPSB	25' Transportable Port Security Boat (Boston Whaler)
<b>AtoN</b>	
ANB	63' and 64' AtoN Boat
BU	45' Buoy Boat
Cable	Cable Servicing Special Purpose Craft
TANB	Trailerable AtoN Boat
<b>Ship-based response</b>	
ASB	Arctic Survey Boat
LCVP	Landing Craft
MCB	Motor Cargo Boat
<b>Training specific</b>	
CT-64	Cadet Training Boat
DPB	42' Deployable Pursuit Boat (Fountain)
SB	Sailboat (Academy)
<b>Miscellaneous</b>	
Ferry	Ferry Special Purpose Craft (D14)
PWB	Ports and Waterways Boat



SKF	Skiff - a trailerable, open construction boat < 19' without installed electronics used for unit tendering, waterborne maintenance, and specialized immediate vicinity search and rescue (SAR) response.
SPC	General Special Purpose Craft – a boat that is unique in the performance of an authorized mission requiring specialized capability that cannot be met within the standardized shore-based response boat fleet.
SPC (LE)	Law Enforcement Special Purpose Craft
SPC (surf)	30' Surf Special Purpose Craft (previously the 30' SRB)
TPSB	22' Transportable Port Security Boat (Boston Whaler)
UTL	Utility Boat Light - a 17' – 28' 11" fiberglass or aluminum hulled boat that may have fendering, has installed electronics and engines. The UTL is representative of the secondary response platform capability at multi-mission <b>Stations</b> . It includes all boats, which previously filled RIBB, RIBM, UTL, and RIBL allowances.
UTM	Utility Boat Medium - a 25' – 40' 11" in length, closed or partially closed cabin, fiberglass or aluminum hulled boat that may have fendering, has installed electronics and engines. It typically fills an authorized <b>Station (small)</b> allowance as the unit's primary response boat.



## Chapter 2. Mission Types

**Introduction**

Boat resources are the Coast Guard’s most numerous and widely distributed assets. As such, they may be called on to perform in or support any Coast Guard mission area.

Mission tasking shall be based on each unit’s ability to support and fulfill required operational requirements. No lack of formal assignment of a mission area shall preclude units from performing the full range of Coast Guard missions. The following missions and employment categories are those **most frequently** supported by Boat Force units.

**Mission Types  
and Employment  
Categories**

Mission Type	Employment Category
Search and Rescue (SAR)	<ul style="list-style-type: none"> <li>• No employment categories</li> </ul>
Enforcement of Laws and Treaties (ELT)	<ul style="list-style-type: none"> <li>• Drugs Surface Interdiction (DRUGS SURF)</li> <li>• Fisheries Enforcement Domestic (FISH-DOM)</li> <li>• Migrant (MIGRANT)</li> <li>• Other (OTHER)</li> <li>• Protected Living Marine Resources (PLMR)</li> </ul>
Marine Safety (MS)	<ul style="list-style-type: none"> <li>• Port Safety (PORT SAFE)</li> <li>• Recreational Boating Safety (RBS)</li> <li>• Waterways Management (WWM)</li> </ul>
Military Operations (MILOPS)	<ul style="list-style-type: none"> <li>• Exercises (EX)</li> <li>• Peace (PEACE)</li> <li>• Port Security (PORT SEC)</li> <li>• War (WAR)</li> </ul>
Aids to Navigation (AtoN)	<ul style="list-style-type: none"> <li>• Short Range (SRA)</li> <li>• Trail (TRAIL)</li> </ul>
Marine Environmental Protection (MEP)	<ul style="list-style-type: none"> <li>• Marine Environmental Protection (ENFORCE)</li> <li>• Response (RESP)</li> </ul>



**In this Chapter**

This Chapter contains the following Sections:

Section	Title	See Page
A	Search and Rescue (SAR)	2-11
B	Enforcement of Laws and Treaties (ELT)	2-18
C	Recreational Boating Safety (RBS)	2-23
D	Marine Safety (MS)	2-25
E	Military Operations (MILOPS)	2-27
F	Short Range Aids to Navigation (SRA)	2-29
G	Marine Environmental Protection (MEP)	2-31

**References for this Chapter**

- a. *Abstract of Operations Reports*, COMDTINST M3123.7 (series)
- b. *Abstract of Operations – Web User Guide*

Each Section contains its own references and description and authority paragraphs, as necessary.

**Core Mission**

Units are universally expected to be able to:

- Safely operate assigned boats to the environmental and mission limitations described in the boat’s operating manuals or in Coast Guard doctrine/policy, whichever is more restrictive.
- Support the District mandated “Alert” posture.

**NOTE**

The Operational Commander shall be immediately notified by record correspondence whenever either of these aforementioned universally expected conditions are not met.

- One of the unit CO’s/OIC’s greatest responsibilities is to ensure boat crews and individual members undertake only those missions and tasks for which they are fully qualified, and for which the inherent risk has been properly assessed and managed using the principals of Operational Risk Management (ORM).
- The number and complexity of Coast Guard missions makes it impossible to have personnel qualified in every task, in every mission area, at every unit.
- Personnel, training, and qualification limitations frequently dictate that units limit support for many missions to simply provide transportation for qualified personnel from other units or organizations (e.g., AtoN, MEP).



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## Section A. Search and Rescue (SAR)

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**Introduction** This Section provides an overview of the role of boat units in support of the Coast Guard’s Search and Rescue (SAR) program. In an average year, boat units are responsible for 70% of the lives saved and 90% of the property saved by the U.S. Coast Guard. Boats perform 75% of all SAR sorties.

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**In this Section** This Section contains the following information:

Title	See Page
Description and Authority	2-12
SAR System, Program Objectives, and Program Standards	2-12
SAR Mission Organization	2-13
SAR Communications	2-14
Initial Action	2-15
SAR Planning	2-16
SAR Operations	2-16
Public Relations	2-17

---

- References for this Section**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series)
  - c. *Operational Risk Management*, COMDTINST 3500.3 (series)
  - d. *Telecommunications Manual (TCM)*, COMDTINST M2000.3 (series)
  - e. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)
-



## Description and Authority

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**A.1. Description** Boat unit responsibilities, organization, and operations in regards to search and rescue missions include:

- Maintaining assigned craft in a readiness condition to respond to SAR missions.
  - Maintaining trained crews to respond to SAR missions.
  - Exercising command and control of SAR missions.
  - Conducting SAR missions in accordance with established Coast Guard instructions.
  - Evaluating mission risk to ensure Coast Guard personnel are not unduly put in harms way.
- 

**A.2. Authority** The Coast Guard is authorized by Sections 2, 88, and 141 of Title 14 U.S.C. to:

- Develop, establish, maintain, and operate search and rescue facilities.
- Perform any and all acts necessary to rescue and aid persons.
- To protect and save property at any time and at any place where its facilities and personnel are available and can be effectively used.

It is important to note that the law authorizes the Coast Guard to undertake SAR missions, but, because of the critical importance of evaluating each mission and risk individually, the law does not compel the Coast Guard to undertake any particular mission.

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## SAR System, Program Objectives, and Program Standards

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**A.3. SAR System** The SAR System is an arrangement of components activated, as needed, to assist persons or property in potential or actual distress. Unit SAR system components may include:

- Unit personnel
  - Communications watchstanders
  - Unit training program
  - Boat crews
  - Boats and equipment
  - Vehicles and equipment
  - Buildings, property, and equipment
-



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**A.4. Program Objectives** The following objectives define expectations of the Coast Guard’s maritime search and rescue system.

- To minimize loss of life, personnel injury, and property loss and damage in the maritime environment.
- To minimize search duration and crew risk during SAR missions by applying the principals of *Operational Risk Management*, COMDTINST 3500.3 (series).

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**A.5. Program Standards** The response standards of particular applicability to unit operations include:

- **Command and Control.** Initiate action within five minutes of initial notification of a distress incident.
- **SAR Response.** A Bravo-Zero (B-0) response time is defined as a search and rescue unit underway within 30 minutes of notification of a distress.

**NOTE**  Area/District Commanders establish unit readiness (i.e., “Bravo”) requirements. A readiness lower than B-0 (e.g., B-2) may be appropriate in certain areas and at certain times of the year.

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## SAR Mission Organization

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**A.6. SAR Coordinator (SC)** The District Commander, as SAR Coordinator (SC), mandates the SAR mission organization, assigning responsibilities for the SAR Mission Coordinator (SMC), On-Scene Coordinator (OSC), and Search and Rescue Units (SRUs) for any mission.

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A.6.a. SAR Mission Coordinator (SMC) SAR operations are carried out under the guidance of a SAR Mission Coordinator (SMC). The SMC shall normally be delegated at the Sector/Group level.

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A.6.b. On-Scene Coordinator (OSC) The SMC shall designate an On-Scene Coordinator (OSC) to coordinate SAR actions. A Coast Guard unit may serve as a shore-based OSC if communications and adequately trained personnel are available.

- The first unit on scene assumes OSC until the SMC directs that unit be relieved.
- OSCs should be thoroughly familiar with the *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series) and appropriate SAR plans (District, Area, Sector, Group, etc.).

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A.6.c. Search and Rescue Unit (SRU)

A Search and Rescue Unit (SRU) is a unit with trained personnel and equipment for SAR operations. Unit personnel, boats, or vehicles may be used as SRUs.

- SRUs are subordinate to the OSC (and SMC).
- SRUs should be staffed, equipped and proficient in the SAR skills necessary to accomplish the mission.

**NOTE**

If an SRU is alone on scene, the SRU shall perform OSC duties and keep the SMC advised.

## SAR Communications

A.7. Objective

The objectives of SAR communications are:

- To obtain information on a distress incident and disseminate it promptly to all units and commands capable of providing assistance.
- To closely coordinate participants during the SAR operation is necessary to save the lives and property involved.

A.8. SAR Communications Coordination

Units shall guard distress channels when the Sector/Group cannot adequately satisfy mission requirements (e.g., bad communications in a particular area, equipment failure).

Coordination of SAR telecommunications closely follows the SAR organization structure. Units, boats or vehicles, and personnel shall communicate in accordance with the following:

- SMC selects SAR frequencies, informs OSC or SRUs, and establishes communications with parent agencies.
- OSC controls communications on scene subject to the instructions and direction of the SMC.

**NOTE**

SRUs communicate through the OSC. Boats shall communicate with the unit via the OSC unless otherwise directed. **Units are not normally staffed or trained to maintain a continuous national distress system communications watch.**

A.8.a. Role of Unit's Communications Watch

Frequently there is no requirement for units to maintain a live communications watch. The decision to maintain such a watch must be based on the unit operational tempo, communications capabilities of the unit's parent command, and the needs of the unit. In the event the unit maintains a communications watch, if only while actively engaged in SAR, this watch is an essential component in effective SAR communications coordination.



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A.8.b.  
Communications  
Watchstander

The communications watchstander is often the first person to become aware of an emergency or potential emergency. The communications watchstander will:

- Collect and disseminate the incident information.
- Perform duties as directed by the SMC (or OSC if the unit is designated a shore-based OSC), including:
  - Facilitate the flow of information between the distressed party and the SMC, as well as communication between the OSC and SMC.
  - Assist in the collection of SAR case information. [e.g., Preliminary Communications (PRECOM), Extended Communications (EXCOM)]
  - Coordinate local SAR or emergency response.

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A.8.b.1.  
Collocated Units  
and  
Sectors/Groups

Where Sectors/Groups and units are collocated, the Sector/Group communications watchstanders normally serve the communications watchstanding function for the unit.

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**A.9.  
Communications  
Searches**

SMCs conduct communications searches when facts are needed to supplement initially reported SAR information. The two types of communications searches are the PRECOM search and EXCOM search. They are usually conducted sequentially.

In many instances, SMCs may request subordinate units to actually perform the local PRECOM/EXCOM functions due to the subordinate unit's increased familiarity with their own AOR. Units shall maintain accurate up-to-date lists of contacts (e.g., major facilities and agencies) for PRECOM and EXCOM searches for their AOR. These lists shall be made available to the SMC.

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## Initial Action

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**A.10. Unit Initial  
Action**

After the initial report of an emergency or potential emergency is evaluated and assigned an emergency phase (i.e., DISTRESS, ALERT, or UNCERTAINTY), the unit usually has one of three possible actions:

- Dispatch an SRU immediately, or request other facilities (i.e., another agency) to act (i.e., DISTRESS phase).
    - Units are authorized to respond without specific tasking from the SMC if it is within the guidelines the SMC has previously provided.
    - May conduct initial response search planning for single unit response SAR incidents.
  - Act in accordance with the Maritime SAR Assistance Policy for incidents classified as non-distress.
  - Notify their Operational Commander or other response agencies and ask for direction.
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## SAR Planning

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**A.11. Procedures** SAR planning shall normally be conducted by the SMC.

SAR planning for a unit is normally restricted to planning for the initial, single unit response and will normally include:

- Utilizing Operational Risk Management (ORM) and the principles of Team Coordination Training to determine what response, if any, is appropriate.
- Selection of the appropriate resource, equipment, and crewing.
- Establishment of datum [i.e., the most probable location of the distressed vessel(s) or person(s)].
- Development of initial response search plans and designation of an OSC.

**NOTE**  The first SRU on scene for a search mission should deploy a datum marker upon arrival; time, position, and description of the datum marker should be reported to the SMC. Further details regarding considerations for datum marker deployment, conditions under which deployment should not be considered, etc., can be found in the *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series).

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## SAR Operations

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**A.12. Procedures** SAR operations should begin with the least possible delay, starting with SRU briefing and dispatch, and ending when the search objective is located and recovered, or the search is suspended. Initial mission planning and crew briefing are extremely critical to effective mission performance and most importantly, crew safety.

**NOTE**  SAR operations shall be conducted in a professional and predictable manner. SAR briefings, communications search execution, and all reports shall be conducted in accordance with the *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series), and the *Telecommunications Manual (TCM)*, COMDTINST M2000.3 (series). Any deviations from prescribed procedures shall be communicated to the SMC via the OSC.

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**A.12.a. Family Member Participation** Participation of family members in SAR operations should be limited because of safety considerations, and the next-of-kin should be spared the potential emotional impact of the distress site. Keeping family members informed of case progress is an essential element of SAR case management.

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A.12.b.  
Trespassing

Coast Guard personnel engaged in SAR operations should obtain permission from the owner or occupant before entering private property.

- If this is not possible, then the SMC must grant permission before private property is entered.
- Only when saving a person's life, can immediate action be taken.

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A.12.c. Searches  
for Bodies

The Coast Guard is not required to conduct searches for bodies. If requests are received from responsible agencies, such as local police, military commands, etc., Coast Guard units may participate in body searches provided that these searches do not interfere with the primary duties of the units. Units are not provided the specific gear or training to conduct underwater searches for bodies; their involvement is usually as a support platform for other agencies.

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## Public Relations

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**A.13. Procedures**

SAR operations often create a great interest with the general public and the media. Units should seek concurrence from the SMC before responding to public relations inquiries.

Relatives of missing persons may also seek information. Proper concern must be shown for their stressful situation. Relatives should be referred to the SMC for any information. Next-of-kin notifications shall be made by the unit's Operational Commander. Unit Commanders should establish local policy in accordance with District and/or Sector/Group SOPs and the *Public Affairs Manual*, COMDTINST M5728.2 (series).

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## Section B. Enforcement of Laws and Treaties (ELT)

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### Introduction

This Section provides an overview of the role of boat units in support of the Coast Guard’s Enforcement of Laws and Treaties (ELT) program. The Coast Guard is the nation’s leading maritime law enforcement agency and has broad, multi-faceted jurisdictional authority. Coast Guard law enforcement responsibilities encompass all Federal laws and regulations applicable in the maritime realm.

The vast majority of recreational and commercial vessels encountered by the Coast Guard in the course of ELT operations are operated by law-abiding citizens who are entitled to be treated with courtesy, respect, and due consideration for the nature of any legitimate activity in which they are engaged. The effectiveness of the ELT program depends on public support for the importance of the laws the Coast Guard enforces, and public recognition of the professional manner in which enforcement responsibilities are discharged.

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### In this Section

This Section contains the following information:

Title	See Page
Description and Authority	2-19
ELT Response	2-19
ELT Patrols	2-20
ELT Boarding	2-22
Coordinating ELT Activity	2-22

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### References for this Section

- a. *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series)
  - b. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
  - c. *Maritime Counter Drug & Alien Migrant Interdiction Operations*, COMDTINST M16247.4 (series)
  - d. *Operational Risk Management*, COMDTINST 3500.3 (series)
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## Description and Authority

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- B.1. Description** Unit law enforcement operations generally include a variety of activities within the unit's area of responsibility (AOR), including:
- Responding to reports of observed violations of maritime laws or regulations.
  - Patrols to detect and deter unsafe boating and unlawful maritime activity.
  - Boardings to detect and suppress violations of all Federal laws and educate the boating public.
  - Coordination activities with waterways user groups (e.g., fishing associations, recreational boating groups), community leaders, and other law enforcement entities.
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- B.2. Authority** Various sections of Titles 8, 14, 16, and 46 U.S.C., several Executive Orders, and Presidential Decision Directives contain authority to conduct the Coast Guard's ELT mission. Refer to the *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series) for more specific guidance.
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## ELT Response

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- B.3. Procedures** Units shall respond to reports of observed violations of U.S. laws or regulations (including pollution laws) in their area of responsibility when it is (1) lawful and appropriate, and (2) the resources required to respond in a safe and effective manner are available. Units shall contact their Operational Commander **before** dispatching any resources:
- If there is any question whether or not the requested (or intended) action is lawful and appropriate.
  - When there are significant potential risks to people or property, including Coast Guard persons or property (e.g., shots fired).
  - If the unit's resources (people or equipment) are inadequate for a safe and effective response.
- Units shall integrate the principals of ORM into daily processes, as appropriate, to help ensure mission success and safety of personnel. ELT response actions generally require close coordination with other agencies. Up-to-date agency contacts for ELT response operations within the unit's AOR should be maintained at the Area, District, Sector/Group, and unit.
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## ELT Patrols

### B.4. Conducting Patrols

Units conduct law enforcement patrols to detect and deter unsafe boating and unlawful activity within their AOR. ELT patrols should only be conducted when there is a:

- Clear, articulate objective.
- Reasonable possibility of meeting that objective.

### B.5. Planning

Unit law enforcement operations must be sharply focused on national and regional law enforcement objectives. Factors to be considered in planning and executing law enforcement operations should include the following:

- Law enforcement threat
- Unit AOR
- Resource status
- Availability of personnel
- Assessment of risk using ORM

**NOTE**  Law enforcement patrols may include multiple objectives.

### B.6. Questions to Ask

- What is the intended objective?
- What are the potential risks and expected benefits?
- Has the ORM process been applied to the mission planning, and is the mission risk continuously evaluated throughout the evolution?
- Who should be contacted to ensure effective patrol coordination (e.g., other Coast Guard units and law enforcement entities)?
- Where, when, and how should the patrol be conducted to achieve the desired results and maximize the opportunity to be successful?

**NOTE**  Boardings are normally conducted in conjunction with patrols to ensure compliance with applicable U.S. laws and regulations.

### B.7. Vessel Safety and Related Law Enforcement Patrols

Patrols to detect recreational and other vessel safety violations and deter unsafe boating practices can normally be considered low risk. Expected benefits include a potential reduction in the number and severity of SAR incidents.

#### B.7.a. Recreational Vessel Safety Patrols

Patrols intended to detect and deter unsafe boating should normally be conducted in high traffic density areas during times when traffic density is expected to be the greatest, or during times when SAR cases have historically occurred. In most instances, these patrols should be conducted in a highly visible manner to maximize the potential deterrent effect. The use of Coast Guard Auxiliary facilities to provide a Coast Guard presence is strongly encouraged.



**B.7.b.  
Commercial  
Vessel Safety  
Patrols**

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Commercial vessel safety patrols (e.g., commercial fishing vessels, towboats, uninspected passenger vessels) shall be coordinated with the cognizant Captain-of-the-Port (COTP)/**MSO** through their Operational Commander.

- At-sea enforcement of commercial fishing vessel safety regulations is normally conducted in conjunction with fisheries law enforcement operations.
- At-sea enforcement of safety regulations for commercial vessels, other than commercial fishing vessels, will normally require the involvement of COTP/**MSO** personnel because of the complex nature of commercial vessel regulations.

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**B.8. Drug Law  
Enforcement  
Patrols**

Unit drug law enforcement operations are normally restricted to action taken in response to drug smuggling information (i.e., response operations). Units should not normally conduct drug law enforcement patrols unless the District Commander has assigned this mission. Drug law enforcement patrols shall be coordinated with the District or Sector/Group Commander.

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**B.9. Immigration  
Law  
Enforcement  
Patrols**

Unit immigration law enforcement operations are normally restricted to action taken in response to migrants smuggling illegal entry information (i.e., response operations). Units should not normally conduct immigration law enforcement patrols unless this mission has been assigned in accordance with the District Commander's mission designation statements. Immigration law enforcement patrols shall be coordinated with the District Commander.

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**B.10. Fisheries  
Law  
Enforcement  
Patrols**

These patrols should be coordinated with the District, Sector/Group Commander or other Coast Guard units, and other Federal (e.g., National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (FWS)), State, and local fisheries enforcement agencies.

Fishing activity is generally area/location, time/season, species, and gear specific. The patrol times and locations should be based on the specific enforcement objective.

- Patrols on the fishing grounds allow for effective enforcement of gear, catch, permit, and safety laws and regulations.
  - Patrols in the transit areas can allow for effective enforcement of catch-related laws and regulations (inbound transits) as well as applicable safety laws and regulations (inbound or outbound transits).
-



## ELT Boarding

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### B.11. Conducting Boardings

ELT boardings may be conducted in conjunction with ELT patrols or an ELT response, or at the conclusion of a SAR case. ELT boardings are conducted to enforce all applicable U.S. laws and to educate mariners on the proper and safe practices associated with operating vessels. In most instances, unit ELT boarding activities should be focused on a certain activity (e.g., recreational boating, commercial fishing). In every instance, vessel inspections, as well as any searches for criminal activity (based on reasonable suspicion developed during the course of the vessel inspection), shall be done as thoroughly and expeditiously as possible so as to interfere as little as possible with legitimate voyages.

**NOTE** All boardings must be complete and thorough. Superficial checks defeat the purpose of vessel boardings.

## Coordinating ELT Activity

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### B.12. Working with other Law Enforcement Agencies

To ensure safe and effective ELT operations, units must establish and maintain a close, working relationship with local law enforcement entities. Units should meet with local law enforcement entities on a regular basis to discuss enforcement issues of mutual concern and identify opportunities to improve coordination and cooperation.

**NOTE** Meetings with other law enforcement officials should be closely coordinated with the unit’s Operational Commander.

#### B.12.a. Assisting State and Local Law Enforcement Agencies

Units may assist State and local law enforcement agencies, resources permitting. Specific guidance regarding assistance to State and local law enforcement agencies is contained in the *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series).

### B.13. Involving Other Federal Agencies in Maritime Law Enforcement Operations

In all cases where other Federal law enforcement agency or DoD personnel are included in a USCG boarding team from a USCG platform, the:

- USCG Boarding Officer shall remain in charge of the boarding team, and
- All non-USCG personnel must agree in advance to follow the USCG Boarding Officer’s direction and comply with USCG policy governing the use of force during vessel boardings.

**NOTE** DoD personnel are prohibited from direct participation in search, seizure and arrest. All concerned must be sensitive to the extent of the statutory authority of non-USCG personnel for participation in at-sea boardings.



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## Section C. Recreational Boating Safety (RBS)

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**Introduction** The purpose of the Recreational Boating Safety (RBS) program is to minimize the loss of life, personal injury, property damage, and environmental impact associated with the use of recreational boats, through preventive means, in order to maximize safe use and enjoyment of U.S. waterways.

**In this Section** This Section contains the following information:

Title	See Page
Description and Authority	2-24
RBS Patrols and Boardings	2-24
Education and Support	2-25

**References for this Section**

- a. *Auxiliary Manual*, COMDTINST M16790.1 (series)
  - b. *Auxiliary Marine Dealer Visitor Manual*, COMDTINST M16796.3 (series)
  - c. *Auxiliary Operations Policy Manual*, COMDTINST M16798.3 (series)
  - d. *Marine Safety Manual, Volume I, Administration and Management*, COMDTINST M16000.6 (series)
  - e. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
  - f. *Vessel Safety Check Program*, COMDTINST 16796.7 (series)
-



## Description and Authority

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- C.1. Description** Units support the RBS program through their interactions with the boating public and State and local boating authorities, and their support of the Coast Guard Auxiliary. RBS activities supported by units include:
- RBS patrols and boardings
  - Community education efforts
  - Support of Coast Guard Auxiliary RBS programs, including:
    - Vessel Safety Checks (VSCs)
    - Marine Dealer Visits (MDVs)
    - Boater Education Classes
- 
- C.2. Authority** Various sections of Titles 14 and 46 U.S.C. contain authority to conduct the Coast Guard’s RBS mission.
- 

## RBS Patrols and Boardings

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- C.3. RBS Patrols** RBS patrols should normally be conducted in high traffic areas during times when traffic density is expected to be the greatest. In most instances, RBS patrols should be conducted in a highly visible manner to maximize the potential deterrent effect on unsafe boating practices.
- Coordinating RBS patrols with Auxiliary VSC efforts (e.g., just off a busy boat ramp) can have a highly desirable effect on the level of boater participation.

**NOTE** The U.S. Power Squadron also participates in the VSC program.

- The use of Auxiliary boats to conduct RBS patrols with or without boarding teams can significantly enhance area coverage.
- 

- C.4. RBS Boardings** RBS boardings, like all other boardings, are conducted to enforce all applicable U.S. laws and to educate mariners on the proper and safe practices associated with operating vessels. In every instance, boardings shall be done as thoroughly and expeditiously as possible to minimize interference with legitimate voyages.

**NOTE** All boardings must be complete and thorough. Superficial checks defeat the purpose of vessel boardings.

- C.4.a. Vessels with Vessel Safety Check (VSC) Decals** Award of the VSC decal is not intended to give boats immunity from being boarded.
- A VSC decal is considered current for one year.
  - Boaters should be told that they are receiving an abbreviated boarding because they have the VSC decal.
-



## Education and Support

**C.5. Community Education** Units should meet regularly with recreational boating groups and participate, as time and resources allow, in boat shows and other events that can be used to promote boating safety. Community education efforts should be closely coordinated with the Coast Guard Auxiliary.

**C.6. Support of Auxiliary RBS Programs** Unit support of Auxiliary RBS programs (i.e., VSCs, MDVs, and boater education classes) can have a significantly positive effect on these extremely valuable programs. Units should contact their local Auxiliary Flotilla Commanders to coordinate support activities.

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## Section D. Marine Safety (MS)

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**Introduction** The Coast Guard’s Marine Safety (MS) mission prevents and mitigates marine incidents, thereby protecting the public, the environment, and U.S. economic interests.

**In this Section** This Section contains the following information:

Title	See Page
Description and Authority	2-26
Marine Safety Program	2-26
Ports and Waterways	2-26

- References for this Section**
- a. *Marine Safety Manual, Volume VI, Ports and Waterways Activities*, COMDTINST M16000.11 (series)
  - b. *Maritime Counter Drug & Alien Migrant Interdiction Operations*, COMDTINST M16247.4 (series)



## Description and Authority

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- D.1. Description** The U.S. Coast Guard oversees commercial vessel safety and operations and hazardous material transport and enforces standards for domestic and foreign flag vessels. The Coast Guard also provides a safeguard to the nation's ports, waterways, port facilities, vessels, persons, and property in the vicinity of the port from accidental destruction, damage, loss, injury, or environmental harm.
- 
- D.2. Authority** Various sections of Titles 14, 16, 33, 46, and 50 U.S.C. contain authority to conduct the Coast Guard's marine safety mission.
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## Marine Safety Program

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- D.3. Unit Requirements** Unit requirements in support of the Marine Safety Program consist of the following:
- Receiving and relaying information regarding commercial vessel operations such as special interest vessels, dangerous cargo transfer, and bulk liquid cargo transfers.
  - Educating the public regarding closure of navigable waterways, marine events, limited access areas, or other port conditions.
  - Transporting specially trained boarding teams.
  - Providing escorts of vessels.
  - Performing harbor patrols and patrols of limited access areas to detect and intercept intruders or possible threats to controlled ports.
- All of the above activities will be coordinated between the cognizant COTP/MSO and the unit's Operational Commander.
- 

## Ports and Waterways

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- D.4. Mission Purpose**
- To minimize deaths, personal injuries, and property loss or damage associated with vessels and onshore and offshore facilities engaged in commercial, scientific, or exploratory activity in the marine environment.
  - To protect the navigable waters and adjacent shore areas of the U.S. and adjacent resources from environmental harm.
  - To prevent pollution of the marine environment from accidental or intentional discharges of oil, hazardous substances, dredged spoils, sewage, and wastes from vessels.
-



**D.5. Unit Responsibilities**

When ports and waterways patrol is requested by the local COTP, units shall, as directed by their Operational Commander:

- Patrol and enforce security zones to safeguard vessels and port areas.
- Survey waterfront facilities to provide baseline data of facility capability that would be useful in emergency response.
- Monitor port operations including certain types of marine events.
- Conduct harbor patrols to detect suspicious activity and determine if the level of security measures taken by vessel and facility owners and operators are adequate and sufficient to meet the existing threat level.
- Identify steps and measures to be taken to prevent acts of maritime terrorism.
- Locate and report the presence of oil or hazardous substance pollution around vessels and along the waterfront.
- Locate and report the presence of dangerous or illegal conditions or situations, such as improperly moored vessels, vessel or waterfront fires, or oil spills.

**Section E. Military Operations (MILOPS)**

**Introduction**

Safeguarding America’s maritime security through complementary and non-redundant military and law enforcement capabilities is the Coast Guard’s unique contribution to U.S. national security. Maritime security is a critical element in ensuring homeland security and protecting critical infrastructure, enforcing sovereignty, and defending American citizens and interests.

**In this Section**

This Section contains the following information:

Title	See Page
Description and Authority	2-28
MILOPS Support and Planning	2-28
Port Operations	2-29

**References for this Section**

- a. *Contingency Preparedness Planning Manual, Volume I, Planning Doctrine and Policy*, COMDTINST M3010.11 (series)



## Description and Authority

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**E.1. Description** The Coast Guard has five major national defense missions:

- General defense operations
- Maritime interception operations
- Military environmental response operations
- Port operations security and defense
- Peacetime military engagement

In the U.S., these missions are conducted to meet the USCG's Title 14 U.S.C. responsibilities. It is likely that units will be directly or indirectly involved in performance of or support to the Coast Guard's national defense missions.

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**E.2. Authority** The statutory authority for the Coast Guard's national defense role is contained in Title 14 U.S.C. Sections 1, 2, and 141. Title 14 states that the Coast Guard shall be a military service and a branch of the armed forces at all times.

The Coast Guard is specifically authorized to assist the Department of Defense in performance of any activity for which the Coast Guard is especially qualified. The Coast Guard's national defense role is to provide non-redundant, complementary naval forces that support the National Military Strategy. The use of the Coast Guard's capabilities and resources in support of the National Military Strategy is addressed by the Oct 1995 DOT/DoD Memorandum of Agreement (MOA).

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## MILOPS Support and Planning

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**E.3. MILOPS Support** The Coast Guard's role in National Military Strategy is to assist the Department of Defense (DoD) in activities in which it is especially qualified, including:

- Maritime Safety
  - Maritime Law Enforcement
  - Marine Environmental Protection
  - Marine Mobility (includes AtoN)
  - National Defense (includes conducting military and defense operations in peacetime, smaller scale contingencies, military operations other than war, and major theater war)
- 

**E.4. MILOPS Planning** COTP planners will normally coordinate unit involvement in the MILOPS planning process. The COTP is responsible for the security of vessels and waterfront facilities in the port, as well as the safety of the general public and environment. It is likely that when supporting or performing MILOPS missions, units will be tasked by the cognizant COTP through their Operational Commander.

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## Port Operations

**E.5. Security and Defense Role** In the wake of the USS COLE (DDG 67) incident, the terrorists attacks of September 11<sup>th</sup> 2001, and Operations ENDURING FREEDOM and IRAQI FREEDOM, the Coast Guard’s wartime port security role has grown significantly with Coast Guard forces being included in DoD OPLANs and validated in action. Under the mandates of the Espionage Act, the Magnuson Act and related Executive Orders, the Coast Guard has explicit responsibility to maintain the security of the nation’s ports and harbors.

**E.6. Unit Requirements**

Unit requirements in support of MILOPS consist of the following:

- Provide credible presence in and conduct surveillance of critical maritime areas.
- Detect, classify, and identify targets of interest, and intercept and prosecute targets as directed.
- For those units whose AOR contains a designated strategic port, conduct boardings as necessary of vessels in and around strategic ports during Threat Conditions (MARSEC).
- For those units whose AOR contains a designated strategic port:
  - Conduct boardings as necessary of vessels in and around strategic ports during MARSEC.
  - Maintain capability to take necessary actions to detect, deter, intercept, and incapacitate hostile vessels during MARSEC.
  - Conduct patrols as necessary.

All the above activities will be coordinated between the cognizant COTP/MSO and the unit’s Operational Commander.

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## Section F. Short Range Aids to Navigation (SRA)

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**Introduction** Short Range Aids to Navigation (SRA) promotes the safety of marine transportation and commerce on United States navigable waters by establishing, maintaining, and operating visual and sound signals to mark safe water or warn of dangers. This program also develops and enforces private aids to navigation regulations.

**In this Section** This Section contains the following information:

Title	See Page
Description and Authority	2-30
Aids to Navigation	2-30

- References for this Section**
- a. *Aids to Navigation Manual – Administration*, COMDTINST M16500.7 (series)
  - b. *Aids to Navigation Manual – Technical*, COMDTINST M16500.3 (series)



## Description and Authority

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**F.1. Description** Other than Buoy Tenders and **ANTs**, most units do not have assigned aids to navigation (AtoN) responsibilities. All units have a responsibility to report AtoN which appear to be missing, off-**Station**, or operating improperly. Units with assigned AtoN responsibilities (i.e., primary or secondary responsibility) shall normally have specially trained AtoN personnel, as well as specialized boats and equipment to accomplish their assigned mission.

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**F.2. Authority** Authority for the Coast Guard's aids to navigation program is covered under Sections 2 and 81 of Title 14 U.S.C.

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## Aids to Navigation

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**F.3. Unit Responsibilities** Units without specific AtoN responsibilities may be requested to position floating aids to navigation within 10 meters of assigned position, as time, resources, and platform limitations permit.

In addition, personnel assigned to units may be requested to perform the following:

- Seek out methods to improve the system of AtoN in their AOR, forwarding suggestions to the proper authority.
  - Collect and report information regarding discrepant aids 100% of the time.
  - Receive, report, and record weather observations as required to facilitate AtoN operations.
  - Transit their AOR and report on the status and condition of AtoN, including hazards to navigation.
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## Section G. Marine Environmental Protection (MEP)

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**Introduction** The Coast Guard’s Marine Environmental Protection (MEP) mission primarily protects public health and safety, natural resources, property, and economic resources and activities from the consequences of oil and hazardous material incidents through prevention and, if prevention fails, appropriate response.

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**In this Section** This Section contains the following information:

Title	See Page
Description and Authority	2-31
MEP Program Objectives and Response	2-32

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- References for this Section**
- a. *Marine Safety Manual, Volume I, Administration and Management*, COMDTINST M16000.6 (series)
  - b. *Marine Safety Manual, Volume VI, Ports and Waterways Activities*, COMDTINST M16000.11 (series)
  - c. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
  - d. *Oil Pollution Response Planning Guide for Extreme Weather*, COMDTINST M16466.2 (series)
  - e. *Operational Risk Management*, COMDTINST 3500.3 (series)
- 

### Description and Authority

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**G.1. Description** The enforcement of pollution laws is primarily accomplished by COTP/MSO personnel. Unit personnel actively enforce marine pollution laws by detecting, investigating, and reporting violations of law relating to marine environmental pollution as well as each instance of pollution.

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**G.2. Authority** Various specific laws, treaties, and sections of Title 16 U.S.C. contain authority to conduct the Coast Guard’s MEP mission.

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## MEP Program Objectives and Response

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### G.3. MEP Program Objectives

Objectives of the MEP program of particular applicability to unit operations include:

- Minimize damage caused by pollutants released into navigable waters.
  - Overcome or reduce threats to the marine environment caused by potential spills of oil or other hazardous substances.
- 

### G.4. Pollution Response

Pollution response activity must be coordinated with the cognizant COTP/**MSO**. While underway or engaged in unit operations, unit boats often detect pollution incidents or other violations of related laws and regulations. Units should:

- Report apparent pollution violations/observations to the cognizant COTP/**MSO**, via the chain of command, and await instructions.
  - If a visual, on-site investigation is indicated, and the COTP/**MSO** has determined it is safe to do so, the unit may be requested to further investigate for source or cause.
  - Due to the potential hazardous nature of pollution materials and the lack of protective equipment, units first on scene should not engage in any other activity unless specifically directed to do so by the COTP/**MSO**.
- 

#### G.4.a. Oil Spill Response

When responding to an oil spill, unit personnel should be prepared to take the following actions:

- Report discharges (and threatened discharges) through the chain of command. If the information can be determined safely, include the following:
  - Nature, amount, and location of the pollutant.
  - Apparent potential impact on public health and the environment (e.g., environmentally sensitive areas, water intakes, beaches, etc.).
  - Countermeasures that seem necessary to adequately contain, control, or remove the pollutants.
- Unit personnel must remain aware of the potential that discharges/spills contain hazardous materials and must use appropriate risk assessment tools in accordance with the ORM process prior to taking any action.

### NOTE

No specific containment mitigation investigation or sampling should be undertaken without express direction of the COTP and then only within the bounds of appropriate hazardous waste training.

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## Chapter 3. Mission Authorization

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**Introduction** This Chapter specifies who authorizes the movement of resources in response to missions at Coast Guard units, including deployment of both personnel and boats (including Auxiliary).

This Chapter also contains information covering the authority and responsibilities of command cadre, boat coxswains, and Coast Guard personnel embarked on platforms other than Coast Guard boats.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Authorization of Resources	2-33
B	Authority and Responsibilities	2-35

**References for this Chapter** Each Section contains its own references, as necessary.

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### Section A. Authorization of Resources

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**Introduction** This Section specifies who authorizes the movement of resources in response to missions at Coast Guard units, including deployment of both personnel and boats (including Auxiliary).

**References for this Section**

- a. *Abstract of Operations Reports*, COMDTINST M3123.7 (series)
- b. *Auxiliary Operations Policy Manual*, COMDTINST M16798.3 (series)
- c. *Marine Safety Manual, Volume VI, Ports and Waterways Activities*, COMDTINST M16000.11 (series)
- d. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
- e. *Reserve Policy Manual*, COMDTINST M1001.28 (series)

**A.1. Authorized Uses of Coast Guard Boats and Personnel** Coast Guard boats may be used to support any of the employment categories detailed in *Abstract of Operations Reports*, COMDTINST M3123.7 (series). Use of Coast Guard personnel or property, including boats and equipment, for any purpose that connotes personal or recreational use is prohibited (with the exception of MWR property).

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**A.2. Personnel Authorized to Operate Coast Guard Boats**

Personnel must be properly qualified and certified as a coxswain in accordance with *Part 5, Boat Crew Training* of this Manual on the boat type being operated in order to be in charge of the boat. Authorized Coast Guard personnel, including Coast Guard Auxiliarists, may be permitted to operate the boat while underway, if a duly certified coxswain is onboard the boat. Members of other organizations are prohibited from being designated as coxswains of Coast Guard boats. Boats may not get underway unless crewed as specified in *Chapter 4* of this Part.

Auxiliarists are prohibited from being coxswains on Coast Guard-owned boats unless the boat is designated as an Auxiliary facility. Auxiliarists may be coxswains on Coast Guard boats when the crew is entirely made up of Auxiliarists.

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**A.3. Authority to Approve, Direct, Initiate, and Cease Coast Guard Boat Deployments**

The following is a discussion of the authority for and considerations behind deploying Coast Guard boats.

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A.3.a. Authority

Unit COs/OICs are ultimately responsible for authorizing the use of unit resources for operational missions. COs/OICs may delegate this authority to a command representative when CO/OIC approval is not practical given the nature of a particular mission. Unit COs/OICs shall make every effort to ensure unit boats, equipment, and personnel are prepared and available to respond to urgent and planned missions within the limits of the unit's capability.

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A.3.b. Risk Management

COs/OICs must balance mission needs with other factors such as weather, boat condition, mission demands, or personnel qualifications that could negatively impact mission completion or personnel safety. The final decision regarding boat deployment may be made by the CO/OIC (or designated representative) or the boat coxswain. If either the command or the coxswain determines the mission risk outweighs the potential for safe and successful mission prosecution, the mission shall be scrubbed and the Operational Commander informed. (See *Chapter 4* of this Part.)

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**A.4. Authorized Use of Coast Guard Reservists and Auxiliarists**

Following is a discussion of how and when Coast Guard Reservists and Auxiliarists can be used.

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A.4.a. Reservists

Coast Guard Reserve personnel should be used in the same manner as active duty personnel, provided they possess the required training and certification. Procedures for initiating use of Coast Guard Reserve personnel are found in the *Reserve Policy Manual*, COMDTINST M1001.28 (series).

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A.4.b. Auxiliaries Coast Guard Auxiliaries may be used in support of any peacetime mission at the discretion of the CO/OIC except as provided below:

- Auxiliaries may perform as crew members or engineers onboard Coast Guard boats, if they are properly certified in accordance with *Part 5, Boat Crew Training* of this Manual.
- Guidance for employment of Auxiliaries and/or their facilities is contained in the *Auxiliary Operations Policy Manual*, COMDTINST M16798.3 (series).
- Specific guidance regarding the use of Auxiliaries in support of law enforcement missions is contained in the *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series).
- Coast Guard Auxiliary members may be used to support Coast Guard missions and activities in certain limited circumstances. As a general rule, Auxiliary members may be used in such roles when there is a low chance of detecting criminal activities.

**NOTE** 

Auxiliary members may not exercise general police powers and may not be a member of a boarding team.

**A.5. Authority to Approve, Direct, Initiate, and Cease Coast Guard Personnel Deployments Onboard other than Coast Guard Boats**

Unit COs/OICs may approve the participation of unit personnel on platforms belonging to other agencies. Although this authority is primarily used in support of law enforcement missions, it may be evoked in support of any appropriate Coast Guard mission. Guidance for Coast Guard personnel performing onboard other agency platforms in support of law enforcement missions is found in the *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series).

Guidance for use of Coast Guard personnel in support of port safety and security missions is contained in the *Marine Safety Manual, Volume VI, Ports and Waterways Activities*, COMDTINST M16000.11 (series).

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## Section B. Authority and Responsibilities

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**Introduction**

This Section contains information covering the authority and responsibilities of command cadre, boat coxswains, and Coast Guard personnel embarked on platforms other than Coast Guard boats.

**References for this Section**

- a. *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series)
- b. *Naval Engineering Manual*, COMDTINST M9000.6 (series)

**B.1. CO/OIC**

The following is a discussion of the responsibilities of the CO/OIC.

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B.1.a. Certification and Qualifications	<b>Station</b> or <b>Aids to Navigation Team</b> (Warrant Officers only) OICs shall maintain coxswain certification on all boats assigned. Surfman certification must be maintained in those geographical areas requiring the surfman qualification. All other <b>Station</b> COs (other than Warrant Officer COs) shall complete the boat crew member certification process for all assigned boats within 12 months.
B.1.b. Authority and Responsibilities	The authority and responsibilities of the CO/OIC, beyond those detailed above, are contained in <i>United States Coast Guard Regulations 1992</i> , COMDTINST M5000.3 (series).
<b>B.2. Executive Officer (XO)/Executive Petty Officer (XPO)</b>	The following is a discussion of the responsibilities of the XO/XPO.
B.2.a. Certification and Qualifications	Unit XPOs shall maintain coxswain certification on all unit boats. <b>Station</b> XO (other than Warrant Officer XOs) shall complete the boat crew member certification process for all assigned boats within 12 months. Surfman certification must be maintained in those geographical areas requiring surfman qualification. <b>Station</b> XOs/XPOs shall maintain Boarding Officer certification. No waivers are permitted for these requirements.
B.2.b. Authority and Responsibilities	The authority and responsibilities of the XO/XPO, beyond those detailed above, are contained in <i>United States Coast Guard Regulations 1992</i> , COMDTINST M5000.3 (series).
<b>B.3. Engineering Petty Officer (EPO)</b>	The following is a discussion of the responsibilities of the EPO.
B.3.a. Certification and Qualifications	<b>Station</b> or <b>Aids to Navigation Team</b> EPOs shall maintain engineer certification on all unit boats. No waivers are permitted for these requirements.
B.3.b. Authority and Responsibilities	The authority and responsibilities of the EPO, beyond those detailed above, are contained in <i>United States Coast Guard Regulations 1992</i> , COMDTINST M5000.3 (series) and the <i>Naval Engineering Manual</i> , COMDTINST M9000.6 (series).
<b>B.4. Officer-of- the-Day (OOD)</b>	Not every unit requires an OOD or has specific billets to support the position. The CO/OIC shall determine if the operational tempo of a unit necessitates an OOD. In the event the unit has an OOD, that individual is the direct representative of the CO/OIC.

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**B.5. Coxswain** Coxswains are assigned by proper authority to take charge of the boat and to be responsible for a specific mission. Normally, although not always, the coxswain is the senior individual onboard the boat, holding the highest designation for that type of boat.

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**B.5.a. Authority** The coxswain has the authority to direct all boat and crew activities during the mission and modify planned missions to provide for the safety of the boat and the crew. All boat crew members must be aware of the coxswain's identity and authority. Successful completion of the assigned mission or the safety of the crew and boat may be jeopardized by a crew member that doesn't know who is in command or fails to recognize the coxswain's authority and act accordingly. The coxswain's authority is independent of rank and/or seniority in relation to any other person onboard the boat.

Coxswains may only be relieved of their duties by the unit CO/OIC or XO/XPO. For a specific mission, the senior officer present as specified in *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series), *Section 5-1-8c*, may relieve a coxswain.

For example: At the scene of a distress situation, a coxswain may be directed to take action or be relieved of responsibilities by the senior officer present. The senior officer must make his or her authority known and the coxswain should immediately take actions as directed and notify the chain of command when the situation permits.

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**B.5.b. Responsibilities** The coxswain is responsible for the safe, orderly, efficient, and effective performance of the boat and crew and passengers during the entire mission. This responsibility exists from the time the coxswain first steps onboard the boat with the intent to get underway, until leaving it upon completion of the mission. The coxswain shall ensure all personnel onboard the boat fully understand their responsibilities and obligations while the boat is underway. Authority and responsibilities of the coxswain are contained in *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series).

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Part 2 – Operations and Missions  
Chapter 3 – Mission Authorization




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## Chapter 4. Mission Planning

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**Introduction**

This Chapter provides guidance for conducting mission planning at multi-mission units. It is intended to supplement other applicable directives, including, but not limited to:

- *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
- *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)
- Specific Boat Type Operator's Handbooks
- *Marine Safety Manual, Volume I, Administration and Management*, COMDTINST M16000.6 (series) through *Marine Safety Manual, Volume X, Interagency Agreements and Acronyms*, COMDTINST M16000.15 (series)

**In this Chapter**

This Chapter contains the following Sections:

Section	Title	See Page
A	Underway Mission Planning	2-40
B	Crew Rest and Utilization	2-46
C	Minimum Crew Requirements	2-53
D	Specific Operations	2-55
E	Natural Disaster and Civil Preparedness	2-58
F	Environmental Health and Safety Programs	2-62

**References for this Chapter**

Each Section contains its own references, as necessary.

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## Section A. Underway Mission Planning

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### Introduction

Mission factors include: weather, boat and crew capabilities, duration, mission goal and others. Some, such as the crew composition, may be modified to suit the mission. Others, such as the weather or platform limitations, are fixed. Because of the often complex interaction among all factors, mission planning is essential for ensuring crew and platform safety and mission performance.

The mission coordinator may be at the unit or at a more senior command, such as the Sector/Group or District. However, some mission planning must occur at the unit level. Participation by the command, OOD, coxswains, and other participating personnel (e.g., boarding team, and other agency personnel) are essential for success.

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### In this Section

This Section contains the following information:

Title	See Page
Team Coordination Training	2-41
Risk Assessment	2-41
Boat Considerations	2-43
Auxiliary Platform Considerations	2-44
Personnel Considerations	2-44
Other Agencies	2-45
Emergencies	2-45

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### References for this Section

- a. *Auxiliary Operations Policy Manual*, COMDTINST M16798.3 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
  - d. *Operational Risk Management*, COMDTINST 3500.3 (series)
  - e. Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series)
  - f. *Team Coordination Training*, COMDTINST 1541.1 (series)
-



## Team Coordination Training

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### A.1. Principles and Concepts

Successful mission planning begins with a solid understanding of the principals and concepts associated with Team Coordination Training (TCT) and Operational Risk Management (ORM) programs. The principles of leadership, mission analysis, adaptability/flexibility, situational awareness, decision-making, communication, and assertiveness must be fully understood and employed by every individual involved in mission planning and execution. TCT emphasizes the role that teamwork, risk assessment, and decision making play in successful operations. TCT acknowledges that technical knowledge and skills alone will not prevent MISHAPs.

A full explanation of TCT and application of the concepts can be found in *Team Coordination Training*, COMDTINST 1541.1 (series) and *Operational Risk Management*, COMDTINST 3500.3 (series). Unit personnel must be current in TCT in accordance with all applicable directives and publications.

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## Risk Assessment

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### A.2. Risk Factors

The Coast Guard must constantly evaluate the danger to boats and personnel against the expected success and possible outcome of the specific mission. A variety of factors shape the manner in which boat operations are conducted. Unit personnel shall integrate the concepts and principals of ORM into their daily processes and activities, as appropriate, to ensure the successful execution of Coast Guard missions and the safety of all personnel.

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### A.3. Risk Management

Unit COs/OICs and boat coxswains shall use ORM tools to evaluate mission risk. Coxswains operate their boat to minimize the inherent risk involved in missions. An integral part of such risk minimization is contingency planning in the event onboard systems fail or evolutions do not proceed as planned.

Operational Commanders, COs/OICs, and boat coxswains are faced with making mission decisions, and must carefully weigh the urgency of each mission and assess the benefits to be gained versus the risks involved. While all possible contingencies cannot be addressed, the following paragraphs establish policy guidelines to be used in making risk versus gain analysis for various boat missions.

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### A.4. National Defense

Damage to or sacrifice of the boat is acceptable in the defense of the United States, its citizens, and/or installations.

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**A.5. Search and Rescue (SAR) and Law Enforcement (LE)**

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For SAR missions, potential risks to the boat and crew shall be weighed against risks to the personnel and/or property in distress if the mission is not undertaken. Probable loss of the boat crew is not an acceptable risk. Additionally, the individuals making the decision shall consider the effects of exposing people in distress to the additional risks associated with rescue operations, especially if the physical condition of those persons in distress is already impaired.

In the case of LE, potential risks to the boat shall be weighed against the risk of bodily harm to LE personnel, hostages, and innocent parties if the mission is not undertaken. Safety of life at sea takes precedence over LE responses. Significant unsafe conditions must be alleviated before moving to a LE phase. This may involve documenting a violation on scene for later LE action.

A.5.a. Saving Lives

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The probability of saving human life warrants a maximum effort. When no suitable alternative exists and the mission has a reasonable chance of success, the risk of damage to or abuse of the boat is acceptable, even though such damage or abuse may render the boat unrecoverable.

The possibility of saving human life or the probability of preventing or relieving intense pain or suffering warrants the risk of damage to or abuse of the boat if recovering the boat can reasonably be expected.

A.5.b. Saving Property

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The probability of saving property of the United States or its citizens warrants the risk of damage to the boat if the value of the property to be saved is unquestionably greater than the cost of boat damage and the boat is fully expected to be recoverable.

A.5.c. Federal Law Violations

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The possibility of recovering evidence and interdicting or apprehending alleged violators of Federal law does not warrant probable damage to or abuse of the boat.

**A.6. Logistics and Other Missions**

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Logistics and other missions having little or no urgency shall not be prosecuted if they expose the boat to hazards greater than those encountered during the course of routine missions.

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## Boat Considerations

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### A.7. Boat Selection

Deciding which boat to use is one of the most critical decisions made in mission planning. An inappropriate choice may result in an inability to complete the mission or severely diminish the team's effectiveness. The following factors should be considered in boat selection decisions:

- Expected distance to travel
  - Expected duration of the mission
  - Expected distance offshore (radar, GPS, and/or HF communications may be required for certain offshore missions)
  - Number of potential passengers/survivors and their condition
  - Equipment status
  - Day/night (radar desirable for night and search operations)
  - SRU speed
- 

### A.8. Mission Planning

A full understanding of the goals of the mission and its likely duration are essential to determine the appropriate boat-mission match. Prior to getting underway, consideration must be given to the following:

- Boat limitations
- Boat readiness
- Boat capabilities
- Boat endurance
- Crew experience
- Weather limitations
- Towing capabilities
- Habitability for both crew and passengers
- Ability for helicopters to safely hoist personnel and/or equipment
- Damage control capabilities

Boat capabilities and limitations are found in each Specific Boat Type Operator's Handbook, COMDTINST M16114 (series).

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#### A.8.a. Mission Limitations

Mission limitations, in addition to the core limitations found in the Specific Boat Type Operator's Handbooks, COMDTINST M16114 (series), may be, in effect, based upon the actual readiness condition of a specific boat.

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#### A.8.b. Boat Readiness

A boat with restrictive discrepancies may only be operated if a written waiver has been issued by the Operational Commander who identifies the specific discrepancy, the conditions under which the boat may be operated, and the measures to be taken to lessen or negate hazards posed by the discrepancy. *Part 4, Readiness and Standardization* discusses procedures regarding mission-specific limitations in detail.

### NOTE

**Only the Operational Commander may waive published operational limitations on a case-by-case basis in order to proceed on a specific mission. This authority may not be delegated.**

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## Auxiliary Platform Considerations

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### A.9. Auxiliary Facilities

Coast Guard Auxiliary facilities may be used to support Coast Guard law enforcement missions and activities in certain limited circumstances. As a general rule, Auxiliary facilities may be used in such roles when there is a low chance of detecting criminal activities. Specific guidance is contained in the *Auxiliary Operations Policy Manual*, COMDTINST M16798.3 (series) and the *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series).

**NOTE**  Auxiliary facilities are prohibited from operating in surf.

Operational Commanders are required to establish facility operating limitation standards as necessary in coordination with the Director of the Auxiliary.

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## Personnel Considerations

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### A.10. Alcohol Consumption

The boat crew, duty section, and any other persons who might reasonably be expected to be recalled to support unit operations shall not consume alcohol less than 12 hours prior to being placed in an alert duty status (a person is on alert duty when engaged in underway operations or is on SAR readiness standby, with a boat response time of 30 minutes or less).

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### A.11. Drugs and Medication

Personnel engaged in boat operations shall not take any medication unless prescribed and/or approved by a medical doctor with due consideration given to its affect on their operational performance.

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### A.12. Auxiliary Personnel

Coast Guard Auxiliary personnel may serve in every boat crew and unit duty section position, except those requiring general law enforcement powers. Auxiliarists are prohibited from being coxswains on Coast Guard owned boats unless the boat is designated as an Auxiliary facility.

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## Other Agencies

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### A.13. Other Resources

Consideration must be given to other available resources that may be better suited to a particular mission or may complement unit resources to increase the potential for success. Other resources may include not only other Coast Guard resources, but also those of other agencies.

COs/OICs may authorize unit personnel to augment other agencies on other than unit platforms in support of joint missions. The cognizant agency is responsible for articulating the skills necessary for augmentation. Units should establish agreements with local agencies regarding agency participation in unit operations. Agreements should cover such issues as notification, resource availability, skill availability and level, processes for requesting agency resources, etc.

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#### A.13.a. Auxiliary Facilities

Coast Guard Auxiliary facilities may be used in prosecution or support of unit missions within the limitations contained in the *Auxiliary Operations Policy Manual*, COMDTINST M16798.3 (series).

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#### A.13.b. Civilian Vessels

Civilian vessels (other than Auxiliary facilities) may assist in Coast Guard search and rescue missions as Good Samaritans as deemed appropriate by the Operational Commander or the Coast Guard unit on scene after a reasonable assessment of the civilian vessel's capabilities and limitations. Normally, civilian vessels will not be accepted to participate in other Coast Guard missions. Approval for such participation will come from the District Commander.

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## Emergencies

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### A.14. Emergency Planning

All personnel involved in mission planning and execution should be aware of potential emergencies that may arise and the possible actions that can be taken. The *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series) and each platform's Specific Boat Type Operator's Handbook, COMDTINST M16114 (series) contain information regarding engineering casualties that could inhibit mission performance and the corrective action that can be taken.

Beyond these scenarios, all personnel involved should be alert for changes in environmental conditions, communications capabilities, personnel capabilities, and the actions that may become necessary. ORM concepts should be utilized.

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## Section B. Crew Rest and Utilization

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<b>Introduction</b>	Evidence exists to associate a high percentage of MISHAPs with prolonged operations and crew fatigue. Since fatigue adversely affects operational capability and safety, it is necessary to establish reasonable boat crew utilization criteria. In doing so, mandatory boat crew mission hour limits have been established.
<b>B.1. Fatigued Personnel</b>	Fatigued personnel may not realize when their physical or mental state is compromised. A fatigued boat crew is physically and mentally unprepared for the rigors of a mission or to safely manage an underway emergency. They make judgmental errors in boat handling and seamanship and exhibit decreased coordination, a narrowed attention span, and a lower standard of performance. In addition, they show a decreased concern for safety and a willingness to “cut corners.”
<b>B.2. Crew Endurance Management (CEM)</b>	Crew Endurance Management (CEM), as described in <i>Appendix G, Glossary</i> can be used to control fatigue-related decrements in safety and performance. CEM is based on operational experience, analysis of boat crew missions, and a wealth of information derived from a variety of studies on the effects of shiftwork on human performance. The most immediate benefits derived are the reduction of fatigue related MISHAPs and improved boat crew performance. Although crew endurance is determined by numerous factors including sleep, stress, workload, family, environmental factors, etc., there are five (5) primary factors that can be used to predict fatigue-related crew endurance decrements in operations: <ul style="list-style-type: none"><li>• Time-of-day</li><li>• Sleep duration and quality</li><li>• Stability of sleep/wake schedule</li><li>• Continuous vs. split sleep</li><li>• Period of sustained wakefulness</li></ul>
B.2.a. Time-of-Day	Human physiology is programmed to release energy resources during day hours, and replenish these same resources during night/early morning hours. During night operations crews are exposed to increased operational risk and experience reduced energy levels. When possible, night operations should be avoided, and only well rested crews should be authorized to perform these missions.
B.2.b. Sleep Duration and Quality	The average person requires approximately 8 hours of uninterrupted sleep per 24-hour period. Less than 6 hours of sleep per 24-hour period will result in the accumulation of daily sleep debt and produce degradation of alertness, decision-making ability, and mental functions requiring logical ability. Persistent sleep debt throughout a week will result in increased daytime sleepiness and degradation of performance in cognitive and psychomotor tasks. Sleep in noisy, hot, or uncomfortable conditions will be less restorative. Under these conditions, sleep periods of 8+ hours may only restore energy to the 6-hour, or less, level. Restoring energy resources is dependent on sufficient duration and quality of sleep.

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<b>B.2.c. Stability of Sleep/Wake Schedule</b>	Inconsistent sleep/wake patterns (e.g., waking up early on duty days while sleeping in on non-duty days) will disrupt the biological clock and result in reduced alertness, severe sleepiness, insomnia, degradation of mental alertness, and performance degradation in mental and motor tasks. Emphasis on consistent work schedules will minimize disruptions to sleep schedules and improve crew endurance.
<b>B.2.d. Continuous vs. Split Sleep</b>	Sleep is most restorative when taken in one continuous period. Crews that experience split sleep on a regular basis experience sleep debt and reduced endurance. Certain operational requirements (e.g., bar patrols and escorts at night) produce split sleep, and crew endurance is severely compromised with each successive patrol.
<b>B.2.e. Period of Sustained Wakefulness</b>	Crew endurance can be degraded even in operational scenarios when work occurs during daylight hours. During routine duty, periods of work exceeding 12 hours will inevitably result in fatigue and performance degradation. Good quality naps or sleep is the only proven (non-pharmacological) method to maintain endurance within safe levels. If periods of sustained work beyond 12 hours are anticipated, napping should be encouraged and scheduled to maintain appropriate levels of readiness.
<b>B.3. Review Practices</b>	Commanders are encouraged to review their operational requirements and personnel scheduling practices using the crew endurance factors to identify crew endurance deficiencies. A working group format, with representatives from each department or work area, is an ideal way to periodically review practices and brainstorm solutions.
<b>B.4. Maximum Underway Hours</b>	Paragraph B.15 of this Section provides maximum underway hours. These totals may be an accumulation of several missions (SAR, ELT, MS, etc.) over a 24-hour period. However, there are occasions, especially during periods of severe weather, where operations will require a long amount of time to complete. In such cases, the prolonged hours and heavy weather will have an accelerating effect on the onset of fatigue as will the amount of time a crewmember has been on duty or working prior to the mission. In evaluating boat crew utilization, Operational Commanders should consider the cumulative effects of fatigue-inducing factors (heavy weather, temperature, boat motion, etc.), and human factors (motion sickness, survival clothing, changes in sleep and work cycles, work-duty time, etc.).
<b>B.5. Urgent Operations</b>	These standards are not intended to unduly restrict Operational Commanders when urgent operations are necessary; they are designed to modify how we pursue missions to increase safety and improve the overall quality of the services provided. No standards can cover every situation that may arise. Common sense and sound judgment must be applied. The Operational Commander must determine the best course to follow in accomplishing certain urgent missions. It is not intended, except for emergencies, that additional crews be recalled when fatigue limits are reached. Other means of assistance such as adjacent Coast Guard units, Coast Guard Auxiliary, Federal, State, local government or commercial resources should be considered in responding to non-urgent cases.

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**B.6. Billet Requests**

Units which cannot comply with operational and training requirements and the intent of the boat crew utilization guidelines without an increase in the unit's personnel allowance, shall bring this information to the attention Commandant (G-OCS) through the chain of command. This information provides operational justification for billet requests. Requests for additional billets which would permit compliance must be specific and fully justified.

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**B.7. Boat Crew Scheduling Standards**

The boat crew scheduling standards in paragraph B.15 of this Section provide Operational Commanders maximum underway limits for boat crew personnel in order to maintain mental and physical readiness. Individual benefits derived depend at least in part upon the proper use of off-duty time to ensure good mental and physical condition. It is the responsibility of each boat crewmember to engage only in those off-duty activities that will ensure reporting to duty fully rested.

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**B.8. Crew Rest and Utilization Policies**

Various policies regarding crew rest and utilization are discussed in the following paragraphs:

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**B.8.a. Hours of Crew Rest**

Alert crews should have a minimum of 8 continuous hours of crew rest before assuming alert duty, and 8 continuous hours of crew rest in every 24-hour duty period. Civilian employment during off-duty hours that interferes with or is not compatible with these crew rest requirements is prohibited.

---

**B.8.b. Sufficient Rest-Recovery Time**

Crews that fail to achieve sufficient rest recovery time (i.e., at least a 6-hour sleep period) or who exceed the underway limits in paragraph B.15 of this Section should not engage in underway operations until they have had sufficient rest-recovery time. Sector/Group Commanders may waive these standards for urgent operations. When fatigue waivers are granted (see paragraph B.13.e of this Section) and fatigued crews undertake missions, the name of the person granting the waiver and the time it was granted shall be noted in the unit's log. SITREPs and other reports shall note that the crew is operating with a waiver.

---

**B.9. Duty Rotation**

Alert duty periods of 24 hours (i.e., 1-in-3 or better) are strongly encouraged. Operational tempo on duty days often require crews to work long hours throughout the 24-hour day severely disrupting the crew endurance factors discussed above. Under those conditions, continuing the duty day beyond 24 hours represents high operational risk.

---

**B.10. Duty Section Watch Relief**

Afternoon duty section watch relief (i.e., between 1530 and 1800) provides the greatest benefits with respect to maintenance of sleep/wake schedule stability and reduction of fatigue as a result of sustained wakefulness. For most **Stations**, afternoon relief should be the preferred time for duty section relief. **Station** work prior to duty day will deplete energy resource that may be essential to respond to missions during the duty night. If afternoon relief is not feasible, efforts should be made to protect duty crews during the workday (e.g., use non-duty personnel to respond to calls) thus protecting the energy resources of the duty crew for possible night operational needs.

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**B.11. Station Work for Duty Crews (Assuming Afternoon Relief)**

**Station** work and training should be limited to the period immediately following duty section relief until sometime between 2000 and 2200. If the duty crew’s sleep is not disrupted for operations, they can be expected to perform normal duty/**Station** work between 0600 and their afternoon relief.

If the duty crew is expected to be in a duty status for more than 24 hours, the duty crew’s work should be limited to operations and light work or training. **Station** work other than light work or training and operations should be limited to the period between 0600 and duty section relief on the final duty day.

**B.12. Station Work for Duty Crews (Assuming Morning Relief)**

Duty crews should be restricted to light operations, training, or **Station** work except as required for direct operations support for the entire duty period.

**B.13. Underway Limits**

Underway limits are established to ensure that boat crew members are not operating the craft in a fatigued status that might impair their judgment or subdue their motor skills during normal or emergency mission requirements.

**B.13.a. Maximum Underway Hours**

Paragraph B.15 of this Section provides the maximum underway hours a crew may accumulate within any 24-hour period without being required to enter a rest-recovery status. Missions shall not be scheduled to exceed these limits. Crews that exceed the limits while underway may complete their mission before being required to enter a rest-recovery status.

**B.13.b. Total Mission Hours**

These totals may be the result of a single mission or an accumulation of several missions (SAR, ELT, MEP, OPTRA, etc.) during the 24-hour period.

**B.13.c. Fatigue-Inducing Factors**

Operational Commanders should consider the cumulative effects of fatigue-inducing factors (heavy weather, temperature, boat mission, **Station** work, etc.) and human factors (motion sickness, survival clothing, changes in sleep and work cycles, work-duty time, etc.) when evaluating mission risk and the ability of crews to perform effectively and safely.

**B.13.d. Boat Crew Availability**

These fatigue standards are not intended to preclude the use of boats. COs/OICs should not be reluctant to get boats underway on normal operations and training for fear of compromising the boat crew’s availability.

**B.13.e. Crew Fatigue Message**

When a **Station’s** alert posture is compromised due to crew fatigue, a Crew Fatigue Message (samples provided in paragraph B.16 of this Section) shall be sent. When the fatigue situation has cleared due to a relief crew reporting aboard or the duty crew having sufficient crew rest, a message referencing the fatigue message stating that operations are normal shall be sent. Whenever a Sector/Group Commander waives the established boat crew utilization limits, the appropriate District Command Center shall be advised of the situation and the actions taken.

**NOTE**

The implementation of a Coast Guard-wide readiness system will eliminate the need for these messages.



---

**B.14. Sleep Debt**

Individual readiness is a personal responsibility. This is especially true with obtaining sufficient sleep and avoiding fatigue as individuals are the best judges of the extent and quality of their own sleep periods. This paragraph provides guidelines designed to assist individuals and Unit Commanders in assessing and managing individual readiness and opportunities for sleep periods. Unit Commanders should provide crews the opportunity to obtain the sleep periods discussed below. Subsequent to these opportunities, individuals must advise their commands if they believe their personal readiness to be compromised.

---

**B.14.a. Higher Risk Missions**

Any mission occurring between 2300 and 0500 should be considered “Higher Risk” because it interrupts crew’s normal physiological cycles. At the conclusion of such missions, the sleep period required to ensure the crew is sufficiently rested for a subsequent mission will depend upon the length of the sleep period achieved (if any) before the mission.

---

**B.14.b. Additional Sleep Needed**

The following information should be used for scheduling considerations and in risk analysis. For missions that begin or end between 2300 and 0500, if the boat crew has had:

- Less than a six-hour sleep period – they need at least a six-hour sleep period to control fatigue on subsequent missions.
- More than a six-hour sleep period but less than a seven-hour sleep period – they need at least a two-hour sleep period to control fatigue on subsequent missions.

<b>If Initial Sleep Period:</b>	<b>Additional Sleep Period Needed:</b>
0-6 hours	6+ hours
6-7 hours	2+ hours

---

**B.15. Maximum Underway Limits**

Unit Commanders shall comply with the policies set forth in this Chapter. These requirements shall be taken into consideration when developing standard staffing for boat operations.

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Boat Size	Maximum Underway Hours <sup>1</sup>			Rest
	Seas < 4 ft	Seas > 4 ft	HWX <sup>2</sup>	Required
40' and above <sup>3</sup>	10	8	6	8
30' – 39'	8	6	N/A	8
Less than 30'	8	6	N/A	8

Notes:

1. Maximum hours within a 24-hour period.
2. Heavy weather is defined as seas and swell conditions combining to exceed 8 feet and/or winds exceeding 30 knots.
3. Time spent at a sheltered anchorage can reduce the maximum underway hours for crew on watch by 50%. Time at a sheltered anchorage need not be counted for crew not on watch.

**B.16. Example Message Formats**

Example message formats related to crew fatigue and distress are as follows.

**B.16.a. Fatigue Situation**

Units unable to respond to any mission other than urgent SAR should send the following message:

```

0
FM UNIT
TO SECTOR/GROUP COMMANDER
INFO CCGDXXX
ADJACENT UNITS (See Note)
BT
UNCLAS//N16130//
SUB J: SAR RESPONSE
A. UNABLE TO RESPOND ANY MISSION OTHER THAN URGENT SAR
   DUE TO BOATCREW FATIGUE. ANTICIPATE OPS NORMAL (LOCAL
   TIME).
BT
    
```



B.16.b. Cancel  
Fatigue Situation

When the boat crew fatigue situation no longer exists, a follow-up message to that effect should be sent.

0  
FM Unit  
TO SECTOR/GROUP COMMANDER  
INFO CCGDXXX  
ADJACENT UNITS (See Note)  
BT  
UNCLAS//N16130//  
SUBJ: SAR RESPONSE  
A. MY  
1. OPERATIONS NORMAL.  
BT

B.16.c. Urgent  
SAR

Whenever an Operational Commander waives the established boat crew limits the District Commander should be advised of the situation and the actions taken. Such notification would best be done in conjunction with the first SITREP.

0  
FM SECTOR/GROUP COMMANDER  
TO CCGDXXX  
BT  
UNCLAS //N16130//  
SUBJ: DISTRESS SITREP ONE – P/V IN TROUBLE (UCN-###)  
1. SITUATION  
A. (DESCRIPTION OF SITUATION)  
2. ACTION TAKEN  
A. BOAT CREW LIMITS WAIVED FOR URGENT SAR. MLB 44XXX  
UNDERWAY WITH COXSWAIN BM3 A. B. CEE; ENGINEER MK3 X.  
Y. ZEE; AND, CREWMEN  
SN L. M. KAY AND SN E. F. GEE.  
3. FUTURE PLANS.  
BT

**NOTE** 

If an adjacent unit is in a different Group, Sector, or District, add that respective Group, Sector, or District as an info addee.



## Section C. Minimum Crew Requirements

**Introduction** This Section defines the requirements for minimum crew size on boats.

**C.1. Policy** A coxswain certified in the type of boat being operated shall be present aboard all Coast Guard boats whenever the boat is underway in all except the most emergent and life-threatening situations.

Paragraph C.3 of this Section shall be used when determining minimum crew size for boats. Use of Personal Watercraft (PWC) by Coast Guard personnel in the performance of official duties is not authorized. Waivers granting authorization for use of PWCs must be obtained from Commandant (G-OCS). Coast Guard Auxiliarists may use PWCs.

**C.2. Procedures** Unit Commanders shall comply with the minimum boat crew requirements when dispatching boats for Coast Guard operations. This requirement shall also be taken into consideration when developing standard staffing for boat operations. Additional crew may be necessary as determined by the nature of the specific mission undertaken.

**C.3. Minimum Crew Requirements**

Requirements <sup>1</sup>	Boats < 30'	Boats < 30' with cabin	Boats 30' and above <sup>2</sup>
Repositioning	1 coxswain 1 linehandler	1 coxswain 1 linehandler	1 coxswain 1 linehandler
Operations other than Law Enforcement or Military Operations	1 coxswain 1 crew	1 coxswain 2 crew	1 coxswain 1 boat engineer 1 crew
Law Enforcement and Military Operations <sup>3, 4, 5</sup>	1 coxswain 2 crew	1 coxswain 3 crew	1 coxswain 1 boat engineer 2 crew



---

Notes:

1. Additional crew above the minimum listed will be required in many instances depending upon the specific mission and vessel type. Minimum crew for specific vessel types will be found in the Specific Boat Type Operator's Handbook, COMDTINST M16114 (series).
  2. For boats 30' and above, if the boat has outboard engines, the required boat engineer may be replaced with an additional crew member.
  3. A qualified Boarding Officer is required to lead party aboard vessel boarded. Coxswain and one crew member should remain aboard to improve surveillance and assist the boarding party.
  4. For boats conducting L/E and MILOPS, one of the required crew (crew member only) may be in a break-in status as long as the member is a certified Boarding Officer or boarding team member.
  5. Cutter boats transporting boarding teams should have a minimum of 1 coxswain and 1 crew.
-



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## Section D. Specific Operations

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**Introduction** This Section gives guidance on certain types of Coast Guard unit operational activities.

---

**References for this Section**

- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- b. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
- c. *Rescue and Survival System Manual*, COMDTINST M10470.10 (series)
- d. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

---

**D.1. Medical Evacuations** Some assistance cases require transport of sick or injured individuals from vessels or remote locations either by vessel or helicopter. A competent medical authority establishes the specific need for an individual to be evacuated from a vessel.

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D.1.a. Helicopter MEDEVACS Helicopter Medical Evacuations (MEDEVACS) shall only be performed using Coast Guard helicopters unless specifically authorized by the SMC.

Every effort should be made to secure flight surgeon authorization prior to performing any MEDEVAC. However, in cases where a flight surgeon is not available, a medical doctor or SMC approval is permissible. Once authorization has been granted to MEDEVAC a patient, the boat coxswain and/or helicopter pilot determine whether or not the evolution can be conducted safely.

---

D.1.b. Transfer to Medical Facility After the patient is placed onboard a Coast Guard boat and prior to the patient being transferred to a medical facility, Coast Guard personnel will provide medical care to the level of their training and capability. The unit receiving the patient is responsible for making further transport arrangements to a medical facility.

The *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series) contains specific guidance regarding hoisting operations including: personnel safety, weather considerations, mechanics of preparing for and completing a hoist, and other considerations.

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**D.2. Fire Suppression** Units should work closely with their Operational Commander, the cognizant **MSO**, and other agencies to develop a comprehensive fire fighting response plan. In general, unit boats are equipped and crews are trained to provide very limited fire fighting capability.

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**NOTE**  The first priority and primary responsibility of unit boats and crews is to save lives, not property.

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When appropriate, unit crews may attempt to save property, but must balance the risks to the boat crew with any potential benefit. Actions taken to save property shall always be limited to indirect attacks from a safe position. Specific guidance regarding fire fighting and damage control activities is contained in the *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series).

---

**D.3. Rescue and Assistance**

When responding to a request for rescue and assistance, the unit boat crew’s first responsibility is to save lives, not property.

**CAUTION!**

Crews must exercise extreme caution when responding to sinking or capsized vessels due to the inherent dangers associated with being onboard or alongside damaged watercraft.

*Section A* of this Chapter details what level of risk is appropriate given the likelihood of saving lives in distress. All boat crew members should be familiar with those guidelines.

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**D.3.a. Towing**

Boat crews will be called upon to tow disabled vessels. Boat coxswains, OODs and unit COs/OICs must be thoroughly familiar with the Coast Guard’s non-emergency assistance policy contained in the *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series).

Boat coxswains must be familiar with the towing limitations of each unit boat to ensure safety of their crew and the assisted vessel. Specific guidance regarding towing safety, equipment, and techniques is found in the *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series).

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**D.3.b. Surface Swimmers**

Although some cases may require placing a surface swimmer in the water to aid a person in distress, this option should only be exercised when:

- No other possible method of assistance exists.
- The risk factors have been appropriately assessed.
- The potential for success sufficiently justifies the risk.
- The action can be taken without unduly placing the swimmer’s safety at risk.

Surface swimmers must comply with the equipment and technique provisions contained in the *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series) and the *Rescue and Survival System Manual*, COMDTINST M10470.10 (series).

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**D.4. Marine Protected Species**

Marine protected species includes those species covered under both the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). The Coast Guard must ensure its operations are environmentally sound and comply with the MMPA and the ESA, and other Federal, State, and local regulations.

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D.4.a. Description It is important to know which marine mammal species and endangered and threatened species exist within an area of responsibility (AOR); the regulations in place to protect them; and what role the Coast Guard can play in promoting species recovery. This information is available from National Marine Fisheries Service and U.S. Fish and Wildlife Service regional offices. Operational procedures should be developed that comply with and enforce MMPA and ESA regulations, such as:

- Speed restrictions for non-emergency operations,
- Slower transit speeds in certain waterways, at certain times of the year, or
- Staying the required distance from members of a species.

Balance the urgency of a given mission with the potential damage to protected species or habitats.

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D.4.b. Authority Additional information regarding specific restrictions within the unit’s AOR should be obtained by contacting the District (ole). Should a unit resource strike, injure, or kill a protected species while underway, procedures outlined in District directives should be followed including notification of the Operational Commander, submission of any reports, and the conducting of any investigations.

Units observing violations of the MMPA or ESA should take appropriate action in accordance with the *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series).

Points of contact with local marine mammal stranding networks, aquariums, and sanctuaries should be maintained to ensure appropriate response to marine mammal and endangered species incidents (strandings, carcasses, reports of harassment, etc.).

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D.4.c. MMPA Prohibited Acts Congress enacted the MMPA of 1972 (16 U.S.C. 1361 to 1421(h)) to help maintain the stability of the marine ecosystem and to maintain an optimum sustainable marine mammal population, keeping in mind the carrying capacity of the habitat. Implementing regulations include:

- 50 CFR 10 (prohibitions on taking possession, sale, etc.).
- 50 CFR 18 (regulations regarding polar bears, sea otters, walruses, dugongs, and manatees).
- 50 CFR 216 (regulations regarding whales, seals, and sea lions).
- 50 CFR 228 (incidental takes).

The MMPA prohibits “takings” of marine mammals; that is, to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal.

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D.4.d. ESA  
Prohibited Acts

The Endangered Species Act of 1973 (16 U.S.C. 1531 to 1544) was enacted to help conserve endangered and threatened species and their habitats. Implementing regulations include:

- 50 CFR 223 (prohibitions on takings)
- 50 CFR 224 (requirements for TEDS)
- 50 CFR 226 (designation of critical habitats)

The ESA prohibits “takings” of endangered or threatened species; that is to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The ESA also prohibits persons subject to the jurisdiction of the United States from importing, possessing, or selling endangered or threatened species.

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## Section E. Natural Disaster and Civil Preparedness

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**Introduction**

A major disaster to Coast Guard assets, facilities, and resources could easily degrade a unit’s capabilities. Even if the affected local command structure survives, Coast Guard personnel may have their attention diverted from Coast Guard and community recovery operations by personal concerns (safety of their families, damage to homes, etc.).

Any Coast Guard unit can be expected to assign personnel (active duty and/or reserve) and assets to the affected area. Such action may necessitate a temporary degradation in traditional Coast Guard functions/performance within a unit’s AOR.

**E.1. Description**

A natural disaster is an occurrence or imminent threat of widespread or severe damage, injury, or loss of life or property resulting from any natural cause, including fire, flood, earthquake, storm, wind or wave action, volcanic activity, epidemic, contamination, blight, drought, or infeunit.

**E.2. Authority**

The primary responsibility for disaster response rests at the local and State levels. Federal assistance may be provided when local and State governments are unable to cope with the effects of the disaster. Authorities frequently request Coast Guard assistance in such cases as severe port and waterfront damage caused by coastal storms. Title 14 U.S.C. 88 authorizes the Coast Guard to engage in saving life and property in the broadest possible terms.

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### E.3. Natural Disaster Planning and Preparation

COs/OICs should consult local Sector/Group and District instructions and directives. Disaster prone areas require constant planning and preparation for the occurrence of a catastrophic event, including the following:

- Prepare, disseminate, and exercise a natural disaster preparedness and response plan that covers units under their command.
- Periodically review the contents of this plan.
- Train personnel in disaster response.
- Maintain a current list of reserve personnel who augment unit with disaster recovery-related skills.

**NOTE**  Carpenters, electricians, dry wall hangers and finishers, air conditioning repairmen, and security personnel should be included in this list.

- Periodically update recall lists and establish a command phone tree.

**NOTE**  Exercise the phone tree semi-annually.

- Maintain emergency food, water, medical, and emergency response supplies. Commands should assume a 72-hour supply requirement.
- Assist in Federal response as directed by the Coast Guard chain of command.
- Utilize public volunteers as legally capable and as required for immediate response operations.
- Restore normal operations as conditions allow.

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### E.4. Natural Disaster Assumptions

The following are natural disaster assumptions.

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E.4.a. Peacetime Conditions will Exist

Should this assumption prove false, there will be serious degradation in the Coast Guard's ability to respond.

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E.4.b. No Mobilization of Reserve Personnel will have Occurred Prior to the Event

A major disaster may require a reserve call-up similar to that which occurred for Hurricane Andrew when it hit Miami in 1992. In that event, 175 reserves were activated. The bulk of these were needed for skills contained within the DC, EM, and PS rates (construction, electrical, and security). Reservists in the other rates with construction experience were in great demand.

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E.4.c. Operational Readiness

A catastrophic disaster will overwhelm the capability of State and local governments to carry out the extensive emergency operations that will be necessary to save lives and protect property.

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**E.5.  
Leave/Liberty  
Policy**

Leave, liberty, or termination of orders may be granted to Coast Guard military personnel if buildings, work areas, or transportation systems to and from commands pose hazards to personnel. Each CO/OIC shall determine policy regarding duty in this event, depending on personnel requirements and the conditions that exist. Personnel shall:

- Contact their command before assuming or departing on leave or liberty status.
- Not place themselves in danger by transiting areas that are inaccessible and potentially dangerous.
- Report to their units as required and when conditions allow.
- Make every reasonable attempt, including phones, fax, and e-mail, to contact their duty unit for possible recall and personnel accountability.
- If unable to contact assigned duty units, contact the District Crisis Action Center (CAC).
- If unable to contact the District CAC, report to the nearest Coast Guard command or other military command if no Coast Guard command is accessible.

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**E.6. Natural  
Disaster Effects**

Simultaneous with, or subsequent to, the occurrence of a disaster, some or all of the following effects will exist:

- Fire – resulting from explosion, etc.
- Water – resulting from flood, rain, or tsunami.
- Pollution – resulting from spills of petroleum products and hazardous chemicals.
- Interference or harassment from civil disobedience groups and law violators.

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**E.6.a. Post  
Disaster Effects**

Following the occurrence of a natural disaster, some or all of the following effects will exist:

- Large number of personnel trapped in buildings and debris.
  - Heavy personnel casualties, both injured and dead.
  - Need for mass evacuation of non-ambulatory casualties to hospitals.
  - Panic and confusion, looting and lawlessness beyond the normal scope of policing action.
  - Extensive damage to structures, considerable debris in disaster areas, which restrict normal operations.
  - Loss of electric power and lighting, communications, water supply, and sewage systems.
  - Substantial disruption of land transportation routes caused by damage and blockage to them.
  - Extensive damage to wharves, docks, and ships alongside piers.
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E.6.b. Continuity of Operations	<p>COs/OICs shall first assess damage to their unit and personnel. Should the disaster be of catastrophic magnitude, COs/OICs shall attempt to recall all necessary personnel. It is possible that communications may be down and road accesses may be cut off.</p> <p>Personnel may be injured or may be involved in rescue efforts of family members. For these reasons, it may not be possible for them to report to their units. Therefore, the only personnel who may initially be available will be those who are currently on duty.</p>
<b>E.7. Natural Disaster Evacuation Preparedness</b>	<p>In the event of an impending natural disaster or immediately after the occurrence of a natural disaster, Coast Guard members and dependents are strongly encouraged to remain in their own residence. Members residing on the economy should consult with their landlord or building manager to verify the structural safety of their dwelling. If evacuation is necessary, report to the nearest designated public shelter.</p>
E.7.a. Civil Defense	<p>The civil defense sections of local phone books contain maps showing evacuation routes and locations of various public shelters. Civil defense sites on the Internet also provide excellent information on evacuation routes and public shelters.</p>
E.7.b. Emergency Provisions	<p>Coast Guard members or dependents relocating to any shelter should bring their own emergency provisions (e.g., food, clothing, sleeping bags, etc.). Do not expect shelters to provide adequate quantities of these supplies for occupants.</p>

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## Section F. Environmental Health and Safety Programs

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### Introduction

This Section discusses the key components of an effective unit environmental health and safety program. Safety is an all-hands evolution. Proper attention to safety and environmental health are essential to protecting Coast Guard personnel and ensuring mission readiness.

The leadership and responsibility for safety starts with the CO/OIC and continues down the chain of command to each individual. Unit COs/OICs are responsible for ensuring that personnel within their command are provided a safe and healthful environment and that all facilities and operations comply with applicable Federal laws and regulations and Coast Guard directives. At each level of command, the message of safety shall be amplified and the standards for safety shall be enforced.

This Section is not all-inclusive, and COs/OICs must refer to the referenced instructions for full guidance in establishing and managing various safety programs.

### References for this Section

- a. *Auxiliary Manual*, COMDTINST M16790.1 (series)
  - b. *Coast Guard Cutter Heat Stress Program*, COMDTINST M6260.17 (series)
  - c. *Equipment Tag-Out Procedure*, COMDTINST 9077.1 (series)
  - d. *Hazard Communication for Workplace Materials*, COMDTINST 6260.21 (series)
  - e. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
  - f. *Medical Manual*, COMDTINST M6000.1 (series)
  - g. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - h. *Naval Ship Technical Manual (NSTM), Chapter 74 Volume 3*
  - i. *Preventing Heat Casualties*, COMDTPUB P6200.12 (series)
  - j. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - k. *Safety and Environmental Health Manual*, COMDTINST M5100.47 (series)
  - l. *Shipboard Regulations Manual*, COMDTINST M5000.7 (series)
  - m. *Shore Confined Space Entry*, COMDTINST 5100.48 (series)
  - n. *Technical Guide: Practices for Respiratory Protection*, COMDTINST M6260.2 (series)
  - o. *Uniform Regulations*, COMDTINST M1020.6 (series)
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**F.1. Unit Responsibilities**

Unit COs/OICs are responsible for:

- Appointing a Safety Officer.
- Ensuring a pre-MISHAP plan is in place.
- Ensuring periodic inspections are conducted by the Safety Officer to detect and alleviate hazardous conditions.
- Investigating, evaluating, and reporting all MISHAPs.
- Identifying personnel to be enrolled in the Occupational Medical Monitoring Program (OMMP) as identified by the responsible MLC.
- Performing Safety Officer duties and responsibilities as directed by the parent unit.
- Ensuring periodic inspections are conducted to detect and alleviate hazardous conditions.
- Evaluating and reporting all MISHAPs.
- Parent units shall conduct MISHAP investigations.
- Identifying personnel to be enrolled in the OMMP as identified by the responsible MLC.

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**F.2. Electrical Safety**

Each unit shall develop a comprehensive Electrical Safety Program and employ equipment tag-out procedure. This is a mandatory program. References for electrical safety are as follows:

- *Equipment Tag-Out Procedure*, COMDTINST 9077.1 (series)
- *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- *Shipboard Regulations Manual*, COMDTINST M5000.7 (series)

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**F.3. Hearing Conservation**

Unit work environments are filled with many noise hazardous operations. Units shall establish a hearing conservation program using the references as follows:

- *Medical Manual*, COMDTINST M6000.1 (series)
- *Safety and Environmental Health Manual*, COMDTINST M5100.47 (series)
- *Shipboard Regulations Manual*, COMDTINST M5000.7 (series)

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**F.4. Hazard Communications**

The Occupational Safety and Health Administration (OSHA) issued the Hazard Communication Standard, which is applicable to the Coast Guard, and requires that employers initiate and comply with a hazard communication program. The goal of the program is to provide education on hazardous substances in the workplace, ensure safety of workers who work with hazardous substances and to protect unit personnel from undue exposure. References for hazard communications are as follows:

- *Hazard Communication for Workplace Materials*, COMDTINST 6260.21 (series)
  - *Shipboard Regulations Manual*, COMDTINST M5000.7 (series)
-



**F.5. Heat Stress**

Heat stress is any combination of elevated air temperature, thermal radiation, high humidity, low airflow, and workload, which affect the regulation of body temperature. When the body’s ability to adjust is exceeded, body temperature increases, resulting in symptoms of fatigue, severe headache, nausea, and decreased physical and mental performance. Generally, the Engineering Officer (EO)/EPO is responsible for administering the heat stress program, although all-hands must be aware of symptoms and treatment. References for development and implementation are as follows:

- *Coast Guard Cutter Heat Stress Program*, COMDTINST M6260.17 (series)
- *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
- *Preventing Heat Casualties*, COMDTPUB P6200.12 (series)
- *Safety and Environmental Health Manual*, COMDTINST M5100.47 (series)
- *Shipboard Regulations Manual*, COMDTINST M5000.7 (series)
- *Uniform Regulations*, COMDTINST M1020.6 (series)

**F.6. Respiratory Protection**

Both Coast Guard policy and Federal law require a written respiratory protection program. Respiratory protection is required whenever engineering or administrative controls of hazardous air contaminants are not feasible or are not in place. Any unit using respirators shall establish a respiratory protection program. Information and guidance for establishing a respiratory protection program can be found in the following references:

- *Medical Manual*, COMDTINST M6000.1 (series)
- *Shipboard Regulations Manual*, COMDTINST M5000.7 (series)
- *Safety and Environmental Health Manual*, COMDTINST M5100.47 (series)
- *Technical Guide: Practices for Respiratory Protection*, COMDTINST M6260.2 (series)

**F.7. Pre-MISHAP Plan**

Units are required to maintain pre-MISHAP plans to ensure responses to Class A or B MISHAPs are adequately coordinated. Plans should enhance the unit’s ability to respond by describing actions and responsible personnel.

**NOTE** 

Operational Commanders shall develop unit pre-mishap plans. Pre-mishap plan information for individual units can be included in a single unit instruction.

Further information on required and recommended content of a unit pre-MISHAP plan is contained in the following reference:

- *Safety and Environmental Health Manual*, COMDTINST 5100.47 (series)



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**F.8. Boat Safety Program**

A boat safety program is essential if Coast Guard missions are to be performed effectively and safely, protecting both the platforms and the crews. A boat safety program need not be a separate unit instruction, but may be fulfilled through routine practices involving safety stand-downs, mission pre-briefs, and identification and alleviation of as many identifiable hazards as possible.

**NOTE** 

Operational Commanders and COs/OICs may develop and maintain boat safety program guidance for all subordinate units.

Further guidance on safety programs is contained in the following reference:

- *Safety and Environmental Health Manual*, COMDTINST M5100.47 (series)

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**F.9. Confined Space Entry Program**

Confined spaces are those that are:

- Large enough and so configured that an employee can bodily enter and perform assigned work.
- Limited or restricted means for entry or exit, such as tanks, vessels, storage bins, vaults, and pits.
- Not designed for continuous employee occupancy.

Intended users are all shore units with confined space work environments. Entry into confined spaces should only occur after evaluation of the hazards and other safety concerns. Units should prepare a unit instruction identifying confined spaces and the required safety procedures for entering those spaces. Further information on required and recommended content of a unit's confined space entry program is contained in the following reference:

- *Shore Confined Space Entry*, COMDTINST 5100.48 (series). (Confined space entry procedures for boats and ships are governed by the *Naval Engineering Manual*, COMDTINST M9000.6 (series) and *Naval Ships' Technical Manual (NSTM), Chapter 74, Volume 3*).

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**F.10. Jewelry**

The wearing of jewelry, including rings, wristwatches, necklaces, or other items not consisting of organizational clothing, personal protective equipment, or uniform articles by boat crew members engaged in hoisting, towing, or other deck evolutions where the potential for snagging exists is prohibited. The wearing of jewelry by personnel embarked in boats should be discouraged, as it is not a safe practice. COs/OICs and coxswains should address this during all pre-underway briefs, and coxswains shall ensure jewelry is removed prior to beginning all evolutions including helo operations, towing, any line handling, and when working around machinery.

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Part 2 – Operations and Missions  
Chapter 4 – Mission Planning




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## Chapter 5. Standards of Boat Operations

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**Introduction** This Chapter provides guidance for operating Coast Guard boats. It is intended to supplement other applicable directives.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Introduction	2-67
B	Readiness	2-68
C	Minimum Equipment for Operation	2-68
D	Passengers and Guests	2-69
E	Position and Operations Normal Reports	2-70
F	Float Plan	2-72
G	Underway Rules, Emergencies, and Maneuvers	2-72
H	Vessel MISHAPs	2-73
I	Offshore Operations	2-74
J	Public Affairs Operations	2-75
K	Trailerred/Beach Operations	2-75
L	Night Vision	2-77

**References for this Chapter** Each Section contains its own references, as necessary.

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### Section A. Introduction

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**Introduction** This Section discusses the role of the coxswain in the operation of the boat.

**A.1. Operation of the Boat** The boat coxswain shall determine who operates the boat during all phases of a mission. Generally, the coxswain is not permitted to leave the boat during any operation. However, when a situation exists onboard the distressed vessel that only the coxswain is capable of alleviating, and the coxswain can ensure the safety of the unit boat, it **may** be permissible. The coxswain, in consultation with the unit, should make this decision.

An example of such a situation is if the coxswain is the only member of the crew capable of delivering the first aid/medical attention and another member of the crew is capable of maintaining control of the boat.

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**A.2. Underway  
Time Use**

Although unit boats generally get underway to execute a specific mission, coxswains should maximize the utility of underway hours by taking advantage of training opportunities.

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## **Section B. Readiness**

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**Introduction**

This Section discusses boat readiness and the handling of discrepancies.

**References for  
this Section**

- a. Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series)

**B.1. Checklists**

Checklists will be used for daily checkoffs. Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series) for standard and non-standard boats also contain procedures for items to be aware of while underway and prior to securing the boat. District Commanders may use the outfit list and the particular needs of their resources to establish boat outfit requirements.

**B.2.  
Discrepancies**

During daily boat checks, particular attention shall be paid to those items that constitute disabling or restrictive discrepancies. In the event such a discrepancy exists, units shall immediately notify the Operational Commander as directed in *Part 4, Readiness and Standardization* of this Manual. Boats with restrictive discrepancies shall not be used in mission performance until the necessary waiver has been granted.

All certified crew members will be familiar with the operating characteristics of all unit boats, the details of which are found in the appropriate Specific Boat Type Operator’s Handbook, COMDTINST M16114 (series).

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## **Section C. Minimum Equipment for Operation**

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**Introduction**

The Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series) contain details of the minimum equipment necessary for boat operation.

**References for  
this Section**

- a. *Non-Standard Boat Operator’s Handbook*, COMDTINST M16114.28 (series)
- b. Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series)



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<b>C.1. Other Factors to Consider</b>	Coxswains should consider the mission being performed to determine if additional equipment, not normally onboard the boat is necessary (additional blankets, personal flotation devices (PFDs), AFFF, etc.). Equipment that is not expressly authorized by the Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series) or the District Commander (for non-standard boats) may not be permanently stored onboard unit boats. Details of this process are contained in <i>Part 4, Readiness and Standardization</i> of this Manual.
<b>C.2. NSB Outfit</b>	District Commanders may use the outfit list provided in the <i>Non-Standard Boat Operator’s Handbook</i> , COMDTINST M16114.28 (series) or modify the outfit list to meet particular needs of their resources.

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## Section D. Passengers and Guests

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<b>Introduction</b>	This Section provides guidance for taking on passengers and guests.
<b>References for this Section</b>	a. <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series) b. <i>United States Coast Guard Regulations 1992</i> , COMDTINST M5000.3 (series)
<b>D.1. Guidelines</b>	Passengers may be taken onboard unit boats, at the discretion of the CO/OIC, provided the numbers do not exceed the maximum safe number of passengers for the boat type, and all passengers are wearing PFDs in accordance with <i>United States Coast Guard Regulations 1992</i> , COMDTINST M5000.3 (series) and the <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series).
<b>D.2. Coxswain Responsibilities</b>	The coxswain is responsible for ensuring that all passengers and guests are aware of necessary safety precautions, including the use of PFDs and emergency procedures. Guests must be authorized by the CO/OIC. Dependents of Coast Guard personnel are permitted onboard Coast Guard boats on a not-to-interfere basis.
<b>D.3. Public Affairs Operations</b>	Guidance for authorization for public affairs operations is found in <i>Section J</i> of this Chapter.
<b>D.4. Emergent Mission Requirements</b>	In the event a unit boat is required for mission response while passengers or guests are onboard, they shall be disembarked prior to proceeding with the mission, if at all possible.

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## Section E. Position and Operations Normal Reports

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<b>Introduction</b>	This Section discusses the use and maintenance of various reports made while underway.
<b>References for this Section</b>	a. <i>Operating Facilities (OPFAC) of the U.S. Coast Guard</i> , COMDTINST M5440.2 (series)
<b>E.1. Policy</b>	Position and operations normal reports are required for all boats as defined in <i>Operating Facilities (OPFAC) of the U.S. Coast Guard</i> , COMDTINST M5440.2 (series). Boats underway shall establish communications contact at least every thirty (30) minutes. The communication interval between boat and shore facility/cutter shall be reduced during periods of increased risk of MISHAP (night, bad weather, etc.), or in environmental conditions that reduce survival time (cold, surf, etc.).

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**E.2. Lost Communications**

A shore facility/cutter losing contact with a Coast Guard boat is responsible for reestablishing communications with the boat directly or through another unit. If a boat fails to check in on the primary or secondary frequency within ten minutes of the communication schedule, the guarding unit shall initiate the following action. The command cadre of the boat's parent command shall be notified first, followed by the Operational Commander (OPCON), then the cognizant District Command Center. If the boat remains unlocated, an immediate UMIB shall be released. Following the UMIB shall be an immediate precedence message to be released as follows:

O ddhhmmZ mmmyy (Date-time-group)  
FM (Station reporting the lost communication)  
TO COGARD SECTOR/GROUP (if not the originator)  
COGARD DISTRICT RCC  
(all adjacent units, e.g., STA, ANT, etc.)  
(Boats parent command)  
INFO (Appropriate Area Command Center)  
(Adjacent Sectors/Groups and Cognizant District Command Center)  
BT  
UNCLAS E F T O//N02001//  
SUBJ: LOST COMMS REPORT  
1. ORIG LOST COMMS WITH COGARD BOAT (list hull number).  
LAST COMMS ON (list appropriate frequency).  
LAST POSITION (list geographic position and/or latitude/longitude).  
LAST TIME COMMS ESTABLISHED (list last time two-way communication was conducted)  
2. REQ RADIO EQPT UNITS ATTEMPT COMMS AND ADVISE.  
3. REQ UNIT ADVISE IF COMMS ESTABLISHED ON VHF EQUIPMENT OR VIA OTHER MEANS.  
4. WILL ADVISE ALL ADDEES WHEN COMMS REESTABLISHED.  
BT  
NNNN

When communications are reestablished with the boat, an immediate cancel of UMIB and precedence message will be sent to all addresses listed in the LOST COMMS REPORT with notification that communications have been restored.

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**E.3. Report Exceptions**

Exceptions to ops normal reports are as follows:

- When maintaining communications with an On-Scene Coordinator (OSC) in conjunction with a SAR mission.
- When directed to maintain radio silence by a competent authority.
- Surf operations.

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**E.4. Radio Log**

If the unit maintains a written radio log, the contents of position and ops normal reports will be logged in the unit radio log. If the unit maintains a recorded radio log, no written report of position or ops normal reports is necessary.

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## Section F. Float Plan

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<b>Introduction</b>	A verbal float plan, or intended course of movement and action, must be completed between the coxswain and OOD/watchstander prior to getting underway.
<b>F.1. Parts of a Float Plan</b>	<p>A detailed float plan consists of these parts:</p> <ul style="list-style-type: none"><li>• Intended course of action shown on applicable chart.</li><li>• Mission particulars such as LE boardings, training, etc.</li><li>• Description of general course and area where operations are to be conducted.</li></ul> <p>Communicate that any deviation from the original float plan must be relayed to the watchstander.</p>
<b>F.2. Emergent Situation</b>	In situations where there is an emergent situation (e.g., SAR), a float plan is not required. The watchstander should assume the boat crew will take the fastest course and should advise of any operating conditions that may hinder a rapid response (low tide, weather, dredging, etc).

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## Section G. Underway Rules, Emergencies, and Maneuvers

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<b>Introduction</b>	This Section provides a brief discussion of the Navigation Rules of the Road, handling emergency situations, and boat maneuvers.
<b>References for this Section</b>	<ol style="list-style-type: none"><li><i>Casualty Reporting (CASREP) Procedures (MATERIEL)</i>, COMDTINST M3501.3 (series)</li><li><i>Coast Guard Navigation Standards Manual</i>, COMDTINST M3530.2 (series)</li><li><i>Navigational Rules International-Inland</i>, COMDTINST M16672.2 (series)</li><li><i>Rescue and Survival Systems Manual</i>, COMDTINST M10470.10 (series)</li><li><i>Safety and Environmental Health Manual</i>, COMDTINST M5100.47 (series)</li><li>Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series)</li></ol>
<b>G.1. Underway Rules</b>	All personnel operating Coast Guard boats are obligated to abide by Inland and International Navigational Rules. Beyond compliance with these rules, crew members must remain alert for vessels or people in distress, potential obstructions such as fishing nets or “deadheads,” and the status of local aids to navigation.
<b>G.2. Underway Emergencies/ MISHAP Reports</b>	Emergencies occur even onboard the best-maintained platforms and despite practices of proper seamanship.

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G.2.a. Crew Preparedness	<p>Well-trained crews are the best able to respond in a timely fashion, thereby maximizing the potential for successful resolution. Frequent underway casualty control drills increase the preparation level of the crew.</p> <p>Specific casualty control actions for emergencies onboard boats, and required post emergency checks to ensure vessel integrity are contained in the Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series) and <i>Part 4, Readiness and Standardization</i> of this Manual. Area/District Boat Managers shall outline, in writing, emergency procedures and follow-up actions for all assigned non-standard boats.</p>
G.2.b. Crew Responsibilities	<p>As soon as practicable after the declaration of an emergency onboard the boat, the coxswain shall notify the unit of the emergency and the actions taken and planned. Responsibility for the safety of the crew and boat and the successful resolution of the emergency lies solely with the coxswain.</p>
G.2.c. Filing MISHAP Reports	<p>MISHAP reports must be filed in accordance with:</p> <ul style="list-style-type: none"> <li>• <i>Casualty Reporting (CASREP) Procedures (MATERIEL)</i>, COMDTINST M3501.3 (series)</li> <li>• <i>Safety and Environmental Health Manual</i>, COMDTINST M5100.47 (series)</li> </ul>
<b>G.3. Maneuvers</b>	<p>Each boat type operates differently in various environmental conditions. Specific guidance regarding techniques for maximum performance, hazardous conditions, and limitations are contained in each Specific Boat Type Operator’s Handbook, COMDTINST M16114 (series). Crew members shall be familiar with operator’s handbook provisions and operate boats accordingly. Districts shall develop similar specific guidance regarding techniques for maximum performance, hazardous conditions, and limitations for all non-standard boats attached to units within the District.</p>

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## Section H. Vessel MISHAPs

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<b>Introduction</b>	This Section provides resources for vessel MISHAPs.
<b>References for this Section</b>	<p>a. <i>Casualty Reporting (CASREP) Procedures (MATERIEL)</i>, COMDTINST M3501.3 (series)</p> <p>b. <i>Safety and Environmental Health Manual</i>, COMDTINST M5100.47 (series)</p>
<b>H.1. Vessel MISHAPs</b>	<p>Documentation and investigation of vessel MISHAPs is covered in the following references:</p> <ul style="list-style-type: none"> <li>• <i>Casualty Reporting (CASREP) Procedures (MATERIEL)</i>, COMDTINST M3501.3 (series)</li> <li>• <i>Safety and Environmental Health Manual</i>, COMDTINST M5100.47 (series)</li> </ul>



**NOTE**

OPCON is responsible for establishing pre-MISHAP plans for all subordinate units. All boat crewmembers shall be familiar with unit pre-MISHAP plans.

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## Section I. Offshore Operations

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<b>Introduction</b>	This Section discusses the boat limitations and waivers for offshore operations.
<b>References for this Section</b>	<ol style="list-style-type: none"><li>Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series)</li><li><i>U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)</i>, COMDTINST M16130.2 (series)</li></ol>
<b>I.1. Operational Limits</b>	Operational limits for standard boats are contained in the appropriate Specific Boat Type Operator’s Handbooks, COMDTINST M16114 (series) and may only be waived by the Cutter CO or Operational Commander on a case-by-case basis. All elements of a boat’s limitations must be considered including the distance offshore, weather, sea state, and sustained winds prior to proceeding. Additional crew should be considered for missions beyond the prescribed distance offshore, or when a mission will be of an extended duration.
<b>I.2. Operational Limits for Auxiliary Vessels</b>	Auxiliary vessels shall be considered non-standard boats when establishing operational limitations and shall never exceed the limits established for non-standard Coast Guard boats of similar size. Order Issuing Authorities, including Unit Commanders, shall carefully consider the operational capability of each surface vessel and its assigned crew when planning missions and issuing orders. The operator (or owner) of an Auxiliary vessel shall abort a mission in the event they become apprehensive or aware of a situation (mission technicality, crew proficiency, weather, etc.) that could jeopardize the safety of the crew or vessel, regardless of the vessel’s operational limitations.
<b>I.3. Waiver and Final Decision</b>	In instances where the Operational Commander grants a waiver of a boat’s operational limits, the final decision regarding the safety of the mission rests with the boat coxswain and unit CO/OIC.



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## Section J. Public Affairs Operations

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<b>Introduction</b>	This Section discusses when unit boats can participate in community affairs and who authorizes this request.
<b>References for this Section</b>	a. <i>Public Affairs Manual</i> , COMDTINST M5728.2 (series)
<b>J.1. Guidelines</b>	Unit boats may be used in support of community and media relations on a not-to-interfere basis with operations, and in accordance with the <i>Public Affairs Manual</i> , COMDTINST M5728.2 (series). Unit readiness shall not be compromised for such participation. Units shall ensure the Operational Commander is informed of all unit commitments. All requests should be routed through the immediate Operational Commander.
<b>J.2. Underway or Static Displays</b>	Various organizations request the participation of Coast Guard boats in local demonstrations and celebrations. Although approval for such events rests with the CO/OIC, the Operational Commander should be kept informed regarding all such events and changes in resource availability, if any, that such participation brings. The provisions of the <i>Public Affairs Manual</i> , COMDTINST M5728.2 (series), <i>Chapter 3</i> are applicable.

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## Section K. Trailered/Beach Operations

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<b>Introduction</b>	This Section discusses guidance and procedure development for trailering boats, the use of emergency lights/sirens, beach rescue, and the use of personal watercraft.
<b>References for this Section</b>	a. <i>Non-Standard Boat Operator's Handbook</i> , COMDTINST M16114.28 (series)
<b>K.1. Trailering Boats</b>	<p>When developing guidance for trailering boats, units shall address:</p> <ul style="list-style-type: none"><li>• Trailer hitch, safety chains, breakaway cable, lights, trailer wheel bearings</li><li>• Permissible speed limit</li><li>• Expected increase in stopping distance</li><li>• Expected increase in turning radius</li><li>• Procedures for launching boat</li><li>• Boat recovery</li></ul> <p>Area/District Boat Managers will develop procedures for trailering boats and conducting beach responses using trailered boats, vehicles, and equipment.</p>

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**K.2. Vehicle  
Emergency  
Lights/Sirens**

For policy concerning vehicle emergency lights and sirens, refer to the *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series).

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**K.3. Beach  
Rescue**

Helicopter response is the preferred method of retrieving people in the water from beach surf areas.

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**K.3.a. Unit or  
Local Agencies**

Generally, local agencies are better equipped and trained for beach rescue. Units will not normally undertake beach rescues alone. Liaison with local rescue authorities is strongly encouraged. Units in AORs where local agencies may call upon the Coast Guard to assist with beach rescues must clearly establish, in writing, each agency's responsibilities and limitations in this area. Copies of these agreements shall be provided to the Operational Commander and District Commander.

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**K.3.b. Developing  
Procedures**

When developing procedures for participating in beach responses in support of other agencies, units should establish the following:

- What agency retains jurisdiction in beach areas within the unit's AOR?
- Does that agency have trained swimmers and appropriate equipment?
- Under what circumstances will the Coast Guard be called upon to perform as the OSC?

COs/OICs will develop training and qualification guidance for crew members likely to be involved in beach rescue missions.

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**Use of Personal Watercraft (PWC)**

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**K.4. Definition**

"Personal Watercraft" means a vessel less than 16 feet in length which is designed to be operated by a person or persons sitting, standing, or kneeling on, rather than within, the confines of a hull.

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**K.5. Policy**

Policy regarding the use of personal watercraft is discussed in the following paragraphs.

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**K.5.a.  
Procurement,  
Ownership, and  
Operation**

Procurement, ownership, and operation of personal watercraft by Coast Guard active duty and reserve units is not authorized without a specific written waiver from Commandant (G-O).

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**K.5.b. Requests  
for Waivers**

Requests for waivers must include a plan that includes concept of operation.

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**K.5.c.  
Expenditure of  
Funds**

Account Certifying Officers and other procurement officials shall not authorize the expenditure of funds for the purchase, support, or operation of personal watercraft in the absence of a waiver allowing purchase and operation from Commandant (G-O).

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## Section L. Night Vision

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<b>Introduction</b>	Many night vision devices are currently used by field units. While these devices have many benefits in an operational environment, the user must be aware of the limitations. Despite all of the limitations, night vision is still an extremely valuable tool to Coast Guard boat crews, and its use is encouraged on every night mission. The Coast Guard is currently in the process of standardizing the type of night vision device used by field units. Regardless, the following discussion is applicable to all types of night vision devices.
<b>References for this Section</b>	a. <a href="http://cgweb.comdt.uscg.mil/G-OCS/G-OCS.htm">http://cgweb.comdt.uscg.mil/G-OCS/G-OCS.htm</a>
<b>L.1. Types of Night Vision</b>	There are two basic types of night vision: <ul style="list-style-type: none"><li>• Monocular (single eye piece)</li><li>• Bi-ocular or binocular (dual eye pieces)</li></ul>
<b>L.2. Limitations</b>	Limitations of night vision include: <ul style="list-style-type: none"><li>• Decrease in peripheral vision</li><li>• Skewed depth perception</li><li>• Tunnel vision</li><li>• Contrast reversal</li><li>• Delay in return to normal vision</li></ul>
L.2.a. Peripheral Vision	Both types of night vision will limit a person's peripheral vision substantially. A normal field of view is 190 degrees. With night vision, this may go as low as 40 degrees.
L.2.b. Depth Perception	Depth perception is skewed with the use of night vision. Objects will be closer than they appear.
L.2.c. Tunnel Vision	Tunnel vision, which means a person has fixated on an object and is ignoring the other things around him/her, is a strong tendency with night vision, making it essential that a person continually scan when using the devices.
L.2.d. Contrast Reversal	Contrast reversal must be considered when using night vision. Contrast reversal occurs when dark colored objects (such as a black hull) actually appear as lightly colored objects under night vision. This can be of particular importance in tactical situations. Night vision devices do not detect color, but when using the monocular type, the unaided eye will allow color to be seen. Whether using monocular or bi-ocular, the color of a light may make it appear brighter through the device. The effect of this is thinking that a light is closer than it really is. For instance, night vision devices are more sensitive to red and white lights than they are to blue and green lights, so the red and white lights will appear brighter, even if they are at the same distance as a green or blue light.

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L.2.e. Return to  
Normal Vision

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After using night vision, the eye(s) will take at least two minutes to go back to normal.

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**L.3. Restrictions**

Because of the above limitations, personnel operating (driving) Coast Guard boats are not permitted to use night vision while the boat is making way. Personnel who have been wearing night vision equipment shall wait a minimum of two minutes before assuming control (driving).

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## Chapter 6. Training and Qualification

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**Introduction**

Active duty, reserve, auxiliary, and civilian personnel conduct unit operational missions. This Chapter describes the training and qualification program and the policies and procedures established to assure the continued development and availability of these professionals.

This Chapter also provides a broad overview of the training infrastructure and how it relates to the unit training program at units. Follow-on Sections describe the unit training program and its various elements in greater detail.

**In this Chapter**

This Chapter contains the following Sections:

Section	Title	See Page
A	Training	2-80
B	Organization	2-81
C	Unit Training Program	2-84
D	Duties and Responsibilities	2-90
E	Personnel Qualification Standards (PQS)	2-93
F	Certification/Lapse and Recertification	2-97
G	Currency Maintenance	2-98
H	Formal Schools	2-98
I	General Military Training	2-108

**References for  
this Chapter**

- a. *Aids to Navigation Manual - Seamanship*, COMDTINST M16500.21 (series)
  - b. *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series)
  - c. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - d. *Cutter Training and Qualification Manual*, COMDTINST M3502.4 (series)
  - e. *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series)
  - f. *Telecommunications Manual (TCM)*, COMDTINST M2000.3 (series)
  - g. *Training and Education Manual*, COMDTINST M1500.10 (series)
  - h. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)
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## Section A. Training

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<b>Introduction</b>	The training and qualification requirements set forth in this Manual are established by various Program Managers to ensure the readiness of the unit and boat crews to complete assigned missions or carry out programmatic responsibilities safely and effectively. The following paragraphs provide a general description of various training sources and programs used to assist the unit in the execution of its unit training program. The availability of individual training sources for each unit may be dependent on missions and geographic location.
<b>A.1. Training Teams</b>	Area or District training teams (TRATEAMS) travel to units and provide a variety of training solutions. Course Managers, in conjunction with Commandant (G-WTT), may certify this training as equivalent to formal school completion. TRATEAMS can provide training for PQS completion; evaluate the skill and knowledge of individual members or teams (e.g., boarding teams); and act as observers for unit drills or exercises.
<b>A.2. Standardization Teams</b>	Standardization (STAN) Teams travel to units to evaluate the condition of standard boats, boat crew proficiency, as well as the knowledge and skill of individual members. STAN Teams also evaluate unit rescue and survival systems, boat crew training, and qualification programs. STAN Teams can provide classroom lectures and provide unit-specific recommendations to improve boat crew training and qualification programs.
<b>A.3. Exportable Training</b>	Coast Guard training commands or Program Managers often “export” training, sending instructors to the unit. This training may include a variety of classroom or underway training. Course Managers, in conjunction with Commandant (G-WTT), may certify this training as equivalent to formal school completion. Instruction received may be applied toward PQS completion.
<b>A.4. Additional Training Sources</b>	<p>Commercial and government (including DoD) schools may be used to obtain training that is not available through the Coast Guard class “C” school system. Course Managers, in conjunction with Commandant (G-WTT), may certify this training as equivalent to formal school completion. Instruction received may also be applied toward PQS completion.</p> <p>Prior to purchasing any commercial training course, the unit should ensure that the training is not available through the Coast Guard class “C” school system or through a DoD school system.</p>

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## Section B. Organization

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### Introduction

Commandant (G-WTT) and the Office of Boat Forces (G-OCS) will coordinate the publishing of approved requirements in this Manual. This policy does not limit Area and District Commanders from specifying additional training requirements. However, District Commanders are encouraged to establish a central approval authority to ensure a coordinated view of all training mandated on their units is maintained. They are also encouraged to provide a single instruction that specifies all training required by the Area or District. The Office of Training and Performance Consulting (G-WTT) is the approval authority for all headquarters mandated formal school and general military training requirements.

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### References for this Section

- a. *Training and Education Manual*, COMDTINST M1500.10 (series)
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### B.1. G-OCS Responsibilities

Chief, Office of Boat Forces (G-OCS), as program manager for boats, shall:

- Promulgate and maintain the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I*, COMDTINST M16114.32 (series) and the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series).
    - Collate formal school and general military training requirements based upon input from Course Managers.
    - Develop and maintain standards for boat training exercises.
    - Establish dutystander qualification requirements.
    - Establish requirements and doctrine for implementation of the unit training program.
  - Monitor Coast Guard boat operations to determine future training needs, and adjust the system accordingly.
  - Maintain liaison with the Training Quota Management Center, other U. S. Government training commands and training sources as appropriate and authorized by Commandant (G-WTT), in order to maintain an integrated quota management system. This system should allow for improved quota management including:
    - The acquisition of non-Coast Guard quotas necessary to meet program needs.
    - An equitable allocation process given program priorities.
    - Out-year quota projections.
  - Provide system documentation for the boat crew training program by:
    - Establishing guidelines for implementing boat crew training.
    - Recommending documentation for maintaining the system records (i.e., AOPS/TMT).
  - Serve as Headquarters Planning Coordinator for Boat Standardization Team staffs.
  - Monitor boat training programs offered by the Boat Forces Center, National Motor Lifeboat School, and Special Missions Training Center.
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**B.2. G-WTT  
Responsibilities**

The following G-WTT responsibilities are provided for a training manager and course manager.

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**B.2.a. Training  
Manager**

Chief, Office of Training and Performance Consulting (G-WTT), as the Coast Guard's training manager, shall:

- Act as final approving authority for new formal school and general military training requirements.
  - Provide training policies and processes needed to manage unit training.
  - Establish and monitor measures of effectiveness and efficiency of training.
  - Manage AFC-56 budget and training quota control systems in support of unit training.
  - Provide training consultation services for course managers when requested.
  - Assist course managers in determining equivalencies between formal schools and training received from other sources including exportable training and commercial and government schools.
  - Coordinate unit training needed as a result of major acquisitions (provide appropriate databases).
- 

**B.2.b. Course  
Manager**

Course Managers (CM) are responsible for detailed management of Coast Guard particular courses and schools. Course Managers, in conjunction with Commandant (G-WTT), shall:

- Establish training requirements within processes and guidelines set forth by Commandant (G-WTT).
  - Manage assigned formal schools and training programs in accordance with Commandant (G-WTT) directives.
  - Act as waiver authority for all formal schools and training requirements under their cognizance.
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**B.3. TQC  
Responsibilities**

The Training Quota Management Center (TQC) is a headquarters unit located in Portsmouth, VA responsible for the order-issuing functions for class “C” Schools. TQC shall:

- Administer the Coast Guard’s quota allocation process and serve as the class “C” school order-issuing authority for all Headquarters program managers in accordance with the *Training and Education Manual*, COMDTINST M1500.10 (series) and this Manual.
- Advise Commandant (G-WTT) of any inconsistencies in unit or boat crew formal school training with information copies to Commandant (G-OCS).
- Assign quotas based upon the training requirements identified in this Manual in conjunction with the Operating Logistics Support Plan for assigned boats and program direction.
- Schedule training for unit personnel in accordance with this Manual, the Operating Logistics Support Plan for assigned boats and program direction.
- Maintain liaison with other U.S. Government training commands and training sources, as appropriate and authorized by Commandant (G-WTT), in order to maintain an integrated quota management system. This system should allow for improved quota management including historical utilization data.

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**B.4. District  
Commander  
Responsibilities**

Within the District, the District Commander is responsible for carrying out the functions and duties of the Coast Guard and for assuring that these duties are performed efficiently, safely, and economically. District Commanders shall:

- Issue directives as necessary to expand upon, but not contradict, the requirements in this Manual.
  - During MLC technical and compliance inspections, ensure the unit training program is implemented in accordance with this Manual and area directives.
  - Schedule District Training Team visits.
  - Submit an annual training plan as required by the *Training and Education Manual*, COMDTINST M1500.10 (series).
  - Submit requests to the Area Commander for the use of training facilities that are not maintained by the Coast Guard or U.S. Navy. Fund training conducted at these facilities upon Area approval.
-



**B.5.  
Sector/Group,  
Air Station  
Responsibilities**

Sector/Group, **Air Station** Commanders provide direction, support and coordination, for functions performed by subordinate units. They provide training support for subordinate units primarily by monitoring the training and operational performance of each unit. Sectors/Groups, **Air Stations** shall:

- Oversee all unit training and qualification programs under their respective cognizance.
- Issue directives as necessary to expand upon, but not contradict, the requirements in this Manual, and all other applicable objectives.
- During unit inspections, ensure the unit training program is implemented in accordance with this Manual and District and Area directives.
- Use standardization team publications and check sheets as guides for conducting ready for operations inspections and drills.

To emphasize the importance of the training program, Sector/Group, **Air Station** Commanders are encouraged to periodically get underway on boats assigned to their units.

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## **Section C. Unit Training Program**

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**Introduction**

A worthwhile unit training program may only be realized through the dedicated efforts and commitment of all unit personnel. It begins with the CO/OIC who must provide an appropriate level of “command emphasis” to ensure a viable training program. Implementing that program then becomes largely an all-hands responsibility. Virtually every member of the crew will participate as a PQS qualifier, drill evaluator, instructor, and mentor or as a member of the Training Board. Responsibilities and duties to be carried out by these personnel are described throughout this Part.

**In this Section**

This Section contains the following information:

<b>Title</b>	<b>See Page</b>
Unit Training Program	2-85
Dutystander Qualification Training Program	2-86
Indoctrination Program	2-88
Training Records	2-89



## Unit Training Program

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### C.1. Written Guidance

Each unit shall maintain written guidance for training that, at a minimum, addresses the following:

- Internal procedures and guidelines for conduct of the Training Board including the required frequency of meetings.
  - Training Board memberships by name and position/title.
  - Dutystander Training Program, including:
    - Qualification Examining Board (QEB) memberships by name and position/title.
    - A list of personnel qualification standards (PQS) and job qualification requirements (JQR) qualifiers by name and subject matter.
    - Processes for:
      - ◇ Successful completion of PQS/JQR tasks.
      - ◇ Practical evaluation of trainees.
      - ◇ Conduct of QEBs in accordance with prescribed procedures.
  - Internal routing procedures for PQS/JQR qualification records (including practical evaluations and Qualification Examining Board recommendations), exercise evaluation [e.g., Ready for Operations (RFO) self-audit] sheets, and departmental and duty section training records.
  - Indoctrination Program responsibilities, policies and procedures.
- 

### C.2. Training Board

All units shall establish a Training Board. Minimum membership shall include the following:

- XO/XPO or a **Non-Pooled Station (small)** OIC,
- EO/EPO,
- **ANT** supervisor (if assigned),
- Training Officer/Training Petty Officer (if assigned), and the
- Senior coxswain/surfman.

See *Section D, Training Board*.

### NOTE

Members of the Parent unit's Command Cadre should serve as members of non-pooled Station (small) Training Boards.

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### C.3. Unit Training Plan

The Unit Training Plan Form (CG-5293 or locally produced form) is the foundation of the unit training program and is prepared by the Training Board.

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C.3.a. Training Scheduling

The training schedule shall, at a minimum, identify time slots for all scheduled drills, exercises, all-hands training, and departmental/divisional training.

The Unit Training Plan is in the form of a universal calendar and provides the unit with a flexible means of scheduling training to be accomplished over a specific period of time. It is anticipated that the unit will prepare Unit Training Plans that correspond with the duty cycle. Form CG-5293 may be locally reproduced and is part of USCG Electronic Forms on Standard Work Station III.

C.3.b. Responsibilities

The following responsibilities apply for administration of the Unit Training Plan:

- The CO/OIC shall approve the Unit Training Plan.
- The XO/XPO/Training Officer is responsible for annotating the Unit Training Plan to reflect what training actually gets accomplished. By this procedure, the Unit Training Plan becomes the Unit Training Record.
- Unit Training Plans must be prepared for at least one month at a time. The Quarterly Training Plan Form (old CG-5293) and Weekly Training Plan Form (CG-5288) are not required at shore units.

## Dutystander Qualification Training Program

C.4. Training Programs

Units shall establish and maintain dutystander qualification training programs to fully prepare assigned personnel for certification and to maintain desired skills through recurrent training. At a minimum, dutystander training programs shall provide for an efficient, effective process for:

- Successful completion of personnel qualification standards.
- Practical assessment of the trainee.
- Comprehensive examination in accordance with prescribed standards.

C.4.a. Personnel Qualification Standards (PQS)

Personnel qualification standards (PQS) are compilations of the minimum knowledge and skills that an individual must demonstrate in order to qualify to stand watches or perform other specific routine duties necessary for the safety, security, and proper operation of the unit. The goal of PQS is to standardize and facilitate these qualifications.

Unit COs/OICs shall analyze PQS and promulgate additional requirements as required to address local needs for certification at the unit. Unit Commanders shall advise Commandant (G-OCS) and the appropriate program manager (e.g., G-OPL for the BO/BTM PQS), by letter via the chain of command, of recommendations for improvement of PQS used to certify unit personnel. Where Coast Guard PQS exists, it shall be used in lieu of Job Qualification Requirements.



C.4.b. Job Qualification Requirements (JQR)

Job Qualification Requirements (JQR) shall be developed for duty-standing positions for which there is no prescribed Coast Guard PQS (e.g., OOD).

- JQRs shall be written in the same format as Coast Guard qualification guides or PQS.
- Sharing of JQRs among units will help standardize the program and mitigate the administrative burden on individual units.

**NOTE** 

Providing copies of JQRs to Commandant (G-OCS), via the chain of command, can aid in the development of Coast Guard specific PQS in those areas where no PQS exists.

**C.5. Local Area Knowledge and Geographic Points**

Units shall prepare and administer local area knowledge and geographic point examinations to satisfy communications watchstander, boat crew member, engineer, coxswain, surfman, PQS, and OOD JQR task requirements. Examinations shall include “open and closed book” tests [i.e., with and without lists of common (i.e., local and charted) names of geographic points], as well as underway AOR trips for shore units.

**C.6. Qualification Examining Board (QEB)**

Qualification Examining Boards (QEBs) [e.g., Boat Crew Examining Board (BCEB), Law Enforcement Qualification Board (LEQB)] shall be established and maintained in accordance with specific guidance contained in qualification guides, personnel qualification standards, and this Manual. Examining boards shall:

- Ensure all phases of the qualification process have been successfully completed in the manner prescribed by qualification guides, personnel qualification standards, and this Manual.
- Make recommendations for certification to the CO/OIC.
- Provide guidance to the member for additional training as required.
- Advise the CO/OIC on matters pertaining to the qualification process.

C.6.a. Membership

Qualification Examining Board members shall be currently certified for the Qualification Examining Board position. If there are not enough members with current certifications, units shall postpone the planned board convening until members with current certifications are available, or contact the Operational Commander to arrange for members with current certifications from neighboring units.

C.6.b. Practical Evaluations

Practical evaluations (i.e., check-rides, supervised break-ins, or mock boardings), shall be prepared and administered in conjunction with the qualification process for:

- Boat crew (i.e., crew member, engineer, coxswain, surfman)
- Boarding team (i.e., boarding team member, Boarding Officers)
- Other dutystanders (e.g., communications watchstander, OOD)



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**C.7. Checklists**

QEB checklists shall be prepared and administered to assess the required knowledge and skill identified in qualification guides, personnel qualification standards, and all applicable directives.

- Checklists shall be used for all practical evaluations.
- Completed checklists shall be reviewed and signed by the trainee and evaluator at the conclusion of the practical evaluation.
- Boat type specific tasks should be specifically identified on boat crew evaluation checklists.
- The use of checklists developed by standardization teams should be used when applicable.

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**C.8. Evaluators**

CO/OIC designated evaluators shall complete QEB checklists. For practical evaluations, evaluators shall be:

- The most qualified and experienced members available.
- Thoroughly familiar with the references and the QEB checklists for the desired designation.
- Designated in writing by the unit CO/OIC.
- Currently certified.

The trainee's trainer/mentor should be excluded from the evaluation process.

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## Indoctrination Program

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**C.9. Purpose**

Each unit shall develop and implement an Indoctrination Program. The purpose of the Indoctrination Program shall be to familiarize each new member with the basic administration, organization, and standard operating procedures of the unit.

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**C.10. Structure**

The program shall be structured so that it can normally be completed within two weeks of the member reporting aboard. Specific attention shall be given to including critical safety-related issues and programs. Certain PQS and JQR or portions of a PQS or JQR may be required as part of the Indoctrination Program.

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## Training Records

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- C.11. Electronic Files** COs/OICs shall ensure required training information is entered into the Abstract of Operations (AOPS), Training Management Tool (TMT), or appropriate database.
- 
- C.12. Individual Training Records** Standardization of individual training records is necessary to permit an orderly review of training accomplished and to evaluate the effectiveness of the unit training program. Individual training records shall be maintained for all personnel in folder CG-5285.
- 
- C.13. Structure** The individual training record shall be structured as follows:
- Inside Front Cover – Completed indoctrination checkoff sheets.
  - Section I – Copies of Certification Letters or Administrative Remarks Form (CG-3307) regarding PQS/JQR certification, revocation, and/or recertification.
  - Section II – Formal school completion letters or certificates. Copies of correspondence course completion letters.
  - Section III – Copies of correspondence related to advancement or promotion and performance based qualifications sheets including:
    - BO/BTM PQS.
    - Boat crew qualification PQS sign-off sheets.
    - Records of underway drills and operations.
    - Boarding team and boat crew practical examination assessments.
    - Dutystander designation letters of certification.
    - AOPS or TMT report reflecting completion of the most recent recurrent training and underway hours.
  - Section IV – Record of lectures attended on general military training, departmental/divisional training, or those associated with professional development programs (law enforcement, SAR training, etc.).
  - Section V – Miscellaneous training records and information.
- 
- C.14. Handling** Officers shall maintain their own training records. All members shall hand-carry their training records between units. The United States Coast Guard Training Record Form (CG-5285) is the standard training jacket for this purpose. Upon permanent change of **Station** (PCS), training records will be sealed and hand-carried by the member to the gaining command. Completed PQS sign-off sheets and letters of certification shall be maintained indefinitely. Each member’s record must be updated at least once each semi-annual period.
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## Section D. Duties and Responsibilities

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**Introduction** This Section reviews the responsibilities of the command cadre and various collateral duty assignments related to training.

**In this Section** This Section contains the following information:

Title	See Page
Command	2-90
Training Board	2-91
Training Petty Officer and Assistant Training Petty Officers	2-91
Educational Services Officer	2-92

---

### Command

**D.1. CO/OIC Responsibilities** Unit COs/OICs shall carry out an active unit training program based on the requirements of this Manual and Area/District directives. COs/OICs shall:

- Provide an appropriate level of guidance to ensure unit personnel, including subordinate unit (i.e., **Station (small)**) personnel, receive the quantity and quality of training needed to carry out assigned missions.
- Approve the Unit Training Plan.

**NOTE** 

Station (small) OICs shall also perform the duties of unit XPO and Unit Training Officer.

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**D.2. XO/XPO Responsibilities**

The unit XO/XPO shall:

- Serve as chairman of the unit's Training Board.
  - Supervise the Training Officer/Training Petty Officer.
  - Maintain liaison with the designated Educational Services Officer.
  - Establish and administer the Indoctrination Program.
  - Publish scheduled training activities in the Plan-of-the-Day/Week.
-



## Training Board

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**D.3. Membership** Training Board membership shall, at a minimum, include the following:

- XO/XPO
  - All Department Heads
  - ANT supervisor (if assigned)
  - Training Petty Officer (if assigned)
  - Coxswain/Surfman
- 

**D.4. Responsibilities** The Training Board shall:

- Prepare the Unit Training Plan to establish training policies and priorities; define unit needs and specify training objectives to meet mission responsibilities.
  - Supervise and control training and periodically review and modify training policies and programs to adapt to changing needs and conditions.
  - Manage the Unit Training Plan by scheduling unit drills and exercises, departmental training periods, professional development training, and schedules for accomplishing general military training.
- 

## Training Petty Officer and Assistant Training Petty Officers

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**D.5. Unit Training Officer/Petty Officer Responsibilities** The Unit Training Officer/Petty Officer (E-6 or above), and **Station (small) OICs** shall:

- Coordinate all unit training.
  - Monitor the unit training program.
  - Maintain unit training program guidance.
  - Maintain a record of general military training conducted in accordance with this Manual.
  - Maintain a record of PQS/JQR qualified personnel in accordance with this Manual and act as PQS/JQR Coordinator.
  - Maintain a record of completed drills and exercises in accordance with this Manual.
  - Maintain a central file of lesson plan outlines for all recurring training.
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#### **D.6. Assistant Training Officer Responsibilities**

It is recommended that units designate Petty Officers (E-4 and/or as designated by the discretion of the CO/OIC), in writing, as Assistant Training Petty Officers, who shall:

- Ensure departmental training and PQS/JQR programs are established and implemented in accordance with this Manual and appropriate Area/District instructions.
- Monitor professional qualification programs and ensure appropriate documentation is completed.
- Implement and monitor recurrent training associated with professional development programs.
- Assign or act as instructors for each training period. Monitor the effectiveness of instruction. Provide appropriate guidance and feedback.
- Ensure lesson plan outlines are complete, accurate, and achieve desired training objectives.
- Advise the Training Officer/Petty Officer (or XO/XPO, or **Station (small)** OIC) of training progress and deficiencies.
- Coordinate the development of lesson plan outlines.
- Ensure the accuracy and currency of individual training records for assigned personnel.

#### **NOTE**

Designated Assistant Training Petty Officers may include the unit EPO, ANT Supervisor (if assigned) or Operations Petty Officer (if assigned).

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### **Educational Services Officer**

#### **D.7. Authority and Coordination**

Educational services for units shall normally be coordinated via a command authorized by the Coast Guard Institute to receive, administer, and forward correspondence course testing material (i.e., a POPFAC). Unit XOs/XPOs shall coordinate educational services via the selected POPFAC's Educational Services Officer. Parent units shall coordinate educational services for **Station (small)** personnel.

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## Section E. Personnel Qualification Standards (PQS)

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**Introduction** Unit dutystanders, including boat crew, boarding team, and duty section personnel (e.g., communications watchstander and OOD) require thorough training to function as a safe and effective team. To ensure unit crewmembers develop and maintain a high standard of proficiency, COs and OICs shall ensure completion of PQS training as described in this Chapter.

**NOTE**  COs and OICs shall require any training beyond the minimum training specified herein as necessary to maintain proficiency.

**References for this Section**

- a. *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series)
- d. *Cutter Surface Swimmer Program*, COMDTINST 16134.2 (series)
- e. *Enlisted Qualification Codes Manual*, COMDTINST M1414.9 (series)
- f. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
- g. *Personnel Manual*, COMDTINST M1000.6 (series)

**E.1. Command Responsibilities**

COs/OICs shall ensure qualification requirements are completed in a timely manner. Personnel shall not be allowed to remain in a qualification program without satisfactory progress for extended periods. Trainee status shall not be used to allow undesignated members to work as a certified member of a boat crew, boarding team, or duty section. Unit dutystander certifications are issued or revoked by the unit's CO/OIC.

**E.2. Certifications**

Every unit has unique operational requirements based on their area of responsibility and tempo of operations or demand for Coast Guard services. The following list of unit certifications is considered representative, but not all inclusive:

- Communications watchstanders
  - Boat crew members
  - Boat engineers
  - Coxswains
  - Heavy weather coxswain
  - Surfmen
  - Boarding team members
  - Boarding Officers
  - OODs
-



E.2.a. Cross-Designations

Members of the boat crew may be cross-designated as boarding team members or Boarding Officers, but all members of the boat crew are not required to be cross-designated.

- Personnel assigned to boat **Stations** are expected to achieve communications watchstander and boarding team member certification.
- Petty Officers and above assigned to **Station, MSST, PSU** boat operations are expected to achieve Boarding Officer certification.

**E.3. Trainee Status**

Members “in-training” may participate in boat operations or other related operational activities as trainees. A trainee shall not be used as a substitute for a certified member of a boat crew, boarding team, or duty section.

**E.4. Qualification Codes and Loss of Certification**

The appropriate enlisted qualification code is assigned and an entry made in the individual’s personnel record when they have met the requirements set forth in this Manual and the *Enlisted Qualification Codes Manual*, COMDTINST M1414.9 (series). The CO/OIC is responsible to ensure the PERSRU/unit Yeoman will make a CGHRMS entry in the member’s PDR and electronic PDR.

E.4.a. Loss of Certification

COs/OICs shall take appropriate action when members do not maintain a current qualification/certification or fail to meet recurrent training minimums. Whenever personnel are encountered who, after a reasonable amount of time, are unable to qualify for boat crew duties, administrative action should be taken.

E.4.b. Documentation Requirements

Any failure to qualify or maintain currency requirements should be documented, delineating the areas of improvement required prior to qualification or recertification, and entered into the member’s training record.

**E.5. Surface Swimmer Qualification Requirements**

It is recommended that prospective surface swimmers complete the *Cutter Surface Swimmer Program*, COMDTINST 16134.2 (series) requirements, in addition to the Boat Crew member PQS requirements:

- Task 101 (series): Safety Fundamentals
- Task 201 (series): Swimmer’s Outfit System
- Task 202 (series): Swimmer External Equipment System
- Task 203 (series): Personnel Recovery Systems
- Task 204 (series): Swimmer/Tender Communications
- Task 301.1 (series): Red Cross Emergency Water Safety Course (or equivalent) including the final three-hour optional session.
- Task 301.2 (series): Swimmer Rescue Tasks
- Task 302 (series): Watchunit – Swimmer/Tender



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**E.6. Officer-of-the-Day Qualification Requirements**

If the unit has a requirement for an OOD, job qualification requirements (JQR) shall address the following:

- Unit operations, including SAR, LE, RBS, MS.
- Boat operations.
- Unit/facility emergencies (e.g., fire, bomb scare, civil unrest).
- Duty section daily routine.
- Public affairs and community affairs.
- **Station** OODs shall successfully complete SAR School or the SAR Fundamentals correspondence course.

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**E.7. Communications Watchstander Qualification Requirements**

Qualification as a communications watchstander requires successful completion of the following:

- *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series).
- A local area knowledge and geographic point examination.

COs/OICs are encouraged to add additional requirements as necessary to meet unique operating requirements. The recommended time limit for completion of communications watchstander qualification requirements, including supervised break-ins for evaluation, is 30 days. The member's experience, other unit work or duty, and unit specific PQS requirements, including area familiarization requirements, are the primary factors that should be considered in determining the time to be allotted.

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**E.8. Boarding Team Training Program Requirements**

All unit personnel tasked with boarding team responsibilities shall be guided by the requirements specified herein.

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**E.8.a. General Requirements**

Prospective Boarding Team Members (BTMs) and Boarding Officers (BOs) shall complete the PQS tasks as prescribed in the *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series).

- BO/BTM PQS instructors must be command designated and MLE School Boarding Officer Course graduates.
  - Prospective BTMs shall complete all BTM PQS tasks.
  - Boarding team member certification is a prerequisite for Boarding Officer certification.
  - CO/OIC can require successful completion of specialty and optional BO/BTM PQS tasks for Boarding Officer certification.
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E.8.b. Trainee Selection

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Trainees should be selected by the Unit Commander or Training Petty Officer in consultation with other Unit Petty Officers. Recommended prerequisites for trainees include:

- Certified in a boat crew position.
- Maturity to take on new responsibilities.
- Physical fitness.
- Willingness and ability to act as the Coast Guard's direct representative.

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**E.9. Boarding Team Member Qualification Requirements**

Qualification as boarding team member requires successful completion of the *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series), *Section One*.

A newly assigned member with no experience can complete boarding team member PQS tasks, with the exception of weapons qualification tasks (1-02, and optional 3-07, 3-08) in approximately 30 days. Completion of the weapons qualification tasks should not be considered in determining time required to complete the BTM PQS.

Member experience, other unit work or duty, and unit specific PQS requirements, including specialty and optional law enforcement requirements (e.g., 3-07, 3-08) are the primary factors to consider in determining the appropriate time to be allotted.

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**E.10. Boarding Officer Qualification Requirements**

Qualification as boarding team member requires successful completion of the *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series), *Sections One and Two*.

Boarding Officer PQS tasks, with the exception of specialty and optional qualification tasks can be completed in approximately 90 days or less for a newly assigned member with no experience.

Member experience, other unit work or duty, and unit specific PQS requirements, including specialty and optional law enforcement requirements are the primary factors that should be considered in determining the time to be allotted.

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## Section F. Certification/Lapse and Recertification

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<b>Introduction</b>	COs/OICs shall only consider members for certification after they have successfully completed the applicable PQS and a thorough practical evaluation, and have been recommended by the appropriate Qualification Examining Board.
<b>References for this Section</b>	<ol style="list-style-type: none"><li>a. <i>Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)</i>, COMDTINST M16247.3 (series)</li><li>b. <i>Communications Watchstander Qualification Guide</i>, COMDTINST M16120.7 (series)</li></ol>
<b>F.1. Dutystander Certification</b>	<p>Final written certification from the CO/OIC is required for all dutystander designations. Final certification is the COs/OICs official statement that the member has demonstrated:</p> <ul style="list-style-type: none"><li>• The minimum required knowledge and skill for the position designation as evidenced by the completed PQS, practical evaluation, and the positive recommendation of the qualification examining board.</li><li>• The judgment and maturity required to:<ul style="list-style-type: none"><li>▪ Act responsibly.</li><li>▪ Perform assigned duties in the manner prescribed by Coast Guard directives and regulations.</li><li>▪ Function as a team member.</li><li>▪ Interact positively with the public in the execution of Coast Guard duties.</li></ul></li><li>• For Boarding Officers and boarding team members, the necessary temperament and judgment to carry and properly use weapons in the performance of their duties.</li></ul>
<b>F.2. Auxiliarist Certification</b>	Documentation of certification by Coast Guard Auxiliarists should be forwarded to the District Director of Auxiliary.
<b>F.3. Revoking Certifications</b>	COs/OICs shall revoke certification when members do not maintain Commandant or unit standards for certification, and fail to meet recurrent training minimums.
F.3.a. CO/OIC Authority	The CO/OIC of a unit has the authority to revoke the certification(s) of any individual attached to the unit. COs/OICs shall revoke certification upon loss of trust or confidence in the member's ability to perform assigned duties.
F.3.b. Relief for Cause	In all cases except medical situations of a temporary nature, a member of the command cadre unable or unwilling to attain required certification or maintain currency shall normally be relieved for cause.
F.3.c. Medical Situations	Medical situations of a temporary nature are defined as conditions that preclude a member from boat operations for a period of no more than 12 months.



**F.4.  
Documentation  
Requirements**

Any failure to qualify or maintain currency requirements should be documented, delineating the areas of improvement required prior to qualification or recertification, and entered into the member’s training record.

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## **Section G. Currency Maintenance**

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**Introduction**

Unit personnel must meet proficiency requirements through performance during normal operations or dedicated training operations in order to maintain competency in their respective dutystanding positions.

**References for  
this Section**

- a. *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series)
- b. *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series)

**G.1.  
Requirements**

In addition to the position specific currency requirements contained in personnel qualification standards or this Manual, Unit Commanders may impose additional requirements. If an individual fails to meet the prescribed currency requirements for the position designation, he/she shall be required to recertify.

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## **Section H. Formal Schools**

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**Introduction**

The Coast Guard’s training infrastructure does not have the capacity to completely support formal school requirements for units. **Table 2-1** through **Table 2-4** represent the desired formal school requirements for units. Commandant (G-OCS) is continuing to develop specific, supported formal school requirements for unit personnel. Commandant (G-OCS) will promulgate these requirements when established.

**References for  
this Section**

- a. *Class Convening Schedule for Coast Guard Class “A” and “C” Resident and Exportable Training Courses*, COMDTNOTE 1540
- b. *Training and Education Manual*, COMDTINST M1500.10 (series).



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**H.1. Tracking  
Formal School  
Records**

Units shall track and maintain a comprehensive record of formal school completion for all assigned personnel. The forms listed below may be used in conjunction with readiness decision aids for tracking and reporting purposes. However, units may track formal school completion using these forms or any other paper/electronic format they find suitable.

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**H.2. Forms**

- Coast Guard Mission Area Formal School Record Form (CG-5396) is used to record formal school data associated with Coast Guard mission areas.
  - Coast Guard formal school schedules are found in the *Class Convening Schedule for Coast Guard Class “A” and “C” Resident and Exportable Courses*, COMDTNOTE 1540 and are posted on TQC’s Internet home page.
- 

**H.3. Training  
Policies**

Formal school availability to meet the requirements set forth in **Table 2-1** through **Table 2-4** is limited by funding constraints, quota restrictions, and/or class sizes.

- Formal school quotas are allocated for units or positions.
  - There are insufficient quotas and funding available to meet all formal school/course requirements.
  - Units must rely on the PQS system and/or on-the-job training (OJT) to qualify personnel for many jobs and watch positions.
- 

**H.4. Formal  
School Quota  
Management**

The Coast Guard Personnel Command (CGPC) will make every effort to assign personnel to units in accordance with the training requirements identified in this Manual.

- Quotas assigned should be used, unless a significant degradation in mission performance would result due to the individual’s absence, or there no longer is a need for the course (i.e., PQS qualification as substitute). Notification procedures for these instances are outlined in the *Training and Education Manual*, COMDTINST M1500.10 (series).
- 

**H.5. Formal  
School Quota  
Procedures**

The procedures for units to obtain formal school quotas are provided in the *Training and Education Manual*, COMDTINST M1500.10 (series) and *Class Convening Schedule for Coast Guard Class “A” and “C” Resident and Exportable Training Courses*, COMDTNOTE 1540.

- Members shall submit a Short-Term Resident Training Request (STTR) for all formal class “C” schools.
  - *Class Convening Schedule for Coast Guard Class “A” and “C” Resident and Exportable Training Courses*, COMDTNOTE 1540 may be accessed via the Internet.
  - Other managed quotas. Some course managers receive STTRs and prepare class rosters for some formal schools. The class rosters are forwarded to TQC who approves the entitlements and issues message orders. Units should contact the appropriate course manager, as indicated in *Class Convening Schedule for Coast Guard Class “A” and “C” Resident and Exportable Training Courses*, COMDTNOTE 1540, for specific information regarding quota allocation.
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## H.6. Master Training Lists (MTLs)

Master Training Lists (MTLs) are a table-formatted administrative tool used to establish formal school requirements common to most **Stations** and **Aids to Navigation Teams**. Other boat units may use the table as a recommended guide if applicable.

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### H.6.a. Table 2-1

**Table 2-1** sets forth school requirements that are NOT tied to specific billets. It lists training requirements in matrix format by course title and unit type [i.e., **Station** and **Station (small)**].

- The required number of graduates from a particular course may be found by looking below the unit type heading.
  - Course managers (CM), course duration (DUR), and course number (COURSE #) are depicted in the same manner as in the legend for **Table 2-2** through **Table 2-4**.
  - The training listed in **Table 2-1** is mandatory, but not required to be completed prior to arrival.
- 

### H.6.b. Table 2-2 Through Table 2-4

**Table 2-2** through **Table 2-4** list formal school requirements tied to specific ranks/rates and positions at most units, including course titles and course numbers.

Additional information contained within the tables is as follows:

- The course length (DUR) is expressed in days and indicates time from class convening until completion, including intervening weekends (i.e., total time away from unit, except travel time).
  - Course managers (CM) are listed for each of the formal schools. The course manager, in conjunction with Commandant (G-WTT), determines the number and mix of personnel required to attend the school(s).
- 

## H.7. Equivalent Training

Course Managers, in conjunction with Commandant (G-WTT), may certify training as equivalent to formal school completion. Units may request certification of other than formal school courses by forwarding a written request for consideration to Commandant (G-WTT) via the chain of command, copies to the Course Manager and Commandant (G-OCS). Equivalent training (i.e., striker programs) must be completed in accordance with all applicable instructions and directives.

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<b>Table 2-1 Formal School Requirements Non-Billet Specific - All Stations</b>					
DUR=Duration	CM=Course Manager	A/H=All-Hands	AN=As Needed		
Course #	Course Title	DUR	CM	Sta	Sta(s)
G-K-CDAR	CDAR – Collateral Duty Addictions Representative	12	G-WKH	1	
G-ELM-CSS	Centralized Supply	5	G-SLS	1	
DEOMI-001	Civil Rights Officer Course	5	G-HI	1	
AFIS-COPAC	Coast Guard Public Affairs	5	G-IP	1	
G-P-FAR	Family Advocacy Representative	5-12	G-WTL	Note 1	
K-WELL-005	Health & Fitness Leader	5	G-WKH	1	
CFM-01	LUFS, Basic	5	G-CPM	1	
CG-100	Simplified Acquisition Procedures, Basic	5	G-CPM	1	
MLE-05	Boarding Team Member	12	G-OPL	Note 2, 5	Note 2, 5
MLE-01	Basic Boarding Officer	32	G-OPL	Note 2, 5	Note 2, 5
G-KSE-052	TCT-Unit	2	G-WKS	A/H	A/H
G-KSE-060	Unit Safety Coordinator	5	G-WKS	1	
CGINT100	USCG Introduction to Intel	5	G-OCI	1	
G-A-005	Contracting Officer Tech. Rep. (COTR)	5	G-CPM	AN	AN
G-KSE-024	Shore Confined Space Entry	3	G-WKS	AN	AN
500986	Lifesaver Training (EMS)	5	G-WKH	Note 2	Note 2
RFTC	Living Marine Resources (Fisheries)	5	AREA	Note 2	Note 2
MS-527	Commercial Fishing Vessel Examiner	5	G-MRP	Note 2	Note 2
ANC-AC	Minor Aids to Navigation Tech. <sup>3</sup>	5	G-OPN	2	
ANC-AP	Aid Positioning <sup>3</sup>	5	G-OPN	2	
ANC-LT	Automated Lighthouse <sup>3</sup>	26	G-OPN	1	
ANC-MAM	Minor AtoN Maint. <sup>3</sup>	5	G-OPN	2	
ANC-FD	Fog Detector <sup>3</sup>	5	G-OPN	1	
G-KSE-022	Crane and Weight Handling	3-5	G-WKS	AN	
G-P-Instructor	Instructor Development Course <sup>4</sup>	5	G-WTL	1	1

Notes:

- Unit COs/OICs and XO/XPOs are required to attend training at least once during their command assignment.
- Training requirements for Lifesaver, Boarding Team Member, Boarding Officer, Fisheries, and Commercial Fishing Vessel Examiner training are based on the number of ready boats assigned. (e.g., 5 positions required per ready boat for a 1-in-4 duty rotation).
- AtoN/ANT specific training is mandatory for units with ANT personnel and AtoN boats assigned.
- Course desired to provide necessary skills needed to conduct performance based training.
- The number of qualified personnel required onboard does not reflect the number of school quotas allowed.



**Table 2-2  
Formal Schools - UTB/RB Stations**

<b>DUR=Duration</b>		<b>CM=Course Manager</b>		
<b>Commanding Officer (CO)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
ANT Assigned	ANC-ANT	Officer-in-Charge AtoN Team	12	G-OPN
	CG-062X	Search Coordination and Execution (SC&E) <sup>3</sup>	4	G-OPR
		RFO Evaluator (Sector/Group CDR Designated)		G-OCS
<b>Officer-in-Charge (OIC)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
ANT Assigned	ANC-ANT	Officer-in-Charge AtoN Team	12	G-OPN
	CG-063	Coxswain "C" School <sup>1</sup>	26	G-OCS
	CG-062X	Search Coordination and Execution (SC&E) <sup>3</sup>	4	G-OPR
		RFO Evaluator (Sector/Group CDR Designated)		G-OCS
<b>Executive Officer (XO)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	CG-062X	Search Coordination and Execution (SC&E) <sup>3</sup>	4	G-OPR
		RFO Evaluator (CO Designated)		G-OCS
<b>Executive Petty Officer (XPO)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	CG-063	Coxswain "C" School <sup>1</sup>	26	G-OCS
	CG-062X	Search Coordination and Execution (SC&E) <sup>3</sup>	4	G-OPR
		RFO Evaluator (CO/OIC Designated)		G-OCS
<b>Engineering Petty Officer (EPO)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	MK-01	Engineering Administration (Ashore)	5	G-SRF
	LANT/PAC	Environmental Compliance Workshop Basic	4	G-SR
UTB Assigned	Commercial	Cummins, VT903M Operation Maint. & T.S.	3	G-OCS
O/B Bt Assigned	Commercial	Outboard Motor Maintenance & Repair	5-12	G-OCS
	G-KSE-024	Shore Confined Space Entry	3	G-WKS
		RFO Evaluator (CO/OIC Designated)		G-OCS
<b>Assistant EPO (if assigned)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	MK-01	Engineering Administration (Ashore)	5	G-SFR
	LANT/PAC	Environmental Compliance Workshop Basic	4	G-SR
UTB Assigned	Commercial	Cummins, VT903M Operation Maint. & T.S.	3	G-OCS
O/B Bt Assigned	Commercial	Outboard Motor Maintenance & Repair	5-12	G-OCS
		RFO Evaluator (CO Designated)		G-OCS



**Table 2-2  
 Formal Schools - UTB/RB Stations – Continued**

<b>ANT Supervisor (ANT assigned)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	ANC-ANT	Officer-in-Charge AtoN Team	12	G-OPN
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
	ANC-AC	AC Minor Aids to Navigation	5	G-OPN
	ANC-AP	Aid Positioning	5	G-OPN
	G-KSE-022	Crane and Weight Handling	3-5	G-WKS
	ANC-MAM	Minor AtoN Maint. Service Tech.	5	G-OPN
<b>Senior Boatswain Mate (CO Station)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
	CG-062X	Search Coordination and Execution (SC&E) <sup>3</sup>	4	G-OPR
		RFO Evaluator (CO Desig)		G-OCS
<b>Officer-of-the-Day (OOD)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-062X	Search Coordination and Execution (SC&E) <sup>3</sup>	4	G-OPR
<b>AtoN Duty</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	G-KSE-022	Crane and Weight Handling	3-5	G-WKS
<b>Coxswain (BM2 and Above)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
<b>Apprentice Cox’n/Boat Crew (BM3)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	CG-063	Coxswain “C” School	26	G-OCS
<b>Boat Crew Member (SA/SN)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
<b>Boat Engineer (MK2 &amp; Above)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer School		G-OCS
UTB Assigned	Commercial	Cummins, VT903M Operation Maint. & T.S.	3	G-OCS
O/B Bt Assigned	Commercial	Outboard Motor Maintenance & Repair	5-12	G-OCS
<b>Boat Engineer (MK3)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer		G-OCS



<b>Table 2-2</b>				
<b>Formal Schools - UTB/RB Stations – Continued</b>				
<b>Boat Engineer (FA/FN)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer		G-OCS
<b>Galley Supv./FS1 (if assigned)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-022	FS Paperwork Management & Admin	19	G-WKW
	K-SS-002	Nutrition and Wellness Cooking	5	G-WKW
Equivalent Training:				
1. Coxswain Certification/Standard Boat (Coxswain PQS)				
2. Coxswain Certification/RHIB (Coxswain PQS)				
3. SAR Fundamentals Correspondence Course				

<b>Table 2-3</b>				
<b>Formal Schools - MLB Stations</b>				
<b>DUR=Duration</b>		<b>CM=Course Manager</b>		
<b>Commanding Officer (CO)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
ANT Assigned	ANC-ANT	Officer-in-Charge AtoN Team	12	G-OPN
	CG-062X	Search Coordination and Execution (SC&E)	4	G-OPR
	CG-065	MLB (44' / 47') OPS/RFO Supervisor Course	5	G-OCS
		RFO Evaluator (Sector/Group CDR Designated)		G-OCS
<b>Officer-in-Charge (OIC)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
ANT Assigned	ANC-ANT	Officer-in-Charge AtoN Team	12	G-OPN
	CG-063	Coxswain "C" School <sup>1</sup>	26	G-OCS
	CG-068	MLB Basic Coxswain Course <sup>2</sup>	12	G-OCS
	CG-064	NMLBS Heavy Weather Coxswain <sup>3</sup>	12	G-OCS
	CG-062X	Search Coordination and Execution (SC&E)	4	G-OPR
	CG-065	MLB (44' / 47') OPS/RFO Supervisor Course	5	G-OCS
		RFO Evaluator (Sector/Group CDR Designated)		G-OCS
<b>Executive Officer (XO)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	CG-062X	Search Coordination and Execution (SC&E)	4	G-OPR
	CG-065	MLB (44' / 47') OPS/RFO Supervisor Course	5	G-OCS
		RFO Evaluator (CO Designated)		G-OCS



**Table 2-3  
 Formal Schools - MLB Stations – Continued**

<b>Executive Petty Officer (XPO)</b>	<b>Course #</b>		<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	PCO/PXO-3	Prospective CO/XO Ashore	12	G-OCS
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
	CG-068	MLB Basic Coxswain Course <sup>2</sup>	12	G-OCS
	CG-064	NMLBS Heavy Weather Coxswain <sup>3</sup>	12	G-OCS
	CG-062X	Search Coordination and Execution (SC&E)	4	G-OPR
	CG-065	MLB (44' / 47') OPS/RFO Supervisor Course	5	G-OCS
		RFO Evaluator (CO/OIC Designated)		G-OCS
<b>Engineering Petty Officer (EPO)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	MK-01	Engineering Administration (Ashore)	5	G-SRF
	LANT/PAC	Environmental Compliance Workshop Basic	4	G-SR
UTB Assigned	Commercial	Cummins, VT903M Operation Maint. & T.S.	3	G-OCS
	MK-06	Hydraulic Systems and Equipment	12	G-SRF
	CG-069	MLB (44' / 47') Engine Maint/RFO Course	5	G-OCS
O/B Bt Assigned	Commercial	Outboard Motor Maintenance & Repair	5-12	G-OCS
	G-KSE-024	Shore Confined Space Entry	3	G-WKS
		RFO Evaluator (CO/OIC Designated)		G-OCS
<b>Assistant EPO (if assigned)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	MK-01	Engineering Administration (Ashore)	5	G-SFR
	LANT/PAC	Environmental Compliance Workshop Basic	4	G-SR
UTB Assigned	Commercial	Cummins, VT903M Operation Maint. & T.S.	3	G-OCS
	MK-06	Hydraulic Systems and Equipment	12	G-SRF
	CG-069	MLB (44' / 47') Engine Maint/RFO Course	5	G-OCS
O/B Bt Assigned	Commercial	Outboard Motor Maintenance & Repair	5-12	G-OCS
		RFO Evaluator (CO Designated)		G-OCS
<b>ANT Supervisor (ANT assigned)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	ANC-ANT	Officer-in-Charge AtoN Team	12	G-OPN
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
	ANC-AC	AC Minor Aids to Navigation	5	G-OPN
	ANC-AP	Aid Positioning	5	G-OPN
	G-KSE-022	Crane and Weight Handling	3-5	G-WKS
	ANC-MAM	Minor AtoN Maint. Service Tech	5	G-OPN



**Table 2-3  
Formal Schools - MLB Stations – Continued**

<b>Senior Boatswain Mate (CO Station)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
	CG-068	MLB Basic Coxswain Course <sup>2</sup>	12	G-OCS
	CG-064	NMLBS Heavy Weather Coxswain <sup>3</sup>	12	G-OCS
	CG-062X	Search Coordination and Execution (SC&E)	4	G-OPR
	CG-065	MLB (44' / 47') OPS/RFO Supervisor Course	5	C-OCS
		RFO Evaluator (CO Desig)		G-OCS
<b>Officer-of-the-Day (OOD)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-062X	Search Coordination and Execution (SC&E)	4	G-OPR
<b>Surfman</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
	CG-068	MLB Basic Coxswain Course <sup>2</sup>	12	G-OCS
	CG-064	NMLBS Heavy Weather Coxswain <sup>3</sup>	12	G-OCS
<b>Coxswain</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
	CG-068	MLB Basic Coxswain Course <sup>2</sup>	12	G-OCS
	CG-064	NMLBS Heavy Weather Coxswain <sup>3</sup>	12	G-OCS
<b>Apprentice Cox'n/Boat Crew (BM3)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
<b>Boat Crew Member (SA/SN)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
<b>Boat Engineer (MK2 &amp; Above)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer School		G-OCS
UTB Assigned	Commercial	Cummins, VT903M Operation Maint. & T.S.	3	G-OCS
	MK-06	Hydraulic Systems and Equipment (MK-06)	12	G-SRF
O/B Bt Assigned	Commercial	Outboard Motor Maintenance & Repair	5-12	G-OCS
<b>Boat Engineer (MK3)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer		G-OCS
<b>Boat Engineer (FA/FN)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer		G-OCS



<b>Table 2-3</b>				
<b>Formal Schools - MLB Stations – Continued</b>				
<b>Galley Supv./FS1 (if assigned)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-022	FS Paperwork Management & Admin	19	G-WKW
	K-SS-002	Nutrition and Wellness Cooking	5	G-WKW
Equivalent Training:				
1. Coxswain Certification/Standard Boat (Coxswain PQS)				
2. Coxswain Certification/MLB (Coxswain PQS)				
3. Surfman Certification (Surfman PQS)				
4. Coxswain Certification/RHIB (Coxswain PQS)				

<b>Table 2-4</b>				
<b>Formal Schools - Non-Pooled Stations (small)</b>				
<b>DUR=Duration</b>			<b>CM=Course Manager</b>	
<b>Officer-in-Charge (OIC)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-067	Officer-in-Charge/XPO School	12	G-OCS
	PCO/PXO-3	Prospective CO/XO Ashore	12	G-OCS
	CG-063	Coxswain “C” School	26	G-OCS
	CG-060	Maritime SAR Planning <sup>3</sup>	18	G-OPR
		RFO Evaluator (Sector/Group CDR Designated)		G-OCS
<b>Coxswain (BM2 and Above)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
<b>Apprentice Cox’n/Boat Crew (BM3)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	CG-063	Coxswain “C” School <sup>1</sup>	26	G-OCS
<b>Boat Crew Member (SA/SN)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
<b>Boat Engineer (MK2 &amp; Above)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer School		G-OCS
UTB Assigned	Commercial	Cummins, VT903M Operation Maint. & T.S.	3	G-OCS
O/B Bt Assigned	Commercial	Outboard Motor Maintenance & Repair	5-12	G-OCS
<b>Boat Engineer (MK3)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer		G-OCS



<b>Table 2-4 Formal Schools - Non-Pooled Stations (small) – Continued</b>				
<b>Boat Engineer (FA/FN)</b>	<b>Course #</b>	<b>Course Title</b>	<b>DUR</b>	<b>CM</b>
	TBD	Boat Crew Member School		G-OCS
	TBD	Boat Engineer		G-OCS
Equivalent Training:				
1. Coxswain Certification/Standard Boat (Coxswain PQS)				
2. Coxswain Certification/RHIB (Coxswain PQS)				
3. SAR Fundamentals Correspondence Course				

## Section I. General Military Training

### Introduction

General military training is usually carried out at the unit level. It is usually imposed by program managers in support of broad Coast Guard policies, programs or missions. Until now, these requirements existed only within a wide variety of directives promulgated by various programs. Although many of these “requirements” were established as optional or recommended objectives, this distinction was often unclear.

This Section is divided into three tables in order to clarify the distinction between required and optional training.

- **Table 2-5.** Lists required all-hands training.
- **Table 2-6 through Table 2-7.** Lists training that is required only for selected personnel.
- **Table 2-8.** Lists recommended (not required) training.

Operational Commanders may require units under their cognizance to conduct additional general military training. This Manual does not include general military training requirements imposed by Areas and Districts.

### I.1. Scheduling and Planning

The Training Board shall schedule all-hands general military training (**Table 2-5**) in the Unit Training Plan. The XO/XPO is responsible for ensuring selected personnel training is scheduled and conducted as listed in **Table 2-6** in the Unit Training Plans. There is no requirement to have all unit personnel complete all-hands training at the same time.

- All-hands training should be scheduled to correspond with duty schedules (i.e., duty section training).
- Standardized lesson plans and training materials are required for duty section training.
- The training plan should identify a primary and secondary trainer for each training topic and duty section.



**I.2. Lesson Plans** For recurring training, it is recommended that a member assigned by the Training Board develop lesson plan outlines. The Training Officer shall maintain lesson plan outlines. Sharing of lesson plans among units promotes standardization and mitigates the administrative burden on individual units. Program managers may provide training materials such as lesson plans or videotapes.

**I.3. Documentation** The Senior Petty Officer in the duty section shall ensure all-hands general military training (**Table 2-5**) is documented in Section IV of individuals’ training records. Program managers may require additional documentation or administrative actions.

<b>Training</b>	<b>Sponsor</b>	<b>Reference</b>	<b>Freq</b>
AIS Security Awareness	CG-65	COMDTINST M5500.13 (series)	A
AtoN Battery Training (ANTs only)	G-SEC	COMDTINST 16478.12 (series)	A
Military Civil Rights/Human Relations	G-H	COMDTINST M5350.4 (series)	T
Critical Incident Stress Management	G-WKW	COMDTINST 1754.3 (series)	B
Drug and Alcohol Awareness	G-WKW	COMDTINST M6200.1 (series)	S
Hazard Communicating/Workplace	G-WKS	COMDTINST 6260.21 (series)	A
OPSEC Management	CG-861	COMDTINST M5510.23 (series)	A
Respiratory Protection Program	G-WKS	COMDTINST M6260.2 (series)	A
Security Awareness	CG-861	COMDTINST M5528.1 (series)	A
Sexual Harassment Training	G-H	COMDTINST M5350.4 (series)	A
Suicide Awareness/Prevention	G-WKW	COMDTINST 1734.1 (series)	A
Workplace Violence	G-WKW	COMDTINST 5370.1 (series)	A
TCT-Unit Level	G-WKS	COMDTINST 1541.1 (series)	B

<b>Training</b>	<b>Sponsor</b>	<b>Reference</b>	<b>Freq</b>
Bloodborne Pathogens	G-WKH	COMDTINST M6220.8 (series)	AR
Continuing Medical Education (CME)	G-WKH	COMDTINST M16135.4 (series)	A
Electrical Safety	G-SCE	COMDTINST M10550.25 (series)	S
Emergency Action Plan	CG-65	COMDTINST 5500.13 (series)	A
Ethics Training	G-LGL	COMDTINST M5370.8 (series)	A
Family Advocacy Representative	G-WKW	COMDTINST M1750.7 (series)	AR
Food Service Sanitation Refresher	G-WKW	COMDTINST M6240.4 (series)	A
Hazardous Waste	G-SEC	COMDTINST M16478.1 (series)	A
HAZWOPER	G-M	COMDTINST M16000.6 (series)	A
Heat Stress Program	G-WKS	COMDTINST M6260.17 (series)	A
Lifesaver Designation Proficiency	TBD		
Supervisor Alcohol Training	G-WKW	COMDTINST M6200.1 (series)	T

Frequency symbols:

- |                |               |                  |              |
|----------------|---------------|------------------|--------------|
| C – Continuous | T – Triennial | AR – As Required | A – Annual   |
| Q – Quarterly  | R – Regularly | S – Semiannual   | B – Biennial |



<b>Table 2-7</b>			
<b>Commandant Mandated Training - Boarding Team Requirements</b>			
<b>Training</b>	<b>Sponsor</b>	<b>Reference</b>	<b>Freq</b>
Authority & Jurisdiction (BO only)	G-OPL	COMDTINST M16247.3 (series)	A
Commercial F/V Safety (BO only)	G-M	COMDTINST 16711.14 (series)	A
BWI Enforcement (BO only)	G-OPL	COMDTINST M16247.3 (series)	A
Conduct a Frisk Search	G-OPL	COMDTINST M16247.3 (series)	A
Conduct a Search Incident to Arrest	G-OPL	COMDTINST M16247.3 (series)	A
Expandable Baton Tactics	G-OPL	COMDTINST M16247.3 (series)	A
Handcuff a Subject	G-OPL	COMDTINST M16247.3 (series)	A
Hostage Situation	G-OPL	COMDTINST M16247.3 (series)	A
Level 1-5 Tactics	G-OPL	COMDTINST M16247.3 (series)	A
Level 3 Tactics	G-OPL	COMDTINST M16247.3 (series)	A
Level 4 Tactics	G-OPL	COMDTINST M16247.3 (series)	A
M9 Weapons Certification	G-OCU	COMDTINST M16247.3 (series)	S
MARPOL Training	G-M	COMDTINST M16000.6 (series)	A
Physical Fitness Standards	G-OPL	COMDTINST M16247.3 (series)	A
Remove a Weapon/Cooperative Subject	G-OPL	COMDTINST M16247.3 (series)	A
Riot Shotgun Familiarization	G-OCU	COMDTINST M16247.3 (series)	S
Tactical Concepts	G-OPL	COMDTINST M16247.3 (series)	A
Tactical Procedures	G-OPL	COMDTINST M16247.3 (series)	A
Use of Force Continuum	G-OPL	COMDTINST M16247.3 (series)	S
Weapons Retention	G-OPL	COMDTINST M16247.3 (series)	A



**Table 2-8  
 Commandant Recommended (Not Required) Training**

<b>Training</b>	<b>Sponsor</b>	<b>Reference</b>	<b>Freq</b>
CG Advancement System	G-W	COMDTINST M1000.6 (series)	A
Code of Conduct	G-W	COMDTINST M1000.6 (series)	AR
Educational Opportunities	G-W	COMDTINST M1500.10 (series)	S
Family Child Care Training	G-WKW	COMDTINST 1754.15 (series)	AR
Financial Management	G-WKW	COMDTINST M1000.6 (series)	A
Forklift Operations	G-SLP	COMDTINST M11240.9 (series)	AR
Geneva Convention	G-WT	COMDTINST M1500.10 (series)	AR
Hazing Awareness	G-W	COMDTINST 1610.1 (series)	AR
Indebtedness	G-W	COMDTINST M1000.6 (series)	AR
Ombudsman Training	G-WKW	COMDTINST 1750.4 (series)	AR
Personal Relationships	G-W	COMDTINST M1000.6 (series)	R
Privacy Act	CG-611	COMDTINST M5260.3 (series)	AR
Retirement/Separation Seminars	G-CCS	COMDTINST 1040.4 (series)	AR
Types of Discharge	G-W	COMDTINST M1000.6 (series)	AR
UCMJ	G-W	COMDTINST M1000.6 (series)	AR
Venereal Disease	G-W	COMDTINST M1000.6 (series)	R
NFPA Standard Training 1001	G-M	COMDTINST M16000.6 (series)	AR
Introduction to TCT (Course #0648)	G-WKS	COMDTINST 1541.1 (series)	B
Energy Management Training	G-CFP	COMDTINST M4100.2 (series)	R
Mail Management Training	CG-611	COMDTINST M5110.1 (series)	R
Public Affairs	G-IPA	COMDTINST M5728.2 (series)	R
Voting Assistance Training	G-WPM-1	COMDTINST 1742.3 (series)	B
Auxiliary Qualification Examiner	G-OCX	COMDTINST M16794.51 (series)	AR
Driver Improvement Course	G-WKS	COMDTINST M5100.47 (series)	A

Frequency symbols:

C – Continuous

T – Triennial

AR – As Required

A – Annual

Q – Quarterly

R – Regularly

S – Semiannual

B – Biennial



Part 2 – Operations and Missions  
Chapter 6 – Training and Qualification



## Chapter 7. Boat Force Operations Insignia Criteria

**Introduction**            The Boat Force operations community is the Coast Guard’s primary source of direct service to the public and executes missions to support all five Strategic Operational Goals. The Boat Force Operations Insignia is intended to identify those Coast Guard personnel currently working in the Boat Force operations field and to recognize the commitment of Coast Guard members who have repeatedly served in the community.

**Description and Design**            This device will consist of one design with two color schemes to designate levels of professional development. The basic insignia design and color scheme is comprised of pewter-tone waves (representative of operations), crossed boathook and oar (representative of boats), and a superimposed compass rose (representing leadership and direction). The insignia, when pewter-tone and highlighted with gold compass rose, further distinguishes those members of the Boat Force operations community who have achieved a heightened level of qualification, knowledge and experience that includes both practical and operational components, with a broader understanding and appreciation for Boat Force command, management, support and leadership issues. **(Figure 2-1 and Figure 2-2)**

**Entitlement**                    Enlisted members and officers of the Coast Guard, Coast Guard Reserve (including inactive reservists), Coast Guard Civilians, and Coast Guard Auxiliary, who complete the criteria listed below, are entitled to wear the Boat Force Operations Insignia.

**In this Chapter**            This Chapter contains the following Sections:

Section	Title	See Page
A	Pewter-Tone Insignia	2-114
B	Gold- and Pewter-Tone Insignia	2-116



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## Section A. Pewter-Tone Insignia

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### A.1. Service Requirements

Five years of cumulative service (in a satisfactory conduct status) at Boat Force field units are required as part of the criteria for earning the pewter-tone insignia (**Figure 2-1**). The following qualify as Boat Force field units:

- Aids to Navigation Teams
- Bases
- Centers of Excellence (NMLBS, BFC, SMTC)
- Marine Safety Offices (with a boat allowance)
- Sections
- Sectors/Groups
- Security Response Teams
- Standardization Teams
- Stations
- Strike Teams

Coast Guard Auxiliary service requirements include a minimum of 1 day per week of support, patrol, or watchstanding at a Boat Force unit for 5 years (or an equivalent amount of service representing a prolonged and dedicated commitment directly impacting Boat Force operations community).

For Sectors/Groups, Bases, Sections, and Marine Safety Offices – only service in a billet with direct and regular involvement in boat operations qualifies (CO determination).

Units not listed as “qualifying units” may submit a written request for determination of eligibility to Commandant (G-OCS) via their chain of command.

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**Figure 2-1**  
**Pewter-Tone Insignia**



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**A.2. Qualification Requirements**

Qualification requirement includes attainment of a boat crewmember qualification code (enlisted) or certification letter (officer) by completing the appropriate qualification tasks contained in *Parts 2-6* of the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series).

For Auxiliary members, qualification requirement includes attainment of Auxiliary boat crew qualification completed in accordance with Auxiliary qualification requirements.

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**A.3. Command Endorsement**

A favorable recommendation from the Operational Commander must be received in order to earn the pewter-tone insignia.

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**A.4. Temporary Entitlements**

Personnel who have served at their present boat unit for at least 6 months and have successfully completed the qualification requirements found in paragraph A.2 are authorized to wear the pewter insignia while assigned to a Boat Force unit/billet (as defined above) with command approval.

---

**A.5. Administration**

COs and OICs will ensure that all requirements have been met before certification.

The pewter-tone insignia will not be worn in conjunction with the coxswain, surfman or gold- and pewter-tone Boat Force Operations Insignia. However, Auxiliary members are authorized to wear both the Auxiliary coxswain insignia and the pewter-tone insignia together.

Issuance of the Boat Force Operations Insignia shall be documented with an Administrative Remarks Form (CG-3307) entry in the member's Personnel Data Record (PDR) and a copy of Form CG-3307 shall be sent to Commander (CGPC-adm-3).

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**A.6. Forms Availability**

Administrative Remarks Form (CG-3307) is available on USCG Electronic Forms on Standard Work Station III.

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**A.7. Certificates**

Boat Force Operations Insignia certificates are available on the CG-61 web site at [http://www.uscg.mil/ccs/cit/cim/forms1/form\\_cg.html](http://www.uscg.mil/ccs/cit/cim/forms1/form_cg.html).

- Boat Force Operations Insignia Certificate (Basic) Form (CG-5068)

For members that have been authorized temporary entitlement, the Form CG-5068 will include the note "(Temporary)" following the member's name.

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## Section B. Gold- and Pewter-Tone Insignia

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### B.1. Service Requirements

Five years of cumulative service (in a satisfactory conduct status) at Boat Force field units as defined in paragraph A.1 of this Chapter are required as a part of the criteria for earning the gold- and pewter-tone insignia (**Figure 2-2**).

---

### B.2. Qualification Requirements

Qualification requirements include:

- Attainment of a boat crewmember qualification code (enlisted) or certification letter (officer).
  - Attainment of a boarding team member or Boarding Officer qualification code (enlisted) or certification letter (officer) by completing the PQS promulgated in *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series). (Auxiliary members are exempt from this requirement.)
  - Attainment of the Boat Force operations qualification code (enlisted) or certification letter (officer) by completing the *Boat Force Operations Personnel Qualification Standard (PQS)*, COMDTINST M16114.30 (series). Enlisted personnel at a **Station** or **Aids to Navigation Team** in an EPO, XPO, or OIC billet will, by virtue of their successful service in these positions, have gained the knowledge and experience associated with the PQS and are therefore exempt from this requirement.
- 



**Figure 2-2**  
**Gold- and Pewter-Tone Insignia**

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### B.3. Command Endorsement

A favorable recommendation from the Operational Commander must be received in order to earn the gold- and pewter-tone insignia.

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**B.4. Prior Qualification Criteria**

Personnel who met all of the following criteria prior to 1 September 2002 are entitled to wear the gold- and pewter-tone insignia:

- Five years of cumulative service (in a satisfactory conduct status) at Boat Force field units as defined in paragraph A.1 of this Chapter.
- For three of the five years, members must have been:
  - Qualified Sector/Group Operations Center Watchstander,
  - Assistant and/or Operations Officer,
  - EPO,
  - EO,
  - XPO,
  - XO,
  - OIC, or
  - CO of Boat Force field units.
- Two of the five years of qualifying service as an active member of a unit's Ready for Operations program or a Readiness and Standardization Team member. This includes legacy units such as District/Sector/Group staff or COEs in which members performed duties directly related to the Ready for Operations Program or the Readiness and Standardization Program.

COs shall evaluate the member's record to ensure this requirement has been met.

---

**B.5. Administration**

COs and OICs will ensure that all requirements have been met before certification.

The gold- and pewter-tone insignia may be worn in conjunction with the coxswain, surfman, or cutterman insignia. The gold- and pewter-tone insignia shall not be worn with the pewter-tone Boat Force Operations insignia.

Issuance of the Boat Force Operations Insignia shall be documented with an Administrative Remarks Form (CG-3307) entry in the member's Personnel Data Record (PDR) and a copy of Form CG-3307 shall be sent to Commander (CGPC-adm-3).

---

**B.6. Forms Availability**

Administrative Remarks Form (CG-3307) is available on USCG Electronic Forms on Standard Work Station III.

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**B.7. Certificates**

Boat Force Operations Insignia certificates are available on the CG-61 web site at [http://www.uscg.mil/ccs/cit/cim/forms1/form\\_cg.html](http://www.uscg.mil/ccs/cit/cim/forms1/form_cg.html).

- Boat Force Operations Insignia Certificate (Advanced) Form (CG-5067)
-



Part 2 – Operations and Missions  
Chapter 7 – Boat Force Operations Insignia Criteria



# Part 3 Station Operations

**Introduction** This Part prescribes policy, standards, instructions, and capabilities pertinent to Coast Guard **Station** operations.

**In this Part** This Part contains the following Chapters:

Chapter	Title	See Page
1	Station Organization and Watchstanding	3-3
2	Station (Small) Standard Operating Procedures	3-29
3	Heavy Weather Stations	3-37
4	Surf Stations	3-41






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## Chapter 1.

# Station Organization and Watchstanding

---

### Introduction

This Chapter provides the basic format for a standard organization of a Coast Guard **Station**. It also sets forth the minimum requirements for organizing, administering, and operating such units. This format should be modified only when necessary to meet individual unit requirements.

COs and OICs shall promulgate the organization manuals for their boat unit. The first section shall cover any general principles desired, including the mission of the unit and any other general information appropriate to the scope of the chapter. The second section shall cover department organization and detailed duties. The third section shall cover watch organization as developed for the unit. The fourth section shall cover the system of unit orders and instructions. Additional sections are authorized as necessary.

Coast Guard boat units shall be organized and operated in accordance with the basic principles contained in the *Coast Guard Organization Manual*, COMDTINST M5400.7 (series) and *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series).

### In this Chapter

This Chapter contains the following Sections:

Section	Title	See Page
A	Station Organization	3-4
B	Mission Requirements and Limitations	3-8
C	Command Cadre	3-9
D	Duties and Responsibilities	3-11
E	Unit Watch Organization	3-19
F	Duty Section Organization	3-20
G	Duty Section Rotation	3-23

### References for this Chapter

- a. *Coast Guard Organization Manual*, COMDTINST M5400.7 (series)
- b. *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series)

Each Section contains its own references, as necessary.

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## Section A. Station Organization

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**Introduction** The core element of every unit’s organizational structure is the duty section. Each unit’s organizational structure should be designed to support and develop the duty section’s capability to perform assigned missions.

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**References for this Section**

- a. *Operating Facilities (OPFAC) of the U.S. Coast Guard*, COMDTINST M5440.2 (series)
- b. *Staffing Standards Manual*, COMDTINST M5312.11 (series)

---

**A.1. Unit Functions**

The primary functions of every unit include the following:

- **TRAIN.** Provide essential training for boat crews, boarding teams, and other operations support personnel (e.g., communications watchstanders) for the safe and effective execution of assigned duties.
- **MAINTAIN.** Accomplish scheduled maintenance and limited repairs for assigned boats and equipment, and perform general housekeeping for unit boats and facilities.
- **OPERATE.** Successfully execute assigned Coast Guard missions in a safe and effective manner.

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Training, maintenance, and operations requirements vary from unit to unit.

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**A.2. Standard Unit Organization**

The standard organizational structure for all units shall consist of the command cadre (e.g., CO/OIC, XO/XPO, EO/EPO) and the duty section.

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A.2.a. Factors

Factors affecting the makeup of unit command cadre and duty section shall include:

- District mandated mission and boat readiness requirements.
- Complexity of operations and community interaction.
- Size of the unit and local conditions (e.g., personnel allowance, duty section requirements, number and type of boats assigned, distance to the parent command, and other factors).

---

A.2.b. Organizational Diagram

**Figure 3-1** and **Figure 3-2** provide a standard organizational diagram for a unit and **Station (small)**. All unit functions must be stated in the unit’s organization chart. Boat units are authorized to make additions or deletions of functions and duties where necessary. However, horizontal changes in the existing chart should be avoided.

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The size of the unit and local conditions (e.g., personnel allowance, duty section requirements, number and type of boats assigned, distance to the parent command, and other factors) should determine any necessary changes. Collateral duties or other duties particular to an individual unit may be added to the organizational chart without changing its effectiveness or its basic purpose.

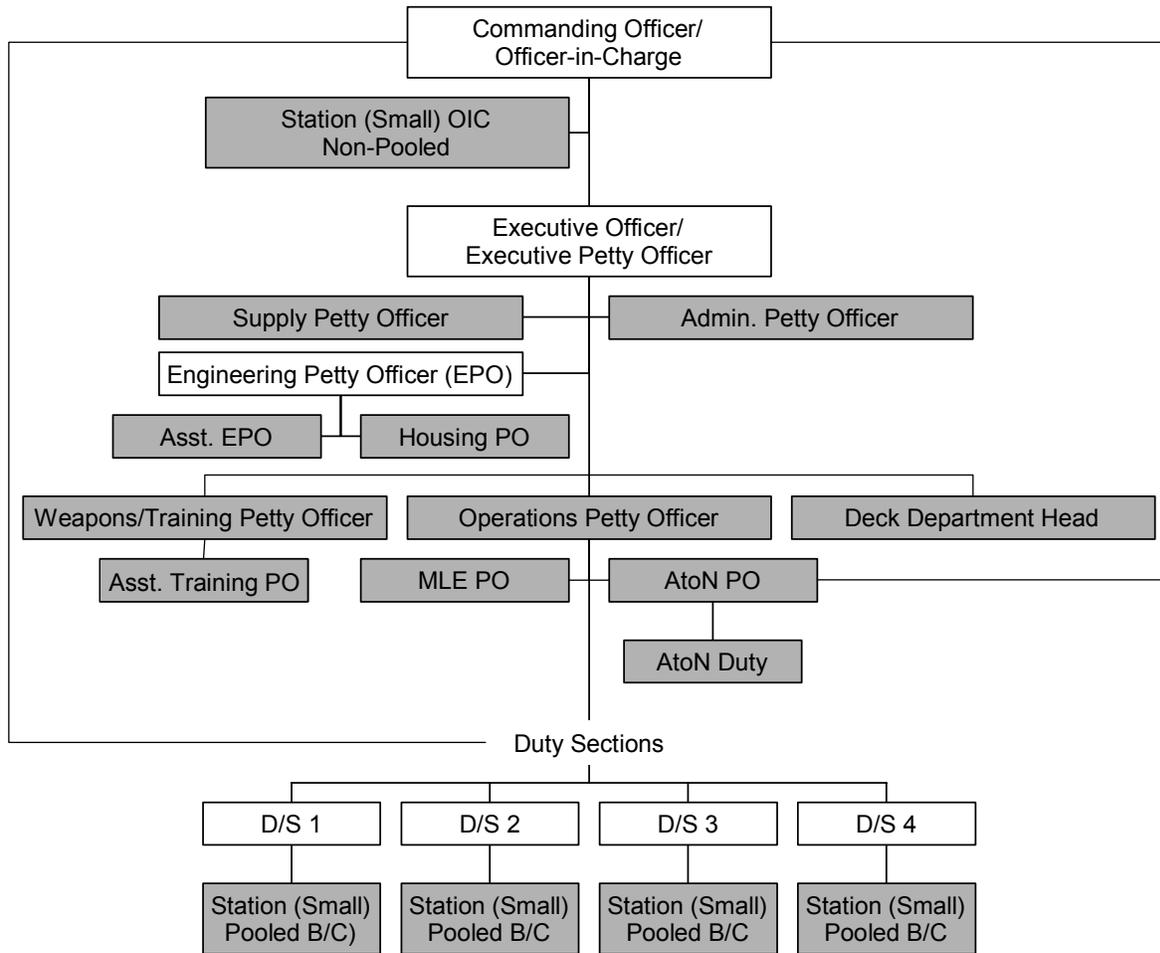
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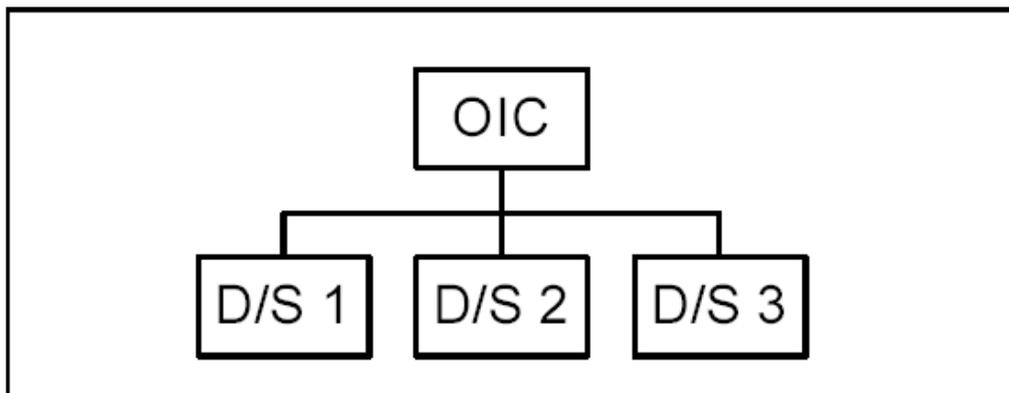
<b>A.3. Unit</b>	A shore unit is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, boats, and equipment.
A.3.a. Elements	The elements of a <b>Station</b> shall include, but are not limited to the following: <ul style="list-style-type: none"><li>• Multi-mission shore facility.<ul style="list-style-type: none"><li>▪ Duty crew berthing.</li><li>▪ Vessel moorings and maintenance.</li></ul></li><li>• Operate boats in support of designated missions.</li><li>• Authorize boat and personnel allowances.</li><li>• Administer units.</li><li>• Provide unit level training and equipment maintenance.</li><li>• Provide their own internal supervision.</li><li>• Receive support and services from:<ul style="list-style-type: none"><li>▪ District office,</li><li>▪ Sector/Group office,</li><li>▪ Base,</li><li>▪ Integrated Support Command,</li><li>▪ <b>Air Station</b>, or</li><li>▪ Other host command.</li></ul></li></ul>
A.3.b. Reserve Augmented Unit	A unit that relies on reserve personnel for at least one-third of its primary duty section staffing for three or more months a year is considered to be a “reserve augmented” unit.
A.3.c. Parent Unit	A parent unit is a unit with one or more subordinate <b>Stations (small)</b> . Its command cadre allowance may be different from that of a typical unit to account for the increased responsibility associated with the assignment of subordinate <b>Stations (small)</b> .
A.3.d. Dutystander	All unit personnel, with the exception of the CO/OIC, XO/XPO, EPO, support and special mission (SSM) positions (e.g., Supply Petty Officer, Food Service Specialist, Administration Petty Officer, Housing Petty Officer, personnel assigned to “AtoN Duty”), and the senior Boatswain’s Mate(s) at units with a CO are counted upon to stand duty. <ul style="list-style-type: none"><li>• Command staff elements (e.g., Deck Department Head, Operations Petty Officer, Weapons/Training Petty Officer, etc.) shall be specifically identified on unit personnel allowance lists (PALs).</li><li>• Unit personnel assigned to “AtoN duty” shall normally be restricted to AtoN operations and operations support.</li></ul>

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**Figure 3-1**  
**Station**

**NOTE** Shaded boxes depict unit-specific positions that may or may not be required to address operational or administrative workload elements.



**Figure 3-2**  
**Station (small), Non-Pooled**

**A.4. Station (Small)**

A **Station (small)** is a minimally-staffed and resource-constrained unit that receives operational direction, command, and support from its parent unit.

A.4.a. Elements

The elements of a **Station (small)** shall include, but are not limited to the following:

- Multi-mission shore facility.
  - Duty crew berthing.
  - Vessel moorings and limited maintenance.
- Operate boats in support of limited missions.
- Provided with boat and personnel.
  - **Auxiliary-Operated Station (small)** may or may not have boats or personnel assigned.
  - **Non-Pooled Station (small)** have personnel allowances.
- Provide unit level training and limited equipment maintenance.
- Provide their own internal supervision.
- Receive support and services from a parent unit, District Office, Sector/Group office, Base, Integrated Support Command, **Air Station** or other host command.

A.4.b. Pooled Station (Small)

A **Pooled Station (small)** appears in the *Operating Facilities (OPFAC) of the U.S. Coast Guard*, COMDTINST M5440.2 (series), but will not have an assigned OPFAC number, assigned personnel, or an OIC. The parent unit for this **Pooled Station (small)** has additional personnel to operate a boat from the physical location of the **Station (small)**. Essentially, the **Pooled Station (small)** becomes a “remote operating location.”

A.4.c. Reserve Augmented Unit

A **Pooled Station (small)** that relies on reserve personnel for at least one-third of their primary duty section staffing for three or more months a year is considered to be a “reserve augmented” unit.



A.4.d. Non-Pooled Station (Small)

A **Non-Pooled Station (small)** is a **Station (small)** with permanently assigned personnel. These units will be assigned an Operating Facility (OPFAC) number and OIC.

A.4.e. Auxiliary Operated Station (Small)

A **Station (small)** that relies on Coast Guard Auxiliary members for their primary duty section staffing for three or more months a year is considered to be an **Auxiliary-Operated Station (small)**. Auxiliary operated units may or may not have an active duty command cadre (i.e., OIC).

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## Section B. Mission Requirements and Limitations

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### Introduction

This Section discusses mission response requirements and gives guidance on self-imposed requirements to be avoided.

### B.1. Mission Requirements

District Commanders establish unit mission requirements. Mission requirements are District-wide requirements with regional variations, as required, to meet the demands for Coast Guard services. The workload associated with District-mandated mission requirements will vary based on the unit's area of responsibility (AOR), boating activity in the AOR, and the proximity and availability of other Coast Guard assets to meet mission requirements.

Community relations/public affairs activities and responsibilities are embedded in assigned missions (e.g., liaison responsibilities associated with SAR or law enforcement activities).

Not all units are required to perform all missions at the same level.

### NOTE

Response boat readiness requirements are separate and distinct from unit mission requirements.

B.1.a. Response Mission Requirements

Units shall maintain the appropriate alert status for all Coast Guard missions requiring a response of 24 hours or less.

- Bravo-Zero (B-0) alert is required for missions requiring Coast Guard response within 30 minutes of notification, or less.
- Additional personnel shall be placed in the appropriate alert status when the projected response mission requirements exceed the capability of the primary response crew(s).

Unit watch composition (e.g., duty crew) should be limited to the minimum required to support response mission requirements. The number of duty personnel maintaining a B-0 alert status should be limited to the minimum required for appropriate Coast Guard response.



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<b>B.1.b. Non-Response Mission Requirements</b>	Units must carefully manage workload/fatigue risks associated with non-response operational requirements. <ul style="list-style-type: none"><li>• Non-duty crews shall be used to the degree necessary to protect the integrity of the duty crew’s response capability.</li><li>• Units should limit personnel to a maximum of 8 hours work/duty for every 24-hour period for non-response missions.</li></ul>
<b>B.2. Mission Limitations</b>	All units are resource-constrained, designed to meet specific threats and mission requirements. Unit COs/OICs shall maintain open communication with District Commanders and Sector/Group Commanders to structure tasking and support accordingly.
<b>B.3. Self-Imposed Requirements to Avoid</b>	The following are examples unit COs/OICs should avoid: <ul style="list-style-type: none"><li>• Staffing Auxiliary-operated units with active duty boat crews in order to maintain a Bravo-Zero response capability.</li><li>• Staffing duty sections in excess of requirements (communications watch where the Sector/Group has adequate coverage, OOD, security watch, etc.).</li><li>• Requiring routine harbor pollution patrols.</li><li>• Setting arbitrary activity requirements (e.g., number of hours underway per day, number of boardings per boat crew).</li><li>• Conducting activities on inland lakes (minus the Great Lakes) and rivers.</li><li>• Refusing to close down buildings or portions of buildings so as to maintain “flexibility.”</li></ul>

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## Section C. Command Cadre

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**Introduction** The unit command cadre is responsible to its chain of command and support for overall mission accomplishment, administrative functions, good order and discipline, and maintenance of shore and boat assets.

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**C.1. Unit Command Cadre** The core command cadre of a unit is the CO/OIC, XO/XPO, and EPO.

**NOTE**  Units shall have a minimum of two senior Boatswain’s Mates (i.e., BM1 or above) assigned. For example:

- CO, XPO, and EPO Unit: Training or Operations Petty Officer assigned as the second senior Boatswain’s Mate.
- CO, XO, EPO Unit: Training and Operations Petty Officers assigned as the two senior Boatswain’s Mates.
- OIC, XPO, EPO Unit: OIC and XPO as two senior Boatswain’s Mates.

Additional command staff elements should be provided to address operational or administrative workload elements (e.g., Operations PO, Weapons/Training PO, Deck Department Head, AtoN Supervisor, Supply PO).

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**C.2. Non-Pooled Station (Small), Command Cadre**

The command cadre for **Non-Pooled Station (small)** consists of an OIC. The parent unit shall provide administrative and maintenance support to the **Station (small)**.

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**C.3. Department Heads**

Units shall normally have a minimum of two departments, a Deck Department and an Engineering Department.

Department Heads shall be Senior Petty Officers (i.e., E-6) or Chief Petty Officers. The CO/OIC shall designate department, assistant Department Heads, and Division Petty Officers in writing, if they are not specifically identified on the unit's personal allowance list (PAL). COs/OICs should only designate Department Heads, assistant Department Heads, or Division Petty Officers when staffing allows sufficient time for effective management of assigned duties and responsibilities (e.g., 1-in-4 duty, with two or more non-duty days available for assigned duties and responsibilities).

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## Section D. Duties and Responsibilities

**Introduction** This Section discusses the duties and responsibilities of command cadre, Department Heads, and collateral duty assignments.

**In this Section** This Section contains the following information:

Title	See Page
Command Cadre	3-11
Support	3-13
Deck Department	3-15
Boat Keepers	3-17
Collateral Duties	3-17

- References for this Section**
- a. *Coast Guard Food Service Manual*, COMDTINST M4061.5 (series)
  - b. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - c. *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series)

### Command Cadre

- D.1. CO and OIC** The duties of the CO/OIC are as follows:
- Perform the duties of the CO or OIC as specified in *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series).
  - Be responsible for the administration and direction of all activities of the unit.
  - Monitor the seamanship proficiency and training of all assigned boat crew members, and ensure that personnel assigned to operational duties meet all appropriate recurrent training requirements.

- D.2. XO and XPO** The duties of the XO/XPO are as follows:
- Perform the duties of the XO or XPO as specified in *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series).
  - Assist the CO or OIC generally in the administration of the functions of the unit.
  - Act as senior member of the Unit Safety Board.
  - Serve as Administration Officer unless an independent duty Yeoman (YN) is assigned.
  - Serve as Supply Officer unless an independent duty Storekeeper (SK) is assigned.



### D.3. EPO

The duties of the EPO are as follows:

- Perform the duties of the head of a department as specified in *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series).
  - Manage the Engineering Department and be responsible to the CO/OIC for the maintenance of boats, associated equipment, vehicles, and the unit facilities.
  - Administer the Engineering Department in accordance with all controlling directives.
  - Establish and maintain a program for the maintenance and repair of buildings, grounds, boats, and vehicles.
  - Establish and maintain a vehicle operator training and qualification program.
  - Provide physical security services.
  - Participate in maintenance and repair check-rides. Ensure boat crews are briefed prior to check-rides so that the purpose and objectives of the rides are clearly understood.
  - Approve or reject completed maintenance or repair work based on appropriate standards.
  - Initiate action for survey in the event of loss, damage, or destruction of accountable items.
  - Maintain liaison with the Supply Department; provide technical advice for procuring and requisitioning engineering materials, supplies, and allowance list spares.
  - Be responsible for procurement, custody, issue, and condition of all general and special tools required by the Engineering Department.
  - Establish internal methods and procedures by which maintenance personnel can obtain required material to support the maintenance effort.
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## Support

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### D.4. Support Petty Officer

The position of Support Petty Officer (SPO) was created to reduce/eliminate the **Station** finance, supply, and administrative workload from the **Station's** command cadre. The SPO position will be Storekeeper (SK) billets. These positions are dayworker positions and **not** intended to be **Station** dutystander positions. The SPO shall perform the following duties:

- Budgeting and accounting for, purchase/requisition, receipt, inspection, issue, stowage and preservation, packaging, shipment, disposal of, reutilization, and performance of inventory control for all property, equipment, supplies, and materials belonging to the unit(s).
  - Maintenance of all allowance documentation, and preparation of configuration change reports and allowance change requests; preparation of public vouchers, transportation requests and shipping documents.
  - Performance of traffic management/transportation functions including shipments, inspection, reservation, service orders, and claims relating to Government and personnel personal property.
  - Preparation of returns covering the receipts and expenditures of public monies.
  - Operation of office labor saving devices and automated data processing equipment.
  - Preparation and maintenance of required forms, records, publications, correspondence, reports, and files.
  - Procuring, receiving, stowing, issuing, shipping, disposing of, accounting for, and while in the SPO's custody, maintaining all stores and equipment of the assigned unit(s), except as otherwise prescribed in appropriate directives or regulations.
  - Performing the allotment accounting functions of the unit(s) assigned.
  - Inspecting services and materials received under contract or order calling for inspection on delivery, unless this function has been specifically assigned in writing by the CO/OIC to another department having technical jurisdiction over the services or material.
  - When specifically designated by the Commandant, the SPO shall function as the authorized certifying officer, assistant disbursing officer, or cashier of the unit. This includes the procurement and disbursement of official funds for the Coast Guard, the payment of personnel, and payment for materials and services procured by the Coast Guard, in accordance with procedures prescribed in the Comptroller Manual.
  - Specific SPO duties and responsibilities **may** include, but not be limited to, the following:
-



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- LUFS or other ledger updates
  - IMPAC verification report
  - Requisitions and procurements including automated requisitions, procurement requests (PRs), and any related research.
  - Mail usage reports
  - UPH usage reports
  - Property reports and surveys
  - Reenlistment interviews (associated paperwork only)
  - PI/MI inspection follow-up
  - CDAR follow-up and aftercare – requires training
  - GSA vehicle report
  - Inventory management
  - Mutual assistance
  - Combined Federal Campaign
  - Enlisted evaluations (EPES) – (coordination only)

**NOTE** 

SPO duties for some of the above tasks will be limited to administration and coordination only (UPH usage report, PI/MI inspection follow-up, documentation of UCMJ proceedings). The station CO/OIC or other assigned departments heads are still responsible for certification of these documents/tasks.

- Performing other collateral duties as assigned by the **Station CO/OIC**.

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**D.5. Food Services Officer**

The duties of the Food Services Officer are:

- Provide commissary services.
  - Ensure cleanliness and sanitation in the galley and commissary.
  - Prepare commissary reports, inventories, and requisitions.
  - Carry out such instructions as are promulgated in the *Coast Guard Food Service Manual*, COMDTINST M4061.5 (series) and *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series).
  - Direct training of Food Service Specialists (FS).
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## Engineering Department

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### D.6. Assistant Engineering Petty Officer (AEPO)

The duties of the Assistant Engineering Petty Officer (AEPO) are as follows:

- Assist the EPO generally in the administration of the functions of the Engineering Department.
  - Serve as Engineering Department “Shop Supervisor”:
    - Direct preventative and corrective maintenance of boats, vehicles, facilities, and all associated equipment.
    - Plan, schedule, and control all phases of maintenance. Perform progress checks on all work assigned.
    - Maintain a boat maintenance status board and keep all appropriate personnel informed of boat status.
    - Ensure maintenance instructions are prepared when required.
    - Ensure prompt and safe movement of boats to facilitate the maintenance effort.
    - Prepare necessary boat docking or parking plans.
    - Process repairable material in a serviceable status.
    - Initiate requests for required shop materials, periodically review shop usage, and establish inventory re-order points.
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## Deck Department

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### D.7. Department Head

A senior Boatswain’s Mate (i.e., E-6 or above), subordinate to the XO/XPO, shall perform the duties as head of the Deck Department:

- Perform the duties of the head of a department as specified by *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series).
- Manage the Deck Department and be responsible to the CO/OIC for the topside maintenance of boats, associated equipment, vehicles, and the unit facilities.
- Serve as Operations Officer.
- Serve as Communications Officer.
- Serve as Navigation Petty Officer.

### NOTE

If the requirement for an E-6 Boatswain’s Mate is unachievable due to the unit billet structure, the next senior BM shall perform this duty.

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D.7.a. Operations Officer Duties and Responsibilities

The duties and responsibilities of the Operations Officer shall include the following:

- Coordinate and control movements of boats (and vehicles, when operationally employed).
- Prepare the daily operations schedule and duty section watch schedules.
- Maintain boat and unit emergency bills.
- Administer the unit's operational readiness program for boats and associated equipment, including towing vehicles and trailers.
- Manage and direct training of surfmen, coxswains, boat engineers, boat crew members, and other unit dutystanders.
- Coordinate training syllabi in accordance with pertinent Commandant directives.
- Provide communications, weather, navigation, and public information services as required.
- Supervise the Qualification Examining Boards and the Operations Standards Board.

D.7.b. Communications Petty Officer Responsibilities

The duties and responsibilities of the Head, Deck Department as unit Communications Officer shall include the following:

- Provide communications services as required.
- Supervise the communications watchstanders and handling of message traffic.
- Administer communications procedures and training.
- Provide control of classified material and cryptographic devices.
- Provide control of communications equipment including portable radios.

D.7.c. Navigation Petty Officer Responsibilities

The duties and responsibilities of the Head, Deck Department as unit Navigation Officer shall include the following:

- Provide charts, publications, navigation equipment, and records.
- Maintain a list with the names of local and charted geographic points in the unit's area of responsibility (AOR).

**D.8. Rescue and Survival Systems Petty Officer**

Unit COs/OICs shall appoint a Petty Officer, in writing, to manage the unit's rescue and survival equipment. This individual should:

- Be intimately familiar with the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).
- Administer and coordinate the preventive/planned maintenance system (PMS) requirements through the appropriate departments.
- Ensure sufficient equipment is purchased to maintain the required allowance.
- Issue protective clothing and equipment (organizational clothing) and account for same using Personal Clothing and Equipment Form (AF Form 538).
- Ensure personnel are aware of the proper use and care of issued equipment.



## Boat Keepers

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**D.9. Deck** Unit Commanders should assign a Boatswain's Mate/Coxswain (E-5 or above) to be the Boat Keeper – Deck for each boat assigned to the unit (one boat, one Boat Keeper – Deck). The Boat Keeper – Deck shall:

- Oversee all aspects of deck standardization and maintenance for their assigned boat.
  - Coordinate maintenance scheduling between the Deck and Engineering Departments.
- 

**D.10. Engineering** Unit Commanders should assign a Machinery Technician (MK3 or above) to be the Boat Keeper – Engineering for each boat assigned to the unit (one boat, one Boat Keeper – Engineering). The Boat Keeper – Engineering shall:

- Oversee all aspects of engineering standardization and maintenance for their assigned boat.
  - Assist the Boat Keeper – Deck in coordination of maintenance scheduling between the Deck and Engineering Departments.
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## Collateral Duties

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**D.11. Assignment** If staffing does not allow for an average workweek of 68 hours or less, department and Assistant Department Heads should retain responsibility for all collateral duties. Collateral duty tasks may be assigned to dutystanders on an ad-hoc basis as long as those tasks do not interfere with dutystanders' primary responsibilities (i.e., training and operations).

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**D.12. Training Petty Officer** The duties and responsibilities of the Training Petty Officer (E-6 or above) shall include the following:

- Plan, coordinate, and execute the training program, and maintain unit training program guidance.
- Maintain a central file of lesson plan outlines for all recurring training.
- Procure and maintain unit training aids.
- Maintain unit personnel training records.
- Maintain a record of general military training conducted in accordance with this Manual.
- Maintain a record of PQS/JQR qualified personnel in accordance with this Manual, and act as PQS/JQR Coordinator.
- Maintain a record of completed drills and exercises in accordance with this Manual.

**NOTE**  If the requirement for an E-6 Training Petty Officer is unachievable due to the unit billet structure, the next senior BM shall perform this duty.

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**D.13.**  
**Administration**  
**Officer**

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The XO/XPO or independent duty Yeoman (if assigned) shall perform the following duties as Administration Officer:

- Administer all functions pertaining to personnel.
  - Provide educational services.
  - Maintain general directives and general message files.
  - Provide clerical and mail services.
  - Provide medical services, including dental and sanitary services.
- Provide special services such as housing, recreation, voting, bond sales, charity drives, and legal assistance.

**D.14.**  
**Educational**  
**Services Officer**

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Educational services for units should normally be coordinated via a command authorized by the Coast Guard Institute to receive, administer, and forward correspondence course testing material (i.e., a POPFAC). Parent units shall coordinate educational services for **Station (small)** personnel.

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## Section E. Unit Watch Organization

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<b>Introduction</b>	Units are required to maintain duty sections to provide an immediate boat response capability (i.e., B-0) for search and rescue, or other mission areas as required by the District Commander.
<b>E.1. Duty Section</b>	Maintaining the integrity of the duty section must be the primary focus of all unit personnel. Unit Commanders shall organize duty sections to: <ul style="list-style-type: none"><li>• Ensure successful execution of assigned missions.</li><li>• Protect the integrity of response boat duty crews.</li><li>• Minimize the unproductive time members spend on the unit, for work life and crew rest considerations.</li></ul>
E.1.a. Duty Rotation	The CO's/OIC's choice of unit watchstanding/duty section rotation is one of the most critical choices any CO/OIC can make. The unit's duty rotation will: <ul style="list-style-type: none"><li>• Define the minimum requirement for Coast Guard boat response in the unit's AOR.</li><li>• Be the primary workweek driver for the unit.</li><li>• Define the amount and nature of the time available for unit training/work/mission requirements.</li></ul>
E.1.b. Tasking	Tasking for duty crews and other members of the duty section should be restricted to proficiency training, routine/minor boat and facility maintenance, or housekeeping and operations. Dutystanders should not be assigned management or administrative duties or responsibilities beyond those required in support of duty section operations.
E.1.c. Factors of Organization	The number of people assigned to the duty section should be the minimum required to provide the requisite response mission capability consistent with sound risk management principles. A unit's duty section organization should be based on: <ul style="list-style-type: none"><li>• District mandated response readiness requirements (e.g., number of B-0 boats/crews)</li><li>• District or Sector/Group mandated watchstanding requirements (e.g., communications watch)</li><li>• Tempo of unit operations (e.g., OOD).</li></ul> Communications watchstanders and/or an OOD may be required to facilitate the unit's response mission capability.

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**E.2. Response  
Boat Readiness**

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District Commanders establish response (or “ready”) boat readiness requirements based on the demand for Coast Guard response services, and the projected workload associated with that demand. Units shall not exceed District mandated boat readiness requirements without concurrence from the District Commander. Copies of approved requests to increase boat readiness requirements shall be forwarded to Commandant (G-OCS-1).

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**E.3.  
Watchstander  
Designation  
Training**

Units must carefully manage workload/fatigue risks associated with watchstander designation training.

- Watchstander designation training conducted in conjunction with the duty day, including underway training, should be scheduled.
  - Supervised break-ins for practical evaluation should normally be conducted in conjunction with routine duty section operations. Supervised break-ins are for evaluation, not training.
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## **Section F. Duty Section Organization**

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**Introduction**

Unit duty sections should, to the maximum extent possible, include the minimum number of people required to maintain the minimum required readiness posture. The communications watchstander and OOD may be members of the boat crew at units with a minimal SAR workload. Many units are not required to maintain a communications watch (i.e., **Station (small)** and units that are collocated with a Sector/Group).

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**F.1.  
Requirements**

Most units require:

- Boat crew personnel (e.g., coxswain/surfman, boat engineer, and boat crew member(s)) for the number of boats required to be maintained in a Bravo-Zero (B-0) status.
  - A communications watchstander to facilitate communications with the unit’s boats and provide shore-side coordination in support of all assigned missions.
  - An OOD to manage duty section operations, administration (including the daily routine), and security as the CO’s/OIC’s direct representative.
-



**F.2. Certifications**

Unit duty section certifications shall be titled as specified below. The duties pertaining to each watch shall be as specified in this Manual and unit instructions, as appropriate.

- OOD
- Communications Watchstander
- Duty Boat Crew(s)/Boarding Team(s)
  - Surfman/Coxswain
  - Boat Engineer
  - Boat Crew Member(s)
    - ◇ Boarding Officer
    - ◇ Boarding Team Member

**NOTE**

The number of personnel assigned to the duty section should be the minimum required to provide the requisite boat response capability.

**F.3. OOD Position**

The OOD is a designated watch position. OODs provide operations planning or execution oversight for SAR and other missions for the unit CO/OIC.

- OODs are not normally required at low operational tempo units. Units with seasonal variations in operational tempo should not maintain an OOD watchstanding position during activity periods.
- Units with two or more response missions after normal working hours on two or more days a week may require an OOD.

**F.4. OOD Responsibilities**

OODs shall be responsible for unit operations, administrative requirements associated with unit operations, and the physical security of the unit as the COs/OICs designated representative. The OOD, with the authority as delegated by the unit CO/OIC, shall:

- Interact with the media and local community after normal working hours.
- Plan and manage the execution of unit operations.
- Direct the duty section's daily routine:
  - Facility emergency plans (e.g., fire, bomb threats)
  - Unit security
  - Housekeeping and routine maintenance
  - Operations related administration (e.g., messages and reports)

Specific duties of the OOD shall be defined in unit instructions. The authorities delegated to OODs shall be designated in writing.



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**F.5. Communications Watchstander Position**

Communications watch requirements for individual units are based on the communications system capabilities within each unit's AOR. Units can be required to maintain a continuous communications watch to:

- Provide National Distress System (NDS) coverage in an area that would otherwise be uncovered.
- Assist the Sector/Group during periods of increased boating activity or at other times when they are unable to maintain an effective communications watch without assistance from outlying units.

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**F.6. Communications Watchstander Responsibilities**

The communications watchstander's primary duties are to monitor the designated distress frequencies (as an element of the NDS), and maintain the communications guard for Coast Guard resources within the designated operating area as an element of the Sector/Group command, control, and communications system. Communications watchstanders should not normally be assigned duties or responsibilities, which might interfere with their ability to maintain the communications guard.

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**F.7. Duty Boat Crew**

Units shall maintain response boat crews in accordance with boat readiness requirements and all other appropriate guidelines set forth by the cognizant District Commander.

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## Section G. Duty Section Rotation

### Introduction

The CO's/OIC's choice of unit watchstanding/duty section rotation is one of the most critical choices any CO/OIC can make. The unit's duty rotation will:

- Define the minimum requirement for Coast Guard boat response in the unit's AOR.
- Be the primary workweek driver for the unit.
- Define the amount and nature of the time available for unit training/work/mission requirements.

This Section provides sample duty section rotations from which COs/OICs may select for their unit, along with advantages and disadvantages of each.

### G.1. One-in-Four (1-in-4)

The sample duty sections depicted below assume a sufficient number of certified watchstanders for each of the duty sections.

Week One							
	M	Tu	W	Th	F	Sa	Su
Duty	1	2	3	4	1	2	3
Daywork	2, 4	1, 3, 4	1, 2, 4	1, 2, 3	2, 4		
OFF	3				3	1, 3, 4	1, 2, 4
Week Two							
	M	Tu	W	Th	F	Sa	Su
Duty	4	1	2	3	4	1	2
Daywork		2, 3, 4	1, 3, 4	1, 2, 4	1, 3		
OFF	2				2	2, 3, 4	1, 3, 4
Week Three							
	M	Tu	W	Th	F	Sa	Su
Duty	3	4	1	2	3	4	1
Daywork	2, 4	1, 2, 3	2, 3, 4	1, 3, 4	2, 4		
OFF	1				1	1, 2, 3	2, 3, 4
Week Four							
	M	Tu	W	Th	F	Sa	Su
Duty	2		4		2	3	4
Daywork	1, 3		1, 2, 3	2, 3, 4	1, 3		
OFF	4				4	1, 2, 4	1, 2, 3



G.1.a. Advantages The 1-in-4 duty rotation provides an average of 68 work hours (i.e., 42 duty hours and 26 daywork hours) and 100 hours of liberty each week, and provides the following advantages:

- Minimizes potential that duty crews will exceed fatigue standards.
- Minimizes unproductive work time (i.e., for messing and berthing).
- Accommodates all-hands evolutions easily without recalling crew.
- Unit personnel can accomplish training and maintenance tasks while they are in a non-duty status.
- The personal needs of the crew (e.g., to take care of family needs) can be easily accommodated during normal work hours.

The straight 1-in-4 duty rotation (i.e. no sliding weekends) does not allow for three-day weekends unless the member takes leave; dutystanders can expect to have duty on at least two (of four) weekends every month.

G.1.b. Disadvantages Sliding weekends can be used with a 1-in-4 duty rotation, but the potential for duty crews to exceed fatigue standards is significantly higher during, what is for most units, the busiest time of the duty week.

**G.2. One-in-Three (1-in-3)**

Week One							
	M	Tu	W	Th	F	Sa	Su
Duty	1	2	3		2		1
Daywork	3	1, 3	1, 2	2, 3	3		
OFF	2				1	1, 2	2, 3
Week Two							
	M	Tu	W	Th	F	Sa	Su
Duty	2	3		2	3	1	2
Daywork	1	1, 2	2, 3	1, 3	1		
OFF	3				2	2, 3	1, 3
Week Three							
	M	Tu	W	Th	F	Sa	Su
Duty	3	1	2	3	1	2	3
	2	2, 3	1, 3		2		
OFF	1				3	1, 3	1, 2



G.2.a. Advantages The 1-in-3 duty rotation provides for an average of 77 work hours (i.e., 56 duty hours and 21 daywork hours) and 91 hours of liberty each week, and provides the following advantages:

- The potential for duty crews exceeding fatigue standards is minimized.
- Unproductive work time (i.e., for messing and berthing) is minimized.
- Unit personnel can accomplish training and maintenance tasks while they are in a non-duty status.
- The personal needs of the crew (e.g., to take care of family needs) can be accommodated during normal work hours.

The straight 1-in-3 duty rotation (i.e., no sliding weekends) does not allow for three-day weekends unless the member takes leave; dutystanders can expect to have duty on at least two (of three) weekends every month.

G.2.b. Disadvantages

Sliding weekends can be used with a 1-in-3 duty rotation, but the potential for duty crews to exceed fatigue standards is significantly higher during, what is for most units, the busiest time of the duty week.

**G.3. Modified One-in-Three (1-in-3)**

Week One							
	M	Tu	W	Th	F	Sa	Su
<b>Duty</b>	1	1		2	1	1	1
Daywork	3	3	3	3			
OFF	2	2	1	1	2	2, 3	2, 3
Week Two							
	M	Tu	W	Th	F	Sa	Su
<b>Duty</b>	3	3	1	1	3	3	3
Daywork	2	2	2	2			
OFF	1	1	3	3	1	1, 2	1, 2
Week Three							
	M	Tu	W	Th	F	Sa	Su
<b>Duty</b>	2	2		3	2	2	2
Daywork	1	1	1	1	1		
OFF	3	3	2	2	3	1, 3	1, 3

**NOTE**

Normally restricted to units with low response mission workload because of the port/starboard duty rotation requirement.



G.3.a. Advantages The modified 1-in-3 duty rotation provides for an average of 69 work hours (i.e., 56 duty hours and 13 daywork hours) and 99 hours of liberty each week, and provides the following advantages:

- Unit crew who are in a non-duty status can accomplish non-response/scheduled missions, and training and maintenance tasks.
- The personal needs of the crew (e.g., to take care of family needs) can normally be accommodated during normal work hours.

G.3.b. Disadvantages The modified 1-in-3 duty rotation requires dutystanders to maintain a port and starboard duty rotation creating significant potential for duty crews to exceed fatigue standards. The “dayworking” duty section may be required to work on the weekend to fulfill non-response/scheduled missions (i.e., potential for working two of three weekends a month).

**G.4. Port and Starboard (1-in-2)**

Week One							
	M	Tu	W	Th	F	Sa	Su
<b>Duty</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>
OFF	2	2	1	1	2	2	2
Week Two							
	M	Tu	W	Th	F	Sa	Su
<b>Duty</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>
OFF	1	1	2	2	1	1	1

**NOTE**

Normally restricted to units with low response mission workload because of the port/starboard duty rotation requirement.

G.4.a. Advantages The port and starboard duty rotation requires an average 84-hour workweek (i.e., 84 duty hours) and 84 hours of liberty each week – which does not account for duty section relief/turnover or all-hands evolutions (e.g., training, inspections). This rotation also provides the following advantages:

- Duty section personnel only work 7 out of every 14 days.
- Fewer dutystanders required than other rotations.
- Fixed duty schedule (i.e. very difficult to require more than port and starboard).



G.4.b.  
Disadvantages

The port and starboard duty rotation requires an average 84-hour workweek (i.e., 84 duty hours) and 84 hours of liberty each week – which does not account for duty section relief/turnover or all-hands evolutions (e.g., training, inspections). This rotation also provides the following disadvantages:

- Duty section personnel are required to perform all operational missions and training and maintenance tasks.
- The personal needs of the crew (e.g., to take care of family needs) cannot normally be accommodated during normal work hours.
- Significant non-duty work/training requirements.
- Duty crews are at significant risk of exceeding fatigue standards.

**G.5. Reduced Readiness Port and Starboard (1-in-2)**

Week One							
	M	Tu	W	Th	F	Sa	Su
<b>Duty</b>					1		1
Daywork	1	1	1, 2	2	2		
OFF	2	2		1		2	2
Week Two							
	M	Tu	W	Th	F	Sa	Su
<b>Duty</b>					2	2	2
Daywork		2	1, 2	1	1		
OFF	1	1		2		1	1

**NOTE** *GS*

Normally restricted to units with low response mission workload because of the port/starboard duty rotation requirement.

G.5.a. Advantages

The reduced readiness port and starboard duty rotation requires an average 60-hour workweek (i.e., 36 duty hours and 24 daywork hours) and 108 hours of liberty each week. The rotation provides the following advantages:

- Training and maintenance tasks can be accomplished while dutystanders are in a non-duty status.
- Dutystanders only required to work an average of 4 days/week.
- Fewer dutystanders required than other rotations.
- Fixed duty schedule.
- The personal needs of the crew (e.g., to take care of family needs) can be accommodated during normal work hours.



G.5.b.  
Disadvantages

The reduced readiness 1-in-2 duty rotation only provides for B-0 boat response three days a week. This rotation also provides the following disadvantages:

- Limited Bravo-Zero (B-0) response capability; requires SAR system support.
- High potential for operational tasking outside of scheduled work hours (during the workweek).
- Significant non-duty work/training requirements.
- Duty crews are at significant risk of exceeding fatigue standards.

G.6. Firefighter  
One-in-Three (1-  
in-3)

Week One							
	M	Tu	W	Th	F	Sa	Su
Duty	1	2	3	1		3	1
OFF	2, 3	1, 3	1, 2	2, 3	1, 3	1, 2	2, 3
Week Two							
	M	Tu	W	Th	F	Sa	Su
Duty	2	3	1	2	3	1	
OFF							
Week Three							
	M	Tu	W	Th	F	Sa	Su
Duty		1	2	3	1	2	3
OFF	1, 2	2, 3	1, 3	1, 2	2, 3	1, 3	1, 2

G.6.a. Advantages

The firefighter 1-in-3 duty rotation provides for an average of 56 work hours (i.e., 56 duty hours) and 112 hours of liberty each week. This section also provides the following advantages:

- All dutystanders are “professional” dutystanders (i.e., duty is all they do).
- Exceptional quality of life for all unit personnel – dutystanders only work 7 out of 21 days).
- The potential for duty crews exceeding fatigue standards is minimized.
- Non-dutystanding personnel (i.e., maintenance and support personnel) can work a normal workweek.

G.6.b.  
Disadvantages

The firefighter 1-in-3 duty rotation requires more non-dutystanding positions than more traditional duty rotations. This rotation also includes the following disadvantages:

- The duty section must accomplish all training.
- Potential for operational tasking outside of scheduled work hours (unless non-response crews are available).
- All-hands evolutions not easily accommodated.



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## Chapter 2.

# Station (Small) Standard Operating Procedures

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**Introduction**      **Stations (small)** are structured to conduct missions more economically than their parent units and have a very limited organic logistic and administrative support capability. **Stations (small)** operate as either pooled or non-pooled units, and report operationally and administratively to their parent units. **Stations (small)** shall limit their occupation of shore facilities to the minimum necessary for safe operations and for a reasonably comfortable work-life environment.

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**In this Chapter**      This Chapter contains the following Sections:

Section	Title	See Page
A	Station (Small) Operation	3-30
B	Station (Small) Duties and Responsibilities	3-31

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**References for this Chapter**      Each Section contains its own references, as necessary.

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## Section A. Station (Small) Operation

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<b>Introduction</b>	<p><b>Stations (small)</b> are organized and located to meet limited mission requirements that may be seasonal or intermittent in demand. These <b>Stations (small)</b> are excellent opportunities for reserve and auxiliary participation and training while meeting operational requirements of the Coast Guard. Special considerations for their management are discussed in this Section.</p>
<b>A.1. Mission Limitations</b>	<p><b>Stations (small)</b> are limited, resource-constrained units that are designed to meet limited threats and mission requirements. Parent CO/OIC and Operational Commanders should structure tasking and support of these units accordingly. Experience has shown that inattention to this can rapidly lead to over-tasking.</p>
<b>A.2. Readiness Response Standards</b>	<p><b>Stations (small)</b> have mission readiness response standards based upon: Commandant standards; appropriate key local factors such as:</p> <ul style="list-style-type: none"><li>• Mission demands of:<ul style="list-style-type: none"><li>▪ SAR.</li><li>▪ ELT.</li><li>▪ Marine Environmental Response (MER).</li><li>▪ RBS mission demand.</li></ul></li><li>• Local environmental factors.</li><li>• Availability of other Coast Guard forces in their locality.</li></ul> <p>Additionally, the SAR readiness response standard reflects the following:</p> <ul style="list-style-type: none"><li>• Units adjacent to or nearby to <b>Station (small)</b> can be the primary means to provide a SAR response capability within a Sector's/Group's AOR.</li><li>• Not all <b>Station (small)</b> need to meet a full "7 x 24 x 365" Bravo-Zero SAR readiness response posture.</li><li>• The Commandant's standard of a 68-hour workweek for dutystanders at alert shore units.</li><li>• Close coordination with Commandant (G-O) and (G-I) is required to ensure prompt documentation of resource issues and coordinated public/congressional notifications.</li></ul>
<b>A.3. Procedures for Modifying Station (Small) Alert Postures</b>	<p>District Commanders shall develop and maintain a comprehensive, up-to-date mission plan for their District. The plan should include existing alert postures and proposed modifications. Special attention should be paid to proposed alert posture modifications.</p> <ul style="list-style-type: none"><li>• Public policy implications for feasibility of modifications must be assessed with Commandant (G-I) and submitted as part of this mission plan.</li><li>• District Commanders shall forward alert posture modification plans to Commandant (G-O) via Area Commanders for approval.</li><li>• Area Commanders are requested to forward District plans as they are received and not combine them into a single Area product to ease outreach efforts and expedite the Headquarters' approval process.</li></ul>

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**A.4. Boat and Facility Maintenance**

**Stations (small)** shall limit their boat and facility maintenance to normal housekeeping and minor repairs. Parent units shall manage the budgets and inventories for their **Stations (small)**, and minimize any financial procurement, administrative, and reporting responsibilities for these units.

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## Section B. Station (Small) Duties and Responsibilities

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**Introduction**

All District Commanders, Sector/Group Commanders, COs, and OICs shall:

- Not impose operational or other requirements that conflict with the policies herein.
- Schedule work and readiness in response to peak demand/ maritime activity in the AOR.
- Set a goal of a 68-hour maximum workweek (including duty).
- Not impose self-generated requirements that conflict with the policy herein or in higher existing Commandant directives.

**In this Section**

This Section contains the following information:

Title	See Page
District Commanders and Sector/Group Commanders	3-32
Parent Units	3-33
Parent Units with a Pooled Station (Small)	3-35
Non-Pooled Station (Small) OICs	3-36

**References for this Section**

- a. *Abstract of Operations Report*, COMDTINST M3123.7 (series)



## District Commanders and Sector/Group Commanders

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### B.1. District Commander's Responsibilities

District Commanders shall:

- Designate **Station (small)** as either pooled or non-pooled.
  - Determine an appropriate mission employment for each **Station (small)** subject to the policies contained herein and without exceeding Commandant standards.
  - Develop and submit a comprehensive mission plan for their District [**Station (small)**] Concept of Operations. Readiness postures for **Station (small)** shall be based upon:
    - Operational requirements including, but not limited to, SAR demand, SAR system capabilities, and other Coast Guard missions and associated system capabilities.
    - Local requirements including, but not limited to, operating area demographics, proximity to the parent unit, and prevailing weather and marine conditions.
    - Workload factors including, but not limited to, the additional workload required to achieve and maintain certification on multiple boat types, and unproductive transit time to and from the duty location.
  - Review policies and procedures at **Station (small)** to determine what activities and requirements are self-imposed and not required.
  - Provide to Commandant (G-OCS):
    - The selected operating structure (i.e., pooled or non-pooled), designated parent unit, and readiness posture for all assigned **Stations (small)**.
    - A list of the operational planning factors used to determine the current level of effort for Coast Guard missions other than SAR at units (e.g., number of recreational boats, number of commercial fishing vessels, etc.).
- 

#### B.1.a. 68-hour Workweek Waivers

District Commanders are authorized to waive, by message, the standard 68-hour average workweek goal for **Stations (small)** to a one-in-three or port-and-starboard duty rotation.

- The Area Commander and Commandant (G-O/G-OC/G-OCS) should be included as info addressees on the waiver authorization message.
  - The waiver shall state the reason for not being able to maintain the 68-hour workweek standard. Waivers shall only be valid for a maximum of one year and must be reissued on each anniversary as necessary.
- 

#### B.1.b. Communications Guard Waivers

For those locations where **Stations (small)** must maintain a radio guard to cover gaps in national distress system (NDS) radio coverage, the District Commander shall:

- Issue a waiver by message authorizing the **Station (small)** to maintain such a guard, specifying the times of watch and frequencies.
  - Place the Area Commander and Commandant (G-O/G-OP/G-OC/ G-OCS/G-OPR) as info addressees on waiver authorization message.
-



**B.2. Sector/Group Commanders**

Sector/Group Commanders shall:

- Authorize off-unit (beeper) watches for **Stations (small)**, as appropriate.
- Maintain communications guards in accordance with current directives. **Stations (small)** are not staffed to, and shall not maintain, a communications guard without a waiver.
- Authorize **Stations (small)**, consistent with system capabilities, to forward telephones to the parent unit after hours and at any other time assigned personnel are unavailable (e.g., underway in support of Coast Guard operations).

**Parent Units**

**B.3. CO/OIC Responsibilities**

Parent unit COs/OICs shall:

- Ensure Coast Guard SAR standards are met utilizing assigned boat(s) and crews, or other components of the SAR system (auxiliary facilities, adjacent units, **Air Stations**, local government forces, etc.).
- Maintain communications guards in accordance with current directives. **Stations (small)** are not staffed to, and shall not maintain, a communications guard without a waiver.
- Augment, as appropriate, **Station (small)** duty crews with fully qualified auxiliary/reserve members in accordance with applicable directives and regulations.
- Guard against self-imposed training requirements (e.g., qualifying on boats not assigned to the unit, in multiple AORs, etc.) that overburden crews and add little practical value to conduct of daily operations.

**NOTE**

**Stations (small)** do present ideal opportunities to train and qualify personnel in required skills.

- Ensure a safe, positive working environment is maintained for all assigned personnel, including those assigned to subordinate units.
- Manage and coordinate administrative responsibilities in the most efficient and effective manner possible subject to the following recommendations.

**B.4. Financial Management Responsibilities**

A parent unit's financial management responsibilities for their **Station (small)** should include:

- |                               |                     |
|-------------------------------|---------------------|
| • LUFs ledger updates         | weekly              |
| • IMPAC verification report   | monthly             |
| • STAR automated requisitions | as required         |
| • Procurement requests        | as required         |
| • Mail usage                  | annual              |
| • UPH usage                   | annual              |
| • Property reports            | annual, as required |
| • Property surveys            | as required         |



**B.5. Personnel Administration Responsibilities**

A parent unit's personnel administration responsibilities for their **Station (small)** should include:

- Mutual assistance quarterly
- Enlisted evaluations (EPES) semi-annual
- Non-rate report monthly
- CFC annual
- CG mutual assistance annual
- Civil rights reports annual
- Human relations reports annual
- Reenlistment interviews as required
- CDAR follow-up & aftercare as required
- Unit physical security as required
- PI/MI inspection follow-up as required
- UCMJ proceedings as required
- Initial work for DONCAF as required
- EOCT inventory management as required
- Use of force report as required

**B.6. Operations and Engineering Management Responsibilities**

A parent unit's operations and engineering management responsibilities for their **Station (small)** should include:

- GSA vehicle report monthly
- MISHAP reports/investigation as required
- CASREPs/CASCORs as required
- Safety board proceedings quarterly
- PMS for boats/facility quarterly
- Surfman reports quarterly
- Inventory management quarterly as required
- DEMPS semi-annual
- Small arms training semi-annual, as required
- Weight handling semi-annual
- SSMR submittal/tracking annual
- Boat inspection annual
- HAZMAT p2s2 mgmt/reporting annual
- Pest control annual
- Weapons verification annual
- CSMP submittal/tracking as required
- Ammunition Transaction Report (ATR) as required
- Ice reports as required
- Ready for operations preps semi-annual
- Training reports as required
- Inspection follow-up as required
- BOATALTs as required
- PA outreach report monthly as required



## Parent Units with a Pooled Station (Small)

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### B.7. CO/OIC Responsibilities

COs/OICs of parent units with **Pooled Stations (small)** assigned shall:

- Ensure Coast Guard SAR standards are met utilizing assigned boat(s) and crews, or other components of the SAR system (auxiliary facilities, adjacent units, **Air Stations**, local government forces, etc.).
  - Maintain the response standard as specified by the governing District Operations Order (OPORDER).
  - Ensure a qualified boat crew can get underway to meet District readiness requirements.
  - Designate the senior (coxswain qualified) BM assigned for duty to the physical location of the **Station (small)** as supervisor for the watch section.
  - Ensure all required training is performed as directed by all applicable directives.
  - Confer all operational qualifications, including coxswain, boat engineer, crew member, Boarding Officer, boarding team member qualifications in accordance with all current directives and regulations.
  - Maintain qualification, certification and recertification requirements in accordance with existing policies.
  - Ensure operations information system entries and updates are completed in accordance with current directives [i.e., *Abstract of Operations Report*, COMDTINST M3123.7 (series)]. Use appropriate unit identifiers (e.g., dummy OPFACs for AOPS) when creating or updating **Station (small)** data entries.
- 

### B.8. Management Responsibilities

Reporting requirements and responsibilities for parent units with **Pooled Stations (small)** should include the following:

- |                                     |             |
|-------------------------------------|-------------|
| • MISLE                             | as required |
| • AOPS reports quarterly            | as required |
| • Unit training records             | ongoing     |
| • Physical security                 | ongoing     |
| • Operational training              | ongoing     |
| • Boat maintenance                  | ongoing     |
| • Facility maintenance              | ongoing     |
| • Public affairs/community outreach | ongoing     |
| • Interagency liaison               | ongoing     |
-



## Non-Pooled Station (Small) OICs

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### B.9. OIC Responsibilities

#### Non-Pooled Station (small) OICs shall:

- Ensure Coast Guard SAR standards are met utilizing assigned boat(s) and crews, or other components of the SAR system (auxiliary facilities, adjacent units, **Air Stations**, local government forces, etc.).
  - Maintain the response standard posture as specified by the governing District OORDER.
  - Ensure a qualified boat crew can get underway to meet District Standard Operation Procedures (SOP) readiness requirements.
  - **Stations (small)** shall not maintain a communications guard without a waiver.
  - Consistent with system capabilities, forward telephones to the parent unit after hours and at any other time assigned personnel are unavailable (e.g., underway in support of Coast Guard operations).
  - Confer all operational qualifications, including coxswain, boat engineer, crew member, Boarding Officer, boarding team member qualifications in accordance with all current directives and regulations.
  - Maintain qualification, certification, and recertification requirements in accordance with existing policies.
  - Limit training to the absolute minimum that is essentially required for safe and professional operations.
    - Conduct routine operational multi-mission training (e.g., boat crew, boat engineer, coxswain, boarding team member, Boarding Officer) consistent with, and in addition to that provided by the parent unit.
    - Ensure all required training is performed as directed by all applicable directives.
    - At all times be fully cognizant as to the status of assigned members' personal qualifications and career intentions so as to facilitate on-site training and education opportunities.
  - Ensure a safe, positive working environment is maintained for all assigned personnel.
  - Ensure operations information system entries and updates are completed in accordance with current directives (i.e., AOPS and MISLE reports). Use appropriate unique unit identifiers when creating or updating **Station (small)** data entries.
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## Chapter 3. Heavy Weather Stations

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**Introduction** This Chapter describes the criteria for **Heavy Weather Stations** and outlines heavy weather training doctrine for MLB and SPC (HWX) **Stations**.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Criteria for Coast Guard Heavy Weather [MLB/SPC (HWX)] Stations	3-37
B	Heavy Weather Training Doctrine	3-38

**References for this Chapter**

- a. *U. S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series)
- b. *Operational Risk Management*, COMDTINST 3500.3 (series)

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### Section A. Criteria for Coast Guard Heavy Weather [MLB/SPC (HWX)] Stations

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**Introduction** This Section establishes the criteria for Coast Guard **Heavy Weather Stations**. It does not identify specific units as **Heavy Weather Stations**, nor is it for the purpose of resource planning or allocation. It does not alter the organizational structure of any unit or its relationship with other units or the public.

**A.1. Heavy Weather (HWX) Station Criteria** The criteria for designating **Heavy Weather Stations** consists of two components:

- Environment
- Frequency of heavy weather

A lack of these components will not allow for the proper qualification, certification, and maintenance of a heavy weather coxswain or properly prepared crew members.

A.1.a. Environment **Heavy Weather Stations** are located in areas where seas (height) are greater than 10 feet or winds (speed) exceed 30 knots, but do not meet the criteria for a **Surf Station**.

For definition and discussion of “surf”, refer to the *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 20*.

A.1.b. Frequency of Heavy Weather **Heavy Weather Stations** are in areas where seas greater than 10 feet and/or winds exceed 30 knots ten percent or more during a calendar year (36 days) averaged over a minimum period of 5 years.



**A.2. Responsibility**

One of the unit CO's/OIC's greatest responsibilities is to ensure boat crews and individual members undertake only those missions and tasks for which they are fully qualified, and for which the inherent risk has been properly assessed and managed using the principals of Operational Risk Management (ORM). Operational Commanders, COs/OICs, and boat coxswains are faced with making mission decisions and must carefully weigh the urgency of each mission and assess the benefits to be gained versus the risks involved. Unit COs/OICs shall make every effort to ensure unit boats, equipment, and personnel are prepared and available to respond to missions within the limits of the unit's capability.

**A.3. Heavy Weather Waivers**

Only the Operational Commander may waive operational limitations on a case-by-case basis in order to proceed on a specific mission. This authority may not be delegated.

**A.4. Operational Guidelines for MLB and SPC (HWX) Coxswains**

	Sea	Wind	Surf
<b>Coxswain</b>	10 ft	30 kts	None
<b>HWX Coxswain</b>	20 ft	40 kts	* <8 ft
<b>Surfman</b>	30 ft	50 kts	20 ft

**NOTE**

Coxswains shall not attempt operations in surf.  
 \* Heavy weather coxswains shall not attempt operations in surf unless they have demonstrated the proper skills through satisfactory accomplishment of the surf operations tasks in *Part 5* of the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series).

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## Section B. Heavy Weather Training Doctrine

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**Introduction**

In order to ensure the safety of unit personnel involved with heavy weather training, the following guidance has been established:

- Environmental restrictions shall not be exceeded.
- District Commanders may require additional restrictions/requirements for units under their control.
- District imposed restrictions/requirements shall be published in writing and copies provided to Commandant (G-OCS) and the National Motor Lifeboat School.

**References for this Section**

- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Operational Risk Management*, COMDTINST 3500.3 (series)
  - c. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
-



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**B.1. Minimum Requirements**

Comply with the following requirements:

- Units shall conduct a pre-brief (including elements of risk assessment) of the heavy weather training plan prior to commencing training.
- Crews shall be properly outfitted with personal protective equipment in accordance with the *Rescue and Survival Systems Manual*, COMDTINST 10470.10 (series).
- A certified heavy weather coxswain or surfman shall be onboard each heavy weather capable boat.

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**B.2. HWX Training**

Observe these environmental limits when conducting heavy weather training:

- Seas less than 15 feet.
- Wind less than 30 knots.
- Breaking seas less than 8 feet.

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**B.2.a. Two-Boat Training**

The preferred method of conducting heavy weather training involves two heavy weather capable platforms operating in tandem, with each boat acting as a backup/safety boat for the other. Some units may experience difficulty conducting two-boat training due to lack of a second heavy weather capable boat and/or heavy weather certified coxswains. Possible solutions are:

- Local cutter support.
- Neighboring heavy weather Coast Guard unit.
- Local fishermen, police, or fire rescue vessels of appropriate size/capability.

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**B.2.b. Single-Boat Training**

Single-boat heavy weather training is authorized when two heavy weather capable platforms are not available.

**NOTE** 

Coxswains shall not attempt operations in surf. Heavy weather coxswains shall not attempt operations in surf unless they have demonstrated the proper skills through satisfactory accomplishment of the surf operations tasks in *Part 5* of the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual Volume II*, COMDTINST M16114.33 (series).



Part 3 – Station Operations  
Chapter 3 – Heavy Weather Stations



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## Chapter 4. Surf Stations

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**Introduction** This Chapter describes the criteria and requirements for **Surf Stations** and outlines surf training doctrine for MLBs.

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**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Criteria and Requirements for Coast Guard Surf Stations	3-42
B	Motor Lifeboat (MLB) Surf Training Doctrine	3-48

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**References for this Chapter**

- a. *Staffing Standards Manual*, COMDTINST M5312.11 (series)

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## Section A. Criteria and Requirements for Coast Guard Surf Stations

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**Introduction** This Chapter establishes the criteria for and identifies selected Coast Guard **Stations** as **Surf Stations**. Identification of a unit as a **Surf Station** is for the purpose of resource planning and allocation only. It does not alter the organizational structure of any unit or its relationship with other units or the public. Unit titles and names will remain unchanged.

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**A.1. Surf Station Criteria** The criteria for designating existing Coast Guard **Stations** as **Surf Stations** consists of two components:

- Environment
- Frequency of surf

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A.1.a. Environment **Surf Stations** are designated in areas where surf is greater than eight (8) feet, on a Federally maintained navigable bar or entrance, of sufficient water depth to allow the operation of a surf capable boat.

For definition and discussion of “surf”, refer to the *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 20*. This Manual is also the source of the requirement that a surfman be onboard when surf exceeds eight (8) feet.

Beach surf is not considered in identifying **Surf Stations**.

---

A.1.b. Frequency of Surf **Surf Stations** are designated in areas where surf greater than 8 feet occurs ten percent or more days during a calendar year (36 days) averaged over a minimum period of 5 years.

If surf greater than 8 feet occurs less than 36 days a year, a **Surf Station** is not appropriate. In such locations, public risk/exposure is minimal, and the training and qualification for Coast Guard personnel to conduct safe operations cannot be maintained at even minimum levels. In those instances when surf occurs in these locations, additional efforts should be made to educate the public and prevent bar crossings awaiting better weather. Surf boats at adjacent **Stations** and helicopters will be used for SAR responses if and when needed.

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**A.2. List of Coast Guard Surf Stations**

<b>District</b>	<b>Surf Stations</b>
<b>D1</b>	Sta Merrimack River
	Sta Chatham
<b>D5</b>	Sta Barnegat Light
	Sta Oregon Inlet
	Sta Hatteras Inlet
<b>D11</b>	Sta Humboldt Bay
	Sta Noyo River
	Sta Bodega Bay (Note 1)
	Sta Golden Gate
	Sta Morro Bay
<b>D13</b>	Sta Grays Harbor
	Sta Cape Disappointment
	Sta Tillamook Bay
	Sta Yaquina Bay
	Sta Depoe Bay
	Sta Umpqua River
	Sta Siuslaw River
	Sta Coos Bay
	Sta Chetco River
Sta Quillayute River	
<b>HQ</b>	National Motor Lifeboat School
<b>Total</b>	<b>21</b>

Note:

1. Based upon currently available information, **Station** Bodega Bay does not meet the criteria for designation as a **Surf Station** outlined this Section. However, because of the absence of data, the probability of surf conditions within their AOR, and the concerns of the Operational Commander, Bodega Bay is provisionally designated a **Surf Station** until 1 October 2006. The Operational Commander is undertaking a comprehensive data collection and evaluation effort during this period and will advise Commandant of the results no later than 30 June 2006 to determine if the unit's designation should be finalized or allowed to lapse.

**A.3. Boat Requirements**

All **Surf Stations** shall have a minimum of two surf-capable boats assigned. To the greatest extent possible, these boats shall be of the same class and type.



**A.4. Surfman Staffing Requirements**

Safe and effective operation of any unit requires that the proper number of personnel with the appropriate skills are assigned. In addition to being fully staffed in accordance with the Commandant approved staffing standard for **Stations**, proper on-site staffing for **Surf Stations** includes Boatswain’s Mate billets and personnel with surfman qualification codes in accordance with the following table. (**Note 1**)

District	Surf Stations	Command Cadre (Note 2)	Duty Surfmen (Note 3)
<b>D1</b>	Sta Merrimack River	2	5
	Sta Chatham	2	5
<b>D5</b>	Sta Barnegat Light	2	5
	Sta Oregon Inlet	2	5
	Sta Hatteras Inlet	2	5
<b>D11</b>	Sta Humboldt Bay	2	5
	Sta Noyo River	2	5
	Sta Bodega Bay	2	5
	Sta Golden Gate	2	5
	Sta Morro Bay	2	5
<b>D13</b>	Sta Grays Harbor	2	7
	Sta Cape Disappointment	2	7
	Sta Tillamook Bay	2	5
	Sta Yaquina Bay	2	7
	Sta Depoe Bay	2	5
	Sta Umpqua River	2	5
	Sta Siuslaw River	2	5
	Sta Coos Bay	2	7
Sta Chetco River	2	5	
	Sta Quillayute River	2	5
<b>HQ</b>	National Motor Lifeboat School	2	11
Total	21	42	121

Notes:

1. Units assigned SPC (HWX) boats (52' MLBs) are allocated two surfman qualification codes in addition to the standard **Surf Station** complement to accommodate longer offshore missions.
2. Command cadre is CO/OIC and XPO, except at **Stations** with a commissioned officer as the CO, where it is the two most senior BMs.
3. Supports 68-hour duty week in accordance with the *Staffing Standards Manual*, COMDTINST M5312.11 (series) and the need to maintain two boats in alert status during certain weather conditions.



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<b>A.5. Surf Log</b>	Existing databases are insufficient to track the environmental conditions or frequency of those conditions at individual <b>Stations</b> . Since designation as a <b>Surf Station</b> involves a significant investment by the Coast Guard, accurate data is essential. The purpose of maintaining the surf log is to document local conditions, the number of surf training opportunities available, and to identify those factors that prevent training from being conducted. Though environmental conditions cannot be anticipated, several factors (visits, no backup boat, no ready boat, etc.) can be mitigated at the <b>Station</b> , Sector/Group, or District levels. Maintaining the surf log is <b>required</b> for designated <b>Surf Stations</b> . Non-designated <b>Surf Stations</b> may track local environmental conditions to justify assignment as a <b>Surf Station</b> . District Commanders may use accumulated data to seek unit designation as a <b>Surf Station</b> .
<b>A.6. Sample Log</b>	A sample surf log is provided at the end of this Section. Other logging formats are acceptable provided they contain all of the information below, and, when explanation codes are used, that they are the same as identified below.
A.6.a. Date	Self-explanatory.
A.6.b. Surf Height	Record maximum surf height in feet (occurring in the unit surf training area) that day. Units will need to establish individual criteria to measure surf height.
A.6.c. Training Surf Available	Answer YES if surf height is 8 to 15 feet and sustained for a minimum of 1 hour, answer NO if surf in under 8 feet or over 15 feet.
A.6.d. Number of Surfmen Available	Indicate the number of surfmen onboard available to conduct surf training that day.
A.6.e. Number of Platforms Available	Indicate the number of surf capable boats available to conduct surf training that day.
A.6.f. Surf Training Hours Conducted	Indicate the number of hours of surf training conducted that day.

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A.6.g. Reason  
Surf Training Not  
Conducted

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Use the following explanation codes provided below to indicate interferences for that day.

- 1 – Surf too small or no surf available in unit training area.
  - 2 – Surf too large in unit training area.
  - 3 – Other environmental hazards (visibility less than 1nm, ice, wind greater than 30 knots, current greater than 5 knots, debris).
  - 4 – Sufficient number of surfmen not available.
  - 5 – Sufficient number of surf capable boats not available.
  - 6 – Operational mission interference.
  - 7 – Higher priority training mission.
  - 8 – Administrative tasking/visit interference.
- Other: Include complete explanation in note section.
-



**A.7. Surf Station  
 – Surf Log**

**Surf Station – Surf Log**

Station: \_\_\_\_\_ for \_\_\_\_\_  
 (month) (year)

Date	Surf Height in Feet	Trainable Surf Available	Number of Surfmen Available	Number of Platforms Available	Surf Trng Hours Conducted	Reason Surf Trng Not Conducted
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
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29						
30						
31						



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## Section B. Motor Lifeboat (MLB) Surf Training Doctrine

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<b>Introduction</b>	<p>In order to ensure the safety of unit personnel involved with surf training, the following guidance has been established:</p> <ul style="list-style-type: none"><li>• Environmental restrictions shall not be exceeded.</li><li>• District Commanders may require additional restrictions/requirements for units under their control.</li><li>• District imposed restrictions/requirements shall be published in writing and copies provided to Commandant (G-OCS) and the National Motor Lifeboat School.</li></ul>
<b>References for this Section</b>	<ul style="list-style-type: none"><li>a. <i>Boat Crew Seamanship Manual</i>, COMDTINST M16114.5 (series)</li><li>b. <i>Operational Risk Management</i>, COMDTINST 3500.3 (series)</li><li>c. <i>Rescue and Survival Systems Manual</i>, COMDTINST M10470.10 (series)</li></ul>
<b>B.1. Minimum Requirements</b>	<p>Comply with the following requirements:</p> <ul style="list-style-type: none"><li>• A dedicated land-based observer shall maintain visual and radio contact with the MLB(s) at all times, and radio contact with the parent unit at all times.</li><li>• Units shall notify their Sector/Group Commander prior to commencing surf training.</li><li>• Units shall conduct a pre-brief (including elements of risk assessment) of the surf training plan prior to commencing training.</li><li>• MLB crews shall be properly outfitted with personal protective equipment in accordance with the <i>Boat Crew Seamanship Manual</i>, COMDTINST M16114.5 (series) and the <i>Rescue and Survival Systems Manual</i>, COMDTINST M10470.10 (series).</li><li>• A handheld backup VHF-FM radio shall be carried onboard each MLB.</li><li>• A certified surfman shall be onboard each MLB.</li></ul>
<b>B.2. Dual MLB Surf Training</b>	<p>The preferred method of conducting MLB surf training involves two motor lifeboats operating in tandem, with each boat acting as a backup/safety boat for the other. Observe these environmental limits when conducting dual MLB surf training:</p> <ul style="list-style-type: none"><li>• Breaking seas less than 15 feet.</li><li>• Wind less than 40 knots.</li><li>• Visibility greater than 1 nautical mile.</li><li>• Daytime only.</li></ul>

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**B.3. Single MLB Surf Training**

Single MLB surf training is authorized when two MLBs are not available. Observe these environmental limits when conducting single MLB surf training:

- Breaking seas less than 10 feet.
  - Winds less than 30 knots.
  - Current less than 5 knots.
  - Visibility greater than 1 nautical mile.
  - Daytime only.
-



Part 3 – Station Operations  
Chapter 4 – Surf Stations



## Part 4 Readiness and Standardization

**Introduction** This Part provides standardized guidance and procedures for ensuring the day-to-day readiness of Coast Guard boats and crews.

**In this Part** This Part contains the following Chapters:

Chapter	Title	See Page
1	Introduction	4-3
2	Unit and OPCON Readiness Evaluations	4-11
3	Readiness and Standardization Assessments	4-17
4	Materiel Inspections	4-27
5	Boat Crew Qualifications and Performance Evaluations	4-33
6	Rescue and Survival and Personal Protective Equipment Program Evaluation	4-39
7	Summary of Directives	4-43





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## Chapter 1. Introduction

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**Introduction** This Chapter provides the basic purpose and responsibilities for implementing the Boat Readiness and Standardization Program.

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**In this Chapter** This Chapter contains the following Sections:

Section	Topic	See Page
A	Purpose	4-4
B	Responsibilities	4-5

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## Section A. Purpose

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### Introduction

This Section provides the goals for the Readiness and Standardization program that emphasize the safe boat operation, PMS, and methods for measuring unit readiness.

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### A.1. Goals

The Readiness and Standardization program is designed to:

- Emphasize readiness and standardization as a daily process with Operational Commanders at the Sector/Group level continually aware of factors that limit the ability of their boats to safely operate at design limits.
  - Improve boat crew safety and proficiency by standardizing procedures.
  - Ensure boats are maintained under their prescribed PMS.
  - Ensure boats are supported and maintained in accordance with configuration management requirements.
  - Provide a uniform method of measuring unit readiness and compliance with program standards.
- 

### A.2. Standard and Non-Standard Boats

Although this Part discusses almost exclusively standard boats, at shore units the Coast Guard operates far more non-standard boats than standard ones. It is the intent of the Coast Guard to move toward including almost all boats in one of several standard boat classes. In the interim, Operational Commanders will continue to have complete responsibility for assessing the readiness and condition of all non-standard boats and their crews. Many of the practices and principles used for the assessment, administration, and operation of standard boats should be used by Operational Commanders to help ensure the safety and effectiveness of their non-standard boats.

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## Section B. Responsibilities

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**Introduction** This Section assigns the responsibilities for management of the Boat Readiness and Standardization Program to various entities within the U.S. Coast Guard.

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- B.1. Commandant (G-OCS)** Commandant (G-OCS) shall:
- Manage and oversee the continuity and effectiveness of the Readiness and Standardization Program.
  - Establish materiel and boat crew evaluation standards and guidelines.
  - Oversee resident boat crew training programs.
  - Ensure funding necessary to maintain the Readiness and Standardization Assessment visit program.
  - Review Readiness and Standardization Assessment visit schedules.
  - Periodically provide observers to accompany STAN Teams during assessment visits.
  - Consult with other headquarters program managers to ensure standards are developed to improve procedures, uniformity, and reduce sources of variation.
  - Coordinate and sponsor an annual Readiness and Standardization Conference.
  - Review and publish annual assessments and other statistics provided by the STAN Teams.
  - Chair configuration control boards (CCBs) for standard boats and meet regularly.
- 

- B.2. Commandant (G-SEN)** Commandant (G-SEN) will:
- Promulgate the PMS for standard boats.
  - Review Boat Class Maintenance Plans for standard boats.
  - Review materiel standards, discrepancy classifications, and STAN Team assessment criteria for standard boats.
  - Continuously monitor materiel condition of standard boat fleet.
  - Periodically provide observers to accompany STAN Teams during assessment visits.
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**B.3. Engineering Logistics Center (ELC)**

Engineering Logistics Center (ELC) will:

- Promulgate engineering changes (ECs) for standard boats that have been approved by the CCB.
- Manage and develop changes to the PMS for standard boats.
- Promulgate and maintain changes to master drawings and technical publications relating to standard boats.
- Manage, promulgate, and update Boat Class Maintenance Plans (BCMP) for standard boats.
- Periodically provide observers to accompany STAN Teams during assessment visits.
- Publish quarterly statistics, notes, and pertinent information on ECs.
- Establish and validate materiel standards for standard boats.
- Develop and maintain Management Information for Configuration and Allowances (MICA) Manuals for each class of standard boats.

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**B.4. Maintenance and Logistics Commands (MLCs)**

Maintenance and Logistics Commands (MLCs) will:

- Provide technical, logistical, and administrative support beyond the capabilities of Operational Commanders to units with standard boats.
- Verify, during compliance audits, whether Operational Commanders are conducting annual RFO evaluations in accordance with the requirements in *Chapter 2* of this Part.
- Verify during compliance audits proper boat maintenance record keeping and documentation in accordance with this and other directives.

---

**B.5. District Commanders**

District Commanders shall:

- Ensure units with boats are provided adequate support by the chain of command.
  - Ensure Operational Commanders execute the Readiness and Standardization Program and evaluations in accordance with this directive.
  - Coordinate Readiness and Standardization Assessment visit schedules with each STAN Team using the following guidelines:
    - Only units with a standard boat allowance shall be scheduled for an assessment visit.
    - Ensure STAN Team schedules do not conflict. Whenever possible, MLB/UTB/BUSL/RB-S/RB-HS visits should be scheduled in alternating years.
    - Do not schedule Readiness and Standardization Assessment visits less than 30 days before or after planned yard availability.
    - Whenever possible, schedule assessment visits to every applicable unit before repeating the visit cycle.
  - Ensure STAN Team report discrepancies and recommendations are addressed and promptly acted upon.
-



**B.6. Operational Commanders**

Operational Commanders shall:

- Monitor unit training and operations at subordinate commands to ensure boat crew readiness is maintained in accordance with applicable Commandant and District directives.
- Ensure Unit Commanders maintain operational readiness by correctly completing prescribed preventative maintenance.
- Act on restrictive discrepancy waiver requests and take action on discrepancies as outlined in *Chapter 4, Section C* of this Part.
- Ensure units comply with standard boat configuration management requirements.
- Conduct Ready for Operations (RFO) evaluations in accordance with *Chapter 2* of this Part.
- Provide or arrange for training, logistics, maintenance, and technical support beyond the capabilities of subordinate units.
- Provide operations and engineering department observers to accompany the STAN Team during all assessments. Observers should be members of the Operational Commander’s RFO evaluation team described in *Chapter 2, Section C* of this Part.
- Train and maintain a competent RFO Team.
- Take necessary action to resolve deficiencies noted in STAN Team reports in accordance with the requirements of this Manual and other applicable directives.
- Hold Unit Commanders accountable for unreported discrepancies.
- Ensure that the boat(s) at each unit scheduled for a Readiness and Standardization Assessment is/are fully mission capable when the visit begins.

**NOTE** 

STAN Teams will not conduct underway exercises when a boat has a disabling casualty or there are significant discrepancies in crew qualification, personal protective, or survival equipment. Operations will not be conducted with restrictive discrepancies without waivers. For personnel safety reasons, the STAN Team leader may decline to conduct underway exercises, if in his or her opinion there are discrepancies in any or all categories that, when combined, create an unsafe condition for the crew or endanger the boat. When a restrictive discrepancy arises during the assessment, the STAN Team will suspend underway exercises until the discrepancy is corrected or the waiver requirements of *Chapter 4, Section C* of this Part have been met.

**B.7. Unit Commanders**

Unit Commanders shall:

- Ensure provisions of *Part 5* of this Manual are strictly adhered to and all certified boat crew personnel possess required performance skills.
- Ensure compliance with functional and structural configuration management requirements in accordance with applicable Commandant directives (i.e., Operator’s Handbooks, PMS Manuals, etc.).
- Ensure required tests, inspections, and preventative maintenance procedures are performed correctly and completely and are documented properly in accordance with applicable directives.
- Take action on discrepancies in accordance with *Chapter 4, Section C* of this Part.



### **B.8. Ready for Operations Teams**

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Ready for Operations Teams shall:

- Evaluate the unit training program with regard to:
  - documentation and currency maintenance in accordance with *Chapter 5* of this Part, and
  - command cadre in accordance with *Part 5* of this Manual.
- Ensure written testing of unit personnel is performed in accordance with the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (MLB test questions can be found on the National Motor Lifeboat School web-site at <http://www.uscg.mil/hq/g-o/nmlbs/Standard/Testquestions/test.htm> and UTB/RB-S/RB-HS test questions on the RTC Yorktown web-site at <http://cgweb.tcyorktown.uscg.mil/utb/Stan/test.asp>).
- Evaluate the unit Survival Systems Program with regard to documentation, condition, and use of equipment in accordance with the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).
- Evaluate the unit personal protective equipment program with regard to documentation, issuance, preventive maintenance, and materiel condition in accordance with the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).
- Evaluate boat platform and outfit for readiness and standardization in accordance with *Chapter 4* of this Part.
- Conduct underway drills in accordance with *Part 4, Chapter 5* of this Manual.
- Review overall compliance with the Boat Readiness and Standardization program and monitor/review the status of prior STAN/RFO assessments.
- Conduct physical fitness evaluation as outlined by the *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series), *Chapter 3, Section A* for all boat crew personnel. This evaluation will satisfy the annual physical fitness currency requirement.

### **B.9. Standardization Teams**

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Standardization Teams (BFC/NMLBS/NATON) shall:

- Provide field units with technical information and guidance that will assist them in complying with program responsibilities.
  - Disseminate to the field new standard procedures and techniques used and/or problem areas regarding procedures and techniques employed by boat crews.
  - Provide information that would assist units in meeting standardization program requirements.
  - Maintain liaison with Commandant (G-OCS) to ensure that Readiness and Standardization Program requirements are being met.
  - Coordinate with Commandant (G-OCS) to make appropriate changes to training syllabi, courses, or manuals when deficiencies are noted during assessment visits.
  - As members of the Coast Guard's Boat Centers of Excellence (BFC/NMLBS/NATON), assist in maintaining the boat operator's handbooks for the appropriate boat class. Propose interim changes to Commandant (G-OCS) as needed and produce updates to the operator's handbooks at least annually.
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- Recommend to Commandant (G-OCS) additions or deletions to boat outfit equipment or stowage plans that would enhance operational efficiency and/or safety.
  - Based on field observations and platform expertise, provide recommendations to Commandant (G-OCS), (G-SEN), ELC, and the MLCs that would increase machinery reliability and maintainability.
  - Recommend performance requirements for boat crew positions that would enhance proficiency and safety.
  - When directed by ELC, conduct prototype evaluations to determine the feasibility of a recommended EC. Review proposed configuration changes and provide recommendations for location and installation of new equipment.
  - At the direction of Commandant (G-OCS), conduct biennial Readiness and Standardization Assessments at each unit with standard boat allowance(s).
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Part 4 – Readiness and Standardization  
Chapter 1 - Introduction



## Chapter 2. Unit and OPCON Readiness Evaluations

**Introduction**

Unit and Operational Commanders are responsible for maintaining the day-to-day readiness of their boats and crews. This is their central, most important responsibility and will not be effective without their support. This Chapter promulgates policy, standards, and guidelines regarding required unit and Operational Commander readiness evaluations.

While a dedicated Coast Guard infrastructure exists to provide resident training and biannual standardization evaluations, this cannot take the place of unit and Operational Commanders who are directly committed to the readiness of their boats and their crews. The goal of the Readiness and Standardization Program is to develop a multi-layered approach to fleet readiness; within which, operational and Unit Commanders have clearly defined requirements to evaluate and act upon materiel condition discrepancies and training deficiencies.

**NOTE** Without fully capable small boat platforms and fully qualified crews to operate them, the ability to safely conduct core Coast Guard missions, such as SAR, homeland security, law enforcement, and AtoN, is greatly degraded.

**NOTE** Operational Commanders, COs, and OICs may require demonstration of required skills at any time. Operational Commanders, COs, and OICs may rescind certification of members unable to meet minimum requirements.

**In this Chapter**

This Chapter contains the following Sections:

Section	Topic	See Page
A	Unit Evaluation Requirements	4-12
B	Operational Commander Evaluation Requirements	4-12
C	Evaluation Team Composition	4-14
D	Safety	4-15



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## Section A. Unit Evaluation Requirements

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- Introduction** The readiness of boats shall be continuously evaluated by the unit to ensure they maintain Bravo status. This constant evaluation is accomplished through a variety of programs including daily boat checks, the boat PMS schedule, and regularly scheduled, self-audited materiel readiness and standardization evaluations. Whenever a discrepancy is noted during any of these inspection programs, it must be classified and acted upon based upon the standards as outlined in *Chapter 4, Section C* of this Part and the appropriate Specific Boat Type Operator’s Handbook, COMDTINST M16114 (series).
- 
- A.1. Self-Audits** Self-audits of materiel readiness and standardization are recommended on a quarterly basis and prior to the Operational Commander’s RFO evaluation or STAN Team Readiness and Standardization Assessment. While not a formal inspection, units should use the materiel inspection procedures provided in *Chapter 4* of this Part and the appropriate checkoff list contained in the operator’s handbook as guidance for conducting self-audits. Self-audits are also designed to assist units in maintaining work lists and Current Ships Maintenance Project (CSMP) records.
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- A.2. Reports** Since self-audits are an informal tool for the unit to monitor boat readiness and standardization, no formal reports of inspection are required unless otherwise directed by the Operational Commander. Reports for other aspects of unit monitoring, such as PMS completion, shall be as directed by appropriate directives or the Operational Commander.
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## Section B. Operational Commander Evaluation Requirements

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- Introduction** Operational Commanders shall conduct a RFO evaluation at least annually at each unit. The RFO evaluation may be conducted at any time of the year. The RFO evaluation shall be comprised of an evaluation of the unit’s boat crew training program, survival systems program, personal protective equipment program, a materiel inspection, and underway exercise evaluations. The Operational Commander shall issue a formal report of the RFO evaluation. Readiness and Standardization Assessments conducted by the Standardization Teams may not substitute for the Operational Commander’s RFO evaluation.
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<b>B.1. Preparation</b>	In preparation for a unit assessment, the RFO Team should at a minimum: <ul style="list-style-type: none"><li>• Review previous RFO/STAN assessment reports.</li><li>• Obtain the status of remaining material discrepancies from previous RFO/STAN visits.</li><li>• Obtain information concerning incomplete ECs.</li><li>• Obtain check sheets from STAN Team or COMDT (G-OCS) web sites (see <i>Chapter 7</i> of this Part).</li><li>• Compare prior RFO/STAN comments concerning the unit training program and rescue and survival systems program to current requirements.</li></ul>
<b>B.2. Training Program Evaluation</b>	At a minimum, the RFO evaluation team shall make a complete review of training records to evaluate unit compliance with the requirements of <i>Part 5, Boat Crew Training</i> and the requirements of <i>Team Coordination Training</i> , COMDTINST 1541.1 (series). Review of other unit training requirements not directly related to boat operations is at the discretion of the Operational Commander. In addition, written tests to evaluate boat crew knowledge of standard practices and procedures shall be administered.
<b>B.3. Rescue and Survival Systems Program</b>	Evaluate the unit rescue and survival systems program with regard to documentation, condition, and use of equipment in accordance with the <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series).
<b>B.4. Personal Protective Equipment Program</b>	Evaluate the unit's personal protective equipment with regard to documentation, issuance, preventative maintenance, and materiel condition in accordance with the <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series).
<b>B.5. Materiel Inspection</b>	A materiel inspection shall be conducted in accordance with the procedures outlined in <i>Chapter 4</i> of this Part.
<b>B.6. Underway Exercise Evaluations</b>	Underway exercises shall be performed to measure how boat crews perform standard procedures, and evaluate the effectiveness of the unit's Boat Crew Training Program. <i>Chapter 5</i> of this Part provides procedures for conducting these evaluations. Operational Commanders may impose additional underway training requirements due to unique operational requirements provided they are not contrary to or inconsistent with published standard procedures.

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### **B.7. RFO Evaluation Report**

Operational Commanders shall provide Unit Commanders an RFO evaluation report. At a minimum, the RFO evaluation report must contain the following information:

- An evaluation of the unit’s boat crew training and qualification program.
- The results of the written tests administered.
- Results of rescue and survival systems evaluation with regard to documentation, condition, and use of equipment in accordance with the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).
- Results of the physical fitness evaluation.
- An evaluation of the unit’s personal protective equipment program as outlined in the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).
- A statement for each standard boat indicating whether the boat is “Bravo” or “Charlie” as defined in *Chapter 4* of this Part. If a boat was found to be “Charlie”, the specific reasons supporting the determination.
- A detailed list of materiel discrepancies noted during the materiel inspection and full power trial.
- Discrepancies that were noted and remain uncorrected from the last Readiness and Standardization Assessment or RFO Evaluation shall be identified.
- A summary of underway exercise evaluations including a determination of boat crew proficiency and adherence to standard operating procedures. Copies of drill evaluation sheets may be included in this Section.

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## **Section C. Evaluation Team Composition**

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### **Introduction**

The Operational Commander’s RFO evaluation team will be comprised of the most qualified and experienced personnel available. Each evaluator must be thoroughly familiar with the references in *Chapter 7* of this Part that pertain to their field of expertise. The Operational Commander shall designate the RFO evaluation team in writing. The team shall consist of at least three personnel as follows:

- Team Leader
- Senior Boatswain’s Mate
- Naval Engineer

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### **C.1. Team Leader**

The team leader should normally be the Operational Commander’s surface Operations Officer or assistant, and be senior to the Unit Commander receiving an evaluation.

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### **C.2. Senior Boatswain’s Mate**

The senior Boatswain’s Mate shall be a currently or previously qualified standard boat coxswain. If staffing does not allow this, the individual shall be a graduate of the MLB Supervisor’s Course or a senior coxswain/surfman from within the Operational Commander’s other unit resources.

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<b>C.3. Naval Engineer</b>	The Naval Engineer should be the Operational Commander's Naval Engineering Department Head or assistant. If staffing or experience does not allow this, the individual shall be the most experienced engineer within the Operational Commander's other unit resources.
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## Section D. Safety

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<b>Introduction</b>	Safety of personnel and the safeguarding of equipment must remain paramount during underway evaluations. For this reason, the following procedures apply.
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<b>D.1. Coxswain Responsibilities</b>	The coxswain has ultimate responsibility for the boat and all persons aboard during a mission, including RFO evaluation. If concern for personnel or vessel safety arises, the coxswain shall halt the exercise until the unsafe situation or condition is corrected.
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<b>D.2. Evaluator Responsibilities</b>	All safeguards must be taken to ensure that the evaluation environment does not become hazardous. When an evaluator observes an unsafe condition, they shall inform the coxswain. If, in the evaluator's judgment, personnel or property remain endangered, they shall terminate the exercise. If at any time it is discovered that the boat has a disabling casualty, underway exercises shall be terminated and the boat placed in "Charlie" until the discrepancy is corrected. If a restrictive discrepancy is discovered on the boat, underway exercises will be suspended until the discrepancy is corrected or the Operational Commander grants a waiver in accordance with <i>Chapter 4, Section C</i> of this Part.
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Part 4 – Readiness and Standardization  
Chapter 2 – Unit and OPCON Readiness Evaluations




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## Chapter 3.

# Readiness and Standardization Assessments

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**Introduction**      The Readiness and Standardization Program is made up of multiple steps in a continuous cycle. The largest portion of this cycle rests with the operational and Unit Commanders as discussed in the previous Chapters. To complete the cycle and ensure fleet-wide boat readiness and configuration management, the STAN Teams conduct biennial unit visits.

**In this Chapter**      This Chapter contains the following Sections:

Section	Topic	See Page
A	Goals and Procedures	4-17
B	General Timeline	4-18

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## Section A.    Goals and Procedures

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**A.1. Goals**      The assessment visit is designed to achieve several goals. These goals fall in line with the goals of the Readiness and Standardization Program as identified in *Chapter 1* of this Part. In addition to providing a venue to ensure Coast Guard standards are maintained, the visits provide on-site, personalized technical and professional training and information sharing between the STAN Team and unit boat crew members. Operational and Unit Commanders should capitalize on these opportunities to improve their ongoing boat crew training programs, as well as use the materiel inspection results to correct operational deficiencies on each standard boat. The specific objectives of the Readiness and Standardization Assessment visits are to:

- Evaluate the materiel condition of standard boats and ensure unit compliance with PMS and configuration management requirements.
  - Evaluate unit compliance with the boat crew training and qualification program.
  - Evaluate boat crew performance skills essential for safe operation.
  - Evaluate the unit Survival Systems Program with regard to documentation, condition, and use of equipment in accordance with the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).
  - Evaluate unit compliance with requirements for personal protective equipment with regard to documentation, issuance, preventative maintenance, and materiel condition in accordance with the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).
  - Determine whether boat crews adhere to standard operating procedures.
  - Provide RFO evaluation guidance to the Operational Commander's observers.
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**A.2. Procedures**

To limit variation for the unit being evaluated, the procedures for the Readiness and Standardization Assessment visits are very similar to the RFO evaluation procedures set forth in *Chapter 2* of this Part. During the visit, a materiel inspection and full power trial will be conducted on each standard boat assigned to the unit (as related to the visiting STAN Team). Underway exercise evaluations will be conducted with all certified boat crew personnel.

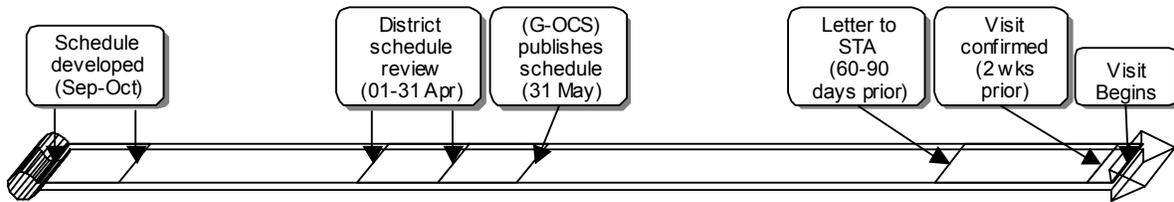
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## Section B. General Timeline

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**Introduction**

This Section provides the timeline of events surrounding a unit’s biennial Readiness and Standardization Assessment visit. As an overview, each Fall the STAN Teams work closely with each District to develop the next year’s visit schedule. Units scheduled are later engaged at selected intervals in preparation for their visit. The comprehensive three- or four-day visit (based on the number of boat types and boat crew members) is conducted. Evaluation feedback is provided as the visit progresses, and at the conclusion of each underway drill. The visit concludes with an overall out briefing. The STAN Team provides a written Readiness and Standardization Assessment report to the Operational Commander and Commandant. The cycle continues, as the unit institutes the feedback received and the system continually improves. **Figure 4-1** depicts the timeline of events preceding an assessment visit.



**Figure 4-1**  
**Pre-Assessment Visit Timeline**

**B.1. Schedule Development**

The program cycle is designed to allow biennial visits to each unit with an assigned standard boat. Development of the next year’s visit schedule begins each Fall. The schedule is a result of negotiations between the STAN Team and Districts to achieve the biennial standard with consideration to District and local concerns.

**B.1.a. Planning**

Between September and October of each year, the STAN Team will develop a draft schedule. The schedule is based on the known location of each standard boat, date of the boat’s last visit, and area of the country in which the boat is assigned.

**NOTE**

Coordination between STAN Teams will minimize the possibility of a unit receiving a visit from two STAN Teams within one given year.



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B.1.b. Initial Contact	During the initial planning stage, the STAN Team is likely to communicate with both the Area/District Boat Managers and individual units. This informal dialog is conducted to prevent unexpected problems and alleviate extensive changes to the schedule later.
B.1.c. District Response	By 01 April, the Area/District Boat Managers will be forwarded the draft schedule for their review and formal feedback. To effectively manage this extensive annual schedule and STAN Team visit costs, minimal changes are desired after publishing the annual schedule. Therefore, Districts should carefully review the schedule based on local concerns, boat assignment change plans, ongoing unit missions, etc. Written District Commander response is due back to the respective STAN Team no later than 30 April.
<b>B.2. Publication</b>	By 31 May, the schedule will be finalized and posted on STAN Team web sites.
<b>B.3. Unit Notification</b>	Between 60 and 90 days prior to a visit (depending on the date in relationship to the schedule development), the unit will receive a letter from the STAN Team formally notifying them of their upcoming assessment visit. The letter also serves to pass important details related to the visit, invite the unit to address important preparation issues/questions, and request several items be made available upon the team's arrival. Then, no later than two weeks prior to the scheduled visit, the designated team leader will contact the unit to confirm the visit dates and address any last minute concerns the unit may have.
B.3.a. Notification Letter	The notification letter will address the following issues: <ul style="list-style-type: none"><li>• Dates of visit.</li><li>• Schedule of events.</li><li>• STAN Team leader.</li><li>• Key visit elements.</li><li>• Drill platform requirements (towed boat).</li><li>• Boat(s) intended to be inspected.</li><li>• Items needed for review upon arrival.</li></ul>

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B.3.b. STAN Team Units must provide the following items to the STAN Team upon their arrival:

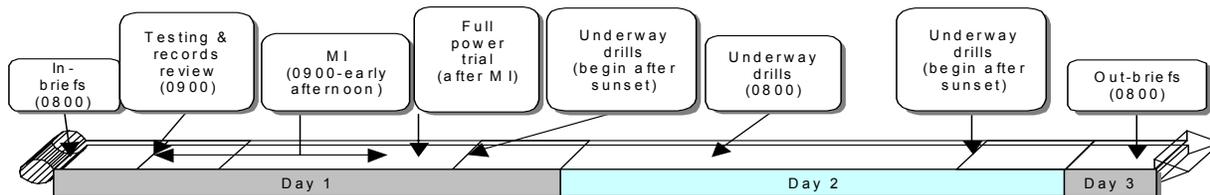
- Last two OPCON RFO evaluation reports.
- **Station** training records.
- Rescue and Survival Systems PMS Log.
- Underway hours for the last six months (boat & crew).
- List of boat crews and a unit personnel roster.
- Unit boat records including the following engineering info:
  - DEMPS.
  - Last yard availability.
  - Last boat inspection report.
  - Last full power trial.
  - EC/CASREP/CSMPs/ISO.
  - PMS completion logs.

#### B.4. Visit

The agenda for each assessment visit follows a routine schedule assuming the boat is Bravo (**Figure 4-2**).

- On the first day, an introduction and short in-brief is provided to the unit, written tests are administered, a records review is conducted, and a dockside boat materiel inspection and underway full power trial is completed.
- After completion of the materiel inspection the remaining days are dedicated to day and evening underway drills. Any remaining administrative review is also completed the second day.
- Upon completion of the assessment, the unit is provided a summary out-brief.

A more detailed description of the requirements for the materiel inspection and full power trial can be found in *Chapter 4* of this Part, the Specific Boat Type Operator’s Handbook, COMDTINST M16114 (series), and appropriate technical publication. The underway drill scenarios are outlined in *Chapter 5* of this Part and in the readiness and standardization drills found in *Appendix A* through *Appendix D* of this Manual. A verification of the unit’s assigned boat inventory against the headquarters’ allowance list will be made. This check is purely an information gathering measure and does not relate to the unit assessment visit (Appropriate documentation/AOPS entries for boat transfers are a unit responsibility).



**Figure 4-2**  
**Assessment Visit Timeline**



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B.4.a. Unit In-Brief      Upon arrival of the STAN Team and OPCON staff representatives, usually about 0800 the first day, an all-hands briefing is conducted to introduce the team to the unit, discuss the agenda for the next few days, address any concerns, and answer any questions from the crew. Units may desire a one-on-one meeting between the STAN Team and unit/OPCON command staff prior to the all-hands briefing. This meeting is welcomed and encouraged, especially if there are command issues that may impact the entire visit but are outside the concern of the whole crew.

**NOTE** 

OPCON operations and engineering representatives shall accompany the STAN Team throughout the unit inspection. This includes operations and engineering reps for the materiel inspection, engineering rep(s) for the full power trial and casualty control drills, and operations reps for a majority, if not all of both nighttime and daytime underway evolutions. Operational Commanders are encouraged to invite their servicing electronics support command to observe applicable portions of the materiel inspection.

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B.4.b. Written Testing      Immediately following the unit in-brief, certified boat crew personnel will take a short written exam for each qualified position (e.g., boat crewmen will take the boat crew exam, coxswains will take the coxswain/rules of the road exam, boat engineers will take the boat crew and boat engineer exam). These exams will provide the command feedback as to the knowledge level of boat crew members about the platform. Areas of strength and weakness will be identified to allow better tailoring of the unit's training program. Areas of knowledge emphasized include boat handling, procedures, navigation/piloting, rules of the road, operating boat equipment, and rescue and survival equipment.

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B.4.c. Training Program Review      While boat crew testing is being conducted, the STAN Team will begin reviewing the unit's training and qualification program and the documents requested in the pre-arrival letter. This review will allow the STAN Team to evaluate unit compliance with boat crew training, qualification, and certification requirements, as well as the unit's ongoing efforts to maintain a strong training program, professionally develop boat crew personnel, and properly maintain the standard boat assigned.

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B.4.d. Materiel Inspection      A thorough materiel inspection is conducted on each standard boat to ensure compliance with Commandant directed configuration management. This inspection is also an excellent opportunity for information sharing, the latest platform news, helpful hints, supply sources for unique items, and a little personalized training between the STAN Team and boat crew personnel. The materiel inspection usually lasts until mid-afternoon (at a one standard boat unit). Materiel inspection procedures are discussed in the next Chapter. Materiel inspection checklists for each standard boat are found in the applicable boat operator's handbook. For non-standard boats, use the District boat outfit list or the example checklist provided in *Appendix E*.

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B.4.e. Full Power Trial      A full power trial is conducted as soon as the materiel inspection is completed (if sufficient daylight remains). During this evolution, the engineering STAN Team member (accompanied by unit and Sector/Group engineering personnel) will check the boat engines and engine room as discussed in *Chapter 4* of this Part.

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B.4.f. Personal Protective Equipment Program Review

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While the materiel inspection and full power trials are being conducted onboard the boat, a review of the personal protective equipment program will be conducted ashore. An assessment of boat and crew personal protective equipment (PPE) shall be completed before underway evaluations. The PPE assessment ensures all required equipment is available and in good working condition, and the unit PMS program meets the requirements of the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series).

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B.4.g. Underway Evaluations

Upon the successful completion of the preceding steps, the unit is ready for the underway boat crew assessment. All certified boat coxswains are expected to conduct at least one day and one night drill set. Boat crewmembers may participate in as many drills as necessary to allow each coxswain to perform the required drill sets. The required underway drill checklists for each available scenario may be found in *Appendix A* through *Appendix D*.

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B.4.h. Out-Brief

Upon completion of the visit, out-briefs are offered to the unit command cadre. An all-hands out-brief is strongly encouraged to provide closure and a final evaluation of the hard work the crew put forth in preparing for the visit. Operational Commander out-briefs are provided upon request and are normally conducted at the last unit visited. During out-briefing, STAN Team assessment findings will be reviewed and recommendations for change or improvement will be made.

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**B.5. Reports**

The Standardization Team will publish the following formal reports:

- Readiness and Standardization Assessment Report
  - STAN Team Assessment Analysis Report
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B.5.a. Readiness and Standardization Assessment Report

Within 15 days of an assessment visit, the STAN Team will provide a formal report to Commandant (G-OCS). Within 30 days of an assessment visit, the STAN Team will provide a formal report to the unit, Operational Commander, and District Commander. The report will assign an assessment rating based on final score:

- 90% - 100% = Outstanding
- 80% - 89% = Excellent
- 65% - 79% = Satisfactory
- < 65% = Unsatisfactory

The report will address the following specific issues:

- Whether the unit is effectively executing the boat crew training program.
  - Written test results showing the percentage of correct answers overall by subject and comparison to service wide averages.
  - Training program evaluation.
  - Boat crew underway hours review.
  - Command cadre underway hours and certification.
- Boat crew proficiency and adherence to standard operating procedures.
  - Underway drill results showing the percentage of satisfactorily completed mission objectives in relation to the Coast Guard average.
- Whether the standard boats evaluated were “Bravo” or “Charlie” as explained in *Chapter 4* of this Part. If the boat is found “Charlie”, specific reasons supporting this determination will be provided.
  - Deficiencies noted during the materiel inspection and full power trial. The enclosed lists will focus on PMS, configuration management and safety deficiencies noted.
  - Deficiencies and incorrect ECs that were noted but remain uncorrected from the last assessment visit will also be identified.
- Personal protective equipment assessment.
- Last Operational Commander RFO.
- Boat hull inventory verification.
- STAN Team comments.

B.5.b. STAN Team Assessment Report Scoring Criteria

The following paragraphs outline the STAN Team assessment report scoring criteria.

B.5.b.1. Maximum Score

The maximum score under this scoring system is 50 points. **Non-pooled Station (small)** will be scored separate from the parent **Station**. **Pooled Station (small)** will be scored with the parent **Station**.

B.5.b.1.a. Status Upon Arrival

A complete assessment of all standard boats will be conducted and arrival status established. If one of the platforms will not be available for inspection (emergency haul-out, on loan to another unit, etc.), the unit (through their chain of command) should notify the STAN Team and G-OCS for possible reschedule of visit when all platforms will be available.



**NOTE** 

Catastrophic failure:

- If a unit boat experiences a catastrophic failure which leads to “Charlie” status and the boat will not be repaired prior to the STAN Team visit, the unit (through their chain-of-command) should consult the STAN Team and G-OCS for possible reschedule of the visit.
- If reschedule is not possible, units with multiple like boats must provide documentation (i.e., CASREP) and the boat will not be factored into the scoring criteria.
- For single boat units, every effort will be made to reschedule the visit.
- If a unit boat experiences a catastrophic failure *during* the “Upon Arrival” portion of the STAN Team visit, which results in “Charlie” status, the assessment will be completed and an overall rating assigned.
- If a unit boat experiences a catastrophic failure *after* its “Upon Arrival” inspection (underway drill exercises, SAR case, etc.), the unit is still scored if the core underway exercises (towing, dewatering, day/night navigation and piloting, man overboard recovery) were completed prior to the failure.

B.5.b.1.b. Multiple Like Boats Units with multiple like boats that receive a boat (e.g., rotatable pool, District spare, etc.) within 30 days of the STAN Team visit **will** have the boat assessed, however, the boat **will not** be used for score.

B.5.b.1.c. One Boat Type Units with only one boat type that have received the boat (e.g., rotatable pool, District spare, etc.) within 30 days of the STAN Team visit **will** have the boat assessed and it **will** be used for score.

B.5.b.2. Platform Materiel Condition Points in this category will be assigned based on the number and severity of discrepancies reported upon arrival of the STAN Team and as a result of the full power trial. The applicable platform Operator’s Handbook describes equipment discrepancies and the level of severity of each discrepancy. The following scoring system will be applied:

- a. Points for boat materiel condition upon arrival (total possible points per boat is 15)

<b>Disabling</b>	<b>Restrictive</b>	<b>Major</b>
0 = 5 pts	0 = 5 pts	0 = 5 pts
	1-3 = 4 pts	1-5 = 4 pts
	4-6 = 3 pts	6-10 = 3 pts
	7-9 = 2 pts	11-15 = 2 pts
	10-12 = 1 pt	16-20 = 1 pt
	>13 = 0 pts	>21 = 0 pts



- b. Units shall continue to clear all disabling and restrictive discrepancies during the STAN Team visit.
- c. Units with multiple like boat platforms (i.e., two 47' MLBs) shall average the arrival scores for all like boat platforms and divide by the number of boats to obtain unit points toward materiel condition score.

For example: **Station X** has two 47' MLBs. The materiel condition score for one MLB was 15 points while the other was 13 points. The two scores will be averaged for the final Platform Materiel Condition score (in this case 14 points). If the average contains a decimal, the number will be rounded up if 0.5 or greater (Boat One = 14 points, Boat Two = 11 points, Average = 12.5 points, Points toward award = 13).

**NOTE** STAN Teams will inspect all standard boats that are berthed at the unit. Maintenance relief hulls will be included unless they are deployed as a relief boat or undergoing major maintenance availability.

**B.5.b.3.**  
 Knowledge Based  
 Written Tests

Tests are administered to all boat crew personnel (coxswain, engineer, and crew members). However, only the test scores for certified crew members will be used to establish unit scores. The average of all certified crew positions will be used in determining the point value (i.e., coxswain average 90.4% + engineer average 85.5% + crew average 80.6% / 3 = 85.5% = 4 points). Overall unit average of .5 or greater will be rounded up to the next whole number.

Overall Unit Average	=	Point Scale
90 -100%	=	5
80 - 89%	=	4
70 - 79%	=	2
60 - 69%	=	1
< 60%	=	0

**B.5.b.4.**  
 Underway  
 Exercises

Points for underway exercises will be determined by the percentage of underway exercises with passing scores (met established drill standards). For example, 9 of 10 drills passed = 90% = 8 points, 13 of 16 drills passed = 81% = 6 points, etc. All drills (core and optional) will be included in the final score.

Underway Exercises with Passing Scores	=	Point Scale
96 -100%	=	10
91 - 95%	=	9
86 - 90%	=	8
81 - 85%	=	6
76 - 80%	=	3
71 - 75%	=	2
65 - 70%	=	1



B.5.b.5. Personal Protective Equipment

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Points in this category will be assigned based on overall compliance with the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series). The following scoring system will be applied:

Issuance:	In Compliance	= 1 pt
Documentation:	In Compliance	= 2 pts
PMS:	In Compliance	= 3 pts
Materiel Condition:	In Compliance	= 4 pts

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B.5.b.6. Training Program Evaluation

Points in this category will be assigned based on overall compliance with *Part 5* of this Manual. The following scoring system will be applied:

Program (administration):	In Compliance	= 2 pts
Training Records:	In Compliance	= 3 pts
Currency:	In Compliance	= 5 pts

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B.5.c. STAN Team Assessment Analysis Report

Each STAN Team will furnish this report to Commandant (G-OCS) annually. The report shall provide recommendations to improve training programs, maintenance procedures, configuration management requirements, and MISHAP trends. G-OCS will publish an Assessment Analysis Report Summary via ALCOAST message.

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## Chapter 4. Materiel Inspections

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**Introduction**      The purpose of the materiel inspection is to validate the readiness and standardization of the boat being inspected and to ensure that it is safe for operations and is mission capable. The materiel inspection is performed both dockside and underway. The dockside portion consists of a complete visual inspection of all boat spaces. The condition of the hull, installed fittings, and watertight structures will be reported. A functional inspection of all installed machinery, weight handling equipment, and boat outfit items will also be completed. During the underway portion, a full power trial will be performed in accordance with the appropriate PMS technical publication.

**In this Chapter**      This Chapter contains the following Sections:

Section	Topic	See Page
A	Formal and Unit Materiel Inspections	4-27
B	Guidelines/References	4-28
C	Discrepancy Classifications and Required Actions	4-28
D	Readiness Rating	4-30

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### Section A.    Formal and Unit Materiel Inspections

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**A.1. Formal Materiel Inspections**      Formal materiel inspections shall be conducted during OPCON RFO evaluations and Readiness and Standardization Assessments. A formal inspection report containing the boat's materiel discrepancy list will be included in the RFO or Readiness and Standardization Assessment reports.

**A.2. Unit Materiel Inspections**      Unit Commanders shall conduct a materiel inspection once per month for each standard boat assigned to the unit. No formal documentation is required for this inspection other than necessary reporting of discrepancies. In addition, daily boat checks, as required by the appropriate PMS technical publication, represent the unit's opportunity to assess the materiel condition of standard boats on a daily basis. Any time materiel discrepancies are noted, units shall comply with the required actions as outlined in *Section C* of this Chapter.

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## Section B. Guidelines/References

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**Introduction** The Specific Boat Type Operator’s Handbook, COMDTINST M16114 (series) provides the materiel inspection checklists for the appropriate standard boat. Additional non-standard boat checklists are available for use and/or modification in *Appendix E* of this Manual. In addition to this Manual, the following reference documents should be used when conducting a standard boat materiel inspection:

- Applicable PMS Manual
- *Coatings and Color Manual*, COMDTINST M10360.3 (series)
- *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
- Specific Boat Type Operator’s Handbook, COMDTINST M16114 (series)
- Additional technical publications and drawings, as appropriate

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**B.1. Personnel Requirements** A materiel inspection normally requires a minimum of two personnel to conduct, preferably a Boatswain’s Mate and Machinery Technician, both of whom possess extensive experience on the type of standard boat to be inspected and a working knowledge of the reference documents which checklist items are judged against.

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**B.2. Discrepancy Classification** Each item on the materiel inspection checklist will be evaluated as standard or non-standard. When the minimum standard for a specific item cannot be met, the evaluator shall classify the discrepancy based upon the classification guidelines contained in the applicable Specific Boat Type Operator’s Handbook, COMDTINST M16114 (series). There are four possible classification categories; each requires a different level of action by the unit and Operational Commanders. These classifications are as follows:

- Disabling casualty
- Restrictive discrepancy
- Major discrepancy
- Minor discrepancy

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## Section C. Discrepancy Classifications and Required Actions

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**Introduction** The readiness of standard boats shall be continuously monitored to ensure that the boat is capable of unrestricted operations. This monitoring is accomplished through a variety of formal and informal inspection programs including daily boat checks, the boat PMS schedule, annual engineering inspections, RFO evaluations, and Readiness and Standardization Assessments. Whenever a discrepancy is noted during any of these inspection programs, it must be classified and acted upon based on the following standards.

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**C.1. Disabling Casualties** Disabling casualties are those which make the boat not serviceable.

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C.1.a. Actions (Underway) In the event a boat sustains a disabling casualty while underway, the boat shall immediately return to the nearest safe mooring, if able, and immediately be placed into “Charlie” status. In many cases, the boat will require assistance from another vessel.

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C.1.b. Actions (Dockside) If a disabling casualty is identified while the boat is moored, the boat is not authorized to get underway until the casualty is corrected. The boat shall immediately be placed into “Charlie” status and repaired. Dockside materiel inspections may continue after discovery of a disabling casualty but the boat shall not get underway for full power trial or underway exercises until all disabling casualties are fully repaired.

**NOTE** Operational Commanders may authorize, *in writing*, the movement of the boat for short distances under its own power only to facilitate haul-outs or corrective maintenance.

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C.1.c. Reports Disabling casualties shall be reported to the Operational Commander by the most expeditious means, followed up by a boat status message as soon as possible but no later than 12 hours after the casualty is discovered. If the casualty cannot be repaired within 48 hours, a CASREP shall be sent within 24 hours of discovery of the casualty in accordance with *Casualty Reporting (CASREP) Procedures (MATERIEL)*, COMDTINST M3501.3 (series). Operational Commanders are responsible for monitoring the status of repairs to disabling casualties.

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**C.2. Restrictive Discrepancies** Restrictive discrepancies are those which restrict the operations of the boat such that it can perform some missions but not all missions safely. Boats with restrictive discrepancies shall only be operated if the Operational Commander has issued a written waiver. A verbal waiver is authorized, as long as it is followed with a written waiver within 4 hours. When advised, and with the concurrence of the Operational Commander, the authority to draft and send/transmit written waivers may be delegated per local SOP.

**NOTE** A written waiver may be a letter, memorandum, e-mail, or record message traffic. The written waiver shall: (1) identify the specific discrepancy which is waived, (2) describe the conditions under which the boat may be operated, and (3) concurrence on the measures to be taken to lessen or negate the hazard posed by the discrepancy. Written waivers shall be maintained as an annotation to part 3 of the boat record.

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C.2.a. Actions (Underway) In the event the boat sustains a restrictive discrepancy while underway, the coxswain shall immediately notify the parent unit with all pertinent information and a recommendation as to whether to continue or abort the mission. The parent unit shall pass along the information pertaining to the casualty, the current mission, and recommendations to the Operational Commander who shall immediately notify the unit as to whether or not continuing the mission is authorized, the conditions under which the boat may be operated, and precautions to be taken to lessen the hazards posed by the discrepancy.

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C.2.b. Actions  
(Dockside)

The boat shall not get underway until the discrepancy is corrected, or a waiver has been received. Dockside materiel inspections may continue after discovery of a restrictive discrepancy, but the boat shall not get underway for full power trial or underway exercises until all restrictive discrepancies are fully repaired or have been waived by the Operational Commander.

C.2.c. Reports

Restrictive discrepancies shall be reported to the Operational Commander if the discrepancy cannot be repaired within 1 hour. If the casualty cannot be repaired within 48 hours, a CASREP shall be sent within 24 hours of discovery of the casualty in accordance with *Casualty Reporting (CASREP) Procedures (MATERIEL)*, COMDTINST M3501.3 (series). Operational Commanders are responsible for monitoring the status of repairs to all restrictive discrepancies.

C.3. Major  
Discrepancies

Major discrepancies are those that degrade the effectiveness of the boat to perform one or more missions. The occurrence of major discrepancies shall be documented and a plan to correct these discrepancies shall be formulated and carried out by the unit. Operational Commanders are responsible for monitoring the status of the repairs to major discrepancies. It is suggested that, in conjunction with unit materiel inspections, Operational Commanders receive monthly reports as to the status of correction of major discrepancies.

C.4. Minor  
Discrepancies

Minor discrepancies do not affect the operational readiness of the boat. However, a boat with minor discrepancies does not meet the standardization criteria as established for that boat. The occurrence and repair of minor discrepancies shall be documented and monitored at the **Station**/unit level.

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## Section D. Readiness Rating

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**Introduction**

Boats shall be assigned readiness ratings that shall be included in all inspection reports. Ratings shall be assigned in categories as described below:

**D.1. Upon  
Arrival**

Upon arrival, the boat is assigned one of the following readiness ratings:

- **“Bravo”**: The boat has no disabling casualties or restrictive discrepancies.
- **“Bravo (Restricted)”**: The boat has one or more restrictive discrepancies with waivers.
- **“Charlie”**: The boat has one or more disabling casualties or the boat has restrictive discrepancies without waivers.

**NOTE** 

If the boat is found to be *Charlie*, specific reasons supporting this determination will be provided.

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**D.2. Upon  
Departure**

Upon departure, the boat is assigned one of the following readiness ratings:

- **“Bravo”**: The boat has no disabling casualties or restrictive discrepancies.
  - **“Bravo (Restricted)”**: The boat has one or more restrictive discrepancies with waivers.
  - **“Charlie”**: The boat has one or more disabling casualties or the boat has restrictive discrepancies without waivers.
-



Part 4 – Readiness and Standardization  
Chapter 4 – Materiel Inspections



## Chapter 5. Boat Crew Qualifications and Performance Evaluations

**Introduction** Unit assessments through practical exercises shall evaluate boat crew professionalism and measure human performance during both OPCON RFO visits and STAN Team visits. OPCON RFO teams should follow the same guidelines and procedures as the STAN Teams. The unit training program shall be evaluated by thorough training record review, knowledge based testing, and the conduct of underway exercises utilizing the core and optional drills. Results of testing and records review, and recommendations for improvement shall be provided to the unit command at the RFO or STAN Team out-brief. STAN Team test results will be compared to Coast Guard wide averages. Evaluations of specific drills and boat crew member performance will be provided at the conclusion of each sortie. Overall drill evaluations and recommendations for improvement will be provided to the command at the out-brief.

**Guidelines/References.** References containing procedural guidelines are found in *Chapter 7* of this Part.

This Chapter provides objective procedures, drills, exercises, and evaluation techniques for determining boat crew qualifications and providing performance evaluations.

**NOTE** Operational Commanders, COs, and OICs may require demonstration of required skills at any time. Operational Commanders, COs, and OICs may rescind certification of members unable to meet minimum requirements.

**In this Chapter** This Chapter contains the following Sections:

Section	Topic	See Page
A	Procedures	4-34
B	Underway Exercise Evaluations and Required and Optional Exercises	4-35
C	Evaluation Procedures	4-37



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## Section A. Procedures

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<b>Introduction</b>	<p>STAN Team and Operational Commander RFO evaluation teams shall conduct the following evaluations:</p> <ul style="list-style-type: none"><li>• Knowledge-based testing</li><li>• Training record review</li><li>• Underway exercises</li></ul>
<b>A.1. Knowledge-Based Testing</b>	<p>After the in-brief, written tests will be administered to all qualified coxswains, boat engineers, and boat crew members. Non-qualified crewmembers may also take the tests; however, their scores will not be recorded or reflected in the unit averages.</p> <ul style="list-style-type: none"><li>• Tests will consist of questions concerning:<ul style="list-style-type: none"><li>▪ boat operations and missions,</li><li>▪ boat specifications,</li><li>▪ first aid and survival,</li><li>▪ rules of the road,</li><li>▪ navigation, and</li><li>▪ engineering systems and components.</li></ul></li><li>• Boat engineers shall take a combined engineering and crew member test.</li></ul>
<b>A.2. Training Program Evaluation</b>	<p>Individual and unit training records will be reviewed for content and format. Certification letters for each boat crew member, including command cadre, will be checked and must be present. Currency maintenance and underway hours will be compared to ensure compliance with requirements. If a member's currency or certification is in question, the STAN Team or RFO leader shall resolve the issue or require another certified/current crew member for that position during drills. Each situation of this nature shall be documented in the Readiness and Standardization Assessment report.</p>
<b>A.3. Exercises</b>	<p>The STAN or RFO evaluator will select exercises from the lists in the following Section and determine how many of the exercises are required to adequately evaluate a unit. Readiness and standardization drills and other checklists may be found in <i>Appendix A</i> through <i>Appendix F</i> of this Manual.</p>

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## Section B. Underway Exercise Evaluations and Required and Optional Exercises

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**Introduction** Underway exercises shall be performed to measure how boat crews perform standard procedures (boat crew readiness) and to evaluate the effectiveness of the unit's boat crew training program.

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**B.1. Evaluation Prerequisites** The following prerequisites and standards shall be met when performing the exercises:

- Trainees will not normally participate during underway exercise evaluations, but may be onboard as observers at the discretion of the evaluator.
- The boat being used shall have no disabling casualties. The Operational Commander shall address all restrictive deficiencies as necessary with written waivers as required in *Chapter 4, Section C* of this Part.
- Dutystanding certified boat crews shall normally perform at least two required exercises; one during daylight hours and one at night. Non-dutystanding certified personnel including the CO (CWO only), OIC, XPO, **Station (small)** Supervisor, Senior Boatswain's Mate (at units commanded by a commissioned officer), EPOs, boat engineers, and boat crew members shall perform at least one required exercise.

**NOTE** 

At all units, the CO (CWO only), OIC, XPO, EPO, and senior Boatswain's Mate (for units commanded by a commissioned officer) will be expected to perform at least one underway exercise if they have been assigned to the unit for more than six months. Command cadre (CO/OIC, XO/XPO) will be expected to perform a day and night drill (i.e., OIC day, XPO night).

- Sorties shall, at a minimum, include core drills as listed below.
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**B.2. Required Exercises (Core Drills)**

Each underway exercise shall, at a minimum, include one or more of the core drills listed below. Drill checklists are available in *Appendix A* through *Appendix D* of this Manual.

- Day/night navigation and piloting
  - Man overboard (MOB) recovery
  - Towing (UTB/MLB, RB-S/RB-HS only)
  - Buoy operations – mooring pull (BUSL only)
  - Dewatering (UTB/MLB and RB-S/RB-HS if pump is available)
-



### B.3. Optional Exercises

Optional exercises may be conducted in conjunction with, but not simultaneous to, required exercises. Please make note that procedures for optional drills may not be specifically addressed in the operator's handbooks or other references. In order to improve standardized procedures, please notify the National Motor Lifeboat School, Boat Forces Center, or National Aids to Navigation School where omissions/deviations may exist. Drill checklists are available in *Appendix A* through *Appendix D* of this Manual.

- Reduced visibility navigation
- Crewmember piloting proficiency
- Search patterns (precision and drifting)
  - Sector – single unit (VS)
  - Expanding square – single unit (SS)
  - Creeping line – single unit (CS)
  - Track line – single unit, non-return (TSN)
  - Track line – single unit, return (TSR)
  - Parallel – single unit (PS)
- Basic engineering casualty control exercises (BECCE)
  - Fire in engine room (41' UTB, 44' MLB, 47' MLB, 49' BUSL)
  - Outboard motor fire (RB-S, RB-HS)
  - Loss of steering (cable/hydraulics - 41' UTB, 49' BUSL) (hydraulics - 44' MLB, 47' MLB, RB-S, RB-HS)
  - Loss of steering (jammed rudder) (41' UTB)
  - Collision with submerged object
  - Accidental grounding (44' MLB)
  - Hard grounding
  - Loss of engine lube oil pressure
  - Engine high water temperature
  - Reduction gear failure (44' MLB, 47' MLB, 49' BUSL)
  - Loss of control of engine RPMs
  - Loss of fuel oil pressure



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## Section C. Evaluation Procedures

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<b>Introduction</b>	Evaluators shall assess boat crew proficiency and performance as follows.
<b>C.1. Pre-Brief</b>	Evaluators shall conduct a pre-brief before the exercise commences.
<b>C.2. Evaluation Criteria</b>	<p>Evaluations will be based on how well each crewmember performs their duties. Each exercise provides a setting for the boat crewmember to demonstrate required skills. Evaluators shall measure and evaluate boat crew performance and proficiency using the following criteria:</p> <ul style="list-style-type: none"><li>• Procedures and methods appropriate for the situation.</li><li>• Adherence to boat crew performance standards.</li><li>• Crewmember familiarity with boat systems, boat outfit equipment, and the stowage plan.</li><li>• Crewmember proficiency as an individual and as a team member (team coordination and risk assessment).</li><li>• Effective coxswain communications, including briefings and task assignments.</li><li>• Crew understanding of commands and safe performance of tasks.</li></ul>
<b>C.3. Debrief</b>	Evaluators shall debrief the boat crew at the end of each exercise. This debrief is normally conducted dockside.
<b>C.4. Additional Assessment Requirements</b>	Operational Commanders may impose additional assessment requirements due to unique operational requirements for specific units. Requirements contrary or inconsistent with published standard procedures are prohibited. Operational Commanders should request written modification of procedures from Commandant (G-OCS), via the National Motor Lifeboat School, Boat Forces Center, or National Aids to Navigation School in cases where approved procedures are insufficient.

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Part 4 – Readiness and Standardization  
Chapter 5 – Boat Crew Qualifications and Performance Evaluations




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## Chapter 6.

# Rescue and Survival and Personal Protective Equipment Program Evaluation

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**Introduction**      The purpose of the Rescue and Survival (R&S) and Personal Protective Equipment (PPE) program evaluation is to verify unit compliance with the requirements for the issuance, documentation, maintenance (PMS), and materiel condition of R&S and PPE.

**In this Chapter**      This Chapter contains the following Sections:

Section	Topic	See Page
A	R&S and PPE Program	4-39
B	Procedures	4-40
C	Evaluation Criteria	4-41

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## Section A.    R&S and PPE Program

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**Introduction**      Both the PPE Program and the Rescue and Survival Systems Program are based on requirements outlined in the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series). The Rescue and Survival Systems Program concentrates on boat equipment (boat outfit) and inspection (PMS) requirements. The PPE Program concentrates on issuance, documentation, and inspection (PMS) requirements of personal issue items.

**A.1. Formal Materiel Inspections**      Formal inspections shall be conducted during annual “Ready for Operations” evaluations and Readiness and Standardization Assessments. A formal inspection report containing program discrepancies shall be included in the RFO and Readiness and Standardization Assessment reports.

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## Section B. Procedures

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<b>Introduction</b>	Ready for Operations and Readiness and Standardization evaluations shall conduct the following evaluations.
<b>B.1. Documentation</b>	Assessment teams will review the unit’s AF Form 538 log documenting issuance and annual inventories of basic and cold weather PPE to individuals. Compliance with inventory control procedures will also be evaluated. Inspecting personnel shall determine if the unit in “in compliance” or “not in compliance” with established requirements. Additionally, assessment teams shall determine that commands issuing PPE waivers are complying with the provisions of the <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series).
<b>B.2. Issuance</b>	Assessment teams will compare AF Form 538 documentation with actual on-hand inventories verifying issuance of PPE with pertinent directives. A statement identifying PPE funding as sufficient or insufficient will be included in the report. Inspecting personnel shall determine if the unit is “in compliance” or “not in compliance” with established requirements.
<b>B.3. PMS</b>	Maintenance logs will be reviewed for documentation and compliance with maintenance procedure requirements and frequency as required by the <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series). Inspecting personnel shall determine if the unit is “in compliance” or “not in compliance” with established requirements.
<b>B.4. Materiel Condition</b>	R&S and PPE will be inspected to ensure satisfactory materiel condition, compliance with PMS requirements, and the overall adequacy of the PMS program. Inspecting personnel shall determine if the unit is “in compliance” or “not in compliance” with established requirements.

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## Section C. Evaluation Criteria

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<b>Introduction</b>	A determination of “in compliance” or “not in compliance” shall be based on thorough compliance with the requirements of the <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series). Any discrepancy noted on the checklist will result in a “not in compliance” determination for that section.
<b>C.1. Basic and Cold Weather Equipment</b>	Issuance requirements include specific basic and cold weather equipment. Currently, only boat shoes are an optional issue item as based on a command decision as to operational necessity. Cold weather gear shall be assessed based on unit location as outlined in the <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series). Maintenance and materiel condition areas shall be assessed for compliance with maintenance program and maintenance procedure card requirements.
<b>C.2. Defective PPE</b>	Defective R&S or PPE that, in the opinion of the inspector, presents a significant safety hazard to personnel shall be removed from service and repaired or replaced. This may prevent certain individuals from conducting underway drills if replacement equipment is not available. Final reports shall make specific note of defective R&S and/or PPE that was in service.

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Part 4 – Readiness and Standardization  
Chapter 6 – Rescue and Survival and Personal Protective Equipment Program Evaluation




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## Chapter 7. Summary of Directives

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**Introduction** This Chapter provides a comprehensive list of publications and directives used to execute the provisions of the Coast Guard Readiness and Standardization Program.

**In this Chapter** This Chapter contains the following Sections:

Section	Topic	See Page
A	Training, Operations, and General Information	4-44
B	Naval Engineering	4-45
C	Management	4-45
D	Supply Support	4-46
E	STAN Team Web Sites	4-46

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## Section A. Training, Operations, and General Information

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<u>Directive</u>	<u>Subject Matter</u>
a. <i>Boat Crew Seamanship Manual</i> , COMDTINST M16114.5 (series)	Training manual.
b. <i>Aids to Navigation Manual-Administration</i> , COMDTINST M16500.7 (series)	AtoN administration procedures and requirements.
c. <i>Aids to Navigation Manual-Positioning</i> , COMDTINST M16500.1 (series)	AtoN positioning procedures and requirements.
d. <i>Aids to Navigation Manual-Technical</i> , COMDTINST M16500.3 (series)	AtoN technical procedures and requirements.
e. <i>Aids to Navigation Manual-Seamanship</i> , COMDTINST M16500.21 (series)	AtoN operating procedures.
f. <i>41' UTB Operator's Handbook</i> , COMDTINST M16114.2 (series)	Operating procedures, capabilities, functional configuration, requirements, boat outfit/stowage plans, and emergency procedures.
g. <i>44' MLB Operator's Handbook</i> , COMDTINST M16114.3 (series)	Operating procedures, capabilities, functional configuration, requirements, boat outfit/stowage plans, and emergency procedures.
h. <i>47' MLB Operator's Handbook</i> , COMDTINST M16114.25 (series)	Operating procedures, capabilities, functional configuration, requirements, boat outfit/stowage plans, and emergency procedures.
i. <i>49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook</i> , COMDTINST M16114.22 (series)	Operating procedures, capabilities, functional configuration, requirements, boat outfit/stowage plans, and emergency procedures.
j. <i>Non-Standard Boat Operator's Handbook</i> , COMDTINST M16114.28 (series)	Operating procedures, capabilities, functional configuration, requirements, boat outfit/stowage plans, and emergency procedures.
k. <i>Defender Class Operator's Handbook</i> , COMDTINST M16114.37 (series)	Operating procedures, capabilities, functional configuration, requirements, boat outfit/stowage plans, and emergency procedures.
l. <i>Operational Risk Management</i> , COMDTINST 3500.3 (series)	Risk assessment and management.
m. <i>Operator's Handbook or Manufacturer's Operational and/or Technical Publications</i>	Operating procedures, capabilities, functional configuration, requirements, boat outfit/stowage plans, and emergency procedures.
n. <i>Personnel Qualification Standard (PQS) - Buoy Deck Operations</i> , COMDTINST M3502.12 (series)	Buoy deck operations PQS.
o. <i>Personnel Qualification Standard (PQS) - River Tender Operations</i> , COMDTINST M3502.13 (series)	Chainsaw PQS.
p. <i>Short Range Aids to Navigation Servicing Guide</i> , COMDTINST M16500.19 (series)	AtoN servicing procedures and requirements.



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## Section B. Naval Engineering

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<u>Directive</u>	<u>Subject Matter</u>
a. <i>Naval Engineering Manual</i> , COMDTINST M9000.6 (series)	Engineering standards and practices.
b. <i>Coatings and Color Manual</i> , COMDTINST M10360.3 (series)	Preservation, coating, color and marking requirements for boats.
c. <i>41' UTB Preventative Maintenance System Manual</i> , Tech. Pub. 2061	Preventative and corrosion maintenance procedures.
d. <i>44' MLB Preventative Maintenance System Manual</i> , Tech. Pub. 2062	Preventative and corrosion maintenance procedures.
e. <i>47' MLB Preventative Maintenance System Manual</i> , Tech. Pub. 3343	Preventative and corrosion maintenance procedures.
f. <i>49' BUSL Preventative Maintenance System Manual</i> , Tech. Pub. 3377	Preventative and corrosion maintenance procedures.
g. <i>Rescue and Survival Systems Manual</i> , COMDTINST M10470.10 (series)	Function, configuration, maintenance, and inspection of rescue and survival equipment.
h. NSTM Chapter 079 V2, <i>Damage Control-Practical Damage Control, Section 079-22.19 through 079-22.54</i>	Maintaining watertight integrity.
i. Manufacturer's Technical Publications	Engineering information for specific boats.

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## Section C. Management

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<u>Directive</u>	<u>Subject Matter</u>
a. <i>United States Coast Guard Regulations 1992</i> , COMDTINST M5000.3 (series). (1) <i>Chapter 4-1</i> (2) <i>Chapter 5-1</i>	CO/OIC responsibilities relating to readiness and training. Authority and responsibility of a coxswain.
b. <i>Boat Management Manual</i> , COMDTINST M16114.4 (series)	Boat management and reporting.
c. <i>Operational Mission Performance Expectations-Groups, Stations, Aids to Navigation Teams</i> , COMDTINST M16501.6 (series)	Operational missions.
d. Directives issued by Districts, Maintenance and Logistics Commands, Operational and Unit Commanders	Maintenance and logistics support policies. Organizational, intermediate and depot level maintenance support responsibilities.



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## Section D. Supply Support

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<u>Directive</u>	<u>Subject Matter</u>
a. <i>Management Information for Configuration and Allowances (MICA) for the 41' UTB</i> , ELCINST M4441.41 (series)	Spare/repair parts allowance requirements. Boat outfit parts list.
b. <i>44' MLB Boat Outfit and System Support Manual</i> , ELCINST M4441.72 (series) (to become MICA)	Spare/repair parts allowance requirements. Boat outfit parts list.
c. <i>Management Information for Configuration and Allowances (MICA) for the 47' MLB</i> , ELCINST M4441.47 (series)	Spare/repair parts allowance requirements. Boat outfit parts list.
d. <i>Management Information for Configuration and Allowances (MICA) for the 49' BUSL</i> , ELCINST M4441.49 (series)	Spare/repair parts allowance requirements. Boat outfit parts list.

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## Section E. STAN Team Web Sites

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<u>Web Site</u>	<u>Subject Matter</u>
a. <a href="http://www.uscg.mil/hq/g-o/nmlbs/index.htm">http://www.uscg.mil/hq/g-o/nmlbs/index.htm</a>	National Motor Lifeboat School with link to STAN Team information.
b. <a href="http://www.uscg.mil/tcyorktown/Ops/NATON/STAN_TEAM.htm">http://www.uscg.mil/tcyorktown/Ops/NATON/STAN_TEAM.htm</a>	49' BUSL STAN Team.
c. <a href="http://cgweb.tcyorktown.uscg.mil/utb/Stan/index.asp#Staff">http://cgweb.tcyorktown.uscg.mil/utb/Stan/index.asp#Staff</a>	UTB/RB-S/RB-HS STAN Teams.



# Part 5 Boat Crew Training

**Introduction** This Part provides the basic guidelines for implementing the Coast Guard Boat Crew Training Program.

**In this Part** This Part contains the following Chapters:

Chapter	Title	See Page
1	Introduction	5-3
2	System Components	5-9
3	Qualification	5-23
4	Certification	5-31
5	Currency Maintenance	5-37
6	Documentation	5-45
7	Samples of Consolidated Letters of Certification, Recertification, or Currency Maintenance	5-51





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## Chapter 1. Introduction

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**Introduction** This Chapter gives a basic overview of the boat crew training program itself, as well as a general outline of the certification process. This Chapter also provides the references used for boat crew training and qualification in the Coast Guard.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Program Overview	5-4
B	Training and Certification Process	5-5
C	Description of Qualification	5-7

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## Section A. Program Overview

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**Introduction** The Coast Guard’s boat crew training program establishes minimum standards of knowledge, performance, and currency maintenance requirements for all personnel (regular, reserve, and auxiliary) serving as crewmembers on all shore-based and **cutter**-based Coast Guard boats. It explicitly tasks COs/OICs with the responsibility for the training of boat crews, and provides them with guidelines for the establishment of a successful training program.

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**A.1. Underway Boat Operations** The best boat crew training programs combine classroom instruction, shore-side practical exercises, and technology with an abundance of underway time. Most of the underway training requirements in this program can be accomplished coincidental with multi-mission operations. When the tempo of operations does not provide sufficient underway opportunities, as in winter or in the off-season, frequent dedicated underway training sorties should be scheduled. For shore units that maintain a readiness response posture, there should be very few days when one or more boats are not underway for operations or training.

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**A.2. Five Boat Crew Positions** This program identifies the five boat crew levels of certification:

- Boat crew member
- Engineer
- Coxswain
- Heavy weather coxswain
- Surfman

It describes separate qualification tasks for each position and establishes task requirements. The program establishes boat crew member, engineer, coxswain, heavy weather coxswain, and surfman qualification codes used to identify qualifications by boat type.

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**A.3. Master and Apprenticeship System** This program is based on a master and apprenticeship system supplemented by trainee self-study and resident training opportunities.

In this system:

- The trainee is apprenticed to an instructor who guides the trainee through the qualification phase, providing hands-on training and assisting with the trainee’s program of study.
  - Reading material is based on the references specified for each task.
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## Section B. Training and Certification Process

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**Introduction** This Section discusses the steps in the Coast Guard’s Boat Crew Training and Certification Program. There are three main stages to this process:

- Qualification
- Certification
- Currency/proficiency maintenance

These stages encompass the training to prepare for the certification process and the maintenance required to keep those skills current. This Section also lists the references that are used in the Coast Guard Training Program.

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**B.1. Qualification** Qualification, and the training inherent in it, is the responsibility of each unit. This phase consists of preparing the trainee to perform individual tasks up to the task standard. Qualification may be accomplished at the member’s unit, another unit, or at Coast Guard resident training courses at TRACEN Yorktown or NMLBS. Boat crew qualification tasks are signed by instructors designated by the command. Only senior experienced members shall be assigned as instructors for unqualified command cadre. In the absence of a heavy weather coxswain or surfman at the unit, the CO/OIC is responsible for verifying performance of heavy weather and surfman tasks to standard. Commands should consider the use of outside resources, where necessary, to ensure proper standards are maintained. When the appropriate training section is completely signed off, the member is qualified and certification may commence.

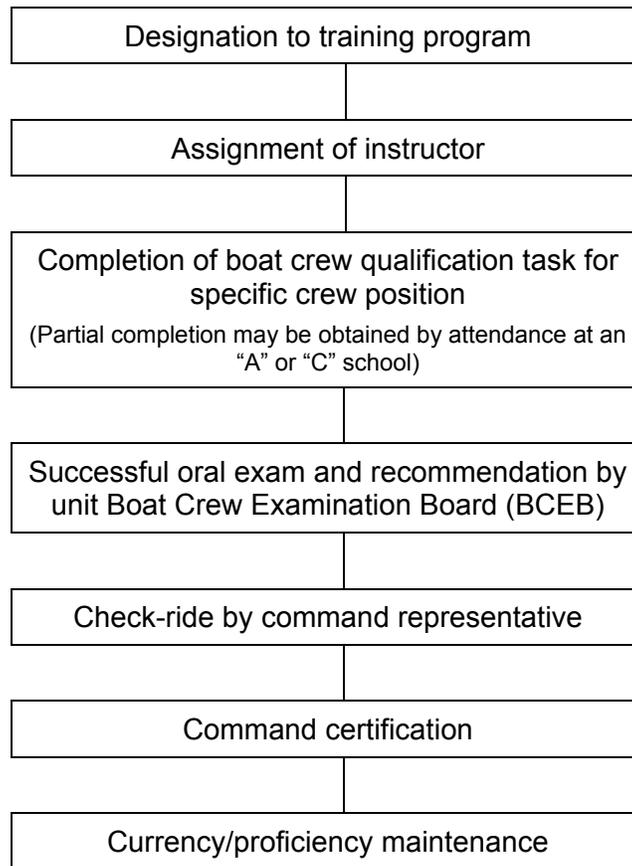
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**B.2. Certification** Certification is the formal process used by the command to examine and attest to an individual’s professional qualifications and maturity. It involves completion of appropriate qualification tasks, an oral board, a comprehensive check-ride aboard unit boats and a professional qualification determination by the command.

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**B.3. Currency/Proficiency Maintenance** The currency/proficiency requirement assures the command that the individual, once certified, stays proficient. Skills must be practiced on a regular basis for a boat crewmember to retain required levels of expertise. COs and OICs may require demonstration of required skills at any time. COs and OICs may rescind certification of members unable to meet minimum requirements.

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**Figure 5-1**  
**Boat Crew Training, Qualification, and Certification System**

**B.4. References**

The following publications are used for the training and qualifications of Coast Guard boat crews:

- a. *30' SRB Operator's Handbook*, COMDTINST M16114.15 (series)
- b. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
- c. *44' MLB Operator's Handbook*, COMDTINST M16114.3 (series)
- d. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
- e. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
- f. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- g. *Defender Class Operator's Handbook*, COMDTINST M16114.37 (series)
- h. *Navigation Rules, International – Inland*, COMDTINST M16672.2 (series)
- i. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)



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## Section C. Description of Qualification

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### Introduction

There are five Boat Crew Qualification Parts of the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series). They are:

- *Part 2* - Boat Crew Member
- *Part 3* - Engineer
- *Part 4* - Coxswain
- *Part 5* - Heavy Weather Coxswain
- *Part 6* - Surfman

Each Part is made up of three major Chapters:

- *Chapter 1* - Task Accomplishment Record
- *Chapter 2* - Qualification Tasks
- *Chapter 3* - Trainee Study Guide

Additional tasks and/or chapters may be included to address specific mission qualification requirements.

*Chapter 1* contains a task accomplishment record which allows the instructor to record the trainee's progress throughout the qualification process.

*Chapter 2* is made up of the qualification tasks, which are designed to measure the trainee's progress.

*Chapter 3* provides guidance for the trainee's reading assignments and is to be removed and retained by the trainee.

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Part 5 – Boat Crew Training  
Chapter 1 – Introduction




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## Chapter 2. System Components

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**Introduction** Each component of the training program has assigned responsibilities and tasks. Each responsibility is important to the success of the training and the final certification process. This Chapter discusses the components of the training program and outlines responsibilities and duties within the program.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Program Managers	5-9
B	District and Operational Commanders	5-10
C	Unit COs and OICs	5-10
D	Unit Training Petty Officers	5-13
E	Boat Crew Examination Board (BCEB)	5-15
F	Instructors and Trainees	5-20

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### Section A. Program Managers

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**A.1. Commandant (G-OCS)** The Office of Boat Forces, Commandant (G-OCS), working for the Assistant Commandant for Operations (G-O), is the program manager for the boat crew training program. As such, Commandant (G-OCS) provides long-range planning for the program. Functions of Commandant (G-OCS) include:

- Monitoring Coast Guard boat operations.
- Determining future personnel and training needs.
- Adjusting and equipping the system accordingly.
- Providing system documentation for the program, including:
  - Guidelines for implementing boat crew training.
  - Specific training guides for the different boat crew positions.
  - Recommended documentation for maintaining the system records.

**A.2. Specific Needs** Other program managers with boat crew training interests or requirements should consult Commandant (G-OCS) to ensure their specific needs are met.

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## Section B. District and Operational Commanders

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**B.1. District Commanders**

District Commanders monitor and ensure:

- Program compliance within their Districts through regular or special District inspections.
- Policies that encourage maximum effective use of District boats for underway operations and training.

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**B.2. Operational Commanders**

Operational Commanders provide training support for subordinate units primarily by monitoring and active engagement in the training and operational performance of each unit. The procedures set forth in *Part 4, Readiness and Standardization* shall be used to accomplish this. Operations personnel should be well versed and engaged in the RFO evaluation process and the conduct of underway drills.

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**B.2.a. Responsibilities**

Operational Commanders are responsible for ensuring that all command cadre personnel maintain certification in accordance with *Section C* of this Chapter. All initial and subsequent recertification letters for the CO/OIC shall be signed by the Operational Commander (without delegation).

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**B.2.b. Participation in Training Exercises**

To emphasize the importance of the program, Operational Commanders are encouraged to periodically get underway on boats assigned to their units.

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## Section C. Unit COs and OICs

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**Introduction**

This Section provides sufficient guidance on how to run an effective boat crew training program that ensures unit personnel can perform assigned missions. Since operational readiness is a function of vessel materiel condition and crew professionalism, boat crew training, along with proper vessel maintenance, shall be treated as a high priority.

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**In this Section**

This Section contains the following information:

Topic	See Page
Responsibilities and Duties	5-11
Boat Crew Certification Requirements	5-11

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## Responsibilities and Duties

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<b>C.1. Unit Commanders</b>	<p>Unit Commanders shall:</p> <ul style="list-style-type: none"><li>• Become thoroughly familiar with the contents of and ensure personnel are following all applicable references listed in <i>Chapter 1</i> of this Part.</li><li>• Monitor the unit training program.</li></ul> <p>Projected deficiencies in the number of certified unit personnel are not to be used to justify deviation from established guidelines.</p>
<b>C.2. Local Knowledge Criteria</b>	<p>Unit Commanders are responsible for analyzing local needs and promulgating any additional requirements for certification at the unit.</p>
<b>C.3. Boat Crew Certification</b>	<p>The Unit Commander has the final authority for certifying boat crewmembers. Recommendations from the Boat Crew Examining Board should be carefully reviewed.</p>
<b>C.4. Reserve Training</b>	<p>Close liaison shall be maintained between Unit Commanders and reservists assigned to ensure that training opportunities are available.</p>
<b>C.5. Coast Guard Auxiliary</b>	<p>Coast Guard Auxiliarists may be assigned in any crew position, except coxswain, heavy weather coxswain, or surfman, on Coast Guard boats, upon completing the qualification and certification requirements as detailed in this Part.</p>
<b>C.6. Improvements</b>	<p>Unit Commanders are requested to advise Commandant (G-OCS), by letter via the chain of command, of recommendations for improvement to the Boat Crew Training Program.</p>

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## Boat Crew Certification Requirements

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<b>C.7. Command Cadre</b>	<p>For the purpose of this Section, the command cadre includes the CO/OIC, XO/XPO, EO/EPO, <b>Station (small)</b> Supervisor, and Senior Boatswain's Mate.</p>
<b>C.8. Certifications</b>	<p>COs (CWOs), OICs, XPOs, <b>Station (small)</b> Supervisors and Senior Boatswain's Mates attached to units with COs (Ensign and above), shall be certified as a coxswain, heavy weather coxswain, or surfman, as applicable. EOs/EPOs shall be certified as boat engineers. COs/XOs (other than CWO) shall be certified as boat crew members. <b>Cutter</b> COs/OICs, XOs/XPOs, EOs/EPOs are exempt from this requirement.</p>

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**C.9. Previously Qualified Command Personnel**

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Previously qualified command personnel (CO/OIC, XO/XPO, and EO/EPO, **Station (small)** Supervisor, and senior Boatswain’s Mates) shall recertify on all boat types assigned to their unit within six months of reporting aboard. All **Station** COs and XOs (above Warrant Officer) shall complete the boat crew member qualification and certification for all boat types assigned to their unit within 12 months of reporting aboard.

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**C.10. CO/OIC Initial Recertification**

For CO/OIC initial Recertification, Operational Commanders, including Sector Department Heads, may certify individuals based on an examination of the individual’s:

- Competency
- Experience
- Background

A comprehensive underway check-ride and an oral examination is recommended as the most suitable method of determining competency. The recertification letter shall be signed by the Operational Commander.

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**C.11. Maintenance Applicability**

Command cadre must complete the semi-annual/annual currency maintenance requirements in *Chapter 5* of this Part and maintain certification while assigned to the unit.

Except for medical situations of a temporary nature, a command cadre member unable or unwilling to attain certification or maintain currency shall normally be relieved for cause. Medical situations of a temporary nature are defined as conditions that preclude a member from boat operations for a period of not more than 12 months.

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**C.12. Inability of Unit Crew to Qualify for Boat Crew Duties**

Billet allowances are based, in part, upon the number of personnel needed to operate the boats assigned. Whenever personnel, after a reasonable amount of time, are unable to qualify for boat crew duties, administrative action should be taken.

---

**C.13. Inability of a Coxswain to Qualify**

The coxswain is the most critical boat crewmember. Coxswain certification is a requirement for advancement to and satisfactory service as a BM2.

If a Boatswain’s Mate (E-5 or above) is unable to certify as coxswain, within a reasonable amount of time, the Unit Commander should provide additional opportunities for training and experience and document the results. If the member still does not show progress, the process for reduction in rate for incompetency or change in rating as outlined in the *Personnel Manual*, COMDTINST M1000.6 (series), *Chapter 5* should be initiated. In no case should a Boatswain’s Mate (E-4 or above), unable to qualify as coxswain, be recommended for advancement.

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**NOTE** 

A guideline for “reasonable amount of time to certify” should be gauged against the average amount of time for all coxswains (previously uncertified) within the sector/group to certify.

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## Section D. Unit Training Petty Officers

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<b>Introduction</b>	<p>The Unit Training Petty Officer (E-6 or above) is responsible for the day-to-day management of the unit training program at ashore operational units with Coast Guard boats assigned. This involves various record keeping and supervisory duties. As such, the Training Petty Officer is responsible for the following tasks:</p> <ul style="list-style-type: none"><li>• Maintaining training records.</li><li>• Supervising unit instructors.</li><li>• Updating the Unit Commander.</li><li>• Interviewing prospective trainees and instructors.</li><li>• Recommending trainee/instructor assignments.</li><li>• Monitoring trainee progress.</li><li>• Coordinating certification procedures with the BCEB and the Unit Commander.</li><li>• Maintaining a central file of lesson plan outlines for all recurring training.</li><li>• Maintaining records of completed drills and exercises.</li><li>• Scheduling classroom and underway training.</li><li>• Monitoring and supervising the currency/proficiency program.</li></ul>
<b>D.1. Maintaining Records</b>	<p>The Training Petty Officer is responsible for the creation and maintenance of unit training records. This includes ensuring that all records regarding the qualification, certification, and currency process are accurate and current.</p>
<b>D.2. Supervising</b>	<p>The Training Petty Officer’s responsibilities to the unit instructors include:</p> <ul style="list-style-type: none"><li>• Supervising</li><li>• Monitoring</li><li>• Supporting</li><li>• Counseling</li></ul> <p>This includes such tasks as:</p> <ul style="list-style-type: none"><li>• Assigning specific training objectives and deadlines for completion to the instructor.</li><li>• Providing training aids, equipment, and technical training expertise as necessary.</li></ul>
<b>D.3. Updating the Unit Commander</b>	<p>The Training Petty Officer will keep the Unit Commander regularly advised of training program progress.</p>
<b>D.4. Interviewing and Recommending Assignments</b>	<p>It is the Training Petty Officer’s responsibility to:</p> <ul style="list-style-type: none"><li>• Interview prospective trainees and instructors.</li><li>• Recommend trainee/instructor assignments to the Unit Commander.</li></ul>

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**D.5. Monitoring  
Trainee Progress**

The Training Petty Officer will:

- Monitor trainee progress through the training phases.
- Address the individual training needs through instructor coordination.

This may include spot-checking of completed training to determine if standards are being met.

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**D.6.  
Coordinating  
Certification  
Procedures**

The Training Petty Officer coordinates certification procedures with the Boat Crew Examining Board and the Unit Commander after a trainee has satisfactorily completed the appropriate qualification tasks.

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**D.7. Scheduling**

The Training Petty Officer is responsible for scheduling dedicated classroom and underway training.

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**D.8. Monitoring  
Currency/  
Proficiency  
Maintenance**

The Training Petty Officer will monitor and supervise the currency/proficiency maintenance program.

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## Section E. Boat Crew Examination Board (BCEB)

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<b>Introduction</b>	The Boat Crew Examination Board (BCEB) is comprised of certified boat crew members, consisting of experienced boat crew members, engineers, coxswains, heavy weather coxswains, and surfmen, selected by the Unit Commander and organized as applicable to examine and evaluate boat crew candidates. The BCEB is designated in writing. The primary function of the BCEB is to recommend personnel for certification to boat crew positions. The board is responsible for the administration of comprehensive check-rides and personal interviews. A unit BCEB serves as the quality control source for unit boat crews.
<b>E.1. Designation</b>	The BCEB shall be designated in writing by the CO/OIC.
<b>E.2. Members</b>	<p>The BCEB should consist of at least:</p> <ul style="list-style-type: none"><li>• One experienced engineer.</li><li>• One experienced coxswain.</li><li>• If applicable, one experienced heavy weather coxswain/surfman.</li></ul> <p>The size of the unit, as well as the number of personnel requiring certification, determines the size of board membership.</p>
<b>E.3. Representation</b>	Members selected should be members of the unit representing different boat crew skills and positions found at the unit. Unit Commanders should monitor the performance of board members. For continuity, those members showing superior performance should be continued on the board.
<b>E.4. Chairman of the Board</b>	The CO/OIC will designate the Chairman of the Board, normally the XO/XPO.
<b>E.5. Underway Check-Rides</b>	BCEBs shall plan and conduct underway check-rides in order to evaluate prospective boat crew members during underway conditions. The trainee should be able to perform all duties required for the boat crew position and boat type for which certification is sought, up to the standards established in the qualification tasks for the crew position. The following specific guidelines apply to the positions indicated.

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E.5.a. Boat Crew  
Member

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The check-ride will be conducted by an experienced, certified coxswain from the BCEB. The evaluation should include drills involving the use of various equipment and line handling. Skills to observe include:

- Boat familiarization.
- Watchstanding.
- Area familiarization.
- Basic navigation.
- Boat handling.
- Use of rescue and survival gear.
- Emergency procedures.
- Application of team coordination and risk assessment standards.

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E.5.b. Engineer

The check-ride will be conducted by an experienced, certified engineer from the BCEB. The evaluation should include drills involving propulsion equipment, damage control, and casualty control. Skills to observe include:

- Area familiarization.
  - Boat engineering systems familiarization.
  - Pre-start checks and adjustments.
  - Monitoring of all engineering systems.
  - Simulated engineering casualties and correction procedures.
  - Shutdown and securing procedures.
  - Knowledge of general engineering specifications of the boat type.
  - Use of rescue and survival gear.
  - Emergency procedures.
  - Required preventive maintenance for the boat type.
  - Application of team coordination and risk assessment standards.
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- E.5.c. Coxswain      The check-ride will be conducted by an experienced, certified coxswain, heavy weather coxswain, or surfman from the BCEB. The evaluation should include drills involving boat type familiarization, boat operations, crew control, mission management, and the maturity and judgment necessary to perform as a boat coxswain. Skills and attributes to observe include:
- Departure planning.
  - Crew brief/debrief.
  - Area familiarization.
  - Navigation and piloting.
  - Plot and execute basic search patterns.
  - Boat handling.
  - Towing.
  - Person-in-the-water recovery.
  - Engineering casualty control procedures.
  - Judgment.
  - Leadership.
  - Use of rescue and survival gear.
  - Emergency procedures.
  - Evolutions specific to unit mission.
  - Local knowledge without reference to charts and publications, including any probable trouble spots (shallow water, sunken pilings, etc.).
  - Application of team coordination and risk assessment standards.
  - Coast Guard, District, Sector/Group, and unit standard operating procedures and policies.
-



E.5.d. Heavy  
Weather Coxswain

The check-ride will be conducted by an experienced, certified heavy weather coxswain, or surfman from the BCEB. The evaluation should include drills involving boat operations in heavy weather and surf (less than 8 ft.), crew control, mission management, and the maturity and judgment necessary to perform as a heavy weather coxswain.

In the absence of a heavy weather coxswain or surfman at the unit, the CO/OIC is responsible for verifying performance of tasks to standard and signing off the qualification tasks. Commands should consider the use of outside resources, where necessary, to ensure proper standards are maintained. Skills to observe include:

- Departure planning.
  - Crew brief/debrief.
  - Judgment.
  - Leadership.
  - Use of rescue and survival gear.
  - Emergency procedures.
  - Boat handling in heavy weather and surf.
  - Piloting in heavy weather.
  - Heavy weather towing.
  - Wave avoidance techniques.
  - **Surf Station** keeping.
  - Transiting a breaking bar.
  - Person-in-the-water recovery in heavy weather and surf.
  - Application of team coordination and risk assessment standards.
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E.5.e. Surfman The check-ride will be conducted by an experienced, certified surfman from the BCEB. The evaluation should include drills involving boat operations in surf, crew control, mission management, and the maturity and judgment necessary to perform as a surfman.

In the absence of a surfman at the unit, the CO/OIC is responsible for verifying performance of tasks to standard and signing off the qualification tasks. Command should consider the use of outside resources, where necessary, to ensure proper standards are maintained. Skills to observe include:

- Departure planning.
- Crew brief/debrief.
- Judgment.
- Leadership.
- Use of rescue and survival gear.
- Emergency procedures.
- Piloting procedures applicable to operating in a surf environment.
- Boat handling in surf.
- Wave avoidance techniques.
- **Surf Station** keeping.
- Transiting a breaking bar or entrance.
- Person-in-the-water recovery in surf.
- Application of team coordination and risk assessment standards.

**NOTE**  A guideline for “reasonable amount of time to certify” should be gauged against the average amount of time for all coxswains (previously uncertified) within the sector/group to certify.

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**E.6. Oral Boards and Reports**

The BCEB has two main duties:

- Interview the candidate and evaluate their leadership ability, judgment, maturity, and knowledge.
  - Provide the Unit Commander a written report on the individual that recommends or does not recommend certification.
-



E.6.a. Oral Board Interview

The board interview should include questions which will evaluate the prospective boat crew member in terms of:

- Leadership ability
- Judgment
- Maturity
- Knowledge of team coordination and risk assessment standards and concepts

Knowledge of the environmental conditions of the local area should be emphasized. The BCEB should question the trainee about:

- Local weather
- Navigation
- Tides
- Currents
- Any particularly hazardous conditions that exist

E.6.b. Recommending Certification

Once a candidate has completed the check-ride and oral board interview, the BCEB shall provide a written report to the Unit Commander. This report shall recommend or not recommend the certification of the individual boat crew candidate. It should include a copy of the trainee's check-ride and oral board evaluations. If the candidate is not recommended, the board must state why and what areas of performance were not acceptable. Also, the report shall include specific recommendations for increased training and/or practical experience.

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## Section F. Instructors and Trainees

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**Introduction**

The instructor is involved primarily with the qualification phase of the training program. As such, the instructor is responsible for the initial training of the boat crew candidate. This involves not only the introduction to the technical skills related to the boat crew position and boat type, but also the development and encouragement of those personal attributes which are most important to boat crew personnel:

- Judgment
- Leadership
- Confidence
- Cooperation
- Team coordination and risk assessment standards and concepts

**F.1. Instructor Selection**

As a minimum, instructors must be certified at the crew position in the boat type in which they will be instructing. Beyond this, they should be individuals with demonstrated qualities of:

- Judgment
  - Patience
  - Maturity
-



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**F.2. Trainees**

The individual trainee (regular, reserve, and auxiliary) shall make a personal effort to learn and develop the knowledge and skills required by this program.

In addition, the trainee must maintain a level of physical fitness and mental alertness appropriate to the duties to be performed.

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Part 5 – Boat Crew Training  
Chapter 2 – System Components




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## Chapter 3. Qualification

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**Introduction** This Chapter discusses the elements of trainee selection and instructor assignment. It also provides an overview of the qualification tasks and the qualification process.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Trainee Selection and Instructor Assignment	5-23
B	Completion of the Qualification Tasks	5-28

---

### Section A. Trainee Selection and Instructor Assignment

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**Introduction** This Section outlines the important prerequisites for the trainee. It also provides an insight into how the instructor is chosen.

**A.1. Trainee Selection** Trainees should be selected by the Unit Commander or Training Petty Officer in consultation with other Unit Petty Officers. The following are prerequisites for trainees:

- Certified in lower crew position, except when entering training for the crew member position.
- Maturity to take on new responsibilities.
- Willingness and ability to interact positively with the public in the execution of Coast Guard duties.
- Physical fitness.

**A.2. Certified in Lower Crew Position** Prior to training for an advanced crew position, the trainee shall be previously certified in the next lower crew position, except when entering training for the crew member position. Coxswain trainees do not have to complete engineer certification.

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**A.3. Maturity to Take on New Responsibilities**

The trainee shall have the willingness and maturity to take on the responsibilities related to the new position. New responsibilities for certain boat crew positions may include:

Position	New Responsibilities
Boat Crew Member	Boat crew duties, including executing coxswain orders quickly and effectively.
Engineer	Responsibility for underway maintenance and operation of the boat power plant and systems, as well as acting as a boat crew member.
Coxswain	Overall responsibility for the safety and conduct of passengers and crew; the safe operation and navigation of the boat; and the completion of the sortie or mission.
Heavy Weather Coxswain	Coxswain duties in heavy weather conditions.
Surfman	Coxswain duties in surf conditions.

**A.4. Willingness and Ability to Act as the Coast Guard’s Direct Representative**

Boat crews are usually the boating public’s first and often only contact with the Coast Guard. Therefore, trainees must be willing and able to interact positively with the public. This requires attention to both appearance and attitude, along with a good professional knowledge of applicable Coast Guard policies and procedures.

**A.5. Trainee/ Instructor Relationship**

Instructors are assigned by the Unit Commander after consultation with the Training Petty Officer. Each trainee shall have an assigned instructor. Trainees and instructors should be in the same duty section.

**A.6. Physical Fitness**

All Coast Guard boat crewmembers are required to meet the following standards of physical fitness (**Table 5-1**). Physical fitness standards are required to ensure crewmembers have sufficient strength, flexibility, and endurance to safely perform duties during normal and adverse conditions. Knowing these standards will ensure that personnel are able to accurately gauge their level of fitness and make improvements where necessary.

**Table 5-1  
Physical Fitness Standards**

Males	Push-ups	Sit-ups	Sit and Reach	1.5-Mile Run	12-Minute Swim*
Under 30	29	38	16.5	12:51	500 yds.
30 to 39	24	35	15.5	13:36	450 yds.
40 to 49	18	29	14.25	14:29	400 yds.
50 to 59	15	25	12.5	15:26	350 yds.
60+	13	22	11.5	16:43	300 yds.



**Table 5-1**  
**Physical Fitness Standards – Continued**

Females	Push-Ups	Sit-Ups	Sit and Reach	1.5-Mile Run	12-Minute Swim*
Under 30	23	32	19.25	15:26	400 yds.
30 to 39	19	25	18.25	15:57	350 yds.
40 to 49	13	20	17.25	16:58	300 yds.
50 to 59	11	16	16.25	17:55	250 yds.
60+	9	15	16.25	18:44	200 yds.

Notes:

- 12-minute swim test chart is based on Dr. Kenneth Cooper’s research.
- Push-ups and sit-ups must be performed within a one-minute time period.
- Either the 1.5-mile run or the 12-minute swim may be performed to meet the standard.

The following physical fitness standards are provided with specific procedures:

- Arm and shoulder strength
- Abdominal and trunk strength
- Flexibility
- Endurance

### Arm and Shoulder Strength

One-Minute Push-Ups	Step	Procedure
Perform as many correct push-ups as possible in one minute.	1	On all fours, place hands approximately shoulder width apart and positioned directly beneath the shoulders.
	2	Extend the legs straight back, supported by the balls of the feet. Keep the torso in a straight line.  <b>NOTE</b>  Females may place knees on the deck and position hands slightly forward of shoulders.
	3	Smoothly bend the elbows and lower the body as a unit, then push back up. Arms should be fully extended without locking the elbows.
	4	For a proper push-up to be completed, lower the body until the chest is within one fist distance of the deck, and then return to the up position.  <b>NOTE</b>  The back must be kept straight the entire time.



### Abdominal and Trunk Strength

One-Minute Sit-Ups	Step	Procedure
Perform as many correct sit-ups as possible in one minute.	1	Lie on back, bend knees, place heels flat on floor about 18 inches away from buttocks, and keep fingers loosely on side of head. Hands may not come off of side of head for sit-up to count.  <b>NOTE</b>  Feet may be anchored.
	2	In the up position, elbows will touch the knees, then return so that both shoulder blades are touching the deck.
	3	The buttocks should never leave the deck.  <b>NOTE</b>  Any resting should be done in the up position.

### Flexibility

Sit and Reach	Step	Procedure
Place a yardstick on top of a box with the 15-inch mark even with the edge of the box.	1	Warm up and stretch sufficiently.
	2	Remove shoes and sit with feet flat against the box.  <b>NOTE</b>  The 15-inch mark is between the individual's feet with the end of the yardstick, 0 inches through 15 inches, extending forward towards the subject's knees.
	3	Feet must be no more than 8 inches apart.
	4	Place the hands exactly together, one on top of the other, with the fingers extended.
	5	Keep the knees extended and the hands together.
	6	Lean forward without lunging and reach as far down the yardstick as possible.
	7	Record the reach to the nearest ½ inch.
	8	Three trials are allowed to pass the minimum standard.



## Endurance

<b>1.5-Mile Run/Walk</b>	<b>Step</b>	<b>Procedure</b>
For the endurance qualification, an individual will be required to run/walk 1.5 miles or perform a 12-minute swim.	1	Refrain from smoking or eating for 2 hours prior to this test.
	2	Warm up and stretch sufficiently.
	3	Run or walk 1.5 miles in the required amount of time for the appropriate age bracket.
	4	If possible, receive pacing assistance, either by having a trained pacer run alongside or by calling out lap times during the test.
	5	Be forewarned not to start out too fast and not to run to complete exhaustion during the test.
	6	At the end of the test, walk for an additional 5 minutes to aid in recovery.
<b>12-Minute Swim</b>	<b>Step</b>	<b>Procedure</b>
The 12-minute swim is an alternative method to fulfill the endurance qualification.	1	Warm up and stretch sufficiently.
	2	Swim the required distance for the appropriate age bracket in 12 minutes.
	3	Use whichever stroke desired and rest as necessary.



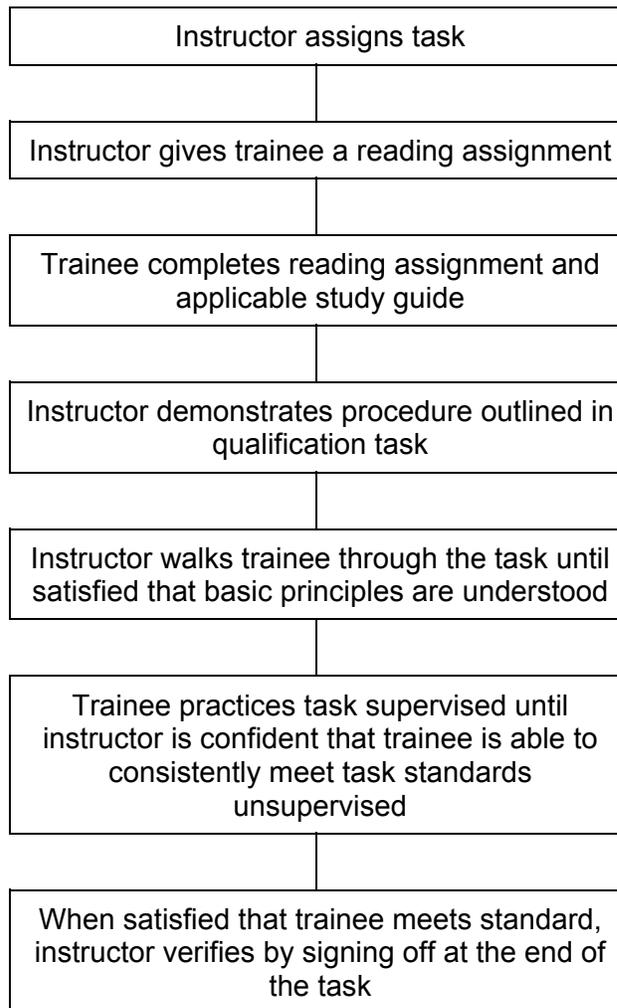
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## Section B. Completion of the Qualification Tasks

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### B.1. Steps

Figure 5-2 maps the steps to completing the boat crew qualification tasks.



**Figure 5-2**  
**Completion of Boat Crew Qualification Tasks**

### B.2. Qualification

Qualification is the completion of the appropriate boat crew qualification tasks for the boat type qualification desired.

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**B.3. Purpose of the Qualification Tasks**

Each qualification Part contains a collection of skill and knowledge tasks which must be:

- Learned
- Practiced
- Performed to the required standard by the trainee

These tasks represent the minimum elements of skill, knowledge, and performance necessary to safely and effectively execute the duties of a crewmember aboard Coast Guard boats. Tasks should be learned through constant practice and under the guidance of the instructor.

An explanation of the Parts and instructions for their use is found in *Part I* of the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series).

---

**B.4. Record of the Training**

A record of the training accomplished shall be kept using the Task Accomplishment Record provided in *Chapter I* of each qualification Part of the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series). Upon beginning the training program, the Task Accomplishment Record shall be removed from the Chapter and placed in the member's training record, not given to the trainee. The instructor is responsible for keeping the trainee's Task Accomplishment Record and the qualification tasks correct and current at all times.

Upon completion, the qualification tasks should be given to the trainee. It is strongly recommended that the trainee retain the completed qualification tasks in his/her personal records.

**NOTE** 

Task Accomplishment Record sheets should be duplicated for use with each boat type.

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**B.5. Changes to Qualification Requirements**

When qualification requirements change due to the issuance of a new manual or change to a manual, a boat crewmember is grandfathered, unless specifically stated otherwise. A member may only be grandfathered if the member was previously qualified or had started the qualification process prior to the effective date of the new manual or change.

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**B.6. Completion of the Qualification Process**

When the trainee has successfully completed the qualification process, he/she is ready to begin the certification process.

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Part 5 – Boat Crew Training  
Chapter 3 – Qualification




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## Chapter 4. Certification

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**Introduction** This Chapter discusses the steps that are required for a trainee to obtain certification.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Authority and Exceptions	5-31
B	Specific Requirements	5-33
C	Recertification	5-35
D	Unit Commander's Certification	5-36

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### Section A. Authority and Exceptions

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**A.1. Authority** The CO/OIC of a unit has the authority and responsibility to certify unit personnel to operate unit facilities. By certifying an individual, the Unit Commander is both verifying the individual's professional expertise and authorizing the individual to operate a unit boat type in the crew position the certification specifies. The CO/OIC of a unit has the authority to revoke the boat crew certification of an individual attached to the unit. This action shall be formally documented and a copy filed in the individual's training record.

**NOTE**

Reference: <i>United States Coast Guard Regulations 1992</i> , COMDTINST M5000.3 (series).
--

**A.2. Exceptions** Certification is normally accomplished in accordance with the requirements set forth in this Chapter. There are two exceptions to these requirements:

- Temporary duty
  - Interim certification
-



A.2.a. Temporary Duty

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Unit Commanders may authorize personnel certified at other commands to operate unit boats when those personnel are assigned under:

- Temporary Duty (TD)
- Temporary Additional Duty (TAD)
- (Reservists) Active Duty for Training to Satisfy Annual Training Required (ADT-AT)
- (Reservists) Active Duty for Special Work in Support of the Active Component (ADSW-AC)
- Inactive Duty Training (IDT)

An area familiarization exercise and a check-ride are required prior to such authorization. Units of a deployable nature (e.g., **MSST** or **PSU**) under TAD orders shall ensure area familiarization rides are completed, when possible, prior to commencement of operations.

A.2.b. Interim Certification

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Personnel previously certified as surfman, heavy weather coxswain, coxswain, or engineer, whose certification has lapsed, will maintain certification as a crew member. It is expected that during this interim period those individuals will attempt to recertify for their original designator by completing the recertification requirements delineated in *Section C* of this Chapter.

A.2.c. New Platform Interim Certification

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When a unit receives a new “type” boat on which no one has been previously qualified or certified, the unit’s CO/OIC shall designate, via interim certification letters, a core group of the unit’s most experienced certified coxswain(s), engineer(s), and crew member(s). The letter will clearly state that the vessel shall only be operated during transit to the unit, initial training and familiarization, and for the engine break-in period. Once qualification and certification is met, in accordance with *Part 5, Chapters 3 and 4* of this Manual, the certified coxswain(s), engineer(s), and crew member(s) can provide training to remaining unit personnel. Certified CO/OICs must receive interim certification in writing by their Operational Commander (this cannot be delegated) until completion of qualification and certification. The CO/OIC may issue interim certification letters to crew members regardless of their certification status. Units should seek all available resources while transitioning to a new platform. Training teams or other local units that operate the type of platform in question are good resources.

Coxswains and engineers operating under interim certification letters must comply with paragraph B.1 of this Chapter and complete all crew member “type” tasks during this period.

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**A.3. Certification Lapse** Certification will lapse upon either of the following:

- PCS transfer (no action necessary).
- Failure to meet the minimum currency requirements in accordance with this Part.

This action shall be formally documented and a copy filed in the training record. The member must complete the recertification process (in accordance with *Section C* of this Chapter).

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## Section B. Specific Requirements

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**Introduction** Each boat crew position has different tasks to accomplish, thus each position requires different qualification requirements for certification. This Section discusses the various qualifications that each job requires. For crewmember certification, the following requirements must be met:

- Must be assigned to a surf designated **Station** (surfman only).
- Complete the applicable qualification tasks.
- Pass a physical fitness test.
- Complete an oral examination conducted by the unit BCEB.
- Demonstrate proficiency during a comprehensive check-ride.
- Personnel record entry and assignment of qualification code.

**B.1. Completion of the Qualification Tasks** The trainee must satisfactorily complete the applicable qualification tasks including all type requirements for which the trainee is being certified.

**NOTE**  When a member is transferred to a unit with a boat type on which the member has not been previously qualified/certified, the member must complete all crew member “type” tasks before beginning the engineer or coxswain qualification process.

Example: Coxswain is certified on a 47' MLB and is transferred to a unit with an RB-S. Member must complete all crew member “type” tasks for the RB-S and certify in accordance with this Manual before beginning the coxswain qualification process.

**B.2. Comprehensive Check-Ride** During a comprehensive check-ride, the trainee will demonstrate required proficiency, including the required “skills to observe” listed in *Chapter 2*, paragraph E.5 of this Part.

**B.3. Oral Examination** Successfully complete an oral examination to be conducted by the unit BCEB on the following topics:

- Policies and procedures.
- Local knowledge without reference to charts and publications (may not be applicable to cutters).
- Application of team coordination and risk assessment standards and concepts.

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B.3.a. Boat Crew Member

The boat crew member should also be familiar with the following topics:

- Seamanship and navigation.
- Pertinent technical data for the boat type being certified on.
- Other subjects as determined by the Unit Commander.

B.3.b. Engineer

The engineer should also be familiar with the following topics:

- Boat casualties and repairs.
- Fuel, lubricating, electrical, hydraulic, steering, and cooling systems.
- Flooding, fire fighting, and damage control.

B.3.c. Coxswain

The coxswain should also be familiar with the following topics:

- Navigation and seamanship.
- Pertinent technical data for the boat type on which the trainee is being certified.
- Appropriate maturity, judgment, attitude, and professionalism associated with duties of a coxswain.
- Willingness to accept the duties and responsibilities of a coxswain.
- Detailed knowledge of the unit's operational area (OPAREA) including (may not be applicable to cutters):
  - Major headlands, points, jetties, shoals, surf zones, and channels.
  - All NAVAIDS and their characteristics.
  - Knowledge of unit's boat piloting and navigation instruction.

B.3.d. Heavy Weather Coxswain

The heavy weather coxswain should also be familiar with the following topics:

- Knowledge of weather, waves, heavy seas, surf, and currents.
- Mission sortie planning for heavy weather or surf situations.
- Piloting procedures applicable to a heavy weather or surf environment.
- Emergency and casualty procedures.

**NOTE** 

A member may be certified as a heavy weather coxswain without completion of the surf tasks in the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II, COMDTINST M16114.33 (series), Part 5, Chapter 2, Section D*. The member's completion or noncompletion of *Part 5, Chapter 2, Section D* must be documented in the certification letter. Coxswains and heavy weather coxswains shall not attempt to operate in the surf, except in a supervised training environment, until they have demonstrated the proper skills through satisfactory accomplishment of the surf tasks in the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II, COMDTINST M16114.33 (series), Part 5, Chapter 2, Section D*.

At some units, the infrequency of heavy weather and surf conditions may not allow completion of the surf tasks associated with the heavy weather coxswain qualification code. The unit command should ensure heavy weather coxswains are prepared to meet the environmental challenges found in their AOR by having them complete as many of the knowledge and skills tasks as possible. This will provide the command with a gauge of an individual's professional competency and the unit's capacity to meet higher risk situations.



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- B.3.e. Surfman      The surfman should also be familiar with the following topics:
- Knowledge of weather, waves, heavy seas, surf, and currents.
  - Mission sortie planning for surf situations.
  - Piloting procedures applicable to a surf environment.
  - Emergency and casualty procedures.
- 

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## Section C.    Recertification

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**Introduction**      Recertification can only occur for a boat type on which the member had previously been certified. Possible reasons a member may need to recertify include:

- PCS to new unit with same boat type.
- Disciplinary action.
- Failure to meet currency requirements.

To recertify, the following must be successfully accomplished:

- Pass a physical fitness test (**Table 5-1**).
  - Underway area familiarization exercise.
  - Comprehensive underway check-ride.
  - Oral examination conducted by the BCEB.
- 

**C.1. Physical Fitness Test**      The trainee must have passed a physical fitness test (**Table 5-1**) at the current unit within the past year.

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**C.2. Underway Area Familiarization Exercise**      The trainee must successfully complete the appropriate underway area familiarization exercise. **Does not apply to cutter boats. Does not apply to MSSTs or PSUs when deployed.**

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**C.3. Comprehensive Underway Check-Ride**      The trainee must demonstrate proficiency and local knowledge by successful completion of a comprehensive underway check-ride, in accordance with the appropriate certification requirements.

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**C.4. Interview**      The trainee must successfully complete an interview with the unit BCEB.

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**C.5. Documentation**      The above accomplishments must be formally documented with a copy placed in the member's training record.

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## Section D. Unit Commander's Certification

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### D.1. Written Certification

Every crewmember must be certified in writing by the Unit Commander. The CO/OIC (except cutter COs/OICs) must be certified in writing by the Operational Commander, including Sector Department Heads (this cannot be delegated).

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### D.2. Further Information

Further information on the documentation required may be found in *Chapter 6* of this Part.

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## Chapter 5. Currency Maintenance

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**Introduction**

The requirements tabulated in this Chapter represent the minimum semi-annual and annual recurrent task completion requirements for all certified boat crew personnel. Due to mission needs, the Unit Commander may impose additional task completion requirements.

Each crewmember's currency/proficiency period normally commences upon the effective date of certification or recertification. However, due to the complexity of managing individual currency maintenance cycles, currency will be tracked through the periods 01 January to 30 June and 01 July through 31 December.

Personnel need only maintain currency in the most senior crew position held.

**NOTE**

A crewmember who is certified or recertified within 60 days of the end of the currency/proficiency period does not have to complete the minimum proficiency requirements for that period.

**In this Chapter**

This Chapter contains the following Sections:

Section	Title	See Page
A	Currency Requirements	5-37
B	Proficiency Requirements	5-39
C	Specific Requirements	5-43

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### Section A. Currency Requirements

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**A.1. CO/OIC Responsibilities**

COs/OICs shall ensure that all designated boat crew members under their command are afforded sufficient opportunity to comply with the prescribed minimum requirements listed in this Part.

The training module of AOPS/TMT is the required system to record and track currency maintenance, with updated semi-annual printouts (AOPS Crew Status Board Report) placed in the member's training record. In addition, a boat crew status board is suggested for visually tracking currency requirements. A sample format can be found below.

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### Sample Boat Crew Status Board

Period:	Physical Fitness Standards	Underway Hours	Area of Responsibility	Boat Handling	Boat Launch and Recovery	Towing	Water Survival Exercise	First-Aid Training	Operational Risk Management Training	Basic Engineering Casualty Control	Person-in-the-Water Recovery	Conduct Pre-Start Check & Start Boat	Secure the Boat	Navigation	Rules of the Road	Transit a Surf Zone
Sect:																
D=Day N=Night *=Annual **=5 Years																
Crew Member																
Engineer																
Coxswain																
Heavy Weather Coxswain																
Surfman																

**NOTE** The above sample boat crew status board does not encompass all currency maintenance requirements. Units should tailor status boards to reflect *Chapter 5, Section B* of this Part and unit's needs.

**A.2. Formal Documentation**

Currency/proficiency maintenance must be documented within the Currency Maintenance Report of AOPS/TMT. The report shall be verified and signed by the unit command and placed in the training record. The Operational Commander, including Sector Department Heads, must verify and sign the Currency Maintenance Report for the CO/OIC. Auxiliary documentation should be forwarded to the District Director of Auxiliary.

**A.3. Failure to Meet Requirements**

Certification will lapse upon failure to meet the minimum currency requirements in accordance with this Chapter. This action shall be formally documented and a copy filed in the training record. The member must complete the recertification process in accordance with *Chapter 4, Section C* of this Part.



## Section B. Proficiency Requirements

**Introduction** Listed in the following table are the minimum proficiency requirements for maintaining current crew position certification.

- Only those tasks required for the highest certification held need be completed.
- Some tasks required for currency maintenance involve evolutions on each boat type.
- Currency maintenance tasks will be accomplished on boats assigned to the unit or identical standard boats.
- Requirements may be met through performance during normal operations or dedicated training operations.

### B.1. Minimum Proficiency Requirements

**NOTE** Frequency means how many times the task must be performed. Remember, if the unit has enough operations, dedicated trips may not be necessary.

**NOTE** Night trips are defined as sorties beginning no sooner than ½ hour after sunset and ending NLT ½ hour before sunrise.

Task	Required for	Required	Frequency
Physical Fitness Standards	All boat crew positions.	Conduct in accordance with <b>Table 5-1</b> .	Once each year (Units receiving an RFO inspection should schedule this requirement to coincide.)
Water Survival Exercise	All boat crew positions.	Conduct in accordance with TASK BCM-02-18-ANY of the <i>U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II</i> , COMDTINST M16114.33 (series).	Once each year
First-Aid Training (Training should be conducted by an EMT or paramedic)	All boat crew positions.	Burns, hypothermia, shock, bleeding, and CPR treatment.	Once each year
Operational Risk Management Training	All boat crew positions.	Review TCT concepts with an emphasis on mission analysis (risk management principles and use of SPE/GAR).	Once each year



Part 5 – Boat Crew Training  
Chapter 5 – Currency Maintenance

Task	Required for	Required	Frequency
Basic Engineering Casualty Control	All boat crew positions.	Conduct in accordance with the Readiness and Standardization/RFO BECCE Drill checklists for each standard boat type. (For boat types not listed, drills should be adapted/modified as appropriate.)	1 set of drills per boat type every six months
Man Overboard (MOB) Recovery	All boat crew positions. Not required for ice skiff boat crews.	Conduct in accordance with Readiness and Standardization/RFO MOB checklist.	1 day and 1 night per boat type every six months
	Heavy weather coxswain and surfman only. Engineers and crew members shall receive credit for either drill performed.	Conduct in accordance with TASK HW-03-05-TYPE, of the <i>U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II</i> , COMDTINST M16114.33 (series).	
Underway Hours	All boat crew positions. Not required for <b>cutter</b> , skiff, or ice skiff boat crews.	Minimum of 40 hours total, with a minimum of 10 nighttime hours. Minimum of 10 hours per boat type, with a minimum of 2 nighttime hours.	Every six months
Area of Responsibility (AOR) Familiarization	All boat crew positions. Not required for <b>cutter</b> , <b>MSST</b> , <b>PSU</b> , or ice skiff boat crews (see paragraph C.1 of this Chapter).	Equivalent of one day and one night trip through all designated areas of interest within the AOR (see paragraph C.1 of this Chapter).	Every six months
Boat Launch and Recovery	All boat crew positions. Only required for <b>cutter</b> boat crews.	Participate in the launch and recovery of the <b>cutter</b> boat.	8 days and 2 nights every six months (minimum of 2 per boat type, one of which must be at night)
Towing [Towing should be applicable to unit primary mission (i.e., other boats, buoys, etc.)]	All boat crew positions. Not required for <b>cutter</b> , skiff, or punt boat crews.	Conduct in accordance with the Readiness and Standardization/RFO towing checklist.	1 day and 1 night (stern/alongside) per boat type every six months (AtoN units shall conduct 2 day-tows per boat type only)
Boat Handling	Only applicable to engineers and crew members. Not required for ice skiffs.	Conduct in accordance with TASK BCM-04-10-TYPE, TASK BCM-04-11-TYPE, and TASK BCM-04-12-TYPE of the <i>U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II</i> , COMDTINST M16114.33 (series).	1 day and 1 night per boat type every six months



Task	Required for	Required	Frequency
Conduct Pre-Start Check and Start the Boat	Engineer, coxswain, heavy weather coxswain, and surfman only.	Conduct the check and start for each boat type in accordance with the applicable qualification tasks for which the trainee is certified.	2 times per each boat type every six months
Secure the Boat	Engineer, coxswain, heavy weather coxswain, and surfman only.	Conduct securing procedures for each boat for which the trainee is certified.	2 times per each boat type every six months
Day/Night Navigation and Piloting	Coxswain, heavy weather coxswain, and surfman only. Does not apply to skiff coxswains or <b>cutter</b> boat coxswains certified to operate <b>only</b> within sight of the cutter.	Conduct in accordance with the Readiness and Standardization/RFO night navigation and piloting checklist. (For boat types not listed, drills should be adapted/modified as appropriate.)	1 day and 1 night per boat type every six months
Search Patterns (Precision)	Coxswain, heavy weather coxswain, and surfman only. Required for <b>stations</b> only.	Conduct each precision search pattern (PS/CS/TSR) in accordance with the Readiness and Standardization/RFO search patterns (precision patterns) checklist.	1 night every six months (1 x PS and 1 x CS and 1 x TSR = 3 total patterns)
Search Patterns (Drifting)	Coxswain, heavy weather coxswain, and surfman only. Not required for <b>cutter</b> , skiff, or punt boat crews.	Conduct each drifting search pattern (SS/VS) in accordance with the Readiness and Standardization/RFO search patterns (drifting patterns) checklist.	1 night every six months (1 x SS and 1 x VS = 2 total patterns)
Rules of the Road	Coxswain, heavy weather coxswain, and surfman only. Does not apply to cutter boat coxswains certified to operate only within sight of the cutter.	Conduct in accordance with TASK COX-04-01-ANY of the <i>U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II</i> , COMDTINST M16114.33 (series).	Once every five years
Transit a Surf Zone (if certified for surf conditions)	Heavy weather coxswain only. Surf-capable boats only.	Conduct in accordance with TASK HW-04-05-TYPE and TASK HW-04-06-TYPE of the <i>U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II</i> , COMDTINST M16114.33 (series).	3 transits per boat type every six months



Part 5 – Boat Crew Training  
Chapter 5 – Currency Maintenance

Task	Required for	Required	Frequency
Heavy Weather Towing	Heavy weather coxswain and surfman only.	Conduct in accordance with TASK HW-03-08-TYPE and TASK HW-03-09-TYPE, of the <i>U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II</i> , COMDTINST M16114.33 (series).	1 day every six months in addition to the towing requirement above
Transit a Surf Zone	Surfman only. Surf-capable boats only.	Conduct in accordance with TASK SRF-01-05-TYPE and TASK SRF-01-06-TYPE of the <i>U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II</i> , COMDTINST M16114.33 (series).	3 transits per boat type every six months



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## Section C. Specific Requirements

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### C.1. Area of Responsibility (AOR)

Ashore Unit Commanders (CO/OIC) shall review their area of responsibility (AOR) and establish, in writing, designated areas of interest that boat crews must be intimately familiar with. Prior local knowledge of AOR is essential to complete missions safely. Although not required for MSSTs and PSUs, COs should designate areas of interest within their homeport.

The AOR familiarization currency maintenance task may be completed by any combination of sorties so that the end result is at least one day trip and one night trip each six months to all command designated areas of interest within the AOR.

**NOTE**  AOR sorties will be completed on unit assigned boats.

#### C.1.a. Station (Small)

For **Pooled Station (small)**, the parent Unit Commander (CO/OIC) shall review the **Station (small)** AOR and establish, in writing, designated areas of interest with which boat crews must be intimately familiar with. For **Non-Pooled Station (small)**, the OIC shall establish, in writing, designated areas of interest. The parent command shall review and approve designated areas of interest. Prior local knowledge of AOR is essential to complete missions safely. Members permanently or temporarily stationed at a **Station (small)** must meet the AOR familiarization currency requirements for the **Station (small)**.

#### C.1.b. Knowledge of Areas

For those areas determined to be of interest, boat crews must be intimately familiar with:

- Harbor and channel conditions.
  - Depth of water.
  - Type of bottom.
  - Shoaling effect.
  - Effects of squalls.
  - Water hazards and surf zones.
  - Currents.
  - How the current affects the boat in various areas.
  - Landmarks.
  - Established ranges.
  - Lights on buildings.
  - Names and locations of marinas and boat ramps.
  - Local terminology for landmarks in area.
  - Magnetic courses in and out of commonly used harbors/inlets.
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**C.2. Requirement for Night Operations**

Nighttime proficiency/currency maintenance requirements are required for all ashore certified boat crew members. Ashore Unit Commanders shall ensure that a minimum of 10 hours (minimum of 2 hours per boat type) of the unit's underway training for each crew member, engineer, coxswain, heavy weather coxswain or surfman be conducted at night.

Waivers for this requirement must be requested by the District Commander (O) and approved by Commandant (G-OCS). Personnel receiving such waivers are not authorized to **ever** operate at night.

Surf training shall not be conducted at night.

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**C.3. Tests and Exams**

The initial NAVRUL End-of-Course Test (EOCT), Deck Watch Officer (DWO) Examination (International/Inland), or Merchant Marine Rules of the Road Exam for Coxswain TASK COX-04-01-ANY are closed-book tests. Rules of the Road proficiency require administration of an open book test every 5 years after initial successful completion of the NAVRUL EOCT, DWO Exam, or Merchant Marine Rules of the Road Exam (Module 054XX). Failure to meet this currency requirement results in loss of coxswain, heavy weather coxswain, or surfman certification until the test is passed.

**NOTE** 

OPEN-BOOK EXAMS – Defined as using a new or corrected, highlighted, and/or underlined copy of *Navigation Rules, International - Inland*, COMDTINST M16672.2 (series), however, this copy may not be book marked or indexed.

Ordering instructions and end-of-course test administration procedures may be found in the *CG Institute Non-Resident Training Manual*.

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**C.4. Team Coordination Training (TCT) Requirement**

Unit Commanders (CO/OIC) shall comply with the requirements of *Team Coordination Training*, COMDTINST 1541.1 (series). All members exercising control over boat operations, including COs/OIC, OODs, communications watchstanders, and all boat crew members assigned to the unit shall receive TCT on a biennial basis. Attendance of this training shall be recorded in TMT. The annual currency maintenance requirement will include a review of TCT concepts with an emphasis on mission analysis (risk management principles and use of SPE/GAR).

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**C.5. Water Survival Exercise**

The water survival exercise is intended to prepare boat crew members for the possibility of finding themselves in the water. This exercise should be conducted in open water using the appropriate survival gear as outlined in the *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series). All attempts should be made to conduct this exercise in a dry suit. Units that do not require dry suits should use the survival gear that is prescribed for their environment. Every effort should be made to incorporate annual pyrotechnics training during the open water survival exercise. This exercise should be conducted in accordance with TASK BCM-02-18-ANY.

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## Chapter 6. Documentation

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**Introduction** This Chapter discusses the documentation requirements for boat crew training, as well as efficient administrative procedures. Documentation provides the verification that proper qualification and certification has been attained.

**In this Chapter** This Chapter contains the following Sections:

Section	Title	See Page
A	Qualification	5-45
B	Certification, Recertification, and Currency	5-47
C	Boat Crew Certificates	5-50

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### Section A. Qualification

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**Introduction** This Section discusses the different forms used to track trainee progress. It also details who is responsible for the different forms associated with trainee record maintenance.

**In this Section** This Section contains the following information:

Topic	See Page
Record of Trainee Progress	5-45
Responsibilities	5-46

### Record of Trainee Progress

**A.1. Two Parts of Trainee Progress Record** A complete record of each trainee's progress should be kept. This record is made up of two parts:

- A record of trainee underway operations and drills.
- The record of those qualification tasks signed off by the instructor as completed.

Together these two records make up the trainee's boat crew training record, and should be kept together by the Training Petty Officer in a Training Record Folder. Each crewmember should have his/her own boat crew training record binder.

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**A.2. Record of Trainee Underway Operations and Drills**

A complete record of all trainee time spent underway shall be maintained for each trainee. The **required** system for recording training accomplished, both underway and shore-side, is the training module of AOPS/TMT. Information captured in the database may then be extracted and placed in the member's training record.

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**A.3. Record of Completed Tasks**

A form for keeping a trainee record of completed tasks is contained at the beginning of *Part 2 – Part 6* of the *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series). Copies of this form should be kept in the trainee boat crew training binder and updated as required.

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**Responsibilities**

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**A.4. Record Maintenance**

The member, the instructor, and the Unit Training Officer/Petty Officer share joint responsibility for maintaining the member's training record.

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**A.5. Unit Training Petty Officer**

The Unit Training Officer/Petty Officer is responsible for the establishment and monitoring of the trainee boat crew training. When a new trainee is designated, the Training Officer shall enter the member in the AOPS/TMT database and assign a Training Record Folder (CG-5285) to the trainee in accordance with paragraph A.7 below.

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**A.6. Instructor**

The instructor is responsible for seeing that all required tasks, or additional locally generated tasks, are signed off and entered into the members Training Record Folder. The instructor should also monitor the Record of Underway Training and Operations to ensure it is current and accurate.

---

**A.7. Member / Trainee**

All underway time shall be recorded. The required system for recording training accomplished, both underway and shore-side, is the AOPS/TMT database. Information captured in the database may then be extracted and placed in the member's training record.

---

**A.8. Disposition of Records**

Upon PCS transfer, the member's Training Record Folder will be hand-carried to the member's new duty **Station**. For periods of TAD forwarding the member's Training Record Folder shall be at the discretion of the receiving unit.

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## Section B. Certification, Recertification, and Currency

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**Introduction** This Section discusses the final steps of certification. It also discusses the means by which currency records may be maintained.

**In this Section** This Section contains the following information:

Topic	See Page
Certification	5-47
Recertification and Currency	5-50

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### Certification

**B.1. Letter of Certification** Final certification for all boat crew positions and boat type designations shall be in writing and signed by the Unit Commander. These letters of certification may be in any format but should contain:

- The boat crew position.
- The boat type for which the certification is granted.
- For heavy weather coxswains, annotate status of surf tasks.

To keep paperwork to a minimum, consolidated letters of qualification and certification are encouraged. Letters of certification shall be placed in the member's individual Training Record Folder (CG-5285). *Chapter 7* of this Part contains sample letters.

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## B.2. Enlisted Qualification Codes

Qualification codes reflect the type of boat and the crew position for which a member is certified. When a certified boat crew member has met the requirements set forth in this Manual and *Enlisted Qualification Codes Manual*, COMDTINST M1414.9 (series), the appropriate enlisted qualification code is assigned and an entry made in the individual's personnel record. The PERSRU yeoman will make a CGHRMS entry in the members PDR and electronic PDR after receipt of supporting documentation provided by the unit command. **Submission of the necessary documentation into the personnel management system is critical to the member as well as all levels of the Coast Guard.** The following table reflects boat crew qualification codes by boat position and boat type.

**NOTE**  Not all boat types have qualification codes assigned.



**Table 5-2**  
**Qualification Codes**

<b>Boat Type</b>	<b>Boat Crew Member</b>	<b>Engineer</b>	<b>Coxswain</b>	<b>Heavy Weather Coxswain</b>	<b>Surfman</b>
CB-S, CB-M, CB-L	CRWUA	ENGTA	CXNCBSA <sup>1</sup>		
UTL	CRWUB	ENGTB	CXUTLSB <sup>1</sup>		
TANB	CRWUC	ENGTC	CXNSC		
MSB	CRWUD	ENGTD	CXNSD		
55' ANB	CRWUE	ENGTE	CXNSP		
63' ANB	CRWUF	ENGTF	CXNSW		
41' UTB	CRWUG	ENGTG	CXNSG		
44' MLB	CRWUH	ENGTH	CXNSH	CXNSN	CXNSK
47' MLB	CRWUI	ENGTI	CXNSL	CXNSO	CXNSM
49' BUSL	CRWUJ	ENG TJ	CXNSI		
SPC (HWX) (52' MLB)	CRWUK	ENGTK	CXNSQ	CXNSS	CXNSU
CB-OTH	CRWUL	ENGLT	CXNSR		
64' ANB	CRWUM	ENGLM	CXNSX		
UTM	CRWUN	ENGLN	CXNST		
PWB	CRWUO	ENGTO	CXNSF		
RB-S/RB-HS	CRWUP	ENGTP	CXNRBSSB <sup>1</sup>		
DPB	CRWUZ	ENG TZ	CXNSZ		
TPSB (BASIC)	CRWUB (Same as UTL) <sup>2</sup>	ENGTB (Same as UTL) <sup>2</sup>	CXNSV		
TPSB (ADVANCED)	CRWUB (Same as UTL) <sup>2</sup>	ENGTB (Same as UTL) <sup>2</sup>	CXNSY		
SPC (HWX) (30' SRB)	CRWUQ <sup>2</sup>	ENG TQ <sup>2</sup>	CXNSE	CXNSJH <sup>2</sup>	CXNSJ
SPC (HWX) (32' NLB)	CRWUR <sup>2</sup>	ENG TR <sup>2</sup>	CXNNLB <sup>2</sup>	CXNNLBH <sup>2</sup>	CXNNLBS <sup>2</sup>

Notes:

1. In situations where the competency codes (qualification codes) have changed for a platform, there is no need to re-submit qualifications to the servicing personnel office as the records will be automatically updated.
2. Competency codes (qualification codes) have been added since last revision.
3. More information on competency codes can be found at:  
<http://www.uscg.mil/hq/psc/da/CompetencyDictionary.xls>.



## Recertification and Currency

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### **B.3. Recertification**

Documentation verifying completion of recertification requirements shall be in writing and signed by the Unit Commander (CO/OIC). The Operational Commander shall sign the recertification letter for the CO/OIC. The recertification may be documented in any format but should contain:

- The boat crew position.
- The boat type for which the recertification or currency maintenance was accomplished.
- For heavy weather coxswains, status of surf tasks.

Recertification letters shall be placed in the member's individual Training Record Folder (CG-5285).

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## **Section C. Boat Crew Certificates**

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### **C.1. Boat Crew Certificates**

Enlisted personnel of the Coast Guard, Coast Guard Reserve, and members of the Coast Guard Auxiliary shall be provided with a certificate recognizing their certification as a boat crewmember. The certificate numbers are listed in the table below.

### **C.2. Authorization**

COs and OICs are authorized to furnish the appropriate certificate providing the member has met the qualification and certification requirements. The Boat Crew Certificates may be obtained from USCG Electronic Forms on Standard Work Station III.

<b>Certificate Number</b>	<b>Certificate</b>
CG-5063	Coxswain Certificate
CG-5063A	Boat Engineer Certificate
CG-5063B	Boat Crewmember Certificate
CG-5063C	Surfman Certificate
CG-5063D	Heavy Weather Coxswain Certificate

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## Chapter 7. Samples of Consolidated Letters of Certification, Recertification, or Currency Maintenance

**Introduction**      This Chapter provides sample letters and records for use in documenting personnel certification, recertification, and currency, as appropriate.

**In this Chapter**      This Chapter contains the following Sections:

Section	Title	See Page
A	Sample Boat Crew Currency Maintenance	5-52
B	Sample Letter of Certification, Recertification, and Currency	5-53
C	Sample Record of Currency Maintenance	5-54
D	Sample Letter of Certification and Currency Maintenance	5-55
E	Sample Letter of Certification for Coxswain, Heavy Weather Coxswain, or Surfman	5-56



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## Section A. Sample Boat Crew Currency Maintenance

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From: Commanding Officer Coast Guard National Motor Lifeboat School  
To: Distribution National Motor Lifeboat School

Subj: BOAT CREW CURRENCY MAINTENANCE FOR 01 JUL 99 TO 31 DEC 99

References: a. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I, COMDTINST M16114.32 (series)*  
b. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II, COMDTINST M16114.33 (series)*

The following personnel have met the proficiency maintenance requirements in reference (a) and are re-certified for the following boat types:

Rate	Name	Position
BMC	Clemens	Surfman 47'
BMC	Gray	Surfman 47'
BMC	Oglesby	Surfman 47'
BM1	Abstetar	Surfman 44', Coxswain 47'
BM1	Edwardson	Surfman 44', Coxswain 47'
BM1	Farmer	Surfman 47'
BM1	Mahoney	Surfman 47', Coxswain 44'
BM1	Pope	Surfman 47'
BM1	Wallace	Surfman 44, 47'
MK1	Guindon	Engineer 44', 47'
MK1	Hanna	Engineer 44', 47'
MK2	Wood	Engineer 44', 47'
MK2	Sowers	Engineer 44', 47'
MK3	Ondich	Engineer 44', 47'
MK3	Peterson	Engineer 44', 47'
SN	Thomas	Crew 44', 47'
BM2	Babcock	Crew 44', 47'

I.M. SAILOR

Copy: Training Records



## Section B. Sample Letter of Certification, Recertification, and Currency

From: Officer-in-Charge, Coast Guard Station XXXX  
 To: SN XXXX  
 Subj: LETTER OF CERTIFICATION, RECERTIFICATION AND CURRENCY

- References:
- a. *Boarding Officer/Boarding Team Member Personal Qualification Standard (PQS)*, COMDTINST M16247.3 (series)
  - b. Group Mayport Instructions
  - c. *Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
  - d. *Station Organization and Regulations Manual*
  - e. *Telecommunications Manual (TCM)*, COMDTINST M2000.3 (series)
  - f. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I*, COMDTINST M16114.32 (series)
  - g. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series)

1. You have been found qualified and are hereby certified to perform the duties as noted by COs/OICs initials, while assigned to this command. You will be guided in the performance of your duties by the above references. These certifications will be rescinded when member transfers, or when deemed necessary by the CO or OIC.
2. In accordance with the applicable reference, you have successfully maintained your currency to perform all duties inherent to that position. As each currency cycle is complete, the CO or OIC and member will initial and date in the appropriate spaces.

### INITIAL CERTIFICATION OR RECERTIFICATION RECORD

	UTB	UTL	CB-OTH	MBR INT	OIC INT	DATE
CREW MEMBER						
ENGINEER						
COXSWAIN						
OC SPRAY						
BOARDING TEAM						
BOARDING OFFICER						





## Section D. Sample Letter of Certification and Currency Maintenance

From: Commanding Officer, Coast Guard Station XXXXXX  
 To: BM2 XXXXX XXXX, USCG  
 Subj: LETTER OF CERTIFICATION AND CURRENCY MAINTENANCE

- References:
- a. *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series)
  - b. *Maritime Law Enforcement Manual*, COMDTINST M16247.1 (series)
  - c. *Telecommunications Manual (TCM)*, COMDTINST M2000.3 (series)
  - d. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I*, COMDTINST M16114.32 (series)
  - e. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series)

1. In accordance with the applicable reference, you are hereby qualified/certified to perform all duties inherent to that position. As each duty is qualified for or certified for, the CO/OIC and person being certified will initial in the appropriate space.

Communications Watchstander:	Ref (a)	_____ / _____	_____ / _____	_____ / _____
		CO/OIC	Member	Date
Boat Crew Member:	Ref (b)	_____ / _____	_____ / _____	_____ / _____
		CO/OIC	Member	Date
Currency Record:	1. _____ / _____	2. _____ / _____	3. _____ / _____	4. _____ / _____
	Intl Date	Intl Date	Intl Date	Intl Date
	5. _____ / _____	6. _____ / _____	7. _____ / _____	8. _____ / _____
	Intl Date	Intl Date	Intl Date	Intl Date
Boat Engineer:	Ref (b)	_____ / _____	_____ / _____	_____ / _____
		CO/OIC	Member	Date
Currency Record:	1. _____ / _____	2. _____ / _____	3. _____ / _____	4. _____ / _____
	Intl Date	Intl Date	Intl Date	Intl Date
	5. _____ / _____	6. _____ / _____	7. _____ / _____	8. _____ / _____
	Intl Date	Intl Date	Intl Date	Intl Date
Boarding Team Member:	Ref (a)	_____ / _____	_____ / _____	_____ / _____
		CO/OIC	Member	Date
Boarding Officer:	Ref (a)	_____ / _____	_____ / _____	_____ / _____
		CO/OIC	Member	Date
Message Releasing Authority:	Ref (a)	_____ / _____	_____ / _____	_____ / _____
		CO/OIC	Member	Date

\_\_\_\_\_  
SIGNATURE



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## Section E. Sample Letter of Certification for Coxswain, Heavy Weather Coxswain, or Surfman

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From:

To:

Subj: CERTIFICATION AS (DESIGNATOR, E.G., COXSWAIN, HEAVY WEATHER COXSWAIN, OR SURFMAN), (BOAT TYPE, E.G., 44' MLB)

References:

- a. *United States Coast Guard Regulations 1992*, COMDTINST M5000.3 (series), Section 5-1-8
- b. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I*, COMDTINST M16114.32 (series)
- c. *U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume II*, COMDTINST M16114.33 (series)

1. Having been found qualified in accordance with reference (a), you are certified to perform the duties of (Designation) onboard (boat type) while assigned to this command. You are hereby assigned the \_\_\_\_\_ qualification code.
2. You shall comply with the guidelines contained in references (b) and (c) and such instructions or policies issued by appropriate authority in performing your duties as a member of a boat crew.
3. You are required to schedule and perform annual proficiency training in accordance with reference (a). Failure to complete such training will result in the loss of this certification.
4. A copy of this letter will remain part of your permanent service record.
5. This certification will expire upon PCS or if otherwise rescinded by this command.

SIGNATURE

Copy to: Training Record  
PERSRU



## Appendix A. 41' UTB Readiness and Standardization Drills

**Introduction** This Appendix provides required and optional underway drill checklists for the 41' UTB.

**In this Appendix** This Appendix contains the following Chapters:

Chapter	Title	See Page
1	Required Underway Drill Checklists	A-3
2	Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns	A-19
3	Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises	A-33



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



## Chapter 1. Required Underway Drill Checklists

**Introduction** This Chapter provides underway drill checklists for the 41' UTB and capabilities used by inspection teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Day/Night Navigation and Piloting	A-5
Towing	A-9
Dewatering	A-13
Man Overboard (MOB) Recovery	A-17



Appendix A – 41' UTB Readiness and Standardization Drills

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Day/Night Navigation and Piloting **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook*, Type Specific
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Pilot a CG boat and arrive at a given position within standards.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, and a certified crew operating within the prescribed limitation.

**Standards** Departure made within 15 minutes of notification that exercise commences. Courses accurately plotted to turn points and given position within 3 degrees. Arrive at position within 5 minutes of ETA, accurate to within 100 yds and in accordance with procedures as set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot course and destination accurately. (N)			
b. Factor variation and deviation in course. (N)			
c. Calculate and label all DR times and ETA. (N)			
d. Correct chart. (N)			
e. State depth at destination. (N)			
f. State distance to destination from shore and entrance. (N)			
g. State weather and tidal conditions. (N)			
h. State sea and bar conditions. (N/P)			
i. State direction and velocity of current. (N)			
j. Energize navigation lights. (P)			
k. Windows open if necessary. (P)			
l. Coxswain brief crew. (T)			
m. Set watertight integrity. (P)			
n. Ensure night vision is not compromised. (P/N)			
o. Make departure within 15 minutes. (S)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
p. Enter a minimum of two waypoints into GPS. (P/N/O)			
2. Underway Navigation:			
a. Utilize sound signals. (P)			
b. Conduct of own vessel in accordance with Rules of the Road. (P/B)			
c. Identify and utilize Aids to Navigation. (P/T)			
d. Consider/compensate effects of set and drift. (P/N)			
e. Provide course guidance to helm. (P)			
f. State speed over ground. (N)			
g. Use radar to supplement DR.			
(1) Radar tune. (P)			
(2) Check accuracy of course. (N)			
(3) Adjust DR courses. (N)			
(4) Use ranges and bearings. (N)			
(5) Display waypoint information on radar screen. (P/O/E)			
(6) Optimum use of radar functions/capabilities. (N)			
h. Use Fathometer to verify depth. (N)			
i. GPS:			
(1) Use course to steer/XTE to maintain track line within .1 NM. (N/P/E)			
(2) Utilize SOG/ETA function. (N/P/E)			
(3) Enter final destination waypoint. (N/P/E)			
j. DR navigation (coxswain demonstrate application of time/distance/speed relationship). (N)			
k. Accuracy of final position within 100 yards. (N/S)			
l. Arrive O/S within 5 minutes of ETA. (N/S)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Towing **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - e. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot to a disabled vessel, take into stern tow, transit to a safe harbor, shift to an alongside tow and moor.

**Conditions** Given a CG boat with required towing equipment, an operational GPS, radar, radio, compass, a certified crew operating within prescribed limitations, and a scenario of a disabled vessel; and using the heavy weather approach (bow into the predominant force).

**Standards** In accordance with the references above.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Coxswain/crew gather following information:			
(1) Position of vessel in distress. (P)			
(2) Number of POB, in PFDs. (P)			
(3) Nature of distress. (P)			
(4) Amplifying information as listed on SAR check sheet. (P)			
b. Plot position of disabled vessel on corrected chart. (N)			
c. Plot track lines to position of disabled vessel. (N)			
d. Enter disabled vessel's position into GPS as waypoint. (N)			
e. Energize all navigational equipment. (N)			
f. Energize navigation lights and sound signal (night & restricted visibility). (N)			
2. O/S Evaluations and Preparations:			
a. Establish communications between disabled vessel and response unit. (O)			
b. Perform on scene assessment of disabled vessel. (P)			
c. Brief crew on procedures: (T/P)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
(1) Equipment to be passed (as required). (T/P)			
(2) Assign tasks and positions. (T/P)			
(3) Make approach. (T/P)			
(4) Passing the towline (consider bridle). (T/P)			
(5) No turns on tow bitt until towline is secured on disabled vessel. (P)			
(6) Discuss emergency breakaway procedures. (P)			
d. Brief disabled vessel on emergency procedures: (T/P)			
(1) Equipment to be passed (as required). (P/T)			
(2) Towing procedures. (P)			
(3) Emergency communications (P/T)			
3. Passing Towline/Equipment:			
a. Pass equipment as required (e.g., pump, drogue, radio). (P)			
b. Make approach into predominate force. (B/P)			
c. Keep coxswain <b>Station</b> in optimal position. (O/B/T)			
d. Pass towline using heaving line(s). (P)			
e. Pay out line and tend away from screws. (B)			
f. Place a working turn on tow bitt after towline is secured on disabled vessel. (O)			
g. Set initial course and adjust towline. (B)			
h. Make up tow bitt. (O)			
i. Set and maintain tow watch. (P/T)			
j. Change navigation lights, if needed. (N)			
k. Change sound signals, if needed. (N)			
l. Install chafing gear, if needed. (P)			
m. Maintain safe towing speed. (B/P)			
n. Check disabled vessel status. (P)			
4. Alongside Tow:			
a. Brief crew on procedures. (T)			
b. Brief disabled vessel on procedures. (T)			
c. Prepare deck for alongside tow (i.e., make rigged fenders and alongside lines ready). (O)			
d. Break tow bitt. (O)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Consider set and drift of both vessels before making approach. (P)			
f. Make approach. (B)			
g. Properly execute drop tow approach or back down approach. (P/O)			
h. Pass alongside lines to disabled vessel. (O/B)			
i. Adjust alongside lines and establish control of vessel. (O)			
j. Change navigation lights, if required. (N)			
k. Discuss mooring instructions with disabled vessel. (P/T)			
l. Brief and post bow pointer in effective location. (T)			
m. Moor vessels. (B/T)			
5. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise: Dewatering** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - e. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Assess the flooding of a vessel, take action and dewater.

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**Conditions** Given a CG boat with dewatering equipment, an operational GPS/radar, radio, compass, a certified crew operating within prescribed limitations, and a disabled vessel with a scenario of taking on water. The coxswain and crew shall use team coordination skills and prosecute the evolution.

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**Standards** In accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Pre-Arrival Preparations:			
a. Coxswain/crew gather information:			
(1) Position of vessel in distress. (N)			
(2) Number of POB, in PFDs. (P)			
(3) Nature of distress. (P)			
(4) Amplifying information as listed on SAR check sheet. (P)			
(5) Plot position of disabled vessel on corrected chart. (N)			
b. Plot track lines to position of disabled vessel. (P)			
c. Enter disabled vessel's position into GPS as waypoint. (N/O)			
d. Energize all navigational equipment. (P)			
e. Energize navigation lights and sound signal (night/restricted visibility). (N/P)			
2. O/S Evaluations and Preparations:			
a. Establish communications between disabled vessel and response unit. (P/O)			



Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Visually inspect and discuss current condition with disabled vessel (evaluate stability, amount of water onboard, depth of water in space, watertight compartmentation or common bilge, etc.). (T/P/O)			
c. Coxswain and crew discuss course of action. (T)			
d. Evaluate and state removal of POB. (T)			
e. Determine dewatering capabilities of disabled vessel. (P)			
f. Advise <b>Station</b> (request assistance if needed). (P/O)			
g. State the level of risk associated with attempting to dewater (salvage) the D/V. (T/B/O/P)			
h. Make approach to disabled vessel. (B)			
3. Dewatering Operations:			
a. Determine appropriate dewatering device. (R/O/T)			
b. Brief disabled vessel on dewatering intentions. (P)			
c. Pass equipment, if required. (P)			
d. Use dewatering device correctly (portable pump started within 6 pulls). (O)			
e. Complete dewatering in a timely manner. (O/P)			
f. Determine if the flooding is controlled. (P/T)			
4. Plugging and Patching:			
a. Identify source of flooding. (T/P)			
b. Use proper materials to reduce or stop flooding. (T/P)			
c. Set and maintain flood watch. (T/P)			
5. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise: Man Overboard (MOB) Recovery** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. American Red Cross First-Aid Course
  - c. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - f. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Recover a simulated crewmember fallen overboard.

**Conditions** Given a CG boat with an operational GPS or DGPS, radio, certified crew operating within prescribed limitations, and a scenario of one crewmember (life-like OSCAR) fallen overboard and unconscious in the water.

**Standards** MOB must be recovered within 3 minutes and in accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Execution:			
a. Pass report of man overboard to coxswain. (T)			
b. Assign and position pointer/lookout watch. (P)			
c. Discuss life ring and strobe deployment. (P)			
d. Discuss sound signals. (P)			
e. Establish electronic position using GPS/DGPS MOB Event function. (N)			
f. Use spotlight or deck lighting. (P)			
g. Brief crew on pickup. (T)			
h. Determine general set and drift for approach based on prevailing weather. (N)			
i. Execute approach to MOB. (B)			
j. Execute direct pick-up of MOB. (P/B)			
k. Recover MOB within 3 minutes. (S)			
l. Crew demonstrate appropriate first aid. (P/T)			
m. Notify unit. (P/O)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			



## Chapter 2. Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

**Introduction** This Chapter provides the required drills and evaluation criteria for the 41' UTB that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Reduced Visibility Navigation	A-21
Crewmember Piloting Proficiency	A-23
Search Patterns (Precision Navigation Patterns)	A-25
Search Patterns (Drifting Patterns)	A-29



Appendix A – 41' UTB Readiness and Standardization Drills

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise: Reduced Visibility Navigation**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS/DGPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*

**Terminal Performance Objective** Pilot the vessel, in reduced visibility, to a given position and return.

**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and a certified crew operating within the prescribed limitations.

**Standards** Departure made within 15 minutes of notification that exercise commences. Course accurately plotted to turn points and given position within 3 degrees. Arrive within 100 yards of given position and in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot courses and destination accurately. (N)			
b. Correct chart. (N)			
c. Factor variation and deviation in course. (N)			
d. Calculate and label All DR times and ETA. (N)			
e. State weather and tidal conditions. (N)			
f. State direction and velocity of current. (N)			
g. State sea and bar conditions. (P/T)			
h. Set watertight integrity. (P)			
i. Energize navigation lights and sound signals (night/restricted visibility). (P/O)			
j. Open windows, if necessary. (P/O)			
k. Rig anchor, if necessary. (P/O)			
l. Energize all electronics. (P/O)			
m. Designate lookout(s) and post effectively. (P/N)			
n. Make departure within 15 minutes. (S)			
2. Underway Navigation:			
a. Utilize sound signals. (N)			
b. Make security broadcast, if appropriate. (P/O)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Provide course guidance to helmsman. (N)			
d. Conduct of own vessel in accordance with Rules of the Road. (N)			
e. Identify and utilize aids to navigation. (N)			
f. Consider/compensate effects of set and drift. (N/P)			
g. Plot and confirm fixes by combination of DR, GPS, DGPS, radar and fathometer. (N)			
h. Use radar to supplement DR using any combination of EBL, VRM, cursor, floating EBL to: (N)			
(1) Check accuracy of course. (N)			
(2) Adjust DR courses. (N)			
(3) Correct for set and drift. (N)			
i. Tune radar correctly. (N/P/O)			
j. Use fathometer to verify depth of water. (N)			
k. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan functions. (N/O)			
(3) Use ETA function. (N/O)			
(4) Use XTE function to determine set and drift and maintain track line within .1 NM (200 yds). (N/O)			
(5) Update ETA utilizing SOG function. (O)			
l. Arrive at given position within 100 yards. (N)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Crewmember Piloting Proficiency **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS/DGPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Crew pilots the boat back to the **Station**, without the assistance of the coxswain.

**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and certified crew operating within prescribed limitations. The scenario is the coxswain becoming incapacitated and unable to pilot the boat.

**Standards** Plot position of CG boat in 5 minutes and within 100 yards of actual position in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Notify unit of the situation. (P/O)			
b. Plot position in 5 min. (S/N)			
c. Plot course and distance to destination. (N)			
d. Factor in variation and deviation. (N)			
e. Calculate DR times and ETA. (N)			
f. Identify shoal areas. (N)			
g. Calculate or compensate set and drift using weather and tide. (N)			
h. Discuss bar conditions. (P/T)			
i. Energize navigation lights (night/reduced visibility). (N)			
j. Crew member in charge brief crew. (T/P)			
k. Discuss anchoring of boat. (T/P/O)			
l. Accuracy of position within 100 yds. (N/S)			
2. Underway Navigation:			
a. Use sound signals, if appropriate. (N)			
b. Conduct of own vessel in accordance with the Rules of the Road. (N)			



Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Identify and utilize aids to navigation. (N/T)			
d. Do not compromise night vision. (P)			
e. Course guidance provided to helm. (N/P)			
f. Use radar bearings and ranges to supplement DR. (N)			
g. Tune radar correctly. (O)			
h. Use fathometer to verify depth of water. (N)			
i. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan/reverse sail plan. (O)			
(3) Use ETA function. (O)			
(4) Use SOG function. (O)			
3. Crew Teamwork and Coordination:			
a. Crew member in charge brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Crew member provide appropriate and timely guidance throughout the evolution. (T)			
f. Wear and/or use crew safety and survival equipment properly. (R/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Crew member in charge communicate with unit during operations. (T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Precision Navigation Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - g. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a C2PC search pattern summary sheet or equivalent listing CSP and turn positions.

**Standards** The CG boat shall be underway within thirty minutes of being given search pattern and CSP. Turn points must be accurately plotted within 100 yds and courses accurate within 3 degrees. Start at CSP within 100 yds of plotted position. Boat shall complete search pattern within 5 minutes of ETA, and complete all turns within 50 yards of plotted position, in accordance with procedures as set forth in the above references.

Creeping Line Search Pattern, Single Unit (CS)

**Standards** The CS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Parallel Search Pattern, Single Unit (PS)

**Standards** The PS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track line, Single Unit Non-Return (TSN)

**Standards** The TSN pattern will be run in its entirety, all turns must be made within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track Line, Single Unit Return (TSR)

**Standards** The TSR pattern will be run in its entirety, all turns must be within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Coxswain choose most appropriate scaled chart that covers the intended search area. (N/P)			



Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Plot courses (magnetic), CSP and turns accurately. (N/P/S)			
c. Calculate and state DR times and total time to run. (N)			
d. Brief crew on initial SAR check sheet items. (P)			
e. Coxswain pass search plans to communications watch. (T/P)			
f. Boat underway within 30 minutes of notification. (P/S)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Start pattern at designated CSP within 100 yds. (P/N/S)			
c. Utilize sound signals in accordance with Rules of the Road. (P)			
d. Conduct of own vessel in accordance with the Rules of the Road. (P)			
e. Identify and utilize aids to navigation. (N)			
f. Use illumination. Do not compromise night vision. (P/O)			
g. Provide course guidance to helm. (N)			
h. State speed over ground. (N)			
i. Complete turns within 50 yds of their plotted positions. (S)			
j. Use GPS as follows: (N)			
(1) Course to steer. (O)			
(2) Use SOG function. (O)			
(3) Use ETA function. (O)			
(4) Enter all turns into GPS as waypoints. (N)			
(5) Use XTE function to maintain track line within .1 NM. (N)			
k. Adjust course and speed as necessary to stay on pattern track line. (P)			
l. Use fathometer to verify depth. (N)			
m. Complete pattern within 5 minutes of ETA. (N/S)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Drifting Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - g. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a position to commence a search pattern.

**Standards** The search patterns shall be commenced within 5 minutes of arrival at CSP within 100 yds of given position. Coxswain shall determine drift prior to starting pattern within 45 degrees of actual drift. Boat shall complete all turns within 15 seconds of stated DR time, in accordance with procedures as set forth in the above references.

Sector Search Pattern, Single Unit (VS)

**Standards** The VS pattern will be run in its entirety with track spacing between 200 to 500 yds. The first leg shall be the direction of drift with all turns made 120 degrees to the right, within 15 seconds of their DR time. On the third, sixth, and ninth legs, steer toward the datum marker. The third, sixth and ninth legs shall end at the datum marker regardless of time run, the fourth and seventh legs are run as individual legs.

Expanding Square Search Pattern, Single Unit (SS)

**Standards** The SS pattern will be run for a minimum of 5 legs with track spacing provided by the evaluator. The first leg shall be the direction of drift with all turns 90 degrees to the right, within 15 seconds of their DR time.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Establish electronic position and determine safe area. (N/P)			
b. Calculate all courses (compass) and turns accurately within 3 degrees. (P/N/S)			
c. Calculate and state DR times and total time to run. (N)			
d. Brief crew on initial SAR check sheet items. (P)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain pass search plans to communications watch. (T/P)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Crewmember drop datum marker overboard at CSP. (VS only) (P)			
c. Coxswain determine direction of drift accurate to 45 degrees. (P/N/S)			
d. Start pattern within 100 yds of CSP. (P/N/S)			
e. Start pattern within 5 minutes of arrival at CSP. (P/N/S)			
f. First leg of pattern in direction of drift (000° C if drift cannot be determined). (P/N/S)			
g. Third, sixth, and ninth legs end at datum marker (VS only). (P/S)			
h. Utilize sound signals in accordance with rules of the road. (P)			
i. Conduct of own vessel in accordance with the rules of the road. (P)			
j. Identify and utilize aids to navigation. (N)			
k. Use illumination. Do not compromise night vision. (P/O)			
l. Provide course guidance to helm. (N)			
m. State speed over ground. (N)			
n. Complete turns within 15 seconds of their stated DR time. (N/S)			
o. On the third, sixth, and ninth legs, steer toward the datum marker (VS only). (P/N/S).			
p. Use GPS as follows: (N)			
(1) Use save feature to record position of datum marker. (O)			
(2) Use SOG function to verify initial speed. (O)			
q. Base course and speed on engine RPMs and compass course, do not adjust to counter set and drift. (P)			
r. Use fathometer to verify depth. (N)			
s. Pass final position of datum marker to SMC (to determine set and drift of datum). (P)			
3. Crew Teamwork and Coordination:			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



## Chapter 3. Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

**Introduction** This Chapter provides a list of the standard engineering casualty control drills for the 41' UTB that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Fire in the Engine Room	A-35
Loss of Steering (Cable/Hydraulics)	A-37
Loss of Steering (Jammed Rudder)	A-39
Collision With Submerged Object	A-41
Loss of Main Engine Lube Oil Pressure	A-43
Main Engine High Water Temperature	A-45



Appendix A – 41' UTB Readiness and Standardization Drills

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Fire in the Engine Room**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Combat a simulated main space fire.

**Conditions** Given a CG boat with required fire fighting equipment and installed systems, take corrective action for combating a fire in the main space.

**Standards** Crewmembers shall demonstrate proper methods of controlling and extinguishing an engine room fire too large to be combated with only the portable fire extinguishers onboard, in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to neutral on both engines and then secure. (P)			
b. Notify crew of casualty. (P/T)			
c. Engineer check engine room through lower cabin view port to assess situation. (P)			
d. Contact and inform <b>Station</b> of situation and current position. (P/N)			
e. Secure electrical power. (P)			
f. On coxswain command, engineer energizes HALON system by pulling pin and actuating the handle (simulate). (T/P/O)			
g. Mark time when HALON system activated. (P)			
h. Crew member rig the anchor, if needed. (P/O)			
i. Disconnect life raft at weak link and move forward. (P)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Steering (Cable/Hydraulics) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

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**References**

- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

---

**Terminal Performance Objective** Given a steering casualty, take corrective action.

---

**Conditions** Given a CG boat, a certified crew operating in prescribed limitations, take corrective actions for a loss of steering, caused by a break in the steering cable.

---

**Standards** Emergency tiller installed on the port rudderpost and positive control of both rudders maintained, in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs on both engines. (P)			
b. Notify crew of casualty. (T)			
c. Verify current position and evaluate situation. (P/T/N)			
d. Coxswain steer with engines, if needed. (T)			
e. Engineer investigate the casualty. (P)			
f. Crew member rig the anchor, if necessary. (P/O)			
g. Crew member provide emergency tiller from lazarette. (P/T)			
h. Place engines in neutral. (P)			
i. Install emergency tiller on the port rudderpost and maintain positive control. (S/P)			
j. Detach release pin on starboard rudderpost to disconnect steering cable. Tie cable out of way. (P/T)			
k. Test rudders for complete range of motion (full port to full starboard). (T/P/O)			
l. Place tiller amidships. (P/O)			
m. Engage engines separately. (P)			
n. Keep RPMs at minimum speed. (P)			
o. Utilize standard steering commands. (P/T)			
p. Notify <b>Station</b> . (P/O)			



Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Loss of Steering (Jammed Rudder)** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

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**References**

- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

---

**Terminal Performance Objective** Given a steering casualty, take corrective action.

---

**Conditions** Given a CG boat, a certified crew operating in prescribed limitations, take corrective actions for a loss of steering, caused by a jammed rudder.

---

**Standards** Emergency tiller installed on the port rudderpost and positive control of both rudders maintained, in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs on both engines. (P)			
b. Notify crew of casualty. (T)			
c. Coxswain steer with engines, if needed. (T)			
d. Engineer investigate the casualty. (P)			
e. Crew member rig the anchor, if necessary. (P/O)			
f. Crew member provide emergency tiller from lazarette. (P/T)			
g. Place engines in neutral. (P)			
h. Install emergency tiller on the port rudderpost and maintain positive control. (P)			
i. Engineer remove tie rod bar between port and starboard rudderposts, if necessary. (P/O)			
j. Exercise rudders to determine which rudder is jammed. (P/O)			
k. Make attempts to free jammed rudder with tiller. (P)			
l. Secure rudder to prevent movement if unable to free jammed rudder. (P)			
m. Keep RPMs at minimum speed. (P)			
n. Utilize standard steering commands. (P/T)			
o. Notify <b>Station</b> . (P/O)			
2. Crew Teamwork and Coordination:			



Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Collision With Submerged Object **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Crew simulates striking a submerged object while underway and takes appropriate action.

**Conditions** Given a CG boat with a certified crew operating in prescribed limitations, take corrective action for striking a submerged object.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to neutral on both engines. (P)			
b. Notify crew of casualty. (P/T)			
c. Coxswain verify position. (N/P/T)			
d. Engineer proceed to the engine room to check for compartment flooding. (P)			
e. Crew member check all other compartments for flooding. (P)			
f. Take appropriate measures to reduce flooding, if applicable. (P)			
g. Engage engines at various speeds to check for vibration. (P/O)			
h. Notify <b>Station</b> of situation. (P/O)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			



Appendix A – 41' UTB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Main Engine Lube Oil Pressure

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Given a simulated loss of lube oil pressure in a main diesel engine, take corrective action.

**Conditions** Given a CG boat with a certified crew operating within prescribed limitations, take corrective action for loss of lube oil pressure.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to clutch ahead on both engines. (P/O)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Secure affected engine. (P/O)			
e. Verify current position and evaluate situation. (P/T/N)			
f. Engineer check engine room through lower cabin view port to assess the situation. (P)			
g. Crew member rig the anchor, if necessary. (P/O)			
h. Engineer enter engine room, crew member act as safety observer for engineer. (P/T)			
i. Fire extinguishers O/S. (P/O)			
j. Check bilge area for lube oil. (P)			
k. Check lube oil for quality and quantity. (P)			
l. Notify <b>Station</b> . (P/O)			
m. Return to <b>Station</b> if cause cannot be determined or repaired. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			



Appendix A – 41' UTB Readiness and Standardization Drills

Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Main Engine High Water Temperature

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *41' UTB Operator's Handbook*, COMDTINST M16114.2 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Given a simulated high water temperature in a main diesel engine, take corrective action.

**Conditions** Given a CG boat with a certified crew operating in prescribed limitations, take corrective action for high water temperature.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to clutch ahead on both engines. (P/O)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (P/T)			
d. Verify current position and evaluate situation. (P/T/N)			
e. Secure engine, if temperature continues to rise. (P/O)			
f. Check overboard discharge. (P)			
g. Engineer check engine room through lower cabin view port to assess the situation. (P)			
h. Crew member rig the anchor, if necessary. (P/O)			
i. Engineer enter engine room, crewmember act as safety observer for engineer. (P/T)			
j. Sea suction valves open. (P)			
k. Check sea strainers, shift strainers, if necessary. (P/O)			
l. Check bilges. (P)			
m. Check cooling lines. (P)			
n. Check raw water pump with back of hand. (P)			
o. Check expansion tank after engine has cooled. (P)			
p. Notify <b>Station</b> . (T/P/O)			



Appendix A – 41' UTB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



## Appendix B. 47' MLB Readiness and Standardization Drills

**Introduction** This Appendix provides required and optional underway drill checklists for the 47' MLB.

**In this Appendix** This Appendix contains the following Chapters:

Chapter	Title	See Page
1	Required Underway Drill Checklists	B-3
2	Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns	B-19
3	Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises	B-33



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



## Chapter 1. Required Underway Drill Checklists

**Introduction** This Chapter provides underway drill checklists for the 47' MLB and capabilities used by inspection teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Day/Night Navigation and Piloting	B-5
Towing	B-9
Dewatering	B-13
Man Overboard (MOB) Recovery	B-17



Appendix B – 47' MLB Readiness and Standardization Drills

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Day/Night Navigation and Piloting **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook*, Type Specific
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Pilot a CG boat and arrive at a given position within standards.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, and a certified crew operating within the prescribed limitation.

**Standards** Departure made within 15 minutes of notification that exercise commences. Courses accurately plotted to turn points and given position within 3 degrees. Arrive at position within 5 minutes of ETA, accurate to within 100 yds and in accordance with procedures as set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot course and destination accurately. (N)			
b. Factor variation and deviation in course. (N)			
c. Calculate and label all DR times and ETA. (N)			
d. Correct chart. (N)			
e. State depth at destination. (N)			
f. State distance to destination from shore and entrance. (N)			
g. State weather and tidal conditions. (N)			
h. State sea and bar conditions. (N/P)			
i. State direction and velocity of current. (N)			
j. Energize navigation lights. (P)			
k. Windows open if necessary. (P)			
l. Coxswain brief crew. (T)			
m. Set watertight integrity. (P)			
n. Ensure night vision is not compromised. (P/N)			
o. Make departure within 15 minutes. (S)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
p. Enter a minimum of two waypoints into GPS. (P/N/O)			
2. Underway Navigation:			
a. Utilize sound signals. (P)			
b. Conduct of own vessel in accordance with Rules of the Road. (P/B)			
c. Identify and utilize Aids to Navigation. (P/T)			
d. Consider/compensate effects of set and drift. (P/N)			
e. Provide course guidance to helm. (P)			
f. State speed over ground. (N)			
g. Use radar to supplement DR.			
(1) Radar tune. (P)			
(2) Check accuracy of course. (N)			
(3) Adjust DR courses. (N)			
(4) Use ranges and bearings. (N)			
(5) Display waypoint information on radar screen. (P/O/E)			
(6) Optimum use of radar functions/capabilities. (N)			
h. Use Fathometer to verify depth. (N)			
i. GPS:			
(1) Use course to steer/XTE to maintain track line within .1 NM. (N/P/E)			
(2) Utilize SOG/ETA function. (N/P/E)			
(3) Enter final destination waypoint. (N/P/E)			
j. DR navigation (coxswain demonstrate application of time/distance/speed relationship). (N)			
k. Accuracy of final position within 100 yards. (N/S)			
l. Arrive O/S within 5 minutes of ETA. (N/S)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Towing **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
- e. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot to a disabled vessel, take into stern tow, transit to a safe harbor, shift to an alongside tow and moor.

**Conditions** Given a CG boat with required towing equipment, an operational GPS, radar, radio, compass, a certified crew operating within prescribed limitations, and a scenario of a disabled vessel; and using the heavy weather approach (bow into the predominant force).

**Standards** In accordance with the references above.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Coxswain/crew gather following information:			
(1) Position of vessel in distress. (P)			
(2) Number of POB, in PFDs. (P)			
(3) Nature of distress. (P)			
(4) Amplifying information as listed on SAR check sheet. (P)			
b. Plot position of disabled vessel on corrected chart. (N)			
c. Plot track lines to position of disabled vessel. (N)			
d. Enter disabled vessel's position into GPS as waypoint. (N)			
e. Energize all navigational equipment. (N)			
f. Energize navigation lights and sound signal (night & restricted visibility). (N)			
2. O/S Evaluations and Preparations:			
a. Establish communications between disabled vessel and response unit. (O)			
b. Perform on scene assessment of disabled vessel. (P)			
c. Brief crew on procedures: (T/P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
(1) Equipment to be passed (as required). (T/P)			
(2) Assign tasks and positions. (T/P)			
(3) Make approach. (T/P)			
(4) Passing the towline (consider bridle). (T/P)			
(5) No turns on tow bitt until towline is secured on disabled vessel. (P)			
(6) Discuss emergency breakaway procedures. (P)			
d. Brief disabled vessel on emergency procedures: (T/P)			
(1) Equipment to be passed (as required). (P/T)			
(2) Towing procedures. (P)			
(3) Emergency communications (P/T)			
3. Passing Towline/Equipment:			
a. Pass equipment as required (e.g., pump, drogue, radio). (P)			
b. Make approach into predominate force. (B/P)			
c. Keep coxswain <b>Station</b> in optimal position. (O/B/T)			
d. Pass towline using heaving line(s). (P)			
e. Pay out line and tend away from screws. (B)			
f. Place a working turn on tow bitt after towline is secured on disabled vessel. (O)			
g. Set initial course and adjust towline. (B)			
h. Make up tow bitt. (O)			
i. Set and maintain tow watch. (P/T)			
j. Change navigation lights, if needed. (N)			
k. Change sound signals, if needed. (N)			
l. Install chafing gear, if needed. (P)			
m. Maintain safe towing speed. (B/P)			
n. Check disabled vessel status. (P)			
4. Alongside Tow:			
a. Brief crew on procedures. (T)			
b. Brief disabled vessel on procedures. (T)			
c. Prepare deck for alongside tow (i.e., make rigged fenders and alongside lines ready). (O)			
d. Break tow bitt. (O)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Consider set and drift of both vessels before making approach. (P)			
f. Make approach. (B)			
g. Properly execute drop tow approach or back down approach. (P/O)			
h. Pass alongside lines to disabled vessel. (O/B)			
i. Adjust alongside lines and establish control of vessel. (O)			
j. Change navigation lights, if required. (N)			
k. Discuss mooring instructions with disabled vessel. (P/T)			
l. Brief and post bow pointer in effective location. (T)			
m. Moor vessels. (B/T)			
5. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** **Dewatering** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - e. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Assess the flooding of a vessel, take action and dewater.

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**Conditions** Given a CG boat with dewatering equipment, an operational GPS/radar, radio, compass, a certified crew operating within prescribed limitations, and a disabled vessel with a scenario of taking on water. The coxswain and crew shall use team coordination skills and prosecute the evolution.

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**Standards** In accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Pre-Arrival Preparations:			
a. Coxswain/crew gather information:			
(1) Position of vessel in distress. (N)			
(2) Number of POB, in PFDs. (P)			
(3) Nature of distress. (P)			
(4) Amplifying information as listed on SAR check sheet. (P)			
(5) Plot position of disabled vessel on corrected chart. (N)			
b. Plot track lines to position of disabled vessel. (P)			
c. Enter disabled vessel's position into GPS as waypoint. (N/O)			
d. Energize all navigational equipment. (P)			
e. Energize navigation lights and sound signal (night/restricted visibility). (N/P)			
2. O/S Evaluations and Preparations:			
a. Establish communications between disabled vessel and response unit. (P/O)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Visually inspect and discuss current condition with disabled vessel (evaluate stability, amount of water onboard, depth of water in space, watertight compartmentation or common bilge, etc.). (T/P/O)			
c. Coxswain and crew discuss course of action. (T)			
d. Evaluate and state removal of POB. (T)			
e. Determine dewatering capabilities of disabled vessel. (P)			
f. Advise <b>Station</b> (request assistance if needed). (P/O)			
g. State the level of risk associated with attempting to dewater (salvage) the D/V. (T/B/O/P)			
h. Make approach to disabled vessel. (B)			
3. Dewatering Operations:			
a. Determine appropriate dewatering device. (R/O/T)			
b. Brief disabled vessel on dewatering intentions. (P)			
c. Pass equipment, if required. (P)			
d. Use dewatering device correctly (portable pump started within 6 pulls). (O)			
e. Complete dewatering in a timely manner. (O/P)			
f. Determine if the flooding is controlled. (P/T)			
4. Plugging and Patching:			
a. Identify source of flooding. (T/P)			
b. Use proper materials to reduce or stop flooding. (T/P)			
c. Set and maintain flood watch. (T/P)			
5. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise: Man Overboard (MOB) Recovery**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. American Red Cross First-Aid Course
  - c. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - f. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Recover a simulated crewmember fallen overboard.

**Conditions** Given a CG boat with an operational GPS or DGPS, radio, certified crew operating within prescribed limitations, and a scenario of one crewmember (life-like OSCAR) fallen overboard and unconscious in the water.

**Standards** MOB must be recovered within 3 minutes and in accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Execution:			
a. Pass report of man overboard to coxswain. (T)			
b. Assign and position pointer/lookout watch. (P)			
c. Discuss life ring and strobe deployment. (P)			
d. Discuss sound signals. (P)			
e. Establish electronic position using GPS/DGPS MOB Event function. (N)			
f. Use spotlight or deck lighting. (P)			
g. Brief crew on pickup. (T)			
h. Determine general set and drift for approach based on prevailing weather. (N)			
i. Execute approach to MOB. (B)			
j. Execute direct pick-up of MOB. (P/B)			
k. Recover MOB within 3 minutes. (S)			
l. Crew demonstrate appropriate first aid. (P/T)			
m. Notify unit. (P/O)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			



Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			



## Chapter 2. Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

**Introduction** This Chapter provides the required drills and evaluation criteria for the 47' MLB that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Reduced Visibility Navigation	B-21
Crewmember Piloting Proficiency	B-23
Search Patterns (Precision Navigation Patterns)	B-25
Search Patterns (Drifting Patterns)	B-29



Appendix B – 47' MLB Readiness and Standardization Drills

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise: Reduced Visibility Navigation**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS/DGPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*

**Terminal Performance Objective** Pilot the vessel, in reduced visibility, to a given position and return.

**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and a certified crew operating within the prescribed limitations.

**Standards** Departure made within 15 minutes of notification that exercise commences. Course accurately plotted to turn points and given position within 3 degrees. Arrive within 100 yards of given position and in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot courses and destination accurately. (N)			
b. Correct chart. (N)			
c. Factor variation and deviation in course. (N)			
d. Calculate and label All DR times and ETA. (N)			
e. State weather and tidal conditions. (N)			
f. State direction and velocity of current. (N)			
g. State sea and bar conditions. (P/T)			
h. Set watertight integrity. (P)			
i. Energize navigation lights and sound signals (night/restricted visibility). (P/O)			
j. Open windows, if necessary. (P/O)			
k. Rig anchor, if necessary. (P/O)			
l. Energize all electronics. (P/O)			
m. Designate lookout(s) and post effectively. (P/N)			
n. Make departure within 15 minutes. (S)			
2. Underway Navigation:			
a. Utilize sound signals. (N)			
b. Make security broadcast, if appropriate. (P/O)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Provide course guidance to helmsman. (N)			
d. Conduct of own vessel in accordance with Rules of the Road. (N)			
e. Identify and utilize aids to navigation. (N)			
f. Consider/compensate effects of set and drift. (N/P)			
g. Plot and confirm fixes by combination of DR, GPS, DGPS, radar and fathometer. (N)			
h. Use radar to supplement DR using any combination of EBL, VRM, cursor, floating EBL to: (N)			
(1) Check accuracy of course. (N)			
(2) Adjust DR courses. (N)			
(3) Correct for set and drift. (N)			
i. Tune radar correctly. (N/P/O)			
j. Use fathometer to verify depth of water. (N)			
k. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan functions. (N/O)			
(3) Use ETA function. (N/O)			
(4) Use XTE function to determine set and drift and maintain track line within .1 NM (200 yds). (N/O)			
(5) Update ETA utilizing SOG function. (O)			
l. Arrive at given position within 100 yards. (N)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** **Crewmember Piloting Proficiency** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS/DGPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Crew pilots the boat back to the **Station**, without the assistance of the coxswain.

**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and certified crew operating within prescribed limitations. The scenario is the coxswain becoming incapacitated and unable to pilot the boat.

**Standards** Plot position of CG boat in 5 minutes and within 100 yards of actual position in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Notify unit of the situation. (P/O)			
b. Plot position in 5 min. (S/N)			
c. Plot course and distance to destination. (N)			
d. Factor in variation and deviation. (N)			
e. Calculate DR times and ETA. (N)			
f. Identify shoal areas. (N)			
g. Calculate or compensate set and drift using weather and tide. (N)			
h. Discuss bar conditions. (P/T)			
i. Energize navigation lights (night/reduced visibility). (N)			
j. Crew member in charge brief crew. (T/P)			
k. Discuss anchoring of boat. (T/P/O)			
l. Accuracy of position within 100 yds. (N/S)			
2. Underway Navigation:			
a. Use sound signals, if appropriate. (N)			
b. Conduct of own vessel in accordance with the Rules of the Road. (N)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Identify and utilize aids to navigation. (N/T)			
d. Do not compromise night vision. (P)			
e. Course guidance provided to helm. (N/P)			
f. Use radar bearings and ranges to supplement DR. (N)			
g. Tune radar correctly. (O)			
h. Use fathometer to verify depth of water. (N)			
i. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan/reverse sail plan. (O)			
(3) Use ETA function. (O)			
(4) Use SOG function. (O)			
3. Crew Teamwork and Coordination:			
a. Crew member in charge brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Crew member provide appropriate and timely guidance throughout the evolution. (T)			
f. Wear and/or use crew safety and survival equipment properly. (R/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Crew member in charge communicate with unit during operations. (T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Precision Navigation Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - g. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a C2PC search pattern summary sheet or equivalent listing CSP and turn positions.

**Standards** The CG boat shall be underway within thirty minutes of being given search pattern and CSP. Turn points must be accurately plotted within 100 yds and courses accurate within 3 degrees. Start at CSP within 100 yds of plotted position. Boat shall complete search pattern within 5 minutes of ETA, and complete all turns within 50 yards of plotted position, in accordance with procedures as set forth in the above references.

Creeping Line Search Pattern, Single Unit (CS)

**Standards** The CS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Parallel Search Pattern, Single Unit (PS)

**Standards** The PS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track line, Single Unit Non-Return (TSN)

**Standards** The TSN pattern will be run in its entirety, all turns must be made within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track Line, Single Unit Return (TSR)

**Standards** The TSR pattern will be run in its entirety, all turns must be within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Coxswain choose most appropriate scaled chart that covers the intended search area. (N/P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Plot courses (magnetic), CSP and turns accurately. (N/P/S)			
c. Calculate and state DR times and total time to run. (N)			
d. Brief crew on initial SAR check sheet items. (P)			
e. Coxswain pass search plans to communications watch. (T/P)			
f. Boat underway within 30 minutes of notification. (P/S)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Start pattern at designated CSP within 100 yds. (P/N/S)			
c. Utilize sound signals in accordance with Rules of the Road. (P)			
d. Conduct of own vessel in accordance with the Rules of the Road. (P)			
e. Identify and utilize aids to navigation. (N)			
f. Use illumination. Do not compromise night vision. (P/O)			
g. Provide course guidance to helm. (N)			
h. State speed over ground. (N)			
i. Complete turns within 50 yds of their plotted positions. (S)			
j. Use GPS as follows: (N)			
(1) Course to steer. (O)			
(2) Use SOG function. (O)			
(3) Use ETA function. (O)			
(4) Enter all turns into GPS as waypoints. (N)			
(5) Use XTE function to maintain track line within .1 NM. (N)			
k. Adjust course and speed as necessary to stay on pattern track line. (P)			
l. Use fathometer to verify depth. (N)			
m. Complete pattern within 5 minutes of ETA. (N/S)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Drifting Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - g. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a position to commence a search pattern.

**Standards** The search patterns shall be commenced within 5 minutes of arrival at CSP within 100 yds of given position. Coxswain shall determine drift prior to starting pattern within 45 degrees of actual drift. Boat shall complete all turns within 15 seconds of stated DR time, in accordance with procedures as set forth in the above references.

Sector Search Pattern, Single Unit (VS)

**Standards** The VS pattern will be run in its entirety with track spacing between 200 to 500 yds. The first leg shall be the direction of drift with all turns made 120 degrees to the right, within 15 seconds of their DR time. On the third, sixth, and ninth legs, steer toward the datum marker. The third, sixth and ninth legs shall end at the datum marker regardless of time run, the fourth and seventh legs are run as individual legs.

Expanding Square Search Pattern, Single Unit (SS)

**Standards** The SS pattern will be run for a minimum of 5 legs with track spacing provided by the evaluator. The first leg shall be the direction of drift with all turns 90 degrees to the right, within 15 seconds of their DR time.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Establish electronic position and determine safe area. (N/P)			
b. Calculate all courses (compass) and turns accurately within 3 degrees. (P/N/S)			
c. Calculate and state DR times and total time to run. (N)			
d. Brief crew on initial SAR check sheet items. (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain pass search plans to communications watch. (T/P)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Crewmember drop datum marker overboard at CSP. (VS only) (P)			
c. Coxswain determine direction of drift accurate to 45 degrees. (P/N/S)			
d. Start pattern within 100 yds of CSP. (P/N/S)			
e. Start pattern within 5 minutes of arrival at CSP. (P/N/S)			
f. First leg of pattern in direction of drift (000° C if drift cannot be determined). (P/N/S)			
g. Third, sixth, and ninth legs end at datum marker (VS only). (P/S)			
h. Utilize sound signals in accordance with rules of the road. (P)			
i. Conduct of own vessel in accordance with the rules of the road. (P)			
j. Identify and utilize aids to navigation. (N)			
k. Use illumination. Do not compromise night vision. (P/O)			
l. Provide course guidance to helm. (N)			
m. State speed over ground. (N)			
n. Complete turns within 15 seconds of their stated DR time. (N/S)			
o. On the third, sixth, and ninth legs, steer toward the datum marker (VS only). (P/N/S).			
p. Use GPS as follows: (N)			
(1) Use save feature to record position of datum marker. (O)			
(2) Use SOG function to verify initial speed. (O)			
q. Base course and speed on engine RPMs and compass course, do not adjust to counter set and drift. (P)			
r. Use fathometer to verify depth. (N)			
s. Pass final position of datum marker to SMC (to determine set and drift of datum). (P)			
3. Crew Teamwork and Coordination:			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



## Chapter 3. Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

**Introduction** This Chapter provides a list of the standard engineering casualty control drills for the 47' MLB that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Fire in the Engine Room	B-35
Loss of Steering (Hydraulics)	B-37
Loss of Steering (Electrical)	B-39
Collision With Submerged Object (or Bottom)	B-41
Hard Grounding	B-43
Loss of Main Engine Lube Oil Pressure	B-47
Main Engine High Water Temperature	B-49
Reduction Gear Failure	B-51
Loss of Fuel Oil Pressure	B-53
Loss of Control of Engine RPMs	B-55
Low Voltage Alarm/Loss of Electrical Charging System	B-57



Appendix B – 47' MLB Readiness and Standardization Drills

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Fire in the Engine Room

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After smoke/heat from a fire in the engine room sets off the alarm, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB, with a certified crew operating within prescribed limitations, the fire alarm sounds and smoke/flames are visible through the engine room port light.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to neutral. (P)			
b. Notify crew of casualty. (T)			
c. Engineer check engine room through engine room port light to assess situation. (P)			
d. Coxswain secure both engines with engine stops at steering station. (P)			
e. Engineer pull emergency fuel stops in survivors compartment with coxswain concurrence. (P/T)			
f. Engineer energize CO <sub>2</sub> system by releasing lock pin and depressing handle, or by pulling ring locally at CO <sub>2</sub> bottle. (P/O)			
g. Crew member secure shutoff valves for both engine room air inlets located within aft buoyancy chamber. (P)			
h. Coxswain account for all persons onboard. (P/T)			
i. Contact and inform <b>Station</b> of situation and current position. (P/N)			
j. Engineer secure nonessential electrical power at DC panels (all except VHF/FM radio) with coxswain concurrence. (P/T)			
k. Crewmember rig the anchor for emergency use (fairlead line but anchor remains in bracket), if directed by coxswain. (P/O)			
l. Coxswain discuss relocation of P-5 portable pump forward, away from engine space, for			



Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
emergency use. (P)			
m. Establish fire watch, with portable fire extinguisher readied in survivors compartment to monitor by observing through engine room port light only. (P)			
n. Coxswain coordinate with <b>Station</b> for tow or other assistance emphasizing crew safety. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			
<b>CAUTION!</b>	It is extremely dangerous to enter a compartment during or after a fire without an OBA or other breathing apparatus. The MLB should be towed back to the station. The compartment must be properly ventilated and the space tested for oxygen level before entering.		

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Loss of Steering (Hydraulics)** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

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**Terminal Performance Objective** After loss of helm (steering) control, identify the cause, prevent further damage, and take corrective actions.

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**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, the helmsman reports the helm turns in either direction with no rudder response (caused by a failure within the hydraulic system). The sounding of the low steering pressure alarm follows this symptom.

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**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to clutch ahead. (P)			
b. Secure both engines when low steering pressure alarm on console sounds. (P)			
c. Notify crew of casualty. (P)			
d. Verify current position and evaluate situation. (P/T/N)			
e. Crew members rig the anchor for emergency use (fairlead line but anchor remains in bracket), if directed by coxswain. (P/O)			
f. Engineer check engine room through engine room port light to assess the situation. (P)			
g. Engineer enter engine room with crew member as a safety observer. (T)			
h. Check bilges and look for obvious leaks. (P)			
i. Check gauge on reservoir for pressure, if no hydraulic oil or pressure, both engines remain secured. (P)			
j. Check remainder of steering system from steering rams in lazarette to helm station on open bridge. (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
k. Coxswain coordinate with <b>Station</b> for tow or other assistance when risk assessment indicates crew or vessel safety will be jeopardized through continued operation. (P/T)			
l. Engineer discuss option of removing the sun gear from “both” hydraulic pumps before restarting engines. (P)			
m. Coxswain discuss option of removing hydraulic pump sun gears in order to gain use of engines for maneuvering. (P)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other’s location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Loss of Steering (Electrical)**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After loss of helm (steering) control at one of the jog levers or the autopilot, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, the helmsman reports: Scenario (1) a jog lever has no rudder response or is not responding correctly, Scenario (2) the autopilot is controlling vessel steering but is not responding correctly. No low steering pressure alarm accompanies this symptom. When checked, the hydraulic portion of the steering system is intact, full, and has the proper head pressure.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to clutch ahead. (P)			
b. Notify crew of casualty. (T)			
c. Scenario (1) Attempt to select steering station, reactivate jog lever control. Check to ensure autopilot disengaged. Scenario (2) Check autopilot select button. Determine what function the autopilot is in (auto/nav/power sys). (P)			
d. Shift steering control to hydraulic helm. Bring engines to neutral if electro-hydraulic side of the steering system continues to effect hydraulic helm control. Establish vessel control and maneuver vessel to safe waters. (P)			
e. Verify current position and evaluate situation. (P/T/N)			
f. Check all steering stations to isolate extent of the steering problem. (P)			
g. Crew members rig the anchor for emergency use (fairlead line but anchor remains in bracket), if directed by coxswain. (P/O)			
h. Engineer check engine room through engine room port light to assess the situation. (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
i. Engineer enter engine room with crew member as a safety observer. (T)			
j. Check bilges and look for obvious leaks. (P)			
k. Check gauge on reservoir for pressure, if no hydraulic oil or pressure, secured both engines. (P)			
l. Check electrical connections at electro-hydraulic steering valve (steering control solenoid actuator). (P)			
m. Check power servo cylinder (steering ram) connections and autopilot rudder angle indicator connections in lazarette. (P)			
n. Check steering system breakers in auxiliary machinery compartment. (P)			
o. Secure steering control breaker if faulty jog lever continues to interfere with hydraulic helm. Secure autopilot breaker if autopilot continues to interfere with hydraulic helm. (P)			
p. Coxswain coordinate with <b>Station</b> for tow or other assistance when risk assessment indicates crew or vessel safety will be jeopardized through continued operation. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** **Collision With Submerged Object (or Bottom)** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

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**References**

- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

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**Terminal Performance Objective** After striking a submerged object (or bottom), assess resulting damage, prevent further damage, and take corrective actions.

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**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, the MLB hits a submerged object or momentarily goes aground.

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**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to neutral (when in safe waters and out of surf zone). (P)			
b. Notify crew of casualty. (T)			
c. Determine what was hit, where the object is located and if it can still be seen. (P)			
d. Verify current position and depth of water and evaluate situation. (N/P/T)			
e. Engineer check gear space and shafting for obvious flooding or damage. (P)			
f. Engineer check engine room through engine room port light to assess obvious flooding or damage. (P)			
g. Engineer enter engine room with crew member as safety observer. (P/T)			
h. Engineer check engine room bilges for flooding or obvious damage (particularly around the strut mounting points). (P)			
i. Engineer check lazarette bilges for flooding, rudder or steering system damage. (P)			
j. Engineer check for proper cooling water circulation or debris in the strainers. (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
k. Crew member check auxiliary and forward compartment bilges for flooding or obvious damage. Assess situation by making observation through door port lights before entering the compartments. (P)			
l. Crew member check forepeak void for flooding by removing drain plug at bulkhead 15. (P)			
m. Coxswain conduct steering checks including helm and jog lever control to identify limitations or isolate areas of damage. (P)			
n. Coxswain engage engines and reduction gears individually at various speeds while engineer check for vibration and assess damage to propulsion system. (P)			
o. Return to <b>Station</b> at reduced speed or on one engine, if warranted, to prevent additional damage or vibration. (P)			
p. Coxswain coordinate with <b>Station</b> for tow or other assistance when risk assessment indicates crew or vessel safety will be jeopardized through continued operation. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** **Hard Grounding** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After going hard aground, assess resulting damage, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB, with a certified crew operating within prescribed limitations, the MLB hits bottom and becomes hard aground (unable to initially float free).

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to neutral. (P)			
b. Notify crew of casualty. Assess condition of crew. (T)			
c. Verify current position and depth of water and evaluate situation. (N/P/T)			
d. Notify <b>Station</b> of position and make follow-ups as situation is clarified. (P)			
e. Engineer check gear space and shaft seals for obvious flooding or damage. (P)			
f. Engineer check engine room through engine room port light to assess obvious flooding or damage. (P)			
g. Engineer enter engine room with crew member as safety observer. (P/T)			
h. Engineer check engine room bilges for flooding or obvious damage (particularly around the strut mounting points). (P)			
i. Engineer check lazarette for any signs of flooding, rudder or steering system damage. (P)			
j. Engineer check for proper cooling water circulation or debris in strainers. Secure engines if cooling is inadequate or if excessive debris (especially sand) is observed. (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
k. Crew member check auxiliary and forward compartment bilges for flooding or obvious damage. Assess situation by making observation through door port lights before entering the compartments. (P)			
l. Crew member check forepeak void for flooding by removing drain plug at bulkhead 15. (P)			
m. Crew members rig the anchor for emergency use (fairlead line but anchor remains in bracket), if directed by coxswain. (P/O)			
n. Crew members take depth soundings all around vessel. Coxswain determine deepest water, extent of grounding, and potential for underwater damage. (P)			
o. Consider present and future state of tide, current, or other weather conditions with regard to re-floating or salvage options. (P)			
p. Deploy anchor if situation involves potential for being set further aground due to conditions. (P/O)			
q. Coxswain determine safest direction to deep water and method for extricating vessel safely and with least damage. (P/T)			
r. Conduct check of propulsion system integrity prior to attempting re-floating or salvage. Take caution to reduce further damage. (P/T)			
s. Conduct check of steering system integrity. Check rudder travel or limitations utilizing hydraulic helm (not jog levers). Take caution to reduce further damage. (P/T)			
t. Coxswain maneuver into safe waters (deep enough for MLB and out of surf zone) using only engines, if damage to steering system occurred. (P/B)			
u. Coxswain conduct steering check including helm and jog lever control to identify limitations or isolate areas of damage. (P)			
v. Coxswain engage engines and reduction gears individually at various speeds while engineer checks for vibration and assesses damage to propulsion system. (P/T)			
w. Return to <b>Station</b> or appropriate haul-out at reduced speed or on one engine, if warranted, to prevent additional damage or vibration. (P/O/B)			
x. Coxswain coordinate with <b>Station</b> for tow or other assistance when risk assessment indicates crew or vessel safety will be jeopardized through continued operation. (P/T)			



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed of during evolution. (P/T)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Main Engine Lube Oil Pressure

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After loss of lube oil pressure in one main diesel engine, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, the EDM alarm sounds and indicates "Code 45" (oil pressure low).

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to clutch ahead. (P)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Secure affected engine. (P)			
e. Verify current position and evaluate situation. (P/T/N)			
f. Crew members rig the anchor for emergency use (fairlead line but anchor remains in bracket), if directed by coxswain. (P/O)			
g. Engineer check engine room through engine room port light to assess the situation. (P)			
h. Engineer enter engine room with crew member as safety observer. (P/T)			
i. Check bilge area for lube oil. (P)			
j. Check obvious lube oil leaks. (P)			
k. Check lube oil for quality and quantity. (P)			
l. Identify and correct source of problem or, (P/T)			
m. Return to <b>Station</b> on one engine as necessary if cause cannot be determined or repaired. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			



Appendix B – 47' MLB Readiness and Standardization Drills

Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Main Engine High Water Temperature**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After rising operating temperature of one main diesel engine sets off the alarm, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, the EDM sounds an alarm and indicates "Code 44" (coolant temperature high).

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to clutch ahead. (P)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Verify current position and evaluate situation. (P/T/N)			
e. Coxswain secure engine if temperature is above 212 °F or if engineer reports steam is present. (P)			
f. Engineer check engine room through engine room port light to assess situation. (P)			
g. Engineer enter engine room with crew member as safety observer. (P/T)			
h. Engineer check engine temperature as indicated on mechanical gauge. (P)			
i. Check bilges and engine for obvious leaks. (P)			
j. Feel brass pipe to determine which system the casualty is in. (P)			
k. If the pipe is hot:			
(1) Check sea suction valve. (P)			
(2) Check and shift duplex strainer. (P)			
(3) Check R/W pump cover with back of hand. (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
(4) Ensure deicing system is closed. (P)			
1. If the pipe is cool:			
(1) Check J/W level on coolant recovery bottle. (P)			
(2) Check weep hole of J/W pump. (P)			
(3) Check L/O for quality and quantity. (P)			
<p><b>NOTE</b>  Even if pipe is cool, components of the R/W system may still be malfunctioning (i.e. partially clogged strainers or missing vanes on impeller).</p>			
m. Identify and correct source of problem or, (P/T)			
n. Secure affected engine and return MLB to <b>Station</b> if cause cannot be determined or repaired. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Reduction Gear Failure**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After one reduction gear would not respond to DDEC throttle station control, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB, with a certified crew operating within prescribed limitations, one of the reduction gears does not respond properly when the throttles are operated in forward and reverse.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Bring both throttles to neutral. (P)			
b. Notify crew of casualty. (T)			
c. Verify current position and evaluate situation. (N/P/T)			
d. Coxswain check EDM for R/G pressure and secure engine if pressure is not within parameters. (P)			
e. Ensure active light is lit at control station. (P)			
f. Coxswain attempt to regain R/G control by changing to another throttle station or engaging backup control panel. (P)			
g. Coxswain secure effected engine. (P)			
h. Crew members rig the anchor for emergency use (fairlead line but anchor remains in bracket), if directed by coxswain. (P/O)			
i. Engineer check both Gear Interface Module breakers on 24V power panel. (P)			
j. Engineer remove deck plates over affected R/G. (P)			
k. Check gear space bilge area for oil. (P)			
l. Check R/G lube oil level. (P)			
m. Check R/G control valve electrical connections. (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
n. Engineer check dirty oil filter indicator on duplex filter, if indicator has popped up, handle is shifted to other filter. (P)			
o. If no leaks are present and oil level is full, restart engine and check clutch application pressure (230 to 290 PSI) when engaged. (P)			
p. Secure engine if pressure is not within parameters. (P)			
q. After all mechanical checks have been made, proceed to troubleshoot electronic controls (ECs). (P)			
r. Manually operate control valve if failure of the electronic control was determined. (P)			
s. Discuss use of R/G “Come Home” device if a long distance must be traveled during return to the unit. (P/B)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other’s location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Loss of Fuel Oil Pressure**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After experiencing a loss in RPMs on one engine, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, one engine begins to run rough and lose power while the EDM sounds an alarm and indicates "Code 48" (fuel pressure low).

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to clutch ahead. (P)			
b. Identify and secure affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Verify current position and evaluate situation. (N/P/T)			
e. Crew member rig the anchor for emergency use (fairlead line but anchor remains in bracket), if directed by coxswain. (P/O)			
f. Engineer check engine room through engine room port light to assess situation. (P)			
g. Engineer enter engine room with crew member as safety observer. (P/T)			
h. Check engine room bilge for fuel oil. (P)			
i. Check emergency fuel cutout valves to ensure they are open. (P)			
j. Check primary fuel filters. (P)			
k. Check entire fuel oil system for leaks. (P)			
l. Identify and correct source of problem or request additional assistance from <b>Station</b> . (P/T)			
m. Coxswain maneuver MLB safely using only one engine. (B)			
2. Crew Teamwork and Coordination:			



Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Control of Engine RPMs **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After one engine fails to respond properly to DDEC throttle station control, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, the coxswain attempts to reduce speed but one engine stays at set RPMs and does not respond to DDEC throttle control.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Place both throttle control levers in clutch ahead position. (P)			
b. Notify crew of casualty. (T)			
c. Coxswain ensure throttle station is active and synch function is off. (P)			
d. Coxswain shift to another station and attempt to gain throttle control. (P)			
e. Use emergency backup panel to gain engine control after checking other throttle stations. (P)			
f. Use engine stop button (push and hold down) to secure effected engine. (P)			
g. If engine fails to secure, engineer proceed to survivor's compartment and pull emergency fuel cutoff for affected engine. (P)			
h. Coxswain use emergency air shutdown if engine still fails to secure. (P)			
i. Coxswain maneuver MLB safely back to moorings on one engine. (P/B)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			



Appendix B – 47' MLB Readiness and Standardization Drills

Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout the evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			

Appendix B – 47' MLB Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Low Voltage Alarm/Loss of Electrical Charging System **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *47' MLB Operator's Handbook*, COMDTINST M16114.25 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After recognizing a low voltage alarm or symptoms of problems with the 24-VDC charging system, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 47' MLB at cruising speed, with a certified crew operating within prescribed limitations, the engineer/crew member reports: Scenario (1) a low voltage alarm (Code 46 ECM battery low) is displayed on the Electronic Display Module (EDM), Scenario (2) a significant drop in voltage is indicated by dimming lights, electronics dropping off line, and/or DDEC III station control is deactivated. A low voltage alarm may/may not accompany Scenario (2).

**Standards** In accordance with procedures set forth in the above reference.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs of both engines to clutch ahead. (P)			
b. Notify crew of casualty. (P)			
c. Engineer check position of battery isolator switches located in the survivor's compartment. (T)			
d. Engineer check engine room through engine room port light to assess the situation. (P)			
e. Engineer enter engine room with crew member as a safety observer. (T)			
f. Check both alternator/regulator reset switches (starboard engine room bulkhead). (P)			
g. Check condition of starboard alternator belts for slippage, damage, or missing. Renew belts with onboard spares, as needed. (P)			
h. Check electrical connections at starboard alternator. (P)			
i. Check electrical connections at lube oil pressure switch. (P)			
j. Repeat checks above for port engine. (P)			
k. Check fuse in 24-volt start panel (port engine room bulkhead). (P)			



Appendix B – 47' MLB Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
l. Engineer check all main battery connections in auxiliary machinery compartment (service pair forward, starting pair aft). Tighten and clean as necessary. (T)			
m. Engineer secure all non-vital equipment at the 24-volt DC power supply panel. (P)			
n. Engineer secure all non-vital equipment at the 12-volt DC power supply panel. (P)			
o. Engineer place start and service batteries in parallel. (P)			
p. Engineer determine extent of electrical power loss, probable cause, and expected service duration for platform. Crew discuss impact on mission. (T)			
q. Coxswain establish secondary communications with <b>Station</b> (handheld portable VHF radio) in case primary power is lost. (P)			
r. Coxswain coordinate with <b>Station</b> for tow or other assistance when risk assessment indicates crew or vessel safety will be jeopardized through continued operation. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep <b>Station</b> informed of during evolution. (P/T)			



## Appendix C. 49' BUSL Readiness and Standardization Drills

**Introduction** This Appendix provides required and optional underway drill checklists for the 49' BUSL.

**In this Appendix** This Appendix contains the following Chapters:

Chapter	Title	See Page
1	Required Underway Drill Checklists	C-3
2	Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns	C-13
3	Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises	C-27



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



## Chapter 1. Required Underway Drill Checklists

**Introduction** This Chapter provides underway drill checklists for the 49' BUSL and capabilities used by inspection teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Day/Night Navigation and Piloting	C-5
Buoy Operations – Mooring Pull	C-9
Man Overboard (MOB) Recovery	C-11



Appendix C – 49' BUSL Readiness and Standardization Drills

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Day/Night Navigation and Piloting **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
- b. *Aids to Navigation Manual – Positioning*, COMDTINST M16500.1 (series)
- c. *Aids to Navigation Manual – Seamanship*, COMDTINST M16500.21 (series)
- d. *Automatic Pilot Operational Manual*, COMNAV Marine 2001
- e. *Automated Aid Positioning Program (AAPS)*, Current Version
- f. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- g. *The Capn Voyager Mosaic Electronic Charting System Owner's Manual*
- h. *DGPS Operator's Handbook*, Type Specific
- i. *Echo Sounder Operational Manual, Raytheon V850*
- j. *Flux Compass Handbook*, Globemaster
- k. *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series)
- l. *Mariner's Eye-25 Owners Manual*, ME-25 for Windows
- m. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
- n. *Radar Operator's Handbook*, Type Specific
- o. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Pilot a CG boat and arrive at a given position within standards.

---

**Conditions** Given a CG boat with an operational DGPS, radar, radio, compass, computer with electronic charting system and current electronic updates, ATONIS/APPS program, corrected electronic and paper chart of the operating area, and a certified crew operating within the prescribed limitation.

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**Standards** Departure made within 15 minutes of notification that exercise commences. Utilizing the Electronic Charting System, planned route and appropriate turning points entered, arrival alarms set, courses accurately plotted to turn points and given position within 3 degrees. Arrive at position within 5 minutes of ETA, accurate to within 30 yards and in accordance with procedures as set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot course and destination accurately utilizing the Mariner's Eye program and the APPS program. Paper chart must be out and available for verification purposes. (N)			
b. Factor variation and deviation in course. (N)			
c. Calculate and label all DR times and ETA. (N)			
d. Correct electronic and paper chart. (N)			
e. State depth at destination. (N)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
f. State distance to destination from shore and entrance. (N)			
g. State weather and tidal conditions. (N)			
h. State sea conditions. (N/P)			
i. State direction and velocity of current. (N)			
j. Energize navigation lights. (P)			
k. Windows open if necessary. (P)			
l. Coxswain brief crew. (T)			
m. Set watertight integrity. (P)			
n. Ensure night vision is not compromised. (P/N)			
o. Make departure within 15 minutes. (S)			
p. Program complete course and destination into computer. (N/O)			
2. Underway Navigation:			
a. Utilize sound signals. (P)			
b. Conduct of own vessel in accordance with Rules of the Road. (P/B)			
c. Identify and utilize aids to navigation. (P/T)			
d. Consider/compensate effects of set and drift. Compare track set and drift to computer compensation. (P/N)			
e. Provide course guidance to helm. (P)			
f. State speed over ground. (N)			
g. Use radar to supplement DR.			
(1) Radar tune. (P)			
(2) Check accuracy of course. (N)			
(3) Adjust DR courses. (N)			
(4) Use ranges and bearings. (N)			
(5) Calibrate automatic pilot immediately after departure from dock/berth. (P/O/E)			
(6) Optimum use of radar functions/capabilities. (N)			
h. Use Fathometer to verify depth. (N)			
i. DR navigation (coxswain demonstrate application of time/speed/distance relationship). (N)			
j. Accuracy of final position within 30 yards. (N/S)			
k. Arrive O/S within 5 minutes of ETA. (N/S)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep unit informed during evolution. (P/T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Buoy Operations – Mooring Pull **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
- b. *Aids to Navigation Manual – Administration*, COMDTINST M16500.7 (series)
- c. *Aids to Navigation Manual – Positioning*, COMDTINST M16500.1 (series)
- d. *Aids to Navigation Manual – Seamanship*, COMDTINST M16500.21 (series)
- e. *Aids to Navigation Manual – Technical*, COMDTINST M16500.3 (series)
- f. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
- g. *Operational Risk Management*, COMDTINST 3500.3 (series)
- h. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
- i. *Short Range Aids to Navigation Servicing Guide*, COMDTINST M16500.19 (series)

**Terminal Performance Objective** Safely conduct buoy deck operations.

**Conditions** Given a CG boat assigned and outfitted to work buoys and a certified crew operating within prescribed limitations.

**Standards** Buoy hauled and reset in accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Break out material and make available. (P)			
b. Secure equipment on deck properly for transit. (P)			
c. Crew in personal protective equipment. (P/S)			
2. Working the Buoy:			
a. Make safe approach to the aid. (B)			
b. Hoist proper day-shapes. (N)			
c. Hook buoy safely and efficiently with the use of mechanical devices. (P)			
d. Safely attach cross deck fair lead to buoy. (P)			
e. Use standard hand signals. (P/T)			
f. Keep buoy low to deck, handle smoothly. (P)			
g. Place chain safely in chain stopper. (P)			
h. Select appropriate method to secure buoy on deck. (P)			
i. Use appropriate tools and procedures for disconnecting the mooring. (P)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
j. Hoist mooring using safe, efficient method. Keep chain “up and down.” Use horse collar. (P)			
3. Setting the Buoy			
a. With the use of chain hooks, fake chain and ensure it is ready. (P)			
b. Spread shackle split keys at a 45-degree angle. (P)			
c. Set buoy and maneuver vessel clear of buoy without damage to vessel or aid. (P)			
4. Crew Teamwork and Coordination:			
a. Coxswain and buoy deck supervisor brief crew of specific job, safety, and mission responsibilities. (P)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other’s location. (T)			
e. Coxswain and buoy deck supervisor/safety supervisor provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (T/P/O)			
g. Do not jeopardize safety of vessel. (T)			
h. Do not jeopardize safety of crew. (T)			
i. Make and use risk assessment. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** **Man Overboard (MOB) Recovery** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
  - b. American Red Cross First-Aid Course
  - c. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - f. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Recover a simulated crewmember fallen overboard.

**Conditions** Given a CG boat with an operational GPS or DGPS, radio, certified crew operating within prescribed limitations, and a scenario of one crewmember (life-like OSCAR) fallen overboard and unconscious in the water.

**Standards** MOB must be recovered within 3 minutes and in accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Execution:			
a. Pass report of man overboard to coxswain. (T)			
b. Assign and position pointer/lookout watch. (P)			
c. Discuss life ring and strobe deployment. (P)			
d. Discuss sound signals. (P)			
e. Establish electronic position using GPS/DGPS MOB Event function. (N)			
f. Use spotlight or deck lighting. (P)			
g. Brief crew on pickup. (T)			
h. Determine general set and drift for approach based on prevailing weather. (N)			
i. Execute approach to MOB. (B)			
j. Execute direct pick-up of MOB. (P/B)			
k. Recover MOB within 3 minutes. (S)			
l. Crew demonstrate appropriate first aid. (P/T)			
m. Notify unit. (P/O)			
2. Crew Teamwork and Coordination:			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			



## Chapter 2. Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

**Introduction** This Chapter provides the required drills and evaluation criteria for the 49' BUSL that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Reduced Visibility Navigation	C-15
Crewmember Piloting Proficiency	C-17
Search Patterns (Precision Navigation Patterns)	C-19
Search Patterns (Drifting Patterns)	C-23



Appendix C – 49' BUSL Readiness and Standardization Drills

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise: Reduced Visibility Navigation**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS/DGPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*

**Terminal Performance Objective** Pilot the vessel, in reduced visibility, to a given position and return.

**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and a certified crew operating within the prescribed limitations.

**Standards** Departure made within 15 minutes of notification that exercise commences. Course accurately plotted to turn points and given position within 3 degrees. Arrive within 100 yards of given position and in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot courses and destination accurately. (N)			
b. Correct chart. (N)			
c. Factor variation and deviation in course. (N)			
d. Calculate and label All DR times and ETA. (N)			
e. State weather and tidal conditions. (N)			
f. State direction and velocity of current. (N)			
g. State sea and bar conditions. (P/T)			
h. Set watertight integrity. (P)			
i. Energize navigation lights and sound signals (night/restricted visibility). (P/O)			
j. Open windows, if necessary. (P/O)			
k. Rig anchor, if necessary. (P/O)			
l. Energize all electronics. (P/O)			
m. Designate lookout(s) and post effectively. (P/N)			
n. Make departure within 15 minutes. (S)			
2. Underway Navigation:			
a. Utilize sound signals. (N)			
b. Make security broadcast, if appropriate. (P/O)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Provide course guidance to helmsman. (N)			
d. Conduct of own vessel in accordance with Rules of the Road. (N)			
e. Identify and utilize aids to navigation. (N)			
f. Consider/compensate effects of set and drift. (N/P)			
g. Plot and confirm fixes by combination of DR, GPS, DGPS, radar and fathometer. (N)			
h. Use radar to supplement DR using any combination of EBL, VRM, cursor, floating EBL to: (N)			
(1) Check accuracy of course. (N)			
(2) Adjust DR courses. (N)			
(3) Correct for set and drift. (N)			
i. Tune radar correctly. (N/P/O)			
j. Use fathometer to verify depth of water. (N)			
k. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan functions. (N/O)			
(3) Use ETA function. (N/O)			
(4) Use XTE function to determine set and drift and maintain track line within .1 NM (200 yds). (N/O)			
(5) Update ETA utilizing SOG function. (O)			
l. Arrive at given position within 100 yards. (N)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Coxswain keep unit informed during evolution. (P/T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Crewmember Piloting Proficiency **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

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**References**

- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *GPS/DGPS Operator's Handbook*, Type Specific
- d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
- e. *Radar Operator's Handbook, AN/SPS 69*
- f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

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**Terminal Performance Objective** Crew pilots the boat back to the **Station**, without the assistance of the coxswain.

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**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and certified crew operating within prescribed limitations. The scenario is the coxswain becoming incapacitated and unable to pilot the boat.

---

**Standards** Plot position of CG boat in 5 minutes and within 100 yards of actual position in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Notify unit of the situation. (P/O)			
b. Plot position in 5 min. (S/N)			
c. Plot course and distance to destination. (N)			
d. Factor in variation and deviation. (N)			
e. Calculate DR times and ETA. (N)			
f. Identify shoal areas. (N)			
g. Calculate or compensate set and drift using weather and tide. (N)			
h. Discuss bar conditions. (P/T)			
i. Energize navigation lights (night/reduced visibility). (N)			
j. Crew member in charge brief crew. (T/P)			
k. Discuss anchoring of boat. (T/P/O)			
l. Accuracy of position within 100 yds. (N/S)			
2. Underway Navigation:			
a. Use sound signals, if appropriate. (N)			
b. Conduct of own vessel in accordance with the Rules of the Road. (N)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Identify and utilize aids to navigation. (N/T)			
d. Do not compromise night vision. (P)			
e. Course guidance provided to helm. (N/P)			
f. Use radar bearings and ranges to supplement DR. (N)			
g. Tune radar correctly. (O)			
h. Use fathometer to verify depth of water. (N)			
i. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan/reverse sail plan. (O)			
(3) Use ETA function. (O)			
(4) Use SOG function. (O)			
3. Crew Teamwork and Coordination:			
a. Crew member in charge brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Crew member provide appropriate and timely guidance throughout the evolution. (T)			
f. Wear and/or use crew safety and survival equipment properly. (R/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Crew member in charge communicate with unit during operations. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Precision Navigation Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *GPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - g. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a C2PC search pattern summary sheet or equivalent listing CSP and turn positions.

**Standards** The CG boat shall be underway within thirty minutes of being given search pattern and CSP. Turn points must be accurately plotted within 100 yds and courses accurate within 3 degrees. Start at CSP within 100 yds of plotted position. Boat shall complete search pattern within 5 minutes of ETA, and complete all turns within 50 yards of plotted position, in accordance with procedures as set forth in the above references.

Creeping Line Search Pattern, Single Unit (CS)

**Standards** The CS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Parallel Search Pattern, Single Unit (PS)

**Standards** The PS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track line, Single Unit Non-Return (TSN)

**Standards** The TSN pattern will be run in its entirety, all turns must be made within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track Line, Single Unit Return (TSR)

**Standards** The TSR pattern will be run in its entirety, all turns must be within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Coxswain choose most appropriate scaled chart that covers the intended search area. (N/P)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Plot courses (magnetic), CSP and turns accurately. (N/P/S)			
c. Calculate and state DR times and total time to run. (N)			
d. Brief crew on initial SAR check sheet items. (P)			
e. Coxswain pass search plans to communications watch. (T/P)			
f. Boat underway within 30 minutes of notification. (P/S)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Start pattern at designated CSP within 100 yds. (P/N/S)			
c. Utilize sound signals in accordance with Rules of the Road. (P)			
d. Conduct of own vessel in accordance with the Rules of the Road. (P)			
e. Identify and utilize aids to navigation. (N)			
f. Use illumination. Do not compromise night vision. (P/O)			
g. Provide course guidance to helm. (N)			
h. State speed over ground. (N)			
i. Complete turns within 50 yds of their plotted positions. (S)			
j. Use GPS as follows: (N)			
(1) Course to steer. (O)			
(2) Use SOG function. (O)			
(3) Use ETA function. (O)			
(4) Enter all turns into GPS as waypoints. (N)			
(5) Use XTE function to maintain track line within .1 NM. (N)			
k. Adjust course and speed as necessary to stay on pattern track line. (P)			
l. Use fathometer to verify depth. (N)			
m. Complete pattern within 5 minutes of ETA. (N/S)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Drifting Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. 49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook, COMDTINST M16114.22 (series)
- b. Boat Crew Seamanship Manual, COMDTINST M16114.5 (series)
- c. GPS Operator's Handbook, Type Specific
- d. Navigation Rules, International-Inland, COMDTINST M16672.2 (series)
- e. Radar Operator's Handbook, AN/SPS 69
- f. Rescue and Survival Systems Manual, COMDTINST M10470.10 (series)
- g. U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR), COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a position to commence a search pattern.

**Standards** The search patterns shall be commenced within 5 minutes of arrival at CSP within 100 yds of given position. Coxswain shall determine drift prior to starting pattern within 45 degrees of actual drift. Boat shall complete all turns within 15 seconds of stated DR time, in accordance with procedures as set forth in the above references.

Sector Search Pattern, Single Unit (VS)

**Standards** The VS pattern will be run in its entirety with track spacing between 200 to 500 yds. The first leg shall be the direction of drift with all turns made 120 degrees to the right, within 15 seconds of their DR time. On the third, sixth, and ninth legs, steer toward the datum marker. The third, sixth and ninth legs shall end at the datum marker regardless of time run, the fourth and seventh legs are run as individual legs.

Expanding Square Search Pattern, Single Unit (SS)

**Standards** The SS pattern will be run for a minimum of 5 legs with track spacing provided by the evaluator. The first leg shall be the direction of drift with all turns 90 degrees to the right, within 15 seconds of their DR time.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Establish electronic position and determine safe area. (N/P)			
b. Calculate all courses (compass) and turns accurately within 3 degrees. (P/N/S)			
c. Calculate and state DR times and total time to run. (N)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
d. Brief crew on initial SAR check sheet items. (P)			
e. Coxswain pass search plans to communications watch. (T/P)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Crewmember drop datum marker overboard at CSP. (VS only) (P)			
c. Coxswain determine direction of drift accurate to 45 degrees. (P/N/S)			
d. Start pattern within 100 yds of CSP. (P/N/S)			
e. Start pattern within 5 minutes of arrival at CSP. (P/N/S)			
f. First leg of pattern in direction of drift (000° C if drift cannot be determined). (P/N/S)			
g. Third, sixth, and ninth legs end at datum marker (VS only). (P/S)			
h. Utilize sound signals in accordance with rules of the road. (P)			
i. Conduct of own vessel in accordance with the rules of the road. (P)			
j. Identify and utilize aids to navigation. (N)			
k. Use illumination. Do not compromise night vision. (P/O)			
l. Provide course guidance to helm. (N)			
m. State speed over ground. (N)			
n. Complete turns within 15 seconds of their stated DR time. (N/S)			
o. On the third, sixth, and ninth legs, steer toward the datum marker (VS only). (P/N/S).			
p. Use GPS as follows: (N)			
(1) Use save feature to record position of datum marker. (O)			
(2) Use SOG function to verify initial speed. (O)			
q. Base course and speed on engine RPMs and compass course, do not adjust to counter set and drift. (P)			
r. Use fathometer to verify depth. (N)			
s. Pass final position of datum marker to SMC (to determine set and drift of datum). (P)			
3. Crew Teamwork and Coordination:			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns




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## Chapter 3.

# Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

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**Introduction** This Chapter provides a list of the standard engineering casualty control drills for the 49' BUSL that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

B - Boat Handling  
 E - Electronics  
 N - Navigation  
 O - Operate  
 P - Procedures  
 S - Standard  
 T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Fire in the Engine Room	C-29
Loss of Steering (Cable/Hydraulics)	C-31
Collision With Submerged Object	C-33
Loss of Main Engine Lube Oil Pressure	C-35
Main Engine High Water Temperature	C-37
Loss of Control of Engine RPMs	C-39
Loss of Fuel Oil Pressure	C-41

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Appendix C – 49' BUSL Readiness and Standardization Drills

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Fire in the Engine Room**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After smoke/heat from a fire in the engine room sets off the alarm, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 49' BUSL, with a certified crew operating within prescribed limitations, the fire alarm sounds and smoke/flames are visible through the engine room port light.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to neutral on both engines and then secure. (P)			
b. Notify crew of casualty. (T)			
c. Engineer check engine room through lower cabin view port to assess situation. (P)			
d. Contact and inform OPCON of situation and current position. (P/N)			
e. On coxswain command, engineer energize fixed system by pulling pin and actuating the handle (simulate). (P/O)			
f. Mark time when fixed system activated. (P)			
g. Secure electrical power. (P/T)			
h. Crew member rig the anchor, if needed. (P/O)			
i. Disconnect life raft at weak link and move forward.(P)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep OPCON informed during evolution. (P/T)			
i. Make and use risk assessment. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Loss of Steering (Cable/Hydraulics)** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

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**References**

- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
- b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

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**Terminal Performance Objective** After loss of helm (steering) control, identify the cause, prevent further damage, and take corrective action.

---

**Conditions** While underway on a 49' BUSL at cruising speed, with a certified crew operating within prescribed limitations, take corrective action for loss of steering.

---

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs on both engines. (P)			
b. Notify crew of casualty. (T)			
c. Coxswain steer with engines, if needed. (B)			
d. Engineer investigate the casualty; crew member safety observer for engineer. (P)			
e. Crew member rig the anchor, if necessary. (P/O)			
f. Place engines in neutral. (P)			
g. Use manual system to retain positive steering control. (B)			
h. Test steering for complete range of motion (full port to full starboard). (P)			
i. Engage engines separately. (P)			
j. Keep RPMs at minimum speed. (P)			
2. Crew Teamwork and Coordination:			
a. Utilize standard steering commands. (T/P)			
b. Coxswain brief crew of specific job and mission responsibilities. (T)			
c. Crew communicate effectively and assertively during evolution. (T)			
d. Crew assist each other as needed. (T/P)			
e. Crew always aware of other's location. (T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
f. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
g. Wear crew safety and survival equipment properly. (P/T/O)			
h. Do not jeopardize safety of vessel and crew. (T)			
i. Coxswain keep OPCON informed during evolution. (P/T)			
j. Make and use risk assessment. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Collision With Submerged Object**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After striking a submerged object, assess resulting damage, prevent further damage, and take corrective action.

**Conditions** While underway on a 49' BUSL at cruising speed, with a certified crew operating within prescribed limitations, the BUSL hits a submerged object.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to neutral on both engines. (P)			
b. Notify crew of casualty. (T)			
c. Coxswain verify position. (N/P/T)			
d. Engineer check engine compartment for flooding. (P)			
e. Crew member check all other compartments for flooding. (P)			
f. Identify source of flooding. (T/P)			
g. Use proper materials to reduce or stop flooding. (T/P)			
h. Set and maintain flood watch. (T/P)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep OPCON informed during evolution. (P/T)			
i. Make and use risk assessment. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Main Engine Lube Oil Pressure **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. 49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook, COMDTINST M16114.22 (series)
  - b. Boat Crew Seamanship Manual, COMDTINST M16114.5 (series)
  - c. Naval Engineering Manual, COMDTINST M9000.6 (series)
  - d. Rescue and Survival Systems Manual, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After loss of lube oil pressure in one main diesel engine, identify the cause, prevent further damage, and take corrective action.

**Conditions** While underway on a 49' BUSL at cruising speed, with a certified crew operating within prescribed limitations, take corrective action for loss of lube oil pressure.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to clutch ahead on both engines. (P)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Secure affected engine. (P)			
e. Engineer check compartment to assess the situation. (P)			
f. Crew member rig the anchor, if necessary. (P/O)			
g. Engineer enter engine compartment, crew member safety observer for engineer. (P)			
h. Fire extinguishers O/S. (P)			
i. Check bilge area for lube oil. (P)			
j. Check lube oil for quality and quantity. (P)			
k. Notify OPCON. (P/T)			
l. Return to nearest safe port if cause cannot be determined or repaired. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep OPCON informed during evolution. (P/T)			
i. Make and use risk assessment. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Main Engine High Water Temperature **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. 49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook, COMDTINST M16114.22 (series)
  - b. Boat Crew Seamanship Manual, COMDTINST M16114.5 (series)
  - c. Naval Engineering Manual, COMDTINST M9000.6 (series)
  - d. Rescue and Survival Systems Manual, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After rising operating temperature of one main diesel engine sets off the alarm, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a 49' BUSL at cruising speed, with a certified crew operating within prescribed limitations, take corrective action for high water temperature.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to clutch ahead on both engines. (P)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Secure engine if temperature continues to rise. (P)			
e. Engineer check engine compartment to assess the situation. (P)			
f. Crew member rig the anchor, if necessary. (P)			
g. Engineer enter engine compartment, crew member act as safety observer for engineer. (P)			
h. Open sea suction valves. (P)			
i. Check bilges. (P)			
j. Check cooling lines. (P)			
k. Check heat exchanger and expansion tank after engine has cooled.			
l. Notify OPCON. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (T/P/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep OPCON informed during evolution. (T/P)			
i. Make and use risk assessment. (T).			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Control of Engine RPMs **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After one engine fails to respond properly to throttle station control, identify the cause, prevent further damage, and take corrective action.

**Conditions** While underway on a 49' BUSL at cruising speed, with a certified crew operating within prescribed limitations, the coxswain attempts to reduce speed, but one engine stays at set RPMs and does not respond to throttle control.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs on both engines. (P)			
b. Notify crew of casualty. (T)			
c. Verify current position and evaluate situation. (P)			
d. Secure effected engine. (P)			
e. Turn into affected engine (if situation permits). (B)			
f. Pull emergency fuel stop for the effected engine. (P)			
g. Engineer check engine compartment to assess the situation.			
h. Engineer enter engine compartment with crew member as safety observer. (P)			
i. Engineer check governor and linkage. (P)			
j. Trip emergency air shutdown. (P)			
k. Make anchor ready, if necessary. (P)			
l. Coxswain maneuver boat safely back to moorings on one engine. (P/B)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as required. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout the evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (T/P/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep OPCON informed during evolution. (T/P)			
i. Make and use risk assessment. (T)			

Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Loss of Fuel Oil Pressure**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *49' Buoy Utility Stern Loading (BUSL) Boat Operator's Handbook*, COMDTINST M16114.22 (series)
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After experiencing a loss in RPMs on one engine, identify the cause, prevent further damage, and take corrective action.

**Conditions** While underway on a 49' BUSL at cruising speed, with a certified crew operating within prescribed limitations, engine begins to run rough and lose power.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs on engine(s) to clutch ahead. (P)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Verify current position and evaluate situation. (N/P/T)			
e. Engineer proceed to mess deck, ensure emergency fuel stops are pushed in. (P)			
f. Crew member rig the anchor, if directed by coxswain. (P/O)			
g. Engineer check engine compartment to assess situation. (P)			
h. Engineer enter engine compartment with crew member as safety observer. (P/T)			
i. Check bilges. (P)			
j. Check governor and linkage. (P)			
k. Identify and correct source of problem or request additional assistance from OPCI. (P)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			



Appendix C – 49' BUSL Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep OPCON informed during evolution. (P/T)			
i. Make and use risk assessment. (T)			



## Appendix D. RB-S/RB-HS Readiness and Standardization Drills

**Introduction** This Appendix provides required and optional underway drill checklists for the RB-S/RB-HS.

**In this Appendix** This Appendix contains the following Chapters:

Chapter	Title	See Page
1	Required Underway Drill Checklists	D-3
2	Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns	D-19
3	Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises	D-35





## Chapter 1. Required Underway Drill Checklists

**Introduction** This Chapter provides underway drill checklists for the RB-S/RB-HS and capabilities used by inspection teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Day/Night Navigation and Piloting	D-5
Towing	D-9
Dewatering	D-13
Man Overboard (MOB) Recovery	D-17



Appendix D – RB-S/RB-HS Readiness and Standardization Drills

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Day/Night Navigation and Piloting

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
  - c. *GPS Operator’s Handbook*, Type Specific
  - d. *Communications Watchstander Qualification Guide*, COMDTINST M16120.7 (series)
  - e. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - f. *Radar Operator’s Handbook*, Type Specific
  - g. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Pilot a CG boat and arrive at a given position within standards.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, and a certified crew operating within the prescribed limitation.

**Standards** Departure made within 15 minutes of notification that exercise commences. Courses accurately plotted to turn points and given position within 3 degrees. Arrive at position within 5 minutes of ETA, accurate to within 100 yds and in accordance with procedures as set forth in the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot course and destination accurately. (N)			
b. Factor variation and deviation in course. (N)			
c. Calculate and label all DR times and ETA. (N)			
d. Correct chart. (N)			
e. State depth at destination. (N)			
f. State distance to destination from shore and entrance. (N)			
g. State weather and tidal conditions. (N)			
h. State sea and bar conditions. (N/P)			
i. State direction and velocity of current. (N)			
j. Energize navigation lights. (P)			
k. Windows open if necessary. (P)			
l. Coxswain brief crew. (T)			
m. Set watertight integrity. (P)			
n. Ensure night vision is not compromised. (P/N)			
o. Make departure within 15 minutes. (S)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
p. Enter a minimum of two waypoints into GPS. (P/N/O)			
2. Underway Navigation:			
a. Utilize sound signals. (P)			
b. Conduct of own vessel in accordance with Rules of the Road. (P/B)			
c. Identify and utilize Aids to Navigation. (P/T)			
d. Consider/compensate effects of set and drift. (P/N)			
e. Provide course guidance to helm. (P)			
f. State speed over ground. (N)			
g. Use radar to supplement DR.			
(1) Radar tune. (P)			
(2) Check accuracy of course. (N)			
(3) Adjust DR courses. (N)			
(4) Use ranges and bearings. (N)			
(5) Display waypoint information on radar screen. (P/O/E)			
(6) Optimum use of radar functions/capabilities. (N)			
h. Use Fathometer to verify depth. (N)			
i. GPS:			
(1) Use course to steer/XTE to maintain track line within .1 NM. (N/P/E)			
(2) Utilize SOG/ETA function. (N/P/E)			
(3) Enter final destination waypoint. (N/P/E)			
j. DR navigation (coxswain demonstrate application of time/distance/speed relationship). (N)			
k. Accuracy of final position within 100 yards. (N/S)			
l. Arrive O/S within 5 minutes of ETA. (N/S)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep unit informed during evolution. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** Towing

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- b. *Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
- c. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
- e. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective**

Pilot to a disabled vessel, take into stern tow, transit to a safe harbor, shift to an alongside tow and moor.

**Conditions**

Given a CG boat with required towing equipment, an operational GPS, radar, radio, compass, a certified crew operating within prescribed limitations, and a scenario of a disabled vessel; and using the appropriate approach (usually, bow into the prominent force).

**Standards**

In accordance with the references above. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Coxswain/crew gather following information:			
(1) Position of vessel in distress. (P)			
(2) Number of POB, in PFDs. (P)			
(3) Nature of distress. (P)			
(4) Amplifying information as listed on SAR check sheet. (P)			
b. Plot position of disabled vessel on corrected chart. (N)			
c. Plot track lines to position of disabled vessel. (N)			
d. Enter disabled vessel’s position into GPS as waypoint. (N)			
e. Energize all navigational equipment. (N)			
f. Energize navigation lights and sound signal (night & restricted visibility). (N)			
2. O/S Evaluations and Preparations:			
a. Establish communications between disabled vessel and response unit. (O)			
b. Perform on scene assessment of disabled vessel. (P)			
c. Brief crew on procedures: (T/P)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
(1) Equipment to be passed (as required). (T/P)			
(2) Assign tasks and positions. (T/P)			
(3) Make approach. (T/P)			
(4) Passing the towline (consider bridle). (T/P)			
(5) No turns on tow bitt until towline is secured on disabled vessel. (P)			
(6) Discuss emergency breakaway procedures. (P)			
d. Brief disabled vessel on emergency procedures: (T/P)			
(1) Equipment to be passed (as required). (P/T)			
(2) Towing procedures. (P)			
(3) Emergency communications (P/T)			
3. Passing Towline/Equipment:			
a. Pass equipment as required (e.g., pump, drogue, radio). (P)			
b. Make approach into predominate force. (B/P)			
c. Keep coxswain <b>Station</b> in optimal position. (O/B/T)			
d. Pass towline using heaving line(s). (P)			
e. Pay out line and tend away from screws. (B)			
f. Place a working turn on tow bitt after towline is secured on disabled vessel. (O)			
g. Set initial course and adjust towline. (B)			
h. Make up tow bitt. (O)			
i. Set and maintain tow watch. (P/T)			
j. Change navigation lights, if needed. (N)			
k. Change sound signals, if needed. (N)			
l. Install chafing gear, if needed. (P)			
m. Maintain safe towing speed. (B/P)			
n. Check disabled vessel status. (P)			
4. Alongside Tow:			
a. Brief crew on procedures. (T)			
b. Brief disabled vessel on procedures. (T)			
c. Prepare deck for alongside tow (i.e., make rigged fenders and alongside lines ready). (O)			
d. Break tow bitt. (O)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Consider set and drift of both vessels before making approach. (P)			
f. Make approach. (B)			
g. Properly execute drop tow approach or back down approach. (P/O)			
h. Pass alongside lines to disabled vessel. (O/B)			
i. Adjust alongside lines and establish control of vessel. (O)			
j. Change navigation lights, if required. (N)			
k. Discuss mooring instructions with disabled vessel. (P/T)			
l. Brief and post bow pointer in effective location. (T)			
m. Moor vessels. (B/T)			
5. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Utilization of kill switch observed. (S)			
f. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
g. Wear crew safety and survival equipment properly. (P/T)			
h. Do not jeopardize safety of vessel and crew. (S/T)			
i. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise:** **Dewatering** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Defender Class Operator's Handbook*, COMDTINST M16114.37 (series)
  - c. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - e. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Assess the flooding of a vessel, take action and dewater.

---

**Conditions** Given a CG boat with dewatering equipment, an operational GPS/radar, radio, compass, a certified crew operating within prescribed limitations, and a disabled vessel with a scenario of taking on water. The coxswain and crew shall use team coordination skills and prosecute the evolution.

---

**Standards** In accordance with the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Pre-Arrival Preparations:			
a. Coxswain/crew gather information:			
(1) Position of vessel in distress. (N)			
(2) Number of POB, in PFDs. (P)			
(3) Nature of distress. (P)			
(4) Amplifying information as listed on SAR check sheet. (P)			
(5) Plot position of disabled vessel on corrected chart. (N)			
b. Plot track lines to position of disabled vessel. (P)			
c. Enter disabled vessel's position into GPS as waypoint. (N/O)			
d. Energize all navigational equipment. (P)			
e. Energize navigation lights and sound signal (night/restricted visibility). (N/P)			
2. O/S Evaluations and Preparations:			
a. Establish communications between disabled vessel and response unit. (P/O)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Visually inspect and discuss current condition with disabled vessel (evaluate stability, amount of water onboard, depth of water in space, watertight compartmentation or common bilge, etc.). (T/P/O)			
c. Coxswain and crew discuss course of action. (T)			
d. Evaluate and state removal of POB. (T)			
e. Determine dewatering capabilities of disabled vessel. (P)			
f. Advise <b>Station</b> (request assistance if needed). (P/O)			
g. State the level of risk associated with attempting to dewater (salvage) the D/V. (T/B/O/P)			
h. Make approach to disabled vessel. (B)			
3. Dewatering Operations:			
a. Determine appropriate dewatering device. (R/O/T)			
b. Brief disabled vessel on dewatering intentions. (P)			
c. Pass equipment, if required. (P)			
d. Use dewatering device correctly (portable pump started within 6 pulls). (O)			
e. Complete dewatering in a timely manner. (O/P)			
f. Determine if the flooding is controlled. (P/T)			
4. Plugging and Patching:			
a. Identify source of flooding. (T/P)			
b. Use proper materials to reduce or stop flooding. (T/P)			
c. Set and maintain flood watch. (T/P)			
5. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 1 – Required Underway Drill Checklists

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists



**Exercise: Man Overboard (MOB) Recovery**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. American Red Cross First-Aid Course
  - b. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - c. *Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - f. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Recover a simulated crewmember fallen overboard.

**Conditions** Given a CG boat with an operational GPS or DGPS, radio, certified crew operating within prescribed limitations, and a scenario of one crewmember (life-like OSCAR) fallen overboard and unconscious in the water.

**Standards** MOB must be recovered within 3 minutes and in accordance with the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Execution:			
a. Pass report of man overboard to coxswain. (T)			
b. Assign and position pointer/lookout watch. (P)			
c. Discuss life ring and strobe deployment. (P)			
d. Discuss sound signals. (P)			
e. Establish electronic position using GPS/DGPS MOB Event function. (N)			
f. Use spotlight or deck lighting. (P)			
g. Brief crew on pickup. (T)			
h. Determine general set and drift for approach based on prevailing weather. (N)			
i. Execute approach to MOB. (B)			
j. Execute direct pick-up of MOB. (P/B)			
k. Recover MOB within 3 minutes. (S)			
l. Crew demonstrate appropriate first aid. (P/T)			
m. Notify unit. (P/O)			
2. Crew Teamwork and Coordination:			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 1 – Required Underway Drill Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep unit informed during evolution. (P/T)			



## Chapter 2. Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

**Introduction** This Chapter provides the required drills and evaluation criteria for the RB-S/RB-HS that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Reduced Visibility Navigation	D-21
Crewmember Piloting Proficiency	D-25
Search Patterns (Precision Navigation Patterns)	D-27
Search Patterns (Drifting Patterns)	D-31



Appendix D – RB-S/RB-HS Readiness and Standardization Drills

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise: Reduced Visibility Navigation**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Defender Class Operator's Handbook*, COMDTINST M16114.37 (series)
  - c. *GPS/DGPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*

**Terminal Performance Objective** Pilot the vessel, in reduced visibility, to a given position and return.

**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and a certified crew operating within the prescribed limitations.

**Standards** Departure made within 15 minutes of notification that exercise commences. Course accurately plotted to turn points and given position within 3 degrees. Arrive within 100 yards of given position and in accordance with procedures set forth in the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Plot courses and destination accurately. (N)			
b. Correct chart. (N)			
c. Factor variation and deviation in course. (N)			
d. Calculate and label All DR times and ETA. (N)			
e. State weather and tidal conditions. (N)			
f. State direction and velocity of current. (N)			
g. State sea and bar conditions. (P/T)			
h. Set watertight integrity. (P)			
i. Energize navigation lights and sound signals (night/restricted visibility). (P/O)			
j. Open windows, if necessary. (P/O)			
k. Rig anchor, if necessary. (P/O)			
l. Energize all electronics. (P/O)			
m. Designate lookout(s) and post effectively. (P/N)			
n. Make departure within 15 minutes. (S)			
2. Underway Navigation:			
a. Utilize sound signals. (N)			
b. Make security broadcast, if appropriate. (P/O)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Provide course guidance to helmsman. (N)			
d. Conduct of own vessel in accordance with Rules of the Road. (N)			
e. Identify and utilize aids to navigation. (N)			
f. Consider/compensate effects of set and drift. (N/P)			
g. Plot and confirm fixes by combination of DR, GPS, DGPS, radar and fathometer. (N)			
h. Use radar to supplement DR using any combination of EBL, VRM, cursor, floating EBL to: (N)			
(1) Check accuracy of course. (N)			
(2) Adjust DR courses. (N)			
(3) Correct for set and drift. (N)			
i. Tune radar correctly. (N/P/O)			
j. Use fathometer to verify depth of water. (N)			
k. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan functions. (N/O)			
(3) Use ETA function. (N/O)			
(4) Use XTE function to determine set and drift and maintain track line within .1 NM (200 yds). (N/O)			
(5) Update ETA utilizing SOG function. (O)			
l. Arrive at given position within 100 yards. (N)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of others location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Utilization of kill switch observed. (S)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
i. Coxswain keep unit informed during evolution. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** **Crewmember Piloting Proficiency** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Defender Class Operator's Handbook*, COMDTINST M16114.37 (series)
  - c. *GPS/DGPS Operator's Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator's Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Crew pilots the boat back to the **Station**, without the assistance of the coxswain.

**Conditions** Given a CG boat with an operational GPS or DGPS, radar, radio, compass, corrected chart of the operating area, and certified crew operating within prescribed limitations. The scenario is the coxswain becoming incapacitated and unable to pilot the boat.

**Standards** Plot position of CG boat in 5 minutes and within 100 yards of actual position in accordance with procedures set forth in the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Notify unit of the situation. (P/O)			
b. Plot position in 5 min. (S/N)			
c. Plot course and distance to destination. (N)			
d. Factor in variation and deviation. (N)			
e. Calculate DR times and ETA. (N)			
f. Identify shoal areas. (N)			
g. Calculate or compensate set and drift using weather and tide. (N)			
h. Discuss bar conditions. (P/T)			
i. Energize navigation lights (night/reduced visibility). (N)			
j. Crew member in charge brief crew. (T/P)			
k. Discuss anchoring of boat. (T/P/O)			
l. Accuracy of position within 100 yds. (N/S)			
2. Underway Navigation:			
a. Use sound signals, if appropriate. (N)			
b. Conduct of own vessel in accordance with the Rules of the Road. (N)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
c. Identify and utilize aids to navigation. (N/T)			
d. Do not compromise night vision. (P)			
e. Course guidance provided to helm. (N/P)			
f. Use radar bearings and ranges to supplement DR. (N)			
g. Tune radar correctly. (O)			
h. Use fathometer to verify depth of water. (N)			
i. Use GPS/DGPS functions as follows: (N)			
(1) Determine course to steer. (N)			
(2) Use waypoints/sail plan/reverse sail plan. (O)			
(3) Use ETA function. (O)			
(4) Use SOG function. (O)			
3. Crew Teamwork and Coordination:			
a. Crew member in charge brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other's location. (T)			
e. Crew member provide appropriate and timely guidance throughout the evolution. (T)			
f. Wear and/or use crew safety and survival equipment properly. (R/T)			
g. Do not jeopardize safety of vessel and crew. (S/T)			
h. Utilization of kill switch observed. (S)			
i. Crew member in charge communicate with unit during operations. (T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Precision Navigation Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
  - GPS Operator’s Handbook*, Type Specific
  - Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - Radar Operator’s Handbook, AN/SPS 69*
  - Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a C2PC search pattern summary sheet or equivalent listing CSP and turn positions.

**Standards** The CG boat shall be underway within thirty minutes of being given search pattern and CSP. Turn points must be accurately plotted within 100 yds and courses accurate within 3 degrees. Start at CSP within 100 yds of plotted position. Boat shall complete search pattern within 5 minutes of ETA, and complete all turns within 50 yards of plotted position, in accordance with procedures as set forth in the above references. (The kill switch **must** be utilized while making way.)

Creeping Line Search Pattern, Single Unit (CS)

**Standards** The CS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Parallel Search Pattern, Single Unit (PS)

**Standards** The PS pattern will be run for a minimum of 5 legs, all turns must be 90 degrees, within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track line, Single Unit Non-Return (TSN)

**Standards** The TSN pattern will be run in its entirety, all turns must be made within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

Track Line, Single Unit Return (TSR)

**Standards** The TSR pattern will be run in its entirety, all turns must be within 50 yards of the turn points, and the search should be completed within 5 minutes of the ETA.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Coxswain choose most appropriate scaled chart that covers the intended search area. (N/P)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Plot courses (magnetic), CSP and turns accurately. (N/P/S)			
c. Calculate and state DR times and total time to run. (N)			
d. Brief crew on initial SAR check sheet items. (P)			
e. Coxswain pass search plans to communications watch. (T/P)			
f. Boat underway within 30 minutes of notification. (P/S)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Start pattern at designated CSP within 100 yds. (P/N/S)			
c. Utilize sound signals in accordance with Rules of the Road. (P)			
d. Conduct of own vessel in accordance with the Rules of the Road. (P)			
e. Identify and utilize aids to navigation. (N)			
f. Use illumination. Do not compromise night vision. (P/O)			
g. Provide course guidance to helm. (N)			
h. State speed over ground. (N)			
i. Complete turns within 50 yds of their plotted positions. (S)			
j. Use GPS as follows: (N)			
(1) Course to steer. (O)			
(2) Use SOG function. (O)			
(3) Use ETA function. (O)			
(4) Enter all turns into GPS as waypoints. (N)			
(5) Use XTE function to maintain track line within .1 NM. (N)			
k. Adjust course and speed as necessary to stay on pattern track line. (P)			
l. Use fathometer to verify depth. (N)			
m. Complete pattern within 5 minutes of ETA. (N/S)			
3. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



**Exercise:** Search Patterns (Drifting Patterns) **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
  - c. *GPS Operator’s Handbook*, Type Specific
  - d. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - e. *Radar Operator’s Handbook, AN/SPS 69*
  - f. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - g. *U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR)*, COMDTINST M16130.2 (series)

**Terminal Performance Objective** Pilot a CG boat and execute a search pattern.

**Conditions** Given a CG boat with an operational GPS, radar, radio, compass, corrected chart of the operating area, certified crew operating within prescribed limitations. The Coxswain will be given a SAR scenario with a position to commence a search pattern.

**Standards** The search patterns shall be commenced within 5 minutes of arrival at CSP within 100 yds of given position. Coxswain shall determine drift prior to starting pattern within 45 degrees of actual drift. Boat shall complete all turns within 15 seconds of stated DR time, in accordance with procedures as set forth in the above references. (The kill switch **must** be utilized while making way.)

Sector Search Pattern, Single Unit (VS)

**Standards** The VS pattern will be run in its entirety with track spacing between 200 to 500 yds. The first leg shall be the direction of drift with all turns made 120 degrees to the right, within 15 seconds of their DR time. On the third, sixth, and ninth legs, steer toward the datum marker. The third, sixth and ninth legs shall end at the datum marker regardless of time run, the fourth and seventh legs are run as individual legs.

Expanding Square Search Pattern, Single Unit (SS)

**Standards** The SS pattern will be run for a minimum of 5 legs with track spacing provided by the evaluator. The first leg shall be the direction of drift with all turns 90 degrees to the right, within 15 seconds of their DR time.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Establish electronic position and determine safe area. (N/P)			
b. Calculate all courses (compass) and turns accurately within 3 degrees. (P/N/S)			
c. Calculate and state DR times and total time to run. (N)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
d. Brief crew on initial SAR check sheet items. (P)			
e. Coxswain pass search plans to communications watch. (T/P)			
2. Search Pattern Execution:			
a. Advise <b>Station</b> of O/S WX and start time of pattern. (P/O)			
b. Crewmember drop datum marker overboard at CSP. (VS only) (P)			
c. Coxswain determine direction of drift accurate to 45 degrees. (P/N/S)			
d. Start pattern within 100 yds of CSP. (P/N/S)			
e. Start pattern within 5 minutes of arrival at CSP. (P/N/S)			
f. First leg of pattern in direction of drift (000° C if drift cannot be determined). (P/N/S)			
g. Third, sixth, and ninth legs end at datum marker (VS only). (P/S)			
h. Utilize sound signals in accordance with rules of the road. (P)			
i. Conduct of own vessel in accordance with the rules of the road. (P)			
j. Identify and utilize aids to navigation. (N)			
k. Use illumination. Do not compromise night vision. (P/O)			
l. Provide course guidance to helm. (N)			
m. State speed over ground. (N)			
n. Complete turns within 15 seconds of their stated DR time. (N/S)			
o. On the third, sixth, and ninth legs, steer toward the datum marker (VS only). (P/N/S).			
p. Use GPS as follows: (N)			
(1) Use save feature to record position of datum marker. (O)			
(2) Use SOG function to verify initial speed. (O)			
q. Base course and speed on engine RPMs and compass course, do not adjust to counter set and drift. (P)			
r. Use fathometer to verify depth. (N)			
s. Pass final position of datum marker to SMC (to determine set and drift of datum). (P)			
3. Crew Teamwork and Coordination:			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T/S)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep <b>Station</b> informed during evolution. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 2 – Optional Underway Drill Checklists for Navigation, Piloting, and Search Patterns



## Chapter 3. Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

**Introduction** This Chapter provides a list of the standard engineering casualty control drills for the RB-S/RB-HS that will be administered by evaluation teams assigned to the Boat Readiness and Standardization Program.

**NOTE** The following codes are found within drill checklists and are used by headquarters programs and the Readiness and Standardization Teams to track trends:

- B - Boat Handling
- E - Electronics
- N - Navigation
- O - Operate
- P - Procedures
- S - Standard
- T - TCT/ORM

**In this Chapter** This Chapter contains the following information:

Topic	See Page
Outboard Engine Fire	D-37
Loss of Steering (Hydraulics)	D-39
Collision with Submerged Object	D-41
Loss of Outboard Engine Lube Oil Pressure	D-43
Outboard Engine High Water Temperature	D-45
Loss of Fuel Pressure	D-47



Appendix D – RB-S/RB-HS Readiness and Standardization Drills

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Outboard Engine Fire**

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - c. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Combat a simulated Outboard engine fire.

**Conditions** Given a CG boat with required fire fighting equipment, take corrective action for combating a Outboard engine fire.

**Standards** Crewmembers shall demonstrate proper methods of controlling and extinguishing an Outboard engine fire, in accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to neutral on both engines and then secure. (P)			
b. Notify crew of casualty. (P/T)			
c. Crewmember check outboard engine to assess situation. (P)			
d. Contact and inform unit of situation and current position. (P/N)			
e. Secure electrical power. (P)			
f. On coxswain command, crewman combat fire using portable fire extinguisher(s). (simulate) (P/O)			
g. Crew member rig the anchor, if needed. (P/O)			
h. Discuss abandon boat options (T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep unit informed during evolution. (P/T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise: Loss of Steering (Hydraulics)** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- b. *Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
- c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

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**Terminal Performance Objective** Given a steering casualty, take corrective action.

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**Conditions** Given a CG boat, a certified crew operating in prescribed limitations, take corrective actions for a loss of steering, caused by a loss of hydraulic steering control.

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**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs on both engines. (P)			
b. Notify crew of casualty. (T)			
c. Verify current position and evaluate situation. (P/T/N)			
d. Coxswain steer with engines, if possible. (T)			
e. Crewman investigate the casualty. (P)			
f. Crew member rig the anchor, if necessary. (P/O)			
g. Place engines in neutral. (P)			
h. Attempts made to repair steering system. (P/O)			
i. Test engines for complete range of motion (full port to full starboard). (T/P/O)			
j. Engage engines separately. (P)			
k. Keep RPMs at minimum speed. (P)			
l. Notify unit. (P/O)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other’s location. (T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep unit informed during evolution. (P/T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Collision with Submerged Object

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - c. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Crew simulates striking a submerged object while underway and takes appropriate action.

**Conditions** Given a CG boat with a certified crew operating in prescribed limitations, take corrective action for striking a submerged object.

**Standards** In accordance with procedures set forth in the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to neutral on both engines. (P)			
b. Notify crew of casualty. (P/T)			
c. Coxswain verify position. (N/P/T)			
d. Crew member check all other compartments for flooding. (P)			
e. Take appropriate measures to reduce flooding, if applicable. (P)			
f. Engage engines at various speeds to check for vibration. (P/O)			
g. Notify unit of situation. (P/O)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Coxswain keep unit informed during evolution. (P/T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Outboard Engine Lube Oil Pressure **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** Given a simulated loss of lube oil pressure in a main diesel engine, take corrective action.

**Conditions** Given a CG boat with a certified crew operating within prescribed limitations, take corrective action for loss of lube oil pressure.

**Standards** In accordance with procedures set forth in the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to clutch ahead on both engines. (P/O)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (T)			
d. Secure affected engine. (P/O)			
e. Verify current position and evaluate situation. (P/T/N)			
f. Crewman check outboard engine assess the situation. (P)			
g. Crew member rig the anchor, if necessary. (P/O)			
h. Fire extinguishers O/S. (P/O)			
i. Check engine compartment area for lube oil. (P)			
j. Check lube oil for quality and quantity. (P)			
k. Notify unit. (P/O)			
l. Return to unit if cause cannot be determined or repaired. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear crew safety and survival equipment properly. (P/T)			
g. Do not jeopardize safety of vessel and crew. (S)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep unit informed during evolution. (P/T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** **Outboard Engine High Water Temperature** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

**References**

- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
- b. *Defender Class Operator’s Handbook*, COMDTINST M16114.37 (series)
- c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
- d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

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**Terminal Performance Objective** Given a simulated high water temperature in a main diesel engine, take corrective action.

---

**Conditions** Given a CG boat with a certified crew operating in prescribed limitations, take corrective action for high water temperature.

---

**Standards** In accordance with procedures set forth in the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs to clutch ahead on both engines. (P/O)			
b. Identify affected engine. (P)			
c. Notify crew of casualty. (P/T)			
d. Verify current position and evaluate situation. (P/T/N)			
e. Secure engine, if temperature continues to rise. (P/O)			
f. Check overboard discharge. (P)			
g. Crewman check outboard engine to assess the situation. (P)			
h. Crew member rig the anchor, if necessary. (P/O)			
i. Outboard cooling water intake ports checked. (P)			
j. Notify unit. (T/P/O)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			
d. Crew always aware of other’s location. (T)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (T)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep unit informed during evolution. (P/T)			

Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
 Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises



**Exercise:** Loss of Fuel Pressure

**Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
  - b. *Defender Class Operator's Handbook*, COMDTINST M16114.37 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

**Terminal Performance Objective** After experiencing a loss in RPMs on one engine, identify the cause, prevent further damage, and take corrective actions.

**Conditions** While underway on a RB-S/RB-HS at cruising speed, with a certified crew operating within prescribed limitations, one engine begins to run rough and lose power.

**Standards** In accordance with procedures set forth in the above references. (The kill switch **must** be utilized while making way.)

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Casualty:			
a. Reduce RPMs on both engines to clutch ahead. (P)			
b. Check fuel gauge (P)			
c. Identify affected engine. (P)			
d. Notify crew of casualty. (T)			
e. Verify current position and evaluate situation. (N/P/T)			
f. Crew member rig the anchor, if directed by coxswain. (P)			
g. Check bilges. (P)			
h. Check primary fuel filters. (P)			
i. Check entire fuel system for leaks. (P)			
j. Check governor and linkage. (P)			
k. Identify and correct source of problem or request additional assistance from unit. (P/T)			
2. Crew Teamwork and Coordination:			
a. Coxswain brief crew of specific job and mission responsibilities. (T)			
b. Crew communicate effectively and assertively during evolution. (T)			
c. Crew assist each other as needed. (T/P)			



Appendix D – RB-S/RB-HS Readiness and Standardization Drills  
Chapter 3 – Optional Underway Drill Checklists for Basic Engineering Casualty Control Exercises

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
d. Crew always aware of other's location. (T)			
e. Coxswain provide appropriate and timely guidance throughout evolution. (T)			
f. Wear and use crew safety and survival equipment properly. (P/T/O)			
g. Do not jeopardize safety of vessel and crew. (S)			
h. Utilization of kill switch observed. (S)			
i. Coxswain keep unit informed during evolution. (P/T)			



## Appendix E. Non-Standard Boat Material Checklists

**Introduction** The following Material Checklists are provided to assist the unit or RFO Team with material inspections.

The District Boat Outfit List is the primary source of appropriate outfit – if there is conflict between these checklists and the District checklists, the District list supercedes.

**In this Appendix** This Appendix contains the following information:

Topic	See Page
55' ANB Material Checklist (recommended)	E-3
TANB/Other NSB & Trailer Material Checklist (recommended)	E-11
64' ANB Material Checklist	E-15



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



**Exercise: 55' ANB Material Checklist (recommended)**

**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

- References**
- a. Applicable District Boat Outfit List (The District Boat Outfit List is the primary source of appropriate outfit—if there is conflict between this recommended list and the District list, the District list supercedes.).0
  - b. *Coatings and Color Manual*, COMDTINST M10360.3 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

- Standards**
- The following standards apply to the 55' ANB’s hull, superstructure, machinery, equipment, outfit, and all installed systems and accessories:
- Operates smoothly and correctly.
  - Free of grease, oil, rust, and corrosion.
  - Protective coatings applied correctly and neatly.
  - Free of rips, tears, abrasions, and cracks.
  - Outfit and equipment correctly installed, adjusted and stowed to specifications and design.
  - Labels, test dates, and placards properly placed and up-to-date.
- Items may be stowed in any location not contrary to published references.*

**Guidelines**

This checklist requires a minimum of two personnel, preferably one Machinery Technician and one Boatswain’s Mate both of whom possess extensive 55' ANB boat experience and a strong working knowledge of the contents of all references listed above. Each item on the checklist should be judged against applicable standards and references. Additional discrepancies, uninstalled ECs, etc. should be listed.

FORE PEAK	SAT	UNSAT	REMARKS
1. Anchor Line			
2. Ground Tackle			

MAIN DECK	SAT	UNSAT	REMARKS
1. Anchor			
2. 8-ft/12-ft Boat Hooks			
3. Life Rings/Marker Lights			
a. Date			
4. 75-ft Heaving Lines			
5. Sounding Rod			
6. Portable Dewatering Pump (normally P1, P5 or P6)			
7. Aft Console			
8. Handrails and Chain			
9. Lifelines			
10. Tiller Caps			
11. Buoy Guard			



Appendix E – Non-Standard Boat Material Checklists

MAIN DECK	SAT	UNSAT	REMARKS
12. Winches/Port/Starboard			

CRANE	SAT	UNSAT	REMARKS
1. Boom/Davit			
a. Cable			
b. Pulleys			
c. Winch			
d. Hook			
e. Support			
f. Weight Test Date			
2. Jib			
3. Wire Rope			
4. Rotation			
5. Labeled			

PILOTHOUSE / MESSDECK	SAT	UNSAT	REMARKS
1. Exterior Door			
a. Gaskets			
b. Dogs			
2. Lighting			
3. Wiring			
4. Bulkheads			
5. Piping			
6. Sink			
7. Cabinet			
8. Refrigerator			
9. Microwave			
10. Electric Stove			
11. Fire Extinguisher 5-lb PKP			
a. Date			
12. Fixed Halon System, Placard			
13. Clock (time tick?)			
14. Binoculars			
15. Hearing Protection			
16. Hand-Held Horn			

Appendix E – Non-Standard Boat Material Checklists



PILOTHOUSE / MESSDECK	SAT	UNSAT	REMARKS
17. Corrected Charts for Area of Operations			
18. Nav Gear (may be in coxswain's kit)			
19. Nav Lights/Dayshapes			
20. Compass Deviation Table			
a. Date of Last Adjustment			
21. <i>Light List</i>			
22. Tide Table			
23. Coast Pilot			
24. Coxswain Chair			
25. Bench Seat Cushions			
26. Bench Seat Compartments			
27. Heaters			
28. 24-Volt panel			
29. VHF-FM Radio			
30. GPS			
31. Radar			
32. Helm (nut properly installed?)			
33. Alarm Panel			
34. Compass/Light			
35. Gauges (red-lined/green-lined)			
36. Loudhailer			
37. Instrument Panel (console)			

EXTERIOR OF PILOTHOUSE	SAT	UNSAT	REMARKS
1. EPIRB			
2. Vents Fuel/Air			
3. Mast			
4. Running Light/Mast Lights			
5. Windows			
6. Windshield Wipers			
7. Spotlight			
8. Speaker			
9. Loran Antenna			
10. VHF-FM Antenna			
11. GPS Antenna			



Appendix E – Non-Standard Boat Material Checklists

<b>EXTERIOR OF PILOTHOUSE</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
12. Handrails			
13. Liferaft and Release			
a. Date			
14. Horn			
15. Radar/Stand			

<b>DECK BOXES PORT / STARBOARD</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Cargo Tie-Downs			
2. Hard Hats/Goggles			
3. DC Plugging Kit			
4. Sledge Hammer			
5. Crow Bar			
6. Grapnel Hook/100-ft Line			
7. Lead Line			
8. Leadsman's Hard Hat/Goggles			
9. Heaving Lines			
10. Tag Lines			
11. Swimmer's Harness w/ Knife			
12. Retrieving Harness			
13. Type III PFDs			
14. Wet Suit			
15. Swimmers Fins/Diving Mask			

<b>LAZARETTE</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Rudder Posts			
2. Steering Ram			
3. Lighting			
4. Wiring			
5. Stuffing Tubes			
6. Mooring Lines			
7. Fenders			
8. Buoy Scrapers			
9. Emergency Steering Disconnect			
10. Emergency Tiller			

Appendix E – Non-Standard Boat Material Checklists



ENGINE ROOM	SAT	UNSAT	REMARKS
1. Bilge			
2. Overhead			
3. Bulkheads			
4. Wiring /Brackets			
5. Deck Plates			
6. Stuffing Tubes			
7. Air Compressor			
8. Generator			
9. Battery/Battery Charge			
10. Shore-Tie Switch			
11. Seachest Valves			
12. Breaker Box 24-Volt			
13. 5-lb PKP			
14. CO <sub>2</sub>			
15. Battle Lanterns			
a. Date			

WORKSHOP	SAT	UNSAT	REMARKS
1. Work Bench			
2. Shelves			
3. Collapsible Litter			
4. First-Aid Kit			
5. Types I PFDs			
6. Types III PFDs			
7. Mustang/Dry Suits			
8. SAR Vest			
9. PKP Fire Extinguishers			
a. Date			
10. A/C Pump			
11. Water Heater/Tank			
12. Transformer			
13. Overboard Discharge			
14. Bilge			
15. Gray Water Tank			



Appendix E – Non-Standard Boat Material Checklists

CREWSPACE	SAT	UNSAT	REMARKS
1. Smoke Detector			
2. PKP Fire Extinguisher			
3. Eye Wash Station			
4. Racks			
5. Light			
6. EMT Kit			
7. Crew Lockers			
8. Bulkhead Storage Lockers			
9. Overboard Discharge			

HEAD	SAT	UNSAT	REMARKS
1. Marine Toilet			
2. Shower/Sink			
3. Light			

SWIM PLATFORM	SAT	UNSAT	REMARKS
1. Hatches			
2. Spaces Free of Water			

ENGINES	Port		Starboard		REMARKS
	SAT	UNSAT	SAT	UNSAT	
1. Stern Tubes					
2. Coupling/Shaft					
3. Recirculation System					
4. Piping and Strainers					
5. Exhaust Piping and Strainers					
6. Exhaust Muffler/Silencer					
7. Reduction Gear					
8. Governor and Linkage					
9. Morse Control					
10. Air Vent Ducts					
11. Raw Water System					
12. Gauges w/ Marking					
13. Starter					
14. Alternator					

Appendix E – Non-Standard Boat Material Checklists



ENGINES	Port		Starboard		REMARKS
	SAT	UNSAT	SAT	UNSAT	
15. Hot Start					
16. Wiring Engine					
17. Block					
18. Head					
19. Blower Flapper Valve					
20. Lube Oil System					
21. Engine Mounts and Framing					
22. Steering Pump Starboard					
23. Steering Tank Starboard					
24. Hydraulic Power Take-Off (PTO)					
25. Hydraulic Tank					

Remarks

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Appendix E – Non-Standard Boat Material Checklists



**Exercise: TANB/Other NSB & Trailer Material Checklist (recommended)**

**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

- References**
- a. Applicable District Boat Outfit List (The District Boat Outfit List is the primary source of appropriate outfit—if there is conflict between this recommended list and the District list, the District list supercedes.)
  - b. *Coatings and Color Manual*, COMDTINST M10360.3 (series)
  - c. Manufacturer’s Instructions/Procedures
  - d. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - e. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

- Standards**
- The following standards apply to the TANB/NSB hull, superstructure, machinery, equipment, outfit, and all installed systems and accessories:
- Operates smoothly and correctly.
  - Free of grease, oil, rust, and corrosion.
  - Protective coatings applied correctly and neatly.
  - Free of rips, tears, abrasions, and cracks.
  - Outfit and equipment correctly installed, adjusted and stowed to specifications and design.
  - Labels, test dates, and placards properly placed and up-to-date.

*Items may be stowed in any location not contrary to published references.*

**Guidelines**

This checklist requires a minimum of two personnel, preferably one Machinery Technician and one Boatswain’s Mate both of whom possess extensive TANB/NSB boat experience and a strong working knowledge of the contents of all references listed above. Each item on the checklist should be judged against applicable standards and references. Additional discrepancies should be listed.

	CONSOLE	SAT	UNSAT	REMARKS
1.	Gauges			
	a. Red Lined			
2.	Radio			
3.	Compass			
	a. Compass Card			
	b. Date			
4.	Engine Control			
5.	Engine Kill Switch (assembly & spare cord)			
6.	Navigation Lights			
7.	Horn			
8.	Windshield			
	a. Windshield Wipers			
9.	Power Trim			
	a. Gauges			
10.	VHF-FM Antenna			



Appendix E – Non-Standard Boat Material Checklists

CONSOLE	SAT	UNSAT	REMARKS
11. GPS/DGPS Antenna (transportable or hardwired)			
12. Navigation Kit (may be in coxswain's kit)			
a. Red Light			
b. Nav Slide Rule			
c. Pencils			
d. Compass and Divider			
e. Charts			

UNDER CONSOLE	SAT	UNSAT	REMARKS
1. Fire Extinguisher			
2. 5-lb CO <sub>2</sub>			
3. Date			
a. Anchor			
4. Anchor Line			
5. Thimble			
6. Swivel			
7. Wiring			
8. Stuffing Tubes			
9. First-Aid Kit/Eyewash			
10. Boat Pyro (aboard boat necessary only when preparing to depart)			

DECK	SAT	UNSAT	REMARKS
1. Searchlight			
2. Cleats			
3. Fuel Fill			
4. Fuel Vents			
5. Paddles			
6. Life Ring w/ Float Light			
7. Heaving Line			
8. Boat Hook			
9. Mooring Lines (nylon double braid)			
10. Deck Plates			
11. Bilge			
12. Boom/Davit (only if installed)			

Appendix E – Non-Standard Boat Material Checklists



DECK	SAT	UNSAT	REMARKS
a. Cable			
b. Pulleys			
c. Winch			
d. Hook			
e. Support			
f. Weight Test Date			

ENGINE SPACE	SAT	UNSAT	REMARKS
1. Battery Connection Cable			
2. Engine			
a. Engine Mount			
b. Starter			
(1) Electric Cable			
(2) Exhaust			
(3) Linkage			
(4) Hoses			
(5) Hot Start (if applicable)			
(6) Alternator			
(7) Bilge			
c. Bilge Pump			
3. Belts			
4. Steering Cable			
5. Throttle Cable			
6. Lower Unit			
7. Prop			

HULL	SAT	UNSAT	REMARKS
1. Hull			
2. Lettering/Decal			
3. Numbering (Bow & Stern)			
4. Rubrails			
5. Transducer			

TRAILER	SAT	UNSAT	REMARKS
1. Tires and Rims			





**Exercise: 64' ANB Material Checklist**

**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

- References**
- a. Applicable District Boat Outfit List (The District Boat Outfit List is the primary source of appropriate outfit—if there is conflict between this recommended list and the District list, the District list supercedes.)
  - b. *Coatings and Color Manual*, COMDTINST M10360.3 (series)
  - c. *Naval Engineering Manual*, COMDTINST M9000.6 (series)
  - d. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)

- Standards**
- The following standards apply to the 64' ANB hull, superstructure, machinery, equipment, outfit, and all installed systems and accessories:
- Operates smoothly and correctly.
  - Free of grease, oil, rust, and corrosion.
  - Protective coatings applied correctly and neatly.
  - Free of rips, tears, abrasions, and cracks.
  - Outfit and equipment correctly installed, adjusted and stowed to specifications and design.
  - Labels, test dates, and placards properly placed and up-to-date.

**Guidelines**

This checklist requires a minimum of two personnel, preferably one Machinery Technician and one Boatswain's Mate both of whom possess extensive 64' ANB boat experience and a strong working knowledge of the contents of all references listed above. Each item on the checklist should be judged against applicable standards and references. Additional discrepancies, uninstalled ECs, etc. should be listed.

PILOT HOUSE	SAT	UNSAT	REMARKS
1. Overhead			
2. Binoculars			
3. Charts			
4. Dividers			
5. Weems			
6. Pencils			
7. Pyro Kit			
8. Drill Book/Underway Log			
9. Antenna			
10. Radar			
11. Searchlight			
12. Horn			
13. Loudhailer Speaker			
14. Ladder			
15. Exhaust Stack			
16. Bulkheads			
17. Deck			



Appendix E – Non-Standard Boat Material Checklists

PILOT HOUSE	SAT	UNSAT	REMARKS
18. Windows and Defoggers			
19. Wiring			
20. Electrical Outlets			
21. Chart Table			
22. Storage Benches			
23. DGPS			
24. Lighting			
25. Chart Light			
26. Console			
27. Compass			
a. Compass Deviation Table			
28. VHF Emergency Radio			
29. Loudhailer			
30. Air Horn Handle			
31. Radar Screen			
32. VHF Radio			
33. Depth Finder			
34. Power Panel			
35. Circuit Breakers			
36. Fire Extinguisher			
a. Date			
37. Hydraulic Oil Tank (steering gear)			
38. MDE Gauge Panel			
39. Helm (wheel)			
40. Throttle Controls			
41. Boat Plate			
42. Deck Drains			
43. Ladderwell			
44. Handrail			
45. Folding Door			
46. Emergency VHF Radio Battery Charger			
47. Alarm Panel			

BRIDGE WINGS	SAT	UNSAT	REMARKS
1. Life Ring w/Marker Light			

Appendix E – Non-Standard Boat Material Checklists



<b>BRIDGE WINGS</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
2. Bell			
3. Day Shapes (B/D/B)			
4. Floodlight			
5. Mast			
6. Mast Lights			
7. Emergency VHF Radio Battery			
8. Deck Drain Vent			
9. Doors			
10. Door Stops			
11. Handrails			
12. Running Lights			
13. E/R Exhaust Fan			
14. Deck			

<b>MESSDECK / PASSAGEWAY</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Medical (EMT) Kit			
2. Swimmer's Kit (Bag)			
3. Swimmer's Harness			
4. Personnel Retrieval Line			
5. Lifejackets			
6. Hardhats			
7. Exterior Doors			
8. Overhead			
9. Bulkhead			
10. Deck			
11. Refrigerator			
12. Cabinets			
13. Mess Deck Table			
14. Storage Benches			
15. Folding Rack			
16. Sink			
17. Stove Top			
18. Stove Exhaust Hood			
19. Deck Drain			
20. Power Panel			



Appendix E – Non-Standard Boat Material Checklists

<b>MESSDECK / PASSAGEWAY</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
21. Lights			
22. Electrical Wiring			
23. Switches			
24. Water Fountain			
25. Water Heater			
26. VCR			
27. TV			
28. A/C Vents			
29. Heat/Air Controller			
30. Loudhailer Speaker			
31. Porthole			
32. Smoke Detector			
33. Fire Extinguisher			
34. Outlets			
35. First-Aid Kit			

<b>BERTHING / HEAD</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Doors (3)			
2. A/C Vents			
3. Head Exhaust Fan			
4. Thermostat			
5. Outlet			
6. Deck			
7. Overhead			
8. Bulkhead			
9. Lockers			
10. Drawers			
11. Berths with Mattresses			
12. Smoke Detector			
13. Lights			
14. Switches			
15. Electrical Wiring			
16. Portlight			
17. Latches, Hinges, Doorknobs			
18. Loudhailer Speaker			

Appendix E – Non-Standard Boat Material Checklists



<b>BERTHING / HEAD</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
19. Shower			
20. Sink			
21. Deck Drain			
22. Toilet			
23. Piping			
24. Mirror			

<b>MAIN DECK</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Anchor w/6-ft ½-inch Chain			
2. Anchor Line, 100-ft 2-inch DBN			
3. Boat Hook			
4. Rescue Heaving Line			
5. Fire Axe			
6. Life Ring w/ Marker Light			
7. Extension Ladder			
8. Fenders			
9. Mooring Lines, 2¾" X 30"			
10. Buoy Deck Lines, 3" X 20" DBN			
11. Climbing Tag Lines			
12. Sledge Hammer			
13. Buoy Punch Sledge			
14. Machete			
15. Marlinespike Wrench			
16. Pry Bar			
17. Crow Bar			
18. Chain Hook			
19. Buoy Scraper			
20. Brush Axe			
21. Nipper Chain			
22. Doubled Leg Sling			
23. Stokes Litter			
24. Pressure Sprayer			
25. Edge			
26. Deck			
27. Superstructure			



Appendix E – Non-Standard Boat Material Checklists

MAIN DECK	SAT	UNSAT	REMARKS
28. Handrail			
29. Hatches			
30. E/R Intake Vent			
31. Cleats			
32. Floodlights			
33. Deck Lights			
34. Tank Vent Tubes			
35. Tank Sounding Tubes			
36. Tank Fills			
37. Chain Stoppers			
38. Spud and Spudwell			
39. Winches			
40. Deck Tie-Down Fitting			
41. Fire Station			
42. Water Hose			
43. Air Hose Reel			
44. Outlet			
45. Crane			
46. Capstan			
47. Controllers			
48. Shore-Tie Fitting			
49. Dogging Wrench			
50. Chain Box			
51. Loudhailer Speakers			
52. Cutting Torch			
53. Power Pruner			
54. Bushwhacker			
55. Chainsaw			

FLAMMABLE LOCKERS	SAT	UNSAT	REMARKS
1. Climbing Belts			
2. Climbing Safety Straps			
3. Climbing Spikes			

Appendix E – Non-Standard Boat Material Checklists



<b>AtoN WORKSHOP</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Doors			
2. Overhead			
3. Bulkhead			
4. Deck			
5. Deck Drain			
6. Deck Tie-Down Fittings			
7. Fire Extinguisher			
8. CO <sub>2</sub> Actuator			
9. Cabinet			
10. Sink			
11. A/C Handler			
12. Mirror			
13. Eye Wash Station			
14. Thermostat			
15. Tool Box			
16. Switch			
17. Loudhailer Speaker			
18. Electrical Wiring			
19. Outlet			
20. Light			
21. Piping			
22. DC Kit			
23. Electrical Kit			
24. E/R Ladderwell			
25. Handrail			

<b>CARGO HOLD</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Deckplate			
2. Deck			
3. Overhead			
4. Bulkhead			
5. Main Wiring Box			
6. Potable Water Tank			
7. Potable Water Pump w/ Pressure Tank			
8. Hoses			



Appendix E – Non-Standard Boat Material Checklists

<b>CARGO HOLD</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
9. Piping			
10. 100-lb CO <sub>2</sub> Bottles			
11. Tool Box			
12. A/C System			
13. Electrical Wiring			
14. Switches			
15. Storage Cabinet			
16. Potable Water Hoses			
17. Portable Pump			
18. Sewage Holding Tank			
19. Dehumidifier			
20. Outlet			
21. Freezer			
22. Access Covers			
23. Fire Extinguisher			

<b>CRANE PEDESTAL</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Hoses			
2. Swivel			
3. Deck			
4. Interior Walls			

<b>STEERING LAZARRETTE</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Bilges			
2. Overhead			
3. Bulkhead			
4. Piping			
5. Electrical Wiring			
6. Steering Ram			
7. Hydraulic Hoses			
8. Light			
9. Access Holes			



<b>FOREPEAK / VOIDS</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Bilges			
2. Bulkheads			
3. Overheads			
4. Access Covers			
5. Piping			
6. Transducer			

<b>ENGINE ROOM</b>	<b>SAT</b>	<b>UNSAT</b>	<b>REMARKS</b>
1. Bilges			
2. Deck Plates			
3. Bulkheads			
4. Overhead			
5. Fire Extinguisher			
6. CO <sub>2</sub> Suppression Nozzles			
7. Fire Alarm Sensor			
8. Engines			
9. Electrical Switchboard			
10. Hydraulic Sump Tank			
11. Pumps			
12. Black Water Tank			
13. Motors			
14. Battery			
15. Air Compressor Tank			
16. Hydraulic Hoses			
17. Piping			
18. Electrical Wiring			
19. Lights			
20. Switches			
21. Fuse Panel			
22. Controllers			
23. Cables			
24. Placards, Labels, Data Plates			
25. Shafts and Seals			
26. Transducers and Seachests			





## Appendix F. Unit and RFO Aids to Navigation Team Checklists

**Introduction**      The following operational and administrative checklists are used by inspection teams assigned to the Boat Readiness and Standardization Program to evaluate **aids to navigation teams**.

**In this Appendix**      This Appendix contains the following information:

Topic	See Page
Buoy Operations - Mooring Pull and Aid Positioning	F-3
Service Minor Lighted Fixed Aid	F-9
ANT RFO General Information	F-11
Unit Training	F-13
Engineering Administration	F-15
Aids to Navigation Administration	F-17
Completion Worksheet	F-21



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



**Exercise:** **Buoy Operations - Mooring Pull and Aid Positioning** **Score** SAT / UNSAT

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Aids to Navigation Manual – Administration*, COMDTINST M16500.7 (series)
  - b. *Aids to Navigation Manual – Positioning*, COMDTINST M16500.1 (series)
  - c. *Aids to Navigation Manual – Seamanship*, COMDTINST M16500.21 (series)
  - d. *Aids to Navigation Manual – Technical*, COMDTINST M16500.3 (series)
  - e. *Navigation Rules, International-Inland*, COMDTINST M16672.2 (series)
  - f. *Operational Risk Assessment*, COMDTINST 3500.3 (series)
  - g. *Rescue and Survival Systems Manual*, COMDTINST M10470.10 (series)
  - h. *Short Range Aids to Navigation Servicing Guide*, COMDTINST M16500.19 (series)

**Terminal Performance Objective** The purpose of this exercise is to determine the crew’s ability to safely conduct buoy deck operations and position an aid. This evaluation may be made during an annual service, mooring evolution, or a buoy relief.

**Conditions** Given a CG boat assigned and outfitted to work buoys, position equipment, and a certified crew operating within prescribed limitations.

**Standards** Buoy hauled, serviced, reset, position checked and recorded in accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
<b>Working the Buoy</b>			
1. Preparations:			
a. Break out material and make available.			
b. Secure equipment on deck properly for transit.			
c. Crew in personal protective equipment.			
2. Working the Buoy:			
a. Make safe approach to the aid.			
b. Hoist proper dayshapes.			
c. Hook buoy safely and efficiently (including the use of mechanical devices).			
d. Safely attach cross deck fair lead to buoy.			
e. Use standard hand signals.			
f. Keep buoy low to deck, handle smoothly.			
g. Place chain safely in chain stopper.			
h. Select appropriate method to secure buoy on deck.			



Appendix F – Unit and RFO Aids to Navigation Team Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
i. Use appropriate tools and procedures for disconnecting the mooring.			
j. Hoist mooring using safe, efficient method. Keep chain “up and down.” (49' BUSL: Use horse collar.)			
3. Servicing Buoy / Inspecting Mooring:			
a. Clean, inspect, and repair buoy, as necessary.			
b. Recharge as necessary.			
c. Check aid characteristic against <i>Light List</i> , chart, and ATONIS database.			
d. Measure and record initial battery voltage.			
e. Measure and record battery load test.			
f. Check battery cable (megger).			
g. Verify battery serial number (recharge only).			
h. Measure and record solar panel output voltage.			
i. Conduct solar panel diode test.			
j. Air test hull, if required.			
k. Check vent valves for obstructions.			
l. Time flasher for accuracy.			
m. Inspect retro.			
n. Verify hull serial number.			
o. Measure and record chafe, plus check the overall condition of the chain.			
p. Inspect swivel for proper operation, installation and wear.			
q. Inspect shackles for proper installation and wear.			
4. Setting Buoy:			
a. Fake chain and make ready.			
b. Spread shackle split keys at a 45-degree angle.			
c. Set buoy and maneuver vessel clear of buoy without damage to vessel or aid.			
<b>Positioning the Buoy</b>			
1. Aid Data:			
a. Update ATONIS database with import from OSC Martinsburg (at unit).			



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
b. Check positioning equipment and ensure it is in proper working order: computer (laptop), DGPS receiver (Trimble), fathometer/lead line/sounding pole, compass (at pier).			
c. Review aid folder (at unit or aboard boat).			
d. Ensure appropriate charts are aboard. Update electronic charts.			
e. Compare aid folder to <i>Light List</i> , chart, and ATONIS database (at unit or aboard boat).			
f. Calculate tide and current predictions for aid.			
2. DGPS (at pier):			
a. Select appropriate differential beacon.			
b. Verify correct NMEA strings selected.			
(1) VHW if fluxgate compass is installed.			
c. Configure trimble receiver correctly:			
(1) GGA, GST, GRS, GSA, VTG.			
(2) Select 2D/3D mode correctly.			
(3) Select GPS mode “Auto”.			
(4) Select DGPS mode “on”.			
(5) Connect correctly to computer.			
(6) Select WGS-84 in DGPS mode.			
3. AAPS (Automated Aid Positioning System):			
a. Verify correct datum selected (usually NAD 83).			
b. Enter vessel data correctly:			
(1) Enter correct draft value.			
(2) Correct buoy port offsets.			
(3) GPS/DGPS revr type/serial number.			
c. Aid data:			
(1) Assign position.			
(2) Accuracy classification.			
(3) Tolerance radius.			
(4) Update vessel’s heading.			
(5) <i>Light List</i> number.			
(6) Chart and edition number.			
(7) Enter chain length correctly.			
(8) Assign work area.			



Appendix F – Unit and RFO Aids to Navigation Team Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
4. Auxiliary Data:			
a. Buoy port			
b. Short stay			
c. Excursion			
d. Measured depth:			
(1) Tide correction (use negative sign with high tide).			
5. Positioning Data Verification:			
a. Plot the assigned position (AP) on the chart.			
b. Does the <i>Light List</i> data agree with the chart and ATONIS?			
c. Do the charted characteristics agree with the ATONIS and <i>Light List</i> ?			
6. Positioning aid:			
a. Take found fix using excursion OR –			
b. Take set fix using Short Stay.			
c. Determine current direction correctly.			
d. Take soundings.			
e. Determine wind direction correctly.			
f. Position using DGPS, in accordance with Positioning Manual.			
7. Completing aid documentation:			
a. Fill out aid position report properly, including remarks, printed and signed.			
b. Export data to OSC Martinsburg.			
<b>Overall</b>			
1. Crew Teamwork and Coordination:			
a. Coxswain and buoy deck supervisor brief crew of specific job, safety, and mission responsibilities.			
b. Crew communicate effectively and assertively during evolution.			
c. Crew assist each other as needed.			
d. Crew always aware of other's location.			
e. Coxswain and buoy deck supervisor/safety supervisor provide appropriate and timely guidance throughout evolution.			

Appendix F – Unit and RFO Aids to Navigation Team Checklists



ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
f. Wear and use crew safety and survival equipment properly.			
g. Do not jeopardize safety of vessel.			
h. Do not jeopardize safety of crew.			
i. Make and use risk assessment.			



Appendix F – Unit and RFO Aids to Navigation Team Checklists



**Exercise:** Service Minor Lighted Fixed Aid

**Score** SAT / UNSAT

**NOTE**  This task is only required if unit performs “Buoy Operations - Mooring Pull and Aid Positioning” with an unlighted aid.

**Unit Name** \_\_\_\_\_ **Boat #** \_\_\_\_\_ **Date** \_\_\_\_\_

**Coxswain** \_\_\_\_\_ **Engineer** \_\_\_\_\_

**Crewmember** \_\_\_\_\_ **Crewmember** \_\_\_\_\_

**Weather During Drill:** **Winds** \_\_\_\_\_ **Seas** \_\_\_\_\_ **Current** \_\_\_\_\_ **Visibility** \_\_\_\_\_

- References**
- a. *Aids to Navigation Manual – Technical*, COMDTINST M16500.3 (series)
  - b. *Operational Risk Management*, COMDTINST 3500.3 (series)
  - c. *Short Range Aids to Navigation Servicing Guide*, COMDTINST M16500.19 (series)

**Terminal Performance Objective** The purpose of this exercise is to determine the crew’s ability to safely and properly conduct a fixed lighted minor aid servicing.

**Conditions** Given an aids to navigation crew with minor aids to navigation qualification operating within prescribed limitations.

**Standards** Minor lighted aid serviced in accordance with the above references.

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
1. Preparations:			
a. Break out material and make available.			
b. Crew in personal protective equipment.			
2. Servicing Signal:			
a. Check aid characteristic against <i>Light List</i> , chart, and ATONIS database.			
b. Measure and record initial battery voltage.			
c. Measure and record battery load test.			
d. Recharge as necessary.			
e. Check battery cable (megger).			
f. Verify battery serial number (recharge only).			
g. Measure and record solar panel output voltage.			
h. Conduct solar panel diode test.			
i. Time flasher for accuracy.			
j. Inspect retro.			
3. Servicing Structure:			
a. Check angle of obscuration (if applicable).			
b. Brush aid site (if needed).			
c. Inspect aid for structural integrity.			
d. Post No Trespassing/Vandalism signs.			



Appendix F – Unit and RFO Aids to Navigation Team Checklists

ENABLING OBJECTIVES	SAT	UNSAT	REMARKS
e. Install safety climb, if required.			
f. Conduct safety check on ladders, stairs, railings.			
4. Crew Teamwork and Coordination:			
a. Make and use risk assessment.			
b. Coxswain (or crew member in charge of servicing) brief crew of specific job and mission responsibilities.			
c. Crew communicate effectively and assertively during evolution.			
d. Crew assist each other as needed.			
e. Crew always aware of other's location.			
f. Coxswain (or crew member in charge of servicing) provide appropriate and timely guidance throughout evolution.			
g. Wear and use crew safety and survival equipment properly.			
h. Do not jeopardize safety of vessel/vehicle (if used).			
i. Do not jeopardize safety of crew.			



**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**ANT RFO General Information**

1. Inspection Team Members (Name and Unit):

\_\_\_\_\_

2. Date of last Ready for Operations Inspection: \_\_\_\_\_ Unit provide list of outstanding discrepancies.

3. Date of last MLC Safety and Environmental Health Inspection: \_\_\_\_\_ Unit provide list of outstanding discrepancies.

4. Number of AIDS assigned to unit for primary servicing: \_\_\_\_ fixed \_\_\_\_ floating \_\_\_\_ lighted

5. AtoN Discrepancies: Unit provide list with aid name, *Light List* number, discrepancy.

6. Any AtoN supply problems being experienced? Yes  / No

\_\_\_\_\_

\_\_\_\_\_

7. Is unit staffed to its Personnel Allowance List (PAL)? Compare PAL to assigned personnel, note + or – from PAL.

OIC _____	XPO _____	EPO _____	
BM1 _____	BM2 _____	BM3 _____	
MK1 _____	MK2 _____	MK3 _____	
QM _____	EM _____	SN _____	FN _____

8. Description/condition of vehicles assigned, including cranes, forklifts, etc.:

_____	mileage/hours	_____

9. Outstanding unit CASREPS: Unit to provide a complete list.

10. Pending CSMPs: Unit to provide a complete list.

11. Pending SSMRs: Unit to provide a complete list for both unit and assigned aids.

12. Pending ECs (formerly BOATALTs). Unit to provide a complete list.

Remarks

\_\_\_\_\_

\_\_\_\_\_



Appendix F – Unit and RFO Aids to Navigation Team Checklists



**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**Unit Training**

ITEM	SAT	UNSAT
1. Unit Training Officer designated in writing.		
Name: _____		
2. Does the unit have an established training program?		
3. Are the unit training records maintained? If used instead of paper records, are entries in the Training Management Tool (TMT) module of the Abstract of Operations up-to-date?		
4. Are the individual training records (CG-5285) properly organized?		
a. Inside Cover: Completed indoctrination checkoff sheets.		
b. <u>Section 1</u> : Copies of Certification Letters or Administrative Remarks (CG-3307) for PQS/JQR certification, revocation, and/or recertification. Copies of Individual’s Record of Small Arms Training (CG-3029A).		
c. <u>Section 2</u> : Formal school completion letters. Correspondence course completion letters.		
d. <u>Section 3</u> : Copies of correspondence related to advancement or promotion and Performance Based Qualification Sheets, including: (1) Boat crew qualification PQS sign-off sheets. (2) Records of underway drills and operations. (3) Boarding team member and boat crew practical examination assessments. (4) AOPS or TMT report reflecting completion of the most recent recurrent training.		
e. <u>Section 4</u> : Records of lectures on form CG-5289 (Dept Training Record).		
f. <u>Section 5</u> : Miscellaneous training records and information.		
5. Is the unit receiving adequate quotas to schools?*		
a. Minor Aids to Navigation		
b. Aid Positioning		
c. OIC/XPO		
d. Advanced Minor Aids		
e. Major Aids		
6. Is the unit following the Boat Crew Training Program?		
a. Is it based on <i>Part 5</i> of this Manual adjusted for unit boat type(s)?		
b. Does the OIC issue certification letters to authorize personnel to operate assigned boat(s)?		
7. Is a PQS/JQR (watch qualification) program in effect?		
a. Coxswain		
b. Boat Engineer		
c. Crew member		
d. Buoy Deck Supervisor (45' boats and larger) [ <i>Aids to Navigation - Seamanship</i> , COMDTINST M16500.21 (series), <i>Chapter 4</i> ]		



Appendix F – Unit and RFO Aids to Navigation Team Checklists

ITEM	SAT	UNSAT
e. Boom Operator (for boats with boom) ( <i>Aids to Navigation - Seamanship</i> , COMDTINST M16500.21 (series), <i>Chapter 4</i> )		
f. Oxyacetylene [ <i>Personnel Qualification Standard (PQS) Buoy Deck Operations</i> , COMDTINST M3502.12 (series)]		
g. Tower climbing (if unit climbs towers over 20') ( <i>AtoN Technical &amp; Seamanship Manuals</i> )		
h. Chain saw (if unit performs brushing) [ <i>Personnel Qualification Standard (PQS) River Tender Operations</i> , COMDTINST M3502.13 (series)]		
8. Are qualification requirements for Engineering watchstanders adequate? (45' boats and larger)		
9. Number of certified/qualified personnel available to perform unit mission?*		
<b>NOTE</b>  *This is a subjective call by inspector and/or OIC. Provide <u>specific</u> amplifying information for an "UNSAT" entry.		

Remarks

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**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**Engineering Administration**

ITEM	SAT	UNSAT
1. Are the following publications available and up-to-date? (Access by CD ROM or Web satisfactory)		
a. <i>Naval Engineering Manual</i> , COMDTINST M9000.6 (series)		
b. MLC SOP		
c. CG Naval Engineering Technical Publications		
d. Manufacturers Instruction Books, and Service Manuals (as applicable to the individual unit)		
e. Allowance List		
f. PMS technical publications (AUX/MP/EM/DC)		
g. Drawings of boats and machinery (NETIMS acceptable)		
h. Are the boats' blueprints indexed?		
i. <i>Boat Management Manual</i> , COMDTINST M16114.4 (series)		
2. Do the Engineering Standing Orders contain the following?		
a. Boat Engineer duties in port and underway.		
b. When to call the EPO.		
c. Daily routine of Engineering Department in port.		
d. Instructions on the issue, use and replenishment of spare parts.		
3. Is/are the assigned boat(s) adequate for the unit's aid assignment list and specific area of operations?*		
<p><b>NOTE</b>  *This is a subjective call by inspector and/or OIC. Provide <u>specific</u> amplifying information for an "UNSAT" entry.</p>		
4. CSMP files. [ <i>Naval Engineering Manual</i> , COMDTINST M9000.6 (series), Chapter 090-4]		
a. Are CSMPs prepared for all major repair items to be corrected by the unit and any repairs beyond the unit's capability?		
b. Are CSMPs filled out in accordance with detailed instructions contained in the reverse of CSMP card, FORM CG-2920?		
c. Does each card contain enough information to allow preparation of a specification?		
d. Are CSMPs submitted to MLC(v) for review and prioritization in accordance with MLC SOP?		
e. List CSMPs on file pending for over two years. (Full list required for General Information Checklist.)		
<p>_____</p> <p>_____</p>		
5. Engineering Change Requests (ECR, formerly BOATALT). (Full list of pending ECRs required for General Information Checklist.)		
a. Does the ECRs file show completed and pending items? [ <i>Naval Engineering Manual</i> , COMDTINST M9000.6 (series), CH. 041-7]		
b. Are there incomplete Class "A" ECRs issued before the last routine availability?		



Appendix F – Unit and RFO Aids to Navigation Team Checklists

ITEM	SAT	UNSAT
c. Are there incomplete Class “B” ECRs over three (3) years old?		
6. Are Boat Record files maintained in a six-part folder and divided into the following sections? [ <i>Boat Management Manual</i> , COMDTINST M16114.4 (series)]		
a. Boat Record Book (CG-2580)		
(1) Is the boat transfer report located in back of Boat Record Book? (CG-2580)		
(2) Is a chronological hull and machinery record appended to the Boat Record?		
b. Boat Inspection Reports (CG-3022)		
c. CASREPs and CASCORs (kept for one year)		
d. ECRs pending (CG-3378)		
e. ECRs completed (CG-3378)		
f. Pending CSMPs		
g. Do the records include District or unit outfit lists / checkoff lists?		
h. Has a Full Power Trial been completed as required by applicable instructions?		
7. Rigging Log [ <i>Aids to Navigation Manual – Seamanship</i> , COMDTINST M16500.21 (series)].		

Remarks

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**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**Aids to Navigation Administration**

ITEM	SAT	UNSAT
1. Are the following publications available and up-to-date? (Access by CD ROM satisfactory)		
a. <i>Aids to Navigation Manual – Seamanship</i> , COMDTINST M16500.21 (series)		
b. <i>Aids to Navigation Manual – Positioning</i> , COMDTINST M16500.1 (series)		
c. <i>Aids to Navigation Manual – Technical</i> , COMDTINST M16500.3 (series)		
d. <i>Aids to Navigation Manual – Administration</i> , COMDTINST M16500.7 (series)		
e. District AtoN SOP		
f. District Aid Assignment List		
g. <i>Automated Technical Guidelines</i> , COMDTINST M16500.8 (series)		
h. <i>Aids to Navigation Information System (ATONIS)</i> , COMDTINST M16500.15 (series)		
i. <i>Lighthouse Maintenance Management</i> , COMDTINST M16500.6 (series) if applicable		
j. <i>Lighthouse Preventive Maintenance System Manual</i> , COMDTINST M16500.10 (series) if applicable		
k. ATONIS/AAPS Unit User Guide (current edition)		
l. <i>Hydrographic Manual (NOAA)</i> , 4 <sup>th</sup> Ed, COMDTINST M16500.2 (series)		
m. <i>Development of New Nautical Charts &amp; Publications</i> , COMDTINST M16502.10 (series)		
n. <i>Aids to Navigation Battery Release Reporting Requirements</i> , COMDTINST 16478.10 (series)		
o. <i>Aids to Navigation Battery Tracking System</i> , COMDTINST 16478.11 (series)		
p. <i>Short Range Aids to Navigation Servicing Guide</i> , COMDTINST M16500.19 (series)		
q. <i>Light List</i> , COMDTPUB P16502.1 (series)		
r. <i>Solar Design Manual</i> , COMDTINST M16500.24 (series)		
s. <i>Aids to Navigation Visual Signal Design Manual</i> , COMDTINST M16510.2 (series)		
t. <i>National Plan for AtoN Battery Recovery and Disposal</i> , COMDTINST 16478.12 (series)		
u. U.S. Coast Pilot for area of responsibility		
v. CHART 1		
w. <i>Tower Manual</i> , COMDTINST M11000.4 (series) for aids over 20 feet tall		



Appendix F – Unit and RFO Aids to Navigation Team Checklists

ITEM	SAT	UNSAT																								
2. Are all buoys on station the authorized hull?																										
a. List any mismatches. <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 45%; text-align: center;">Aid Name LLNR</th> <th style="width: 25%; text-align: center;">Authorized</th> <th style="width: 30%; text-align: center;">On Station</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table>	Aid Name LLNR	Authorized	On Station	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____		
Aid Name LLNR	Authorized	On Station																								
_____	_____	_____																								
_____	_____	_____																								
_____	_____	_____																								
_____	_____	_____																								
_____	_____	_____																								
_____	_____	_____																								
_____	_____	_____																								
3. Does the unit submit recommendations for changes to assigned aids?																										
4. Does the unit review the <i>Light List</i> for agreement with assigned aids to navigation?																										
a. Have corrections been sent to District?																										
5. Does the unit maintain a file of SSMRs for assigned aids that include pending, current and completed (as required)?																										
6. Are AtoN allowance spares maintained in accordance with District SOP?																										
7. Is the unit adequately funded and are funds properly expended to support assigned aids? (Compare budget vs. expenditures in aid maintenance and shore maintenance categories).																										
8. Does the unit maintain Battery Tracking Log and Folder?																										
a. Is the battery tracked from time received at unit to time it is disposed of?																										
b. Does the unit have an adequate number of tracking labels onboard?																										
c. Are DD 1149s on battery transfers (disposal) and bills of lading kept together in the battery tracking folder?																										
d. Are battery release messages sent in accordance with <i>Aids to Navigation Battery Release Reporting Requirements</i> , COMDTINST 16478.10 (series)?																										
9. Are all batteries properly disposed of?																										
10. Does the unit maintain Aid Folders for all assigned aids as follows:																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>NOTE</b> </td> <td>Contents listed below are required, but the order in which they are kept is not. Alternate folder-keeping sequences are allowed, as long as all forms and information are properly maintained. Some districts may prescribe a particular sequence.</td> </tr> </table>			<b>NOTE</b>	Contents listed below are required, but the order in which they are kept is not. Alternate folder-keeping sequences are allowed, as long as all forms and information are properly maintained. Some districts may prescribe a particular sequence.																						
<b>NOTE</b>	Contents listed below are required, but the order in which they are kept is not. Alternate folder-keeping sequences are allowed, as long as all forms and information are properly maintained. Some districts may prescribe a particular sequence.																									
a. Six-part folders containing the following sections:																										
(1) ATONIS Field Information Documents (FID)																										
(2) Aid Positioning Reports (APR)																										
(3) Related message traffic																										
(a) Discrepancies																										
(b) Corrections																										
(c) Broadcast Notice to Mariners																										



ITEM	SAT	UNSAT
(d) AtoN Work Orders (3213/3213As)		
(4) Correspondence		
(5) Misc. aid positioning information		
(a) Accuracy classification		
(b) Old grids and pre-comps		
(c) Best fix info		
(6) Misc. aid information		
(a) Discrepancy Response Factors (DRF Part I and II)		
(b) Service Interval Flowcharts (SIF)		
(c) Buoy mooring selection sheets		
(d) SSMRs		
(e) Photos (within 5 years)		
(f) Vandalism documentation (i.e., evidence)		
(g) Equipment list and historical info		
(h) Old Sands Forms		
(i) OIC comments		
(j) Solar calculations		
11. Check at least 10% of folders for lighthouses. Do the folders reflect proper maintenance of the aids in accordance with <i>Lighthouse Maintenance Management</i> , COMDTINST M16500.6 (series) and <i>Lighthouse Preventive Maintenance System Manual</i> , COMDTINST M16500.10 (series)?		
12. Does the unit use ATONIS?		
<b>NOTE</b>  Compare at least 10 ATONIS records against Aid Folders.		
a. Are the unit aid data files current/correct? (check all fields)		
b. Is ATONIS used to schedule pending work?		
c. Is the unit current on all inspections/servicing?		
d. Is the current version of AAPS being used?		
e. Are imports/exports being conducted within 5 days of changing data?		
13. Are required charts maintained? (electronic or paper)		
14. Does unit have an instruction for designating which nautical charts/pubs are to be maintained?		
15. Are the latest editions of required navigation publications available and corrected to date?		
16. Does unit have a system for tracking status of changes/updates to nautical charts and pubs?		
17. Are Local Notices to Mariners received and verified weekly?		

Remarks

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Appendix F – Unit and RFO Aids to Navigation Team Checklists



**Unit Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**Completion Worksheet**

Item	SAT	UNSAT	N/A	Explanation / Comment
<b>Administration</b>				
1. General Information Checklist Completed	no evaluation			
2. Boat Crew/AtoN Training				
3. AtoN Administration				
4. Engineering Administration				
<b>Material Condition</b>				
1. 64' ANB				
2. 55' ANB				
3. TANB/NSB				
4. 49' BUSL				
5. Unit Unique (cable boat, BU)				
<b>Required Exercises</b>				
1. Day/Night Navigation and Piloting				
2. Towing				
3. Man Overboard				
4. Service Floating Aid (mooring/positioning)				
5. Minor Fixed Aid Servicing				
<b>Optional Exercises</b>				
1. Reduced Visibility Navigation				
2. Crewmember Piloting Proficiency				
3. Fire in the Engine Compartment				
4. Loss of Steering				
5. Collision with Submerged Object				
6. Loss of Lubrication Oil Pressure				
7. Main Engine High Water Temperature				
8. Loss of Engine RPM Control				
9. Loss of Fuel Oil Pressure				

**Is the unit ready for operations?** Yes  / No

Remarks

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Appendix F – Unit and RFO Aids to Navigation Team Checklists



## Appendix G. Glossary

**Introduction** This Appendix contains a list of terms that may be useful when reading this Manual.

**In this Appendix** This Appendix contains the following information:

Topic	See Page
Glossary	G-3



U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



TERM	DEFINITION
<b>Aids to Navigation Team</b>	An <b>Aids to Navigation Team</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.
<b>Air Station</b>	An <b>Air Station</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment, which reports to a District Commander or an Area Commander.
<b>Alert Duty</b>	A person is on alert duty when engaged in underway operations or is on SAR readiness standby, with a boat response time of 30 minutes or less.
<b>AOPS/TMT</b>	Abstract of Operations/Training Management Tool – allows the user to compile daily AOPS data in a Coast Guard centralized database accessed through the web-based application. TMT enables the user to track boat crew training, certification, and currency dates for both underway and shore-side training.
<b>Auxiliary-Operated Station (Small)</b>	An <b>Auxiliary-Operated Station (small)</b> is a <b>Station (small)</b> that relies on auxiliary members for its primary duty section staffing for three or more months a year. Auxiliary operated units may or may not have an active duty command cadre (i.e., OIC).
<b>Boat Crew</b>	Includes the coxswain, boat engineer, crewmembers, and all other personnel required onboard a boat acting in an official capacity.
<b>Boat Crew Examination Board (BCEB)</b>	A group of certified boat crew members, consisting of experienced surfmen, heavy weather coxswains, boat coxswains, engineers, and crew members, as applicable, selected by the Unit Commander and organized to examine and evaluate boat crew candidates. BCEB is designated in writing.
<b>Boat Outfit/Stowage Plans</b>	The configuration requirements for standard boat outfits and equipment stowage plans are set forth in the applicable Specific Boat Type Operator's Handbook, COMDTINST M16114 (series).
<b>Certification</b>	Formal command verification that an individual has met all requirements and is authorized to perform the boat crew duties at a specific level aboard a particular boat type.
<b>Command Cadre</b>	The CO or OIC, the XO or XPO, the EPO and senior Boatswain's Mate (at units with COs) are a unit's command cadre.



TERM	DEFINITION
<b>Configuration Management</b>	A management discipline designed to preserve and control the functional and structural characteristics of a standard boat. Unlike cutters, standard boats are resources that do not have permanent crews. These resources must be as uniform as possible to support operational safety, maximize crew familiarity, and simplify training, maintenance and support.
<b>Crew Endurance Management (CEM)</b>	A systematic process for balancing organizational (e.g., 24/7 operations, number of B-0 resources, etc.) and mission (e.g., environmental factors, time-of-day, etc.) requirements with the physical and mental capabilities and needs of the crew. CEM uses a systems approach to evaluate the effects of all factors, and interaction of these factors, to control adverse effects, like fatigue, of our operations.
<b>Crew Rest</b>	Time during which alert crews do not engage in any <b>Station</b> work or operations. Crews are allowed to recreate and sleep.
<b>Crew Underway Time</b>	Begins when the crew member reports to the designated place to prepare for a specific boat mission. Computation of such time ends when the mission is complete. Crew underway time includes time spent accomplishing pre-mission and post-mission boat checks.
<b>Current</b>	A current crew member is certified and has all recurring training requirements completed and up to date. Currency is maintained by completing the regularly scheduled minimum proficiency requirements of their current crew position.
<b>Cutter</b>	A <b>Cutter</b> is a Coast Guard facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.
<b>Engineering Changes (ECs)</b>	<p>These are the only authorized modifications to a standard boat. No one other than Commandant (G-SEN) is authorized to approve ECs to standard boats. The Specific Boat Type Operator's Handbook, COMDTINST M16114 (series) provides amplifying details on the EC process.</p> <p><b>NOTE</b>  Engineering Changes (ECs) were formerly known as BOATALTs.</p>
<b>Extended Alert Duty</b>	A person is on extended alert duty when assigned for more than 24 hours. Generally, this occurs as the result of 48- or 72-hour duty weekends.



TERM	DEFINITION
<b>Fatigue</b>	A condition of impaired mental and physical performance brought about by extended periods of exertion and stress which reduces the individual's capability to respond to external stimuli. Some factors contributing to fatigue are sleep loss, exposure to temperature extremes (hypothermia and heat stress), motion sickness, changes in work and sleep cycles, physical exertion, workload, illness, hunger, and boredom. While an individual or crew may be considered to be fatigued at any time, at a minimum, they are considered to be fatigued when they exceed the underway or alert posture standards.
<b>Fatigue Waiver</b>	A waiver to crew rest or rest-recovery requirements granted by the Operational Commander.
<b>Functional Configuration Requirements</b>	This applies to the operation of machinery (i.e. main engines, marine gears, etc.) and electronic/electrical systems and equipment. Minimum performance requirements (full power) and operating parameters as set forth in the applicable Specific Boat Type Operator's Handbook, COMDTINST M16114 (series) are functional configuration requirements.
<b>Heavy Weather</b>	<p>Heavy weather is defined as sea, swell and wind conditions combining to exceed 8 feet and/or winds exceeding 30 knots.</p> <p><b>NOTE</b> <i>g</i> This definition of heavy weather is not intended to define a heavy weather situation for a specific boat type. Heavy weather for each specific boat type may be determined by the coxswain at any time.</p>
<b>Marine Safety Offices (MSO)</b>	An <b>MSO</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment, which reports to a District Commander.
<b>Maritime Safety Security Teams (MSST)</b>	An <b>MSST</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment, which reports to an Area Commander.
	Night is defined as ½ hour after nautical sunset and ½ hour before nautical sunrise.
<b>Non-Pooled Station (Small)</b>	A <b>Non-Pooled Station (small)</b> is a <b>Station (small)</b> with permanently assigned personnel. These units will be assigned an Operating Facility (OPFAC) number, unit boat allowance and Officer-in-Charge (OIC).



TERM	DEFINITION
<b>Operational Commander</b>	For the purpose of this instruction, Operational Commanders are defined as those who exercise <i>direct</i> operational control of a subordinate unit with a standard boat or non-standard boat assigned. This definition specifically does not include <b>Station</b> COs/OICs exercising operational control of a <b>Station (small)</b> .
<b>Operations</b>	Time spent on pre-mission planning, underway, and post mission reporting or follow-up.
<b>Parent Station</b>	A parent <b>Station</b> is a unit with one or more subordinate <b>Station/s (small)</b> . Its command cadre allowance may be different from that of a typical unit to account for the increased responsibility associated with the assignment of subordinate <b>Station/s (small)</b> .
<b>Pooled Station (Small)</b>	The <b>Pooled Station (small)</b> is essentially a “remote operating location”, formerly known as a detachment.  A <b>Pooled Station (small)</b> appears in the <i>Operating Facilities (OPFAC) of the U. S. Coast Guard</i> , COMDTINST M5440.2 (series), but will not have a unique assigned OPFAC number, assigned unit boat allowance, personnel, or an OIC. The parent unit for this <b>Pooled Station (small)</b> has additional personnel and boat(s) to operate a boat from the physical location of the <b>Station (small)</b> .
<b>Port Security Unit (PSU)</b>	A <b>PSU</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned duty standers, unit boat allowance, and equipment, which reports to an Area Commander.
<b>Qualification</b>	The satisfactory completion of the appropriate qualification tasks.
<b>Readiness</b>	The ability of a boat to perform the functions and missions for which it was designed.
<b>Ready for Operations Team (RFO Team)</b>	A minimum of three members, the RFO team consists of members designated by the Operational Commander. Teams conduct annual assessment visits to ensure the goals of the Readiness and Standardization Program are achieved.
<b>Recertification Process</b>	The steps a crew member takes to regain command authorization to be assigned boat crew duties when prior certification has lapsed due to PCS transfer, failure to meet semi-annual/annual currency requirements, or revocation.
<b>Reserve Augmented Unit</b>	A Reserve Augmented Unit is a unit that relies on reserve personnel for at least one third of its primary duty section staffing for three or more months a year.



TERM	DEFINITION
<b>Rest-Recovery Time</b>	That period of time after operations and/or <b>Station</b> work which is allocated for rest and recovery and during which no other duties are assigned or performed. Any combination of off-duty time and standby duty may make up rest-recovery time. Rest-recovery time does not necessarily allow the individual to go home or otherwise leave the bounds of the unit.
<b>Rough Bar</b>	A rough bar is a river entrance or inlet where heavy seas or surf conditions exist. Also, in situations when the coxswain or the CO/OIC is unsure, a rough bar is assumed.
<b>Senior Boatswain's Mate</b>	The senior Boatswain's Mate permanently assigned, other than the OIC or XPO. For purposes of Boat Crew Training, this individual is considered a member of the command cadre whose primary function is to lend experience to the unit training program, and assist in the training and mentoring of subordinate personnel.
<b>Sleep Period</b>	A period of time available for an individual to devote to sleeping that is not interrupted by official responsibilities.
<b>Standardization Team (STAN Team)</b>	A three- to five-member deployable evaluation team that consists of highly trained and experienced professionals specializing in the operational/deck and engineering aspects of each standard boat platform. Each team conducts biennial assessment visits to ensure the goals of the Readiness and Standardization Assessment (outlined in this Manual) are achieved. These teams act as a deployable asset to the centers of excellence (BFC/NMLBS/NATON) for each standard boat platform, and in addition to providing field units with technical information, they support the centers by providing guidance and feedback to improve school training and program functions.
<b>Standards and Standardization</b>	The uniform application of processes, procedures, or techniques to ensure boat crew safety, proficiency, configuration, and vessel reliability. Standards are promulgated by Commandant (G-OCS) and (G-SEN) and are contained in various publications and directives. <i>Part 4, Chapter 7</i> provides a summary of directives, which contain policy, procedures and guidance affecting the Readiness and Standardization Program.
<b>Standby Duty</b>	A person is on standby duty when in a liberty status, but subject to recall to proceed on a mission as soon as the need is known, with a boat response time of two hours or less after notification.
<b>Station</b>	A <b>Station</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.



TERM	DEFINITION
<b>Station Aids to Navigation Team (STANT)</b>	A <b>STANT</b> is a Coast Guard shore facility with an OPFAC, command cadre, and permanently assigned dutystanders, unit boat allowance, and equipment.
<b>Station (Small)</b>	A <b>Station (small)</b> is a minimally staffed and resource constrained unit that receives operational direction, command, and support from its parent unit.
<b>Station Work</b>	Activities that constitute normal unit work which are not directly associated with duty, boat operations, pre-mission planning, or post-mission reporting and follow-up. Ex: boat maintenance, <b>Station</b> cleanup, non-mission administrative tasks.
<b>Structural Configuration Characteristics</b>	This applies to the fit, form, and function of structural vessel parts. Watertight closures, vessel coatings, and mounted equipment locations are managed by structural configuration requirements.
<b>Surf</b>	Surf is defined as the waves or swell of the sea breaking on the shore or a reef.
<b>Task</b>	A separate training step learned in order to perform a particular job skill.
<b>Task Code</b>	A four-element code used to identify the applicability of tasks listed in the Boat Crew Qualification Guide.
<b>Type</b>	
<b>Unit Commander</b>	A CO or OIC of a unit with a standard or non-standard boat assigned.
<b>Urgent Operations</b>	A mission of sufficient importance that the District Commander elects to execute it with a fatigued boat crew.
<b>Urgent SAR</b>	A mission that involves the probable loss of life unless the Coast Guard intervenes.



# Appendix H. List of Acronyms

**Introduction** This Appendix contains a list of acronyms used throughout the Manual.

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**In this Appendix** This Appendix contains the following information:

Topic	See Page
List of Acronyms	H-3

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U.S. Coast Guard Boat Operations and Training (BOAT) Manual, Volume I



<b>ACRONYM</b>	<b>DEFINITION</b>
ADSW-AC	Active Duty Special Work in Support of Active Component
ADT-AT	Active Duty Training for Annual Training
AEPO	Assistant Engineering Petty Officer
ANB	Aids to Navigation Boat
AOPS	Abstract of Operations
AOR	Area of Responsibility
APR	Aid Positioning Report
ASB	Arctic Survey Boat
ATB	Aviation Training Boat
ATR	Ammunition Transaction Report
BCEB	Boat Crew Examination Board
BCM	Boat Crew Member
BCMP	Boat Class Maintenance Plan
BECCE	Basic Engineering Casualty Control Exercises
BFC	Boat Forces Center
BM	Boatswain's Mate
BO/BTM PQS	Boarding Officer/Boarding Team Member Personnel Qualification Standard
BTM	Boarding Team Member
BU	Buoy Boat
BUSL	Buoy Utility Stern Loading
CAC	Crisis Action Center
CASCOR	Casualty Correct
CASREP	Casualty Report
CB-L	Cutter Boat - Large
CB-M	Cutter Boat - Medium
CB-OTH	Cutter Boat - Over the Horizon
CB-S	Cutter Boat - Small
CCB	Configuration Control Boards
CDAR	Collateral Duty Addictions Representative
CDV	Course Deviation Variance
CEM	Crew Endurance Management
CFC	Combined Federal Campaign
CGHRMS	Coast Guard Human Resource Management System
CGPC	Coast Guard Personnel Command
CO	Commanding Officer
CO/OIC	Commanding Officer/Officer-in-Charge
COMDTINST	Commandant Instruction



<b>ACRONYM</b>	<b>DEFINITION</b>
COTP	Captain-of-the-Port
CS	Creeping Line Search
CSIM	Control Station Interface Module
CSMP	Current Ship’s Maintenance Project
CSP	Commence Search Point
CSP	Career Sea Pay
CWO	Chief Warrant Officer
DDEC	Detroit Diesel Electronically Controlled
DEMPs	Diesel Engine Maintenance Programs
DGPS	Differential Global Positioning System
DoD	Department of Defense
DONCAF	Department of the Navy Central Adjudication Facility
DPB	Deployable Pursuit Boat
DR	Dead Reckoning
DWO	Deck Watch Officer
DWONR	Deck Watch Officer Navigation Rules
EBL	Electronic Bearing Line
EC	Electronic Control
ECM	Electronic Control Module
EDM	Electronic Display Module
EGIM	Electronic Gear Interface Module
ELC	Engineering Logistics Center
ELT	Enforcement of Laws and Treaties
EMT	Emergency Medical Technician
EO	Engineering Officer
EOCT	End-of-Course Test
EPES	Enlisted Personnel Evaluation System
EPO	Engineering Petty Officer
ERIM	Engine Room Interface Module
ESA	Endangered Species Act
ETA	Estimated Time of Arrival
EXCOM	Extended Communications
FID	Field Information Document
FOUO	For Official Use Only
FS	Food Service Specialist
FWS	Fish and Wildlife Service



<b>ACRONYM</b>	<b>DEFINITION</b>
GAR	Green-Amber-Red
GPS	Global Positioning System
GSA	General Services Administration
HAZMAT	Hazardous Materials
HPU	Hydraulic Power Unit
HWX	Heavy Weather
IDT	Inactive Duty Training
IMARV	Independent Maritime Response Vessel
IMPAC	International Merchant Purchase Authorization Card
ISO	International Standards Organization
JQR	Job Qualification Requirement
LCVP	Landing Craft, Vehicle, Personnel
LE	Law Enforcement
LEQB	Law Enforcement Qualification Board
LNG	Liquid Natural Gas
LORSTA	Loran Station
LUFS	Large Unit Financial System
MARSEC	Maritime Security
MBR INT	Member's Initials
MCB	Motor Cargo Boat
MDV	Marine Dealer Visit
MDZ	Maritime Defense Zone
MEDEVACS	Medical Evacuations
MEP	Marine Environmental Protection
MER	Marine Environmental Response
MI	Maintenance Inspection
MICA	Management Information for Configuration and Allowances
MILOPS	Military Operations
MIM	Marine Interface Module
MISLE	Marine Information for Safety and Law Enforcement
MLB	Motor Lifeboat
MLC	Maintenance and Logistics Command
MLEM	Maritime Law Enforcement Manual
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
MOB	Man Overboard
MOU	Memorandum of Understanding



<b>ACRONYM</b>	<b>DEFINITION</b>
MSB	Motor Surf Boat
MSO	Marine Safety Office
MSS	Marine Safety and Security
MSST	Maritime Safety and Security Team
MTL	Master Training List
MWR	Moral, Welfare and Recreation
NAVAIDS	Navigational Aids
NAVRULS	Navigation Rules
NDS	National Distress System
NLB	Nearshore Life Boat
NLT	No Later Than
NMEA	National Marine Electronics Association
NMFS	National Marine Fisheries Service
NMLBS	National Motor Lifeboat School
NSB	Non-Standard Boat
O/S WX	On-Scene Weather
OBA	Oxygen Breathing Apparatus
OIC	Officer-in-Charge
OIC INT	Officer-in-Charge's Initials
OJT	On-the-Job Training
OMMP	Occupational Medical Monitoring Program
OOD	Officer of the Deck/Day
OPAREA	Operational Area
OPCON	Operational Commander
OPFAC	Operating Facility
OPORDER	Operations Order
ORM	Operational Risk Management
OSB	Operations Standards Board
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
PAL	Personnel Allowance List
PCS	Permanent Change of Station
PDR	Personnel Data Record
PDS	Personnel Data System
PERSRU	Personnel Reporting Unit
PFD	Personal Flotation Device



<b>ACRONYM</b>	<b>DEFINITION</b>
PI	Personnel Inspection
PMS	Preventive/Planned Maintenance System
PO	Petty Officer
POB	Person Onboard
POPFAC	Parent Operating Facility
PPE	Personal Protective Equipment
PQS	Personnel Qualification Standard
PRECOM	Preliminary Communications
PTO	Power Take-Off
PWB	Ports and Waterways Boat
QEB	Qualification Examining Board
RB-HS	Response Boat - Homeland Security
RB-M	Response Boat - Medium
RB-S	Response Boat - Small
RBS	Recreational Boating Safety
RFO	Ready for Operations
SAR	Search and Rescue
SB	Sailboat
SC	SAR Coordinator
SITREP	Situation Report
SK	Storekeeper
SKF	Skiff
SMC	SAR Mission Coordinator
SOG	Speed Over Ground
SOP	Standard Operating Procedures
SPC	Special Purpose Craft
SPC (HWX)	Heavy Weather Special Purpose Craft
SPC (LE)	Law Enforcement Special Purpose Craft
SPE	Severity-Probability-Exposure
SPE/GAR	Severity-Probability-Exposure/Green-Amber-Red
SPS	Standard Positioning Service
SRA	Short Range Aids to Navigation
SRB	Surf Rescue Boat
SRS	Synchronous Reference Sensor
SRU	Search and Rescue Unit
SS	Square Search Single Unit
SSL	Standard Support Level



<b>ACRONYM</b>	<b>DEFINITION</b>
SSM	Support and Special Mission
SSMR	Shore Station Maintenance Record
STANT	Station Aids to Navigation Team
STAR	Standard Automated Requisitioning
STTR	Short-Term Resident Training Request
TAD	Temporary Assigned Duty
TANB	Trailerable AtoN Boat
TCM	Telecommunications Manual
TCT	Team Coordination Training
TD	Temporary Duty
TMT	Training Management Tool
TPSB	Transportable Port Security Boat
TRACEN	Training Center
TRATEAM	Training Team
TRS	Timing Reference Sensor
TSN	Track Line Search Single Unit Non-Return
TSR	Track Line Search Single Unit Return
U/W	Underway
UCMJ	Uniform Code of Military Justice
UMI	Universal Marine Interface
UPH	Unaccompanied Personnel Housing
UTB	Utility Boat
UTL	Utility Boat Light
UTM	Utility Boat Medium
VRM	Variable Range Marker
VS	Sector Search Single Unit
VSC	Vessel Safety Check
WLL	Working Load Limit
XO	Executive Officer
XPO	Executive Petty Officer
XTE	Cross Track Error
YN	Yeoman



# Index

## A

abstract of operations, 2-10, 2-33, 2-89, 3-31, 3-35, F-13, G-3, H-3  
 ADSW-AC, 5-32, H-3  
 ADT-AT, 5-32, H-3  
 AEPO, 3-15, H-3  
 aid positioning, 2-101, 2-103, 2-105, C-5, F-1, F-3, F-5, F-13, F-18, F-19, H-3  
 aid positioning report, F-18, H-3  
 aids to navigation, 2-4, 2-5, 2-9, 2-29, 2-30, 2-36, 2-72, 2-79, 2-100, 2-101, 2-103, 2-105, 2-114, 2-116, 4-36, 4-37, 4-44, 4-45, A-6, A-22, A-24, A-26, A-30, B-6, B-22, B-24, B-26, B-30, C-5, C-6, C-9, C-16, C-18, C-20, C-24, D-6, D-22, D-26, D-28, D-32, F-1, F-3, F-9, F-13, F-14, F-16, F-17, F-18, G-3, H-3  
 aids to navigation boat, H-3  
 alcohol consumption, 2-44  
 alongside tow, A-9, A-10, B-9, B-10, D-9, D-10  
 ammunition transaction report, 3-34, H-3  
 ANB, 2-6, 2-7, 5-49, E-1, E-3, E-15, F-21, H-3  
 anchor, A-21, A-35, A-37, A-39, A-43, A-45, B-21, B-35, B-37, B-39, B-44, B-47, B-51, B-53, C-15, C-29, C-31, C-35, C-37, C-39, C-41, D-21, D-37, D-39, D-43, D-45, D-47, E-3, E-12, E-19  
 ANT RFO, F-1, F-11  
 AOPS, 2-81, 2-89, 3-35, 3-36, 4-20, 5-37, 5-38, 5-46, F-13, G-3, H-3  
 AOR, 2-15, 2-19, 2-20, 2-29, 2-30, 2-57, 2-58, 2-76, 2-87, 3-8, 3-16, 3-19, 3-22, 3-23, 3-30, 3-31, 3-43, 5-40, 5-43, H-3  
 APR, F-18, H-3  
 arctic survey boat, 2-7, H-3  
 area of responsibility, 2-19, 2-57, 2-93, 3-8, 3-16, 5-38, 5-40, 5-43, F-17, H-3  
 ASB, 2-7, H-3  
 assistant engineering petty officer, 3-15, H-3  
 ATB, 2-7, H-3  
 AtoN, 2-6, 2-7, 2-9, 2-10, 2-28, 2-30, 2-101, 2-102, 2-103, 2-104, 2-105, 2-109, 3-5, 3-9, 4-44, 5-40, E-21, F-11, F-14, F-17, F-18, F-19, F-21, H-8  
 ATR, 3-34, H-3  
 auxiliariar certification, 2-97  
 auxiliary, 2-4, 2-5, 2-20, 2-23, 2-24, 2-25, 2-33, 2-34, 2-35, 2-40, 2-44, 2-45, 2-47, 2-62, 2-74, 2-79, 2-97, 2-111, 2-113, 2-114, 2-115, 2-116, 3-7, 3-8,

3-9, 3-30, 3-33, 3-35, 3-36, 5-4, 5-11, 5-21, 5-38, 5-50, B-40, B-42, B-44, B-58, F-6, G-3  
 aviation training boat, 2-7, H-3

## B

bar, 2-47, 3-42, 5-18, 5-19, A-5, A-21, A-23, A-39, B-5, B-21, B-23, C-15, C-17, D-5, D-21, D-25, E-6, E-19, G-7  
 basic engineering casualty control exercise, 4-36, A-33, B-33, C-27, D-35, H-3  
 BCEB, 2-87, 5-6, 5-13, 5-15, 5-16, 5-17, 5-18, 5-19, 5-20, 5-33, 5-35, G-3, H-3  
 BCM, 5-39, 5-40, 5-44, H-3  
 BCMP, 4-6, H-3  
 beach rescue, 2-75, 2-76  
 BECCE, 4-36, 5-40, H-3  
 billet request, 2-48  
 BM, 3-35, H-3  
 BO, 2-86, 2-89, 2-95, 2-110, 5-54, H-3  
 BO/BTM PQS, 2-86, 2-89, 2-95, H-3  
 boarding team, 2-18, 2-22, 2-24, 2-26, 2-40, 2-54, 2-79, 2-80, 2-87, 2-89, 2-93, 2-94, 2-95, 2-96, 2-97, 2-98, 2-101, 2-110, 2-116, 3-4, 3-21, 3-35, 3-36, 5-53, 5-55, F-13, H-3  
 boarding team member, 2-18, 2-54, 2-79, 2-87, 2-93, 2-94, 2-95, 2-96, 2-97, 2-98, 2-101, 2-116, 3-21, 3-35, 3-36, 5-53, 5-55, F-13, H-3  
 boat class maintenance plan, 4-5, 4-6, H-3  
 boat crew certificates, 5-45, 5-50  
 boat crew examination board, 5-6, 5-9, 5-15, G-3, H-3  
 boat crew member, 2-36, 2-37, 2-49, 2-56, 2-65, 2-87, 2-93, 2-103, 2-104, 2-106, 2-107, 2-108, 3-11, 3-16, 3-20, 3-21, 4-17, 4-18, 4-21, 4-33, 4-34, 4-35, 5-4, 5-7, 5-11, 5-12, 5-15, 5-16, 5-20, 5-24, 5-34, 5-37, 5-44, 5-48, 5-49, 5-55, G-3, H-3  
 boat crew training, 2-34, 2-35, 2-80, 2-81, 4-5, 4-12, 4-13, 4-14, 4-17, 4-21, 4-23, 4-35, 5-1, 5-3, 5-4, 5-5, 5-6, 5-9, 5-10, 5-11, 5-45, 5-46, F-13, G-3, G-7  
 boat deployments, 2-34  
 boat force operations insignia criteria, 2-1, 2-113  
 boat handling, 2-46, 4-21, 5-16, 5-17, 5-18, 5-19, 5-38, 5-40  
 boat keepers, 3-11, 3-17  
 boat operations, 1-1, 2-1, 2-3, 2-41, 2-44, 2-50, 2-53, 2-67, 2-81, 2-94, 2-95, 2-97, 2-114, 2-115, 3-37, 4-8, 4-13, 4-34, 5-4, 5-7, 5-9, 5-12, 5-17, 5-18, 5-19,



5-29, 5-39, 5-40, 5-41, 5-42, 5-44, 5-46, 5-52, 5-53, 5-55, 5-56, G-8  
boat piloting, 5-34  
boat safety program, 2-65  
boat unit, 1-1, 2-1, 2-3, 2-4, 2-5, 2-11, 2-12, 2-18, 2-100, 2-115, 3-3, 3-4, 4-21  
boom operator, F-14  
breaking seas, 3-39, 3-48, 3-49  
bridle, A-10, B-10, D-10  
BTM, 2-95, 2-96, 5-54, H-3  
BU, 2-7, F-21, H-3  
buoy boat, 2-7, H-3  
buoy deck supervisor, C-10, F-6, F-13  
buoy operations, 4-35, C-3, C-9, F-1, F-3  
Buoy Utility Stern Loading Boat, 2-6, 4-44, 5-6, C-5, C-9, C-11, C-15, C-17, C-19, C-23, C-29, C-31, C-33, C-35, C-37, C-39, C-41, H-3  
BUSL, 2-6, 4-6, 4-35, 4-36, 4-44, 4-45, 4-46, 5-6, 5-49, C-1, C-3, C-5, C-9, C-11, C-13, C-15, C-17, C-19, C-23, C-27, C-29, C-31, C-33, C-35, C-37, C-39, C-41, F-4, F-21, G-8, H-3

## C

cable, 2-7, A-33, A-37, C-27, C-31, E-4, E-13, E-14  
CAC, 2-60, H-3  
captain-of-the-port, 2-21, H-4  
career sea pay, H-4  
CASCOR, H-3  
CASREP, 2-72, 2-73, 4-20, 4-29, 4-30, H-3  
casualty correct, H-3  
casualty report, 2-72, 2-73, 4-29, 4-30, H-3  
CB-L, 2-6, 5-49, H-3  
CB-M, 2-6, 5-49, H-3  
CB-OTH, 2-6, 5-49, 5-53, 5-54, H-3  
CB-S, 2-6, 5-49, H-3  
CDAR, 2-101, 3-14, 3-34, H-3  
CDV, H-3  
CEM, 2-46, G-4, H-3  
certification, 2-34, 2-36, 2-79, 2-86, 2-87, 2-89, 2-94, 2-95, 2-97, 2-100, 2-104, 2-107, 2-108, 2-110, 2-115, 2-116, 2-117, 3-32, 3-35, 3-36, 3-37, 4-21, 4-23, 4-34, 5-1, 5-3, 5-4, 5-5, 5-6, 5-9, 5-10, 5-11, 5-12, 5-13, 5-14, 5-15, 5-19, 5-20, 5-23, 5-29, 5-31, 5-32, 5-33, 5-35, 5-36, 5-37, 5-38, 5-39, 5-44, 5-45, 5-47, 5-50, 5-51, 5-53, 5-55, 5-56, F-13, G-3, G-6  
certification/lapse and recertification, 2-79, 2-97  
CFC, 3-34, H-3  
CGPC, 2-99, 2-115, 2-117, H-3  
channel, 5-43  
check-ride, 2-87, 3-12, 5-5, 5-6, 5-12, 5-15, 5-16, 5-17, 5-18, 5-19, 5-20, 5-32, 5-33, 5-35  
chief warrant officer, H-4  
civil preparedness, 2-39, 2-58  
cleats, E-12, E-20  
CO, 1-1, 2-10, 2-34, 2-35, 2-36, 2-37, 2-60, 2-62, 2-69, 2-74, 2-75, 2-84, 2-86, 2-87, 2-88, 2-90, 2-92, 2-93, 2-94, 2-95, 2-97, 2-102, 2-103, 2-104, 2-105, 2-106, 2-107, 2-114, 2-117, 3-4, 3-5, 3-9, 3-10, 3-11, 3-12, 3-13, 3-14, 3-15, 3-19, 3-20, 3-21, 3-23, 3-30, 3-33, 3-35, 3-38, 3-44, 4-35, 4-45, 5-5, 5-10, 5-11, 5-12, 5-15, 5-18, 5-19, 5-31, 5-32, 5-36, 5-37, 5-38, 5-43, 5-44, 5-50, 5-53, 5-55, G-3, G-7, G-8, H-3  
CO/OIC, 2-34, 2-35, 2-36, 2-37, 2-60, 2-62, 2-69, 2-74, 2-75, 2-84, 2-86, 2-87, 2-88, 2-90, 2-92, 2-93, 2-94, 2-95, 2-97, 2-102, 2-105, 3-4, 3-5, 3-9, 3-10, 3-11, 3-12, 3-13, 3-14, 3-15, 3-19, 3-21, 3-23, 3-30, 3-33, 3-35, 3-44, 4-45, 5-5, 5-10, 5-11, 5-12, 5-15, 5-18, 5-19, 5-31, 5-32, 5-36, 5-37, 5-38, 5-43, 5-44, 5-50, 5-53, 5-55, G-7, H-3  
coast guard personnel command, 2-99, H-3  
collateral duties, 3-4, 3-11, 3-14, 3-17  
combined federal campaign, 3-14, H-3  
command cadre, 2-4, 2-5, 2-6, 2-33, 2-35, 2-71, 2-90, 2-97, 3-3, 3-4, 3-5, 3-8, 3-9, 3-10, 3-11, 3-13, 3-44, 4-8, 4-22, 4-23, 4-34, 5-5, 5-10, 5-11, 5-12, G-3, G-4, G-5, G-6, G-7, G-8  
commence search point, H-4  
communications watchstander, 2-11, 2-12, 2-15, 2-79, 2-87, 2-93, 2-94, 2-95, 2-97, 2-98, 3-4, 3-16, 3-19, 3-20, 3-21, 3-22, 5-44, 5-55, C-5, D-5  
compass course, A-30, B-30, C-24, D-32  
completion worksheet, F-1, F-21  
control station interface module, H-4  
COTP, 2-21, 2-26, 2-27, 2-28, 2-29, 2-31, 2-32, H-4  
course deviation variance, H-3  
CPR, 5-39  
creeping line search, 4-36, A-25, B-25, C-19, D-27, H-4  
crew brief, 2-16, 5-17, 5-18, 5-19  
crew endurance management, 2-46, G-4, H-3  
crew fatigue, 2-46, 2-49, 2-51, 2-52  
crew rest and utilization, 2-39, 2-46, 2-48  
crewmember piloting proficiency, 4-36, A-19, A-23, B-19, B-23, C-13, C-17, D-19, D-25, F-21  
crisis action center, 2-60, H-3  
CS, 4-36, 5-41, A-25, B-25, C-19, D-27, H-4  
CSIM, H-4  
CSMP, 3-34, 4-12, F-15, H-4  
CSP, A-25, A-26, A-29, A-30, B-25, B-26, B-29, B-30, C-19, C-20, C-23, C-24, D-27, D-28, D-31, D-32, H-4  
CT-64, 2-7  
currency maintenance, 2-79, 2-98, 4-8, 4-34, 5-1, 5-4, 5-12, 5-37, 5-38, 5-39, 5-43, 5-44, 5-50, 5-51, 5-52, 5-54, 5-55



current ship's maintenance project, H-4  
cutting, E-20  
CWO, 4-35, 5-11, H-4

## D

day/night navigation and piloting, 4-35  
DDEC, B-51, B-55, B-57, H-4  
dead reckoning, H-4  
deck department, 3-5, 3-9, 3-10, 3-11, 3-15, 3-16  
deck watch officer, 5-44, H-4  
deck watch officer navigation rules, H-4  
defense operations, 2-28  
DEMPs, H-4  
Department of Defense, 2-28, H-4  
department of the navy central adjudication facility, H-4  
depth of water, 5-43, A-14, A-22, A-24, B-14, B-22, B-24, B-41, B-43, C-16, C-18, D-14, D-22, D-26  
detroit diesel electronically controlled, H-4  
dewatering, 4-35, A-3, A-13, A-14, B-3, B-13, B-14, D-3, D-13, D-14, E-3  
DGPS, A-17, A-21, A-22, A-23, B-17, B-21, B-22, B-23, C-5, C-11, C-15, C-16, C-17, D-17, D-21, D-22, D-25, E-16, F-5, F-6, H-4  
diesel engine maintenance programs, H-4  
disabling casualties, 4-28, 4-29, 4-30, 4-31, 4-35  
district commander responsibilities, 2-83  
DoD, 2-22, 2-28, 2-29, 2-80, H-4  
DONCAF, 3-34, H-4  
DPB, 2-7, 5-49, H-4  
DR, A-5, A-6, A-21, A-22, A-23, A-24, A-26, A-29, A-30, B-5, B-6, B-21, B-22, B-23, B-24, B-26, B-29, B-30, C-5, C-6, C-15, C-16, C-17, C-18, C-20, C-23, C-24, D-5, D-6, D-21, D-22, D-25, D-26, D-28, D-31, D-32, H-4  
drifting pattern, 5-41, A-19, A-29, B-19, B-29, C-13, C-23, D-19, D-31  
drogue, A-10, B-10, D-10  
drugs and medication, 2-44  
dummy, 3-35  
duty rotation, 2-48, 2-101, 3-19, 3-23, 3-24, 3-25, 3-26, 3-27, 3-28, 3-32  
duty section, 2-4, 2-5, 2-44, 2-48, 2-49, 2-85, 2-93, 2-94, 2-95, 2-108, 2-109, 3-3, 3-4, 3-5, 3-7, 3-8, 3-9, 3-16, 3-19, 3-20, 3-21, 3-23, 3-26, 3-27, 3-28, 5-24, G-3, G-6  
duty section watch relief, 2-48  
dutystander certification, 2-93, 2-97  
dutystander qualification training program, 2-84, 2-86  
DWO, 5-44, H-4  
DWONR, H-4

## E

EBL, A-22, B-22, C-16, D-22, H-4  
EC, 4-9, 4-20, G-4, H-4  
EDM, B-47, B-49, B-51, B-53, B-57, H-4  
educational services officer, 2-90, 2-92, 3-18  
EGIM, H-4  
ELC, 4-6, 4-9, H-4  
electrical charging system, B-33, B-57  
electrical safety, 2-63, 2-109  
electrical system, G-5  
electronic bearing line, H-4  
electronic charting system, C-5  
electronic control, B-52, H-4  
electronic control module, H-4  
electronic display module, B-57, H-4  
electronic gear interface module, H-4  
ELT, 2-9, 2-18, 2-19, 2-20, 2-22, 2-47, 2-49, 3-30, H-4  
ELT boarding, 2-18, 2-22  
ELT patrol, 2-20, 2-22  
emergency lights, 2-75, 2-76  
Emergency Medical Technician, 5-39, E-8, E-17, H-4  
emergency planning, 2-45  
emergent mission requirements, 2-69  
endangered species act, 2-56, 2-58, H-4  
End-of-Course Test, 3-34, 5-44, H-4  
enforcement of laws and treaties, 2-9, 2-10, 2-18, H-4  
engine high water temperature, 4-36, D-35, D-45  
engine room interface module, H-4  
engineering administration, 2-102, 2-105, F-1, F-15, F-21  
engineering logistics center, 4-6, H-4  
Engineering Officer, 2-64, 2-85, 2-117, 3-4, 5-11, 5-12, H-4  
engineering petty officer, 2-36, 2-102, 2-105, H-4  
enlisted personnel evaluation system, H-4  
environmental health and safety program, 2-62  
EPES, 3-14, 3-34, H-4  
EPO, 2-36, 2-64, 2-85, 2-102, 2-105, 2-116, 2-117, 3-4, 3-5, 3-9, 3-12, 3-15, 5-11, 5-12, F-11, F-15, G-3, H-4  
ERIM, H-4  
ESA, 2-56, 2-57, 2-58, H-4  
estimated time of arrival, H-4  
ETA, A-5, A-6, A-21, A-22, A-23, A-24, A-25, A-26, B-5, B-6, B-21, B-22, B-23, B-24, B-25, B-26, C-5, C-6, C-15, C-16, C-17, C-18, C-19, C-20, D-5, D-6, D-21, D-22, D-25, D-26, D-27, D-28, H-4  
evaluation team, 4-7, 4-11, 4-13, 4-14, 4-34, A-19, A-33, B-19, B-33, C-13, C-27, D-19, D-35, G-7  
EXCOM, 2-15, H-4  
expanding square, 4-36, A-29, B-29, C-23, D-31



exportable training, 2-80, 2-82, 2-98, 2-99  
extended communications, 2-15, H-4

## F

fathometer, A-6, A-22, A-24, A-26, A-30, B-6, B-22, B-24, B-26, B-30, C-6, C-16, C-18, C-20, C-24, D-6, D-22, D-26, D-28, D-32, F-5  
fatigue, 2-46, 2-47, 2-48, 2-49, 2-50, 2-51, 2-52, 2-64, 3-9, 3-20, 3-24, 3-25, 3-26, 3-27, 3-28, G-4, G-5  
ferry, 2-7  
FID, F-18, H-4  
field information document, F-18, H-4  
fire, 2-55, 2-56, 2-58, 2-60, 2-95, 3-21, 3-39, 4-36, 5-34, A-33, A-35, A-43, B-33, B-35, B-36, C-27, C-29, C-35, D-35, D-37, D-43, E-4, E-7, E-8, E-12, E-16, E-18, E-19, E-20, E-21, E-22, E-23, F-21  
fire in the engine room, A-33, A-35, B-33, B-35, C-27, C-29  
fire suppression, 2-55  
first-aid, 5-38, 5-39, A-17, B-17, C-11, D-17, E-7, E-12, E-18  
fish and wildlife service, 2-21, 2-57, H-4  
fittings, 4-27, E-21  
float plan, 2-67, 2-72  
flooding, 5-34, A-13, A-14, A-41, B-13, B-14, B-41, B-42, B-43, B-44, C-33, D-13, D-14, D-41  
food service specialist, 3-5, 3-14, H-4  
for official use only, H-4  
formal schools, 2-79, 2-82, 2-98, 2-99, 2-100, 2-102, 2-103, 2-104, 2-105, 2-106, 2-107, 2-108  
FOUO, H-4  
FS, 2-104, 2-107, 3-14, H-4  
FWS, 2-21, H-4

## G

GAR, H-5  
global positioning system, H-4, H-5  
G-OCS, 1-1, 2-48, 2-53, 2-77, 2-81, 2-83, 2-86, 2-98, 2-100, 2-102, 2-103, 2-104, 2-105, 2-106, 2-107, 2-108, 2-114, 3-20, 3-32, 3-38, 3-48, 4-5, 4-8, 4-9, 4-13, 4-23, 4-26, 4-37, 5-9, 5-11, 5-44, G-7  
gold- and pewter-tone insignia, 2-113, 2-116, 2-117  
GPS, 2-43, A-5, A-6, A-9, A-13, A-17, A-21, A-22, A-23, A-24, A-25, A-26, A-29, A-30, B-5, B-6, B-9, B-13, B-17, B-21, B-22, B-23, B-24, B-25, B-26, B-29, B-30, C-11, C-15, C-16, C-17, C-18, C-19, C-20, C-23, C-24, D-5, D-6, D-9, D-13, D-17, D-21, D-22, D-25, D-26, D-27, D-28, D-31, D-32, E-5, E-12, F-5, H-5

GPS/DGPS, A-17, A-21, A-22, A-23, A-24, B-17, B-21, B-22, B-23, B-24, C-11, C-15, C-16, C-17, C-18, D-17, D-21, D-22, D-25, D-26, E-12, F-5  
green-amber-red, H-5, H-7  
GSA, 3-14, 3-34, F-5, H-5  
G-WTT, 2-80, 2-81, 2-82, 2-83, 2-100

## H

hard grounding, 4-36, B-33, B-43  
hazard communication, 2-62, 2-63  
hazardous materials, 2-32, H-5  
HAZMAT, 3-34, H-5  
hearing conservation, 2-63  
heat stress, 2-62, 2-64, 2-109, G-5  
heavy seas, 5-34, 5-35, G-7  
heavy seas or surf, G-7  
heavy weather, 2-7, 2-47, 2-49, 2-51, 2-93, 2-104, 2-105, 2-106, 3-1, 3-37, 3-38, 3-39, 5-4, 5-5, 5-7, 5-11, 5-15, 5-17, 5-18, 5-24, 5-32, 5-34, 5-38, 5-40, 5-41, 5-42, 5-44, 5-47, 5-49, 5-50, 5-51, 5-56, A-9, B-9, G-3, G-5, H-5, H-7  
heavy weather approach, A-9, B-9  
heavy weather towing, 5-18, 5-42  
helmsman, A-22, B-22, B-37, B-39, C-16, D-22  
homeland security, 2-6, 2-27, H-7  
HPU, H-5  
hydraulic power unit, H-5

## I

IDT, 5-32, H-5  
IMARV, H-5  
IMPAC, 3-14, 3-33, H-5  
inactive duty training, 5-32, H-5  
independent maritime response vessel, H-5  
inlet, 3-43, 3-44, G-7  
insignia, 2-113, 2-115, 2-117  
international merchant purchase authorization card, H-5  
international standards organization, H-5  
ISO, 4-20, H-5

## J

jammed rudder, 4-36, A-39  
job qualification requirement, 2-85, 2-86, 2-87, 2-95, H-5  
JQR, 2-85, 2-87, 2-88, 2-89, 2-91, 2-92, 2-95, 3-17, F-13, H-5

## K

knots, 2-51, 3-37, 3-39, 3-46, 3-48, 3-49, G-5



## L

landing craft, vehicle, personnel, H-5  
 large unit financial system, H-5  
 law enforcement patrol, 2-20, 2-21  
 law enforcement qualification board, 2-87, H-5  
 LCVP, 2-7, H-5  
 leave/liberty policy, 2-60  
 LEQB, 2-87, H-5  
 line handling, 2-65, 5-16  
 liquid natural gas, H-5  
 LNG, H-5  
 lookout watch, A-17, B-17, C-11, D-17  
 loran station, H-5  
 LORSTA, H-5  
 loss of control of engine RPM, 4-36, B-55, C-39  
 loss of fuel oil pressure, 4-36, B-33, B-53, C-27, C-41, F-21  
 loss of main engine lube oil pressure, A-33, A-43, B-33, B-47, C-27, C-35  
 loss of steering, 4-36, A-33, A-37, A-39, B-33, B-37, B-39, C-27, C-31, D-35, D-39, F-21  
 low voltage alarm, B-33, B-57  
 lube oil pressure, 4-36, A-43, B-47, B-57, C-35, D-35, D-43  
 LUFSS, 2-101, 3-14, 3-33, H-5

## M

magnetic course, 5-43  
 main engine, A-33, A-45, B-33, B-49, C-27, C-37, F-21, G-5  
 main engine high water temperature, A-33, A-45, B-33, B-49, C-27, C-37, F-21  
 maintenance and logistics command, 4-6, 4-45, H-5  
 maintenance inspection, H-5  
 man overboard, 4-35, 5-40, A-3, A-17, B-3, B-17, C-3, C-11, D-3, D-17, F-21, H-5  
 marine dealer visit, 2-23, 2-24, H-5  
 marine environmental protection, 2-9, 2-10, 2-28, 2-31, H-5  
 marine environmental response, 3-30, H-5  
 marine interface module, H-5  
 marine mammal protection act, 2-56, H-5  
 marine protected species, 2-56  
 marine safety and security, H-6  
 marine safety office, 2-4, 2-5, 2-114, G-5, H-6  
 maritime defense zone, H-5  
 maritime law enforcement, 2-18, 2-19, 2-22, 2-23, 2-28, 2-31, 2-33, 2-35, 2-39, 2-40, 2-44, 2-55, 2-57, 2-62, 2-64, 2-76, 2-93, 5-53, 5-55, H-5  
 maritime safety security teams, G-5  
 maritime SAR planning, 2-107  
 master training list, 2-100, H-6

material checklist, E-1, E-3, E-11, E-15  
 materiel inspections, 4-1, 4-27, 4-29, 4-30, 4-39  
 maximum underway hours, 2-47, 2-49, 2-51  
 MBR INT, 5-53, H-5  
 MCB, 2-7, H-5  
 MDV, H-5  
 MDZ, H-5  
 MEDEVACS, 2-55, H-5  
 medical evacuation, 2-55, H-5  
 memorandum of agreement, 2-28, H-5  
 memorandum of understanding, H-5  
 MEP, 2-9, 2-10, 2-31, 2-32, 2-49, H-5  
 MER, 3-30, H-5  
 message format, 2-51  
 MI, 3-14, 3-34, H-5  
 military training, 2-79, 2-81, 2-82, 2-89, 2-91, 2-108, 2-109, 3-17  
 MIM, H-5  
 minimum crew requirement, 2-53  
 minor lighted fixed aid, F-1, F-9  
 MISHAP report, 2-72, 2-73, 3-34  
 MISLE, 3-35, 3-36, H-5  
 mission authorization, 2-1, 2-33  
 mission planning, 2-1, 2-16, 2-20, 2-39, 2-40, 2-41, 2-43, 2-45, G-6, G-8  
 MLB, 2-6, 2-7, 2-52, 2-104, 2-105, 2-106, 2-107, 3-37, 3-38, 3-41, 3-48, 3-49, 4-6, 4-8, 4-14, 4-25, 4-35, 4-36, 4-44, 4-45, 4-46, 5-6, 5-49, 5-56, B-1, B-3, B-5, B-9, B-13, B-17, B-19, B-21, B-23, B-25, B-29, B-33, B-35, B-37, B-39, B-41, B-43, B-44, B-47, B-49, B-50, B-51, B-53, B-55, B-57, G-8, H-5  
 MLB surf training, 3-48, 3-49  
 MLC, 2-63, 2-83, F-11, F-15, H-5  
 MMPA, 2-56, 2-57, H-5  
 MOA, 2-28, H-5  
 MOB, 4-35, 5-40, A-3, A-17, B-3, B-17, C-3, C-11, D-3, D-17, H-5  
 moor, A-9, A-11, B-9, B-11, D-9, D-11  
 mooring evolution, F-3  
 mooring pull, 4-35, C-3, C-9, F-1, F-3  
 moral, welfare and recreation, H-6  
 motion sickness, 2-47, 2-49, G-5  
 Motor Lifeboat, 2-6, 3-41, 3-48, H-5  
 Motor Surf Boat, 2-6, H-6  
 MOU, H-5  
 MSB, 2-6, 5-49, H-6  
 MSO, 2-4, 2-5, 2-21, 2-26, 2-29, 2-31, 2-32, 2-55, G-5, H-6  
 MSS, H-6  
 MSST, 2-4, 2-5, 2-94, 5-32, 5-40, G-5, H-6  
 MTL, H-6  
 MWR, 2-33, H-6

**N**

national defense, 2-28, 2-41  
national distress system, 3-22, 3-32, H-6  
national marine electronics association, H-6  
national marine fisheries service, 2-21, 2-57, H-6  
national motor lifeboat school, 2-81, 3-38, 3-43, 3-44, 3-48, 4-8, 4-36, 4-37, 4-46, 5-52, H-6  
natural disaster, 2-39, 2-58, 2-59, 2-60, 2-61  
nautical chart, F-17, F-19  
NAVAIDS, 5-34, H-6  
navigation and piloting, 5-17, 5-41, A-3, A-5, B-3, B-5, C-3, C-5, D-3, D-5, F-21  
navigation kit, E-12  
navigation lights, A-5, A-9, A-10, A-11, A-13, A-21, A-23, B-5, B-9, B-10, B-11, B-13, B-21, B-23, C-6, C-15, C-17, D-5, D-9, D-10, D-11, D-13, D-21, D-25, E-11  
navigation rules, 2-72, 5-6, A-5, A-9, A-13, A-17, A-21, A-23, A-25, A-29, B-5, B-9, B-13, B-17, B-21, B-23, B-25, B-29, C-5, C-9, C-11, C-15, C-17, C-19, C-23, D-5, D-9, D-13, D-17, D-21, D-25, D-27, D-31, F-3, H-6  
navigation rules of the road, 2-72  
navigational aids, H-6  
NAVRULS, H-6  
NDS, 3-22, 3-32, H-6  
night vision, 2-67, 2-77, 2-78, A-5, A-24, A-26, A-30, B-5, B-24, B-26, B-30, C-6, C-18, C-20, C-24, D-5, D-26, D-28, D-32  
NLT, H-6  
NMEA, F-5, H-6  
NMFS, 2-21, H-6  
NMLBS, 2-104, 2-105, 2-106, 2-114, 4-8, 5-5, G-7, H-6  
non-standard boat, 2-6, 2-7, 2-68, 2-69, 2-73, 2-74, 2-75, 4-4, 4-21, 4-28, 4-44, E-1, G-6, G-8, H-6  
NSB, 2-6, 2-69, E-1, E-11, F-21, H-6  
NSB outfit, 2-69

**O**

O/S WX, A-26, A-30, B-26, B-30, C-20, C-24, D-28, D-32, H-6  
OBA, H-6  
occupational medical monitoring program, 2-63, H-6  
occupational safety and health administration, 2-63, H-6  
officer-of-the-day, 2-36, 2-95, 2-103, 2-106  
offshore operations, 2-67, 2-74  
OIC, 1-1, 2-4, 2-10, 2-36, 2-85, 2-92, 2-102, 2-104, 2-107, 2-116, 2-117, 3-7, 3-8, 3-10, 3-11, 3-19, 3-20, 3-23, 3-36, 3-38, 4-35, 5-31, 5-32, 5-43, 5-44,

5-50, 5-53, 5-54, F-11, F-13, F-19, G-3, G-5, G-6, G-7, G-8, H-6  
OIC INT, 5-53, 5-54, H-6  
OJT, 2-99, H-6  
OMMP, 2-63, H-6  
on-the-job training, 2-99, H-6  
OOD, 2-36, 2-40, 2-72, 2-87, 2-93, 2-95, 2-103, 2-106, 3-9, 3-19, 3-20, 3-21, H-6  
OPAREA, 5-34, H-6  
operating facility, 2-4, 3-8, G-5, H-6  
operational area, 5-34, H-6  
operational commander evaluation, 4-11, 4-12  
operational risk management, 2-10, 2-11, 2-13, 2-16, 2-18, 2-31, 2-40, 2-41, 3-37, 3-38, 3-48, 4-44, 5-38, 5-39, C-9, F-9, H-6  
operations and missions, 2-1  
operations order, 3-35, H-6  
operations standards board, 3-16, H-6  
OPFAC, 2-3, 2-4, 2-5, 2-70, 3-4, 3-5, 3-7, 3-8, G-3, G-4, G-5, G-6, G-7, G-8, H-6  
OPORDER, 3-35, 3-36, H-6  
ORM, 2-10, 2-16, 2-19, 2-20, 2-32, 2-41, 2-45, 3-38, H-6  
OSB, H-6  
OSC, 2-13, 2-14, 2-15, 2-16, 2-71, 2-76, F-4, F-6, H-6  
OSHA, 2-63, H-6  
oxygen breathing apparatus, H-6

**P**

PAL, 3-10, F-11, H-6  
parallel, 4-36, A-25, B-25, B-58, C-19, D-27  
parallel search, A-25, B-25, C-19, D-27  
parent operating facility, H-7  
passengers, 2-37, 2-43, 2-67, 2-69, 5-24  
PCS, 2-89, 5-33, 5-35, 5-46, 5-56, G-6, H-6  
PDR, 2-94, 2-115, 2-117, 5-48, H-6  
PDS, H-6  
permanent change of station, H-6  
personal qualification standard, 2-18, 2-79, 2-93, 2-95, 2-96, 2-97, 2-98, 2-116, 5-53  
personal watercraft, 2-53, 2-75, 2-76  
person-in-the-water, 5-17, 5-18, 5-19, 5-38  
personnel allowance list, 3-5, F-11, H-6  
personnel data record, 2-115, 2-117, H-6  
personnel data system, H-6  
personnel inspection, H-7  
personnel reporting unit, H-6  
PERSRU, 2-94, 5-48, 5-56, H-6  
petty officer, 2-36, 2-91, 2-92, 2-94, 2-96, 2-102, 2-105, 2-109, 3-5, 3-10, 3-13, 3-15, 3-16, 5-23, 5-46, H-7, H-8  
pewter-tone insignia, 2-113, 2-114, 2-115, 2-117



PFD, H-6  
 physical fitness, 2-96, 2-110, 4-8, 4-14, 5-21, 5-23, 5-24, 5-25, 5-33, 5-35, 5-38, 5-39  
 PI, 3-14, 3-34, H-7  
 pier, F-5  
 planned maintenance system, 3-16, H-7  
 PMS, 3-16, 3-34, 4-4, 4-5, 4-6, 4-7, 4-12, 4-17, 4-20, 4-22, 4-23, 4-26, 4-27, 4-28, 4-39, 4-40, F-15, H-7  
 PO, 3-9, 3-13, H-7  
 POB, A-9, A-13, A-14, B-9, B-13, B-14, D-9, D-13, D-14, H-7  
 pointer, A-11, A-17, B-11, B-17, C-11, D-11, D-17  
 pollution response, 2-31, 2-32  
 POPFAC, 2-92, 3-18, H-7  
 portable pump, A-14, B-14, B-35, D-14, E-22  
 position and operations normal report, 2-70  
 posts, E-6  
 power take-off, E-9, H-7  
 PPE, 4-22, 4-39, 4-40, 4-41, H-7  
 PQS, 2-18, 2-79, 2-80, 2-84, 2-85, 2-86, 2-87, 2-88, 2-89, 2-91, 2-92, 2-93, 2-94, 2-95, 2-96, 2-97, 2-98, 2-99, 2-104, 2-107, 2-108, 2-116, 3-17, 4-44, 5-53, F-13, F-14, H-7  
 precision navigation pattern, A-19, A-25, B-19, B-25, C-13, C-19, D-19, D-27  
 PRECOM, 2-15, H-7  
 preliminary communications, 2-15, H-7  
 pre-MISHAP plan, 2-63, 2-64  
 preventative maintenance system, 4-45  
 proficiency maintenance, 5-5, 5-6, 5-14, 5-38, 5-52  
 propulsion equipment, 5-16  
 propulsion system, B-42, B-44  
 PS, 2-59, 4-36, 5-41, A-25, B-25, C-19, D-27  
 PTO, E-9, H-7  
 public affairs operations, 2-67, 2-69, 2-75  
 PWB, 2-7, 5-49, H-7  
 pyrotechnics, 5-44

## Q

QEB, 2-85, 2-87, 2-88, H-7  
 qualification and certification, 5-11, 5-12, 5-32, 5-45, 5-47, 5-50  
 qualification code, 2-93, 2-94, 2-115, 2-116, 3-44, 5-4, 5-33, 5-48, 5-49, 5-56  
 qualification examining board, 2-85, 2-87, 2-97, 3-16, H-7  
 qualification task, 2-96, 2-115, 5-4, 5-5, 5-6, 5-7, 5-14, 5-15, 5-18, 5-19, 5-23, 5-28, 5-29, 5-33, 5-41, 5-45, G-6

## R

radio, 2-71, 3-32, 3-48, A-5, A-9, A-10, A-13, A-17, A-21, A-23, A-25, A-29, B-5, B-9, B-10, B-13, B-17, B-21, B-23, B-25, B-29, B-35, B-58, C-5, C-11, C-15, C-17, C-19, C-23, D-5, D-9, D-10, D-13, D-17, D-21, D-25, D-27, D-31, E-5, E-11, E-16, E-17  
 radio log, 2-71  
 RB-HS, 2-6, 4-6, 4-8, 4-35, 4-36, 4-46, 5-49, D-1, D-3, D-19, D-35, D-47, H-7  
 RB-M, 2-6, H-7  
 RBS, 2-9, 2-23, 2-24, 2-25, 2-95, 3-30, H-7  
 RB-S, 2-7, 4-6, 4-8, 4-35, 4-36, 4-46, 5-49, D-1, D-3, D-19, D-35, D-47, H-7  
 readiness and standardization, 2-43, 2-68, 2-69, 2-73, 2-117, 4-1, 4-3, 4-4, 4-5, 4-6, 4-7, 4-8, 4-9, 4-11, 4-12, 4-14, 4-17, 4-18, 4-20, 4-22, 4-23, 4-27, 4-28, 4-34, 4-39, 4-40, 4-43, 5-10, 5-40, 5-41, A-1, A-3, A-19, A-33, B-1, B-3, B-19, B-33, C-1, C-3, C-13, C-27, D-1, D-3, D-19, D-35, F-1, G-6, G-7  
 readiness rating, 4-27, 4-30, 4-31  
 ready for operations team, 4-8, G-6  
 recertification, 2-89, 2-94, 2-98, 3-35, 3-36, 5-1, 5-10, 5-12, 5-31, 5-32, 5-33, 5-35, 5-37, 5-38, 5-45, 5-47, 5-50, 5-51, 5-53, F-13, G-6  
 recreational boating safety, 2-9, 2-10, 2-23, H-7  
 reduced visibility navigation, 4-36, A-19, A-21, B-19, B-21, C-13, C-15, D-19, D-21, F-21  
 reduction gear failure, 4-36, B-33, B-51  
 rescue and assistance, 2-56  
 respiratory protection, 2-62, 2-64, 2-109  
 response boat readiness, 3-20  
 restrictive discrepancies, 2-43, 2-68, 4-25, 4-29, 4-30, 4-31  
 risk assessment, 2-32, 2-40, 2-41, 3-39, 3-48, 4-37, 4-44, 5-16, 5-17, 5-18, 5-19, 5-20, 5-33, B-38, B-40, B-42, B-44, B-58, C-10, C-30, C-32, C-34, C-36, C-38, C-40, C-42, F-3, F-7, F-10  
 risk factors, 2-41, 2-56  
 risk management, 2-34, 2-41, 3-19, 5-39, 5-44  
 rivers, 3-9  
 rough bar, G-7  
 rules of the road, 4-21, 4-34, 5-38, 5-41, 5-44, A-6, A-22, A-23, A-26, A-30, B-6, B-22, B-23, B-26, B-30, C-6, C-16, C-17, C-20, C-24, D-6, D-22, D-25, D-28, D-32

## S

safety precautions, 2-69  
 salvage, A-14, B-14, B-44, D-14



- SAR, 2-8, 2-9, 2-11, 2-12, 2-13, 2-14, 2-15, 2-16, 2-17, 2-20, 2-22, 2-42, 2-44, 2-47, 2-49, 2-51, 2-52, 2-71, 2-72, 2-89, 2-95, 2-104, 2-108, 3-8, 3-20, 3-21, 3-28, 3-30, 3-32, 3-33, 3-35, 3-36, 3-42, A-9, A-13, A-25, A-26, A-29, B-9, B-13, B-25, B-26, B-29, C-19, C-20, C-23, C-24, D-9, D-13, D-27, D-28, D-31, D-32, E-7, G-3, G-8, H-7
- SAR coordinator, 2-13, H-7
- SB, 2-7, 5-49, H-7
- scheduling, 2-47, 2-48, 2-50, 2-86, 2-91, 2-108, 3-17, 5-13, 5-14
- sea conditions, C-6
- search and rescue, 2-8, 2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-39, 2-42, 2-45, 2-55, 2-56, 2-74, 2-79, 3-19, 5-6, A-9, A-13, A-17, A-25, A-29, B-9, B-13, B-17, B-25, B-29, C-11, C-19, C-23, D-9, D-13, D-17, D-27, D-31, H-7
- search and rescue unit, 2-13, 2-14, H-7
- search pattern, 4-36, 5-17, 5-41, A-19, A-25, A-26, A-29, A-30, B-19, B-25, B-26, B-29, B-30, C-13, C-19, C-20, C-23, C-24, D-19, D-27, D-28, D-31, D-32
- sector, 2-5, 2-13, 2-14, 2-15, 2-17, 2-19, 2-21, 2-40, 2-48, 2-49, 2-59, 2-84, 2-102, 2-104, 2-107, 2-117, 3-5, 3-7, 3-9, 3-19, 3-20, 3-22, 3-30, 3-31, 3-32, 3-33, 3-45, 3-48, 4-4, 4-21, 4-36, 5-12, 5-17, 5-36, 5-38, A-29, B-29, C-23, D-31, H-8
- sector search, A-29, B-29, C-23, D-31, H-8
- secure the boat, 5-38, 5-41
- set watertight integrity, A-5, A-21, B-5, B-21, C-6, C-15, D-5, D-21
- severity-probability-exposure, H-7
- shackle, C-10, F-4
- shaft seal, B-43
- ship-based response, 2-7
- shoal area, A-23, B-23, C-17, D-25
- shore station maintenance record, H-8
- shore-based response, 2-3, 2-6, 2-8
- short range aids to navigation, 2-10, 2-29, 4-44, C-9, F-3, F-9, F-17, H-7
- Short Term Resident Training Request, 2-99, H-8
- SITREP, 2-52, H-7
- SKF, 2-8, H-7
- sleep debt, 2-46, 2-47, 2-50
- SMC, 2-13, 2-14, 2-15, 2-16, 2-17, 2-55, A-30, B-30, C-24, D-32, H-7
- SOG, A-6, A-22, A-24, A-26, A-30, B-6, B-22, B-24, B-26, B-30, C-16, C-18, C-20, C-24, D-6, D-22, D-26, D-28, D-32, H-7
- SOP, 3-36, 4-29, F-15, F-17, F-18, H-7
- sound signals, 2-29, A-6, A-10, A-17, A-21, A-23, A-26, A-30, B-6, B-10, B-17, B-21, B-23, B-26, B-30, C-6, C-11, C-15, C-17, C-20, C-24, D-6, D-10, D-17, D-21, D-25, D-28, D-32
- SPC, 2-7, 2-8, 3-37, 3-38, 3-44, 5-49, H-7
- SPC (HWX), 2-7, 3-37, 3-38, 3-44, 5-49, H-7
- SPC (surf), 2-8
- SPE, 5-39, 5-44, H-7
- SPE (LE), 2-8, H-7
- SPE/GAR, 5-39, 5-44, H-7
- speed, 2-43, 2-57, 2-75, 3-37, A-6, A-10, A-26, A-30, A-37, A-39, B-6, B-10, B-26, B-30, B-37, B-39, B-41, B-42, B-44, B-47, B-49, B-53, B-55, B-57, C-6, C-20, C-24, C-31, C-33, C-35, C-37, C-39, C-41, D-6, D-10, D-28, D-32, D-39, D-47, H-7
- SPS, A-21, A-23, A-25, A-29, B-21, B-23, B-25, B-29, C-15, C-17, C-19, C-23, D-21, D-25, D-27, D-31, H-7
- square search, H-7
- SRA, 2-9, 2-29, H-7
- SRS, H-7
- SRU, 2-14, 2-15, 2-16, 2-43, H-7
- SS, 2-104, 2-107, 4-36, 5-41, 5-49, A-29, B-29, C-23, D-31, H-7
- SSL, H-7
- SSM, 3-5, H-8
- SSMR, 3-34, H-8
- stability, 2-46, 2-47, 2-48, 2-57, A-14, B-14, D-14
- standard automated requisitioning, H-8
- standard boat, 2-6, 2-74, 2-80, 2-104, 2-107, 2-108, 4-4, 4-5, 4-6, 4-7, 4-9, 4-14, 4-17, 4-18, 4-21, 4-23, 4-27, 4-28, 5-39, 5-40, G-3, G-4, G-6, G-7
- standard positioning service, H-7
- standard support level, H-7
- standardization team, 2-80, 2-81, 2-84, 2-88, 2-114, 4-8, 4-12, 4-22, G-7
- STANT, 2-4, 2-5, G-8, H-8
- STAR, 3-33, H-8
- static display, 2-75
- station (small) standard operating procedures, 3-1, 3-29
- station aids to navigation team, 2-4, 2-5, G-8, H-8
- station operations, 3-1
- steering, 5-34, A-37, A-39, B-35, B-37, B-39, B-40, B-41, B-42, B-43, B-44, C-31, D-39, E-6, E-9, E-13, E-16, E-22
- steering casualty, A-37, A-39, D-39
- stern tow, A-9, B-9, D-9
- stokes litter, E-19
- striking a submerged object, A-41, B-41, C-33, D-41
- support and special mission, 3-5, H-8
- surf, 2-8, 2-70, 2-71, 2-76, 3-1, 3-37, 3-38, 3-41, 3-42, 3-43, 3-44, 3-45, 3-46, 3-47, 3-48, 3-49, 5-18, 5-19, 5-24, 5-33, 5-34, 5-35, 5-38, 5-41, 5-42, 5-43, 5-44, 5-47, 5-50, B-41, B-44, G-8, H-7
- surf capable boat, 3-42, 3-45, 3-46
- surf log, 3-45, 3-47
- surf operations, 2-71



surf station, 3-37, 3-41, 3-42, 3-43, 3-44, 3-45, 3-47, 5-18, 5-19  
 surface swimmer, 2-56, 2-93, 2-94  
 survival, 2-47, 2-49, 2-55, 2-56, 2-62, 2-69, 2-70, 2-72, 2-80, 3-11, 3-16, 3-38, 3-39, 3-48, 4-1, 4-8, 4-12, 4-13, 4-14, 4-17, 4-20, 4-21, 4-22, 4-26, 4-28, 4-34, 4-39, 4-40, 4-41, 4-45, 5-16, 5-17, 5-18, 5-19, 5-44, A-5, A-7, A-9, A-11, A-13, A-15, A-17, A-18, A-22, A-23, A-24, A-25, A-27, A-29, A-31, A-35, A-36, A-37, A-38, A-39, A-40, A-41, A-43, A-44, A-45, A-46, B-5, B-7, B-9, B-11, B-13, B-15, B-17, B-18, B-22, B-23, B-24, B-25, B-27, B-29, B-31, B-35, B-36, B-37, B-38, B-39, B-40, B-41, B-42, B-43, B-45, B-47, B-48, B-49, B-50, B-51, B-52, B-53, B-54, B-55, B-56, B-57, B-58, C-5, C-7, C-9, C-10, C-11, C-12, C-16, C-17, C-18, C-19, C-21, C-23, C-25, C-29, C-30, C-31, C-32, C-33, C-34, C-35, C-36, C-37, C-38, C-39, C-40, C-41, C-42, D-5, D-7, D-9, D-11, D-13, D-15, D-17, D-18, D-22, D-25, D-26, D-27, D-29, D-31, D-33, D-37, D-39, D-40, D-41, D-43, D-44, D-45, D-46, D-47, D-48, E-3, E-11, E-15, F-3, F-7, F-10  
 symbols, 2-109, 2-111  
 synchronous reference sensor, H-7

## T

TAD, 5-32, 5-46, H-8  
 TANB, 2-7, 5-49, E-1, E-11, F-21, H-8  
 TCM, 2-11, 2-79, 5-53, 5-55, H-8  
 TCT, 2-41, 2-101, 2-109, 2-111, 5-39, 5-44, H-8  
 TD, 5-32, 5-49, H-8  
 team coordination, 2-16, 2-40, 2-41, 4-13, 4-37, 5-16, 5-17, 5-18, 5-19, 5-20, 5-33, 5-44, A-13, B-13, D-13, H-8  
 team coordination training, 2-16, 2-40, 2-41, 4-13, 5-44, H-8  
 technical knowledge, 2-41  
 telecommunications manual, 2-11, 2-79, 5-53, 5-55, H-8  
 temporary assigned duty, H-8  
 temporary duty, 5-31, 5-32, H-8  
 threat conditions, 2-29  
 throttle stations, B-55  
 time, 2-46, 2-48, 2-51, 2-68, F-4, F-9, G-4, G-6, G-7  
 timing reference sensor, H-8  
 TMT, 2-81, 2-89, 5-37, 5-38, 5-44, 5-46, F-13, G-3, H-8  
 towing, 2-43, 2-56, 2-65, 3-16, 4-35, 5-17, 5-38, 5-40, 5-42, A-3, A-9, A-10, B-3, B-9, B-10, D-3, D-9, D-10, F-21  
 towline, A-10, B-10, D-10  
 TPSB, 2-7, 2-8, 5-49, H-8  
 TQC, 2-83, 2-99

TRACEN, 5-5, H-8  
 training center, 2-81, H-8  
 training management tool, 2-89, F-13, G-3, H-8  
 training petty officer, 2-85, 2-90, 2-91, 2-92, 2-96, 3-5, 3-17, 5-13, 5-14, 5-23, 5-24, 5-45  
 training team, 2-80, 2-83, 5-32, H-8  
 training teams, 2-80, 5-32  
 Transportable Port Security Boat, 2-7, 2-8, H-8  
 TRATEAM, H-8  
 TRS, H-8  
 TSN, 4-36, A-25, B-25, C-19, D-27, H-8  
 TSR, 4-36, 5-41, A-25, B-25, C-19, D-27, H-8  
 type III PFD, E-6

## U

UCMJ, 2-111, 3-34, H-8  
 UMI, 2-71, H-8  
 underway drill checklists, 4-22, A-1, A-3, A-19, A-33, B-1, B-3, B-19, B-33, C-1, C-3, C-13, C-27, D-1, D-3, D-19, D-35  
 underway emergencies, 2-72  
 underway exercise evaluations, 4-12, 4-13, 4-14, 4-18, 4-33, 4-35  
 underway limits, 2-48, 2-49, 2-50  
 underway rules, 2-67, 2-72  
 uniform code of military justice, H-8  
 unit evaluation, 4-11, 4-12  
 unit training petty officer, 5-13, 5-46  
 unit training program, 2-12, 2-79, 2-80, 2-81, 2-83, 2-84, 2-85, 2-89, 2-90, 2-91, 3-17, 4-8, 4-13, 4-33, 5-11, 5-13, G-7  
 unit watch organization, 3-3, 3-19  
 universal marine interface, H-8  
 UPH, 3-14, 3-33, H-8  
 UTB, 2-7, 2-102, 2-103, 2-104, 2-105, 2-106, 2-107, 4-6, 4-8, 4-35, 4-36, 4-44, 4-45, 4-46, 5-6, 5-49, 5-53, 5-54, A-1, A-3, A-5, A-9, A-13, A-17, A-19, A-21, A-23, A-25, A-29, A-33, A-35, A-37, A-39, A-41, A-43, A-45, G-8, H-8  
 Utility Boat, 2-7, 2-8, H-8  
 UTL, 2-8, 5-49, 5-53, 5-54, H-8  
 UTM, 2-8, 5-49, H-8

## V

variable range marker, H-8  
 vessel MISHAP, 2-73  
 vessel safety, 2-20, 2-21, 2-23, 2-24, 2-26, 4-15, B-38, B-40, B-42, B-44, B-58, H-8  
 visibility, 3-46, 3-48, 3-49, A-5, A-9, A-13, A-17, A-21, A-23, A-25, A-29, A-35, A-37, A-39, A-41, A-43, A-45, B-5, B-9, B-13, B-17, B-21, B-23, B-25, B-29, B-35, B-37, B-39, B-41, B-43, B-47, B-49,



B-51, B-53, B-55, B-57, C-5, C-9, C-11, C-15, C-17, C-19, C-23, C-29, C-31, C-33, C-35, C-37, C-39, C-41, D-5, D-9, D-13, D-17, D-21, D-25, D-27, D-31, D-37, D-39, D-41, D-43, D-45, D-47, F-3, F-9

vision, 2-3, 2-6, 2-77, 2-78

VRM, A-22, B-22, C-16, D-22, H-8

VS, 4-36, 5-41, A-29, A-30, B-29, B-30, C-23, C-24, D-31, D-32, H-8

## W

watchstander designation training, 3-20

water survival, 5-38, 5-39, 5-44

water survival exercise, 5-38, 5-39, 5-44

watertight integrity, 4-45

## X

XO, 2-36, 2-37, 2-85, 2-86, 2-90, 2-91, 2-92, 2-102, 2-104, 2-105, 2-107, 2-108, 2-117, 3-4, 3-5, 3-9, 3-11, 3-15, 3-18, 5-11, 5-12, 5-15, G-3, H-8

XO/XPO, 2-36, 2-37, 2-85, 2-86, 2-90, 2-91, 2-92, 2-108, 3-4, 3-5, 3-9, 3-11, 3-15, 3-18, 5-11, 5-12, 5-15

XPO, 2-36, 2-102, 2-103, 2-104, 2-105, 2-106, 2-107, 2-116, 2-117, 3-11, 3-44, 4-35, F-11, F-13, G-3, G-7, H-8