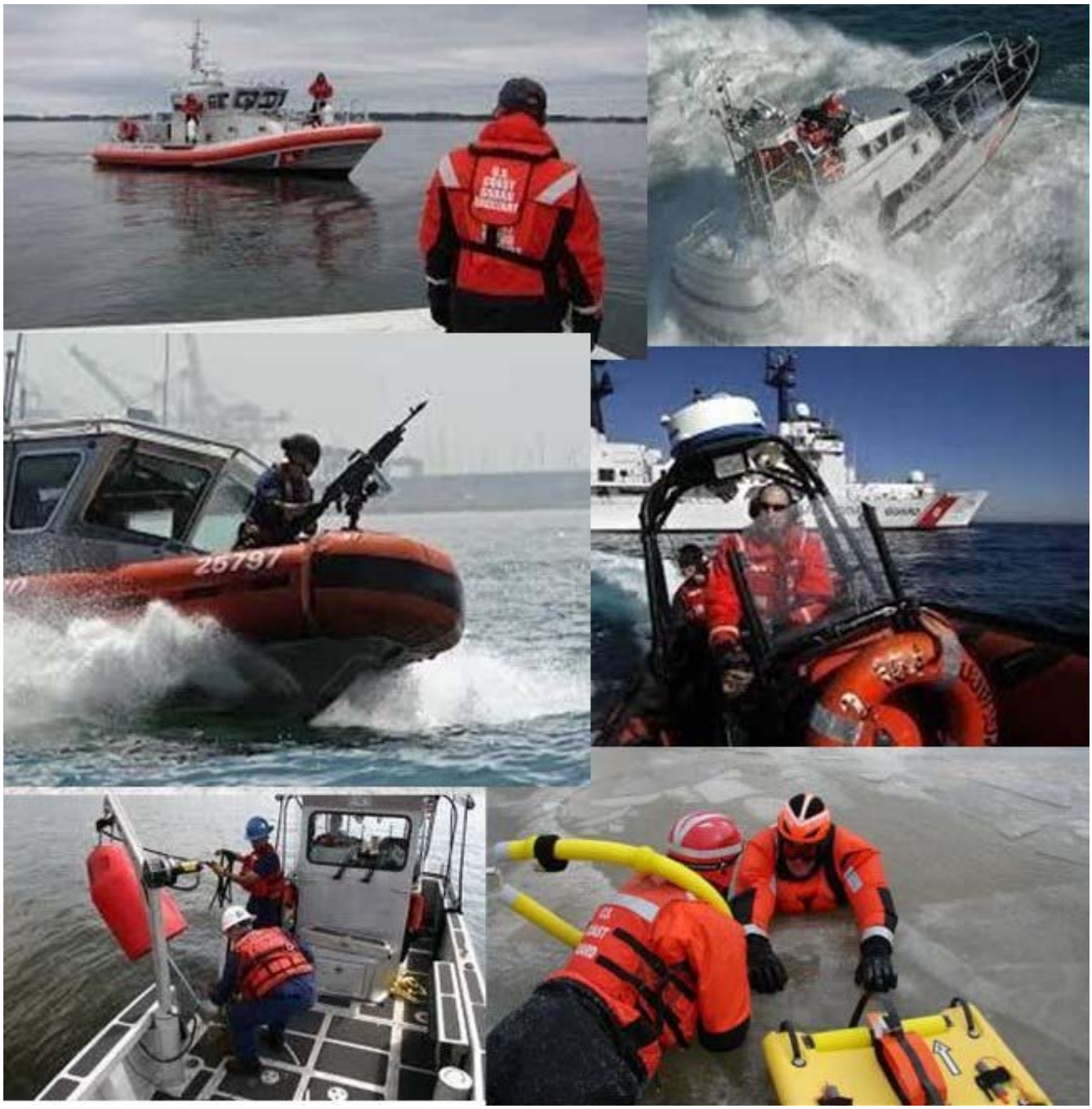
Rescue and Survival Systems Manual



COMDTINST M10470.10G **with CH-1 pages**

September 2014 **May 2015**

U.S. Department of Homeland Security
United States Coast Guard

Commandant
United States Coast Guard

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COMDTCHANGE NOTE 10470
MAY 26, 2015

COMMANDANT CHANGE NOTICE 10470

Subj: CH-1 TO RESCUE AND SURVIVAL SYSTEMS MANUAL, COMDTINST M10470.10G

1. PURPOSE. This Commandant Change Notice publishes a change to Rescue and Survival Systems Manual, COMDTINST M10470.10G.

2. ACTION. All Coast Guard unit and training center commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Commandant Change Notice. Internet release is authorized.

3. DIRECTIVES AFFECTED. With the addition of this Commandant Change Notice, Rescue and Survival Systems Manual, COMDTINST M10470.10G, is updated.

4. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.

5. MAJOR CHANGES. Major changes that this Commandant Change Notice effects in the Rescue and Survival Systems Manual are as follows.

   a. Added that Scheduled Mission Personnel, with few specific exceptions, shall be issued and wear the same gear as required of crew members.

   b. Added a requirement that the CO/OIC of a unit not required to have cold weather gear brief the Sector Commander OPCON when the decision is made to get underway without proper PPE.

DISTRIBUTION – SDL No. 165

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c. Added that Shoreside Personnel fall under Scheduled Passenger requirements when being transferred by boat.

d. Added circumstances and conditions of Ready Service Locker.

e. Added explanation of dry suit issue.

f. Added conditions for operating in cold weather for units not required to have cold weather gear.

g. Added CO/OIC responsibility to determine whether waived equipment shall be carried while underway.

h. Added “crewmembers” in place of “CG Personnel” in sections discussing the wear of hypothermia gear.

i. Added correct blanks in place of incorrect blanks for content related to Personal Clothing and Equipment Record, Form AF-538.

j. Removed link to electronically-signable version of Personal Clothing and Equipment Record, Form AF-538.

k. Added Goggles and Sunglasses to Returnable Items.

l. Issue of the boat crew knife changed to “optional.”

m. Removed Safety Boots and replaced with Tactical Boots.

n. Clarified required life raft capacity for cutters.

o. Removed requirement that PFD PQS completion shall be recorded on a Administrative Remarks, Form CG 3307.

p. Removed CGM models of personal flotation devices.

q. Added wording allowing exception to Layer I and II requirement with dry suit.

r. Removed specific thigh pocket requirement for storing neoprene hood – now allowing unspecified pocket storage.

s. Clarified when cold weather boots are required to be worn.

t. Modified salient characteristics of Cold Weather Boots.

u. Added Mustang Survival MD-0450 v22 among options for minimum flotation requirement for Tactical operations.

v. Added provisions that address geographic and logistical challenges associated with Auxiliary survival systems.

w. Added language authorizing Inspectors and Investigators to wear anti-exposure coveralls in lieu of a dry suit without a waiver.

x. Added alternatives to Boat Crew Survival Vest for Auxiliarists to carry their non-pyrotechnic equipment.

6. IMPACT ASSESSMENT. No impact assessment warranted.

7. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental aspects and impact considerations were examined in the development of this Commandant Change Notice and have been determined to be not applicable.

   a. The development of this Commandant Change Notice and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, and are categorically excluded (CE) under current USCG CE #33 from further environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series). Because this Commandant Change Notice contains guidance documents that implement, without substantive change, the applicable Commandant Instruction and other guidance documents, Coast Guard categorical exclusion #33 is appropriate.

   b. This directive will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this manual shall be individually evaluated for compliance with the National Environmental Policy Act (NEPA), DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates. Due to the administrative and procedural nature of this Commandant Change Notice, and the environmental guidance provided within it for compliance with all applicable environmental laws prior to promulgating any directive, all applicable environmental considerations are addressed appropriately in this Commandant Change Notice.

8. DISTRIBUTION. No paper distribution will be made of this Commandant Change Notice. An electronic version will be located on the following Commandant (CG-612) web sites. Internet: http://www.uscg.mil/directives/ , and CGPortal: https://cgportal2.uscg.mil/library/SitePages/Home.aspx .

9. PROCEDURE. Changed pages have been marked with CH-1 in the footer, and specific content changes have been designated with vertical lines in or near the margins, on the same lines as the changes. If maintaining a paper library, place this Commandant Change Notice inside the front cover and update the record of changes with the date completed. Remove and replace the following sections of RESCUE AND SURVIVAL SYSTEMS MANUAL, COMDTINST M10470.10G:

Remove	Replace
Page 1-1 thru 1-2	Page 1-1 thru 1-2
Page 2-3 thru 2-8	Page 2-3 thru 2-8
Page 2-13 thru 2-18	Page 2-13 thru 2-18
Page 2-21 thru 2-24	Page 2-21 thru 2-24
Page 2-29 thru 2-32	Page 2-29 thru 2-32
Page 2-37 thru 2-42	Page 2-37 thru 2-42
Page 3-3 thru 3-8	Page 3-3 thru 3-8
Page 3-15 thru 3-16	Page 3-15 thru 3-16
Page 3-37 thru 3-38	Page 3-37 thru 3-38
Page 3-63 thru 3-64	Page 3-63 thru 3-64
Page 3-67 thru 3-68	Page 3-67 thru 3-68
Page 3-77 thru 3-78	Page 3-77 thru 3-78

10. RECORDS MANAGEMENT CONSIDERATIONS. This Commandant Change Notice has been thoroughly reviewed during the directives clearance process, and it has been determined there are not records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 ct seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTlNST M5212.12 (series).

11. FORMS/REPORTS. The forms referenced in this Commandant Change Notice are available in USCG Electronic Forms on the Standard Workstation or on the Internet: http://www.uscg.mil/forms/, CGPortal at https://cgportal.uscg.mil/delivery/Satellite/uscg/References; and Intranet at http://cgweb.comdt.uscg.mil/CGForms. The Air Force forms (AF) can be found using this link: http://www.e-publishing.af.mil/.

12. REQUESTS FOR CHANGES. To recommend edits and changes to this Commandant Change Notice, please e-mail the Office of Boat Forces (CG-731) technical writer at CG731Manuals@uscg.mil to obtain the proper feedback form.

JOHN P. NADEAU /s/
Rear Admiral, U.S. Coast Guard
Assistant Commandant for Capability

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COMDTINST M10470.10G

SEPTEMBER 9, 2014

COMMANDANT INSTRUCTION M10470.10G

Subj: RESCUE AND SURVIVAL SYSTEMS MANUAL

Ref: (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 III*, COMDTINST M16114.42 (series)
(c) *Boat Crew Seamanship Manual*, COMDTINST M16114.5 (series)
(d) *U.S. Coast Guard Maritime Law Enforcement Manual (MLEM)*, COMDTINST M16247.1 (series)
(e) *Deployable Specialized Forces Tactical Operations and Operator Policy*, COMDTINST 16600.7 (series)
(f) *Coast Guard Configuration Management Policy*, COMDTINST 4130.6 (series)
(g) *Financial Resource Management Manual (FRMM)*, COMDTINST M7100.3 (series)
(h) *Simplified Acquisitions Procedures (SAP) Handbook*, COMDTINST M4200.13 (series)
(i) *Supply Policy And Procedures Manual (SPPM)*, COMDTINST M4400.19 (series)
(j) *Personal Property Management Manual*, COMDTINST M4500.5 (series)
(k) *U.S. Coast Guard Water Survival Training Program Manual*, COMDTINST M16240.4A (series)
(l) *Helicopter Insertion and Extraction (HIE) Tactics, Techniques, and Procedures (TTP)*, CGTTP 3-95.3
(m) *Naval Engineering Manual*, COMDTINST M9000.6 (series)
(n) *Uniform Regulations*, COMDTINST M1020.6 (series)

1. PURPOSE. This Manual establishes policy, equipment standards, procedures and procurement authorization for the use, configuration, maintenance and logistics of rescue and survival equipment used by United States Coast Guard personnel operating on or near the water.

DISTRIBUTION – SDL 163

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NON-STANDARD DISTRIBUTION:

2. ACTION. All Coast Guard unit and training center commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Manual. Internet release is authorized.

3. DIRECTIVES AFFECTED. Rescue and Survival Systems Manual, COMDTINST M10470.10F is canceled.

4. DISCUSSION. The policies in this Manual apply to all Active Duty, Reserve, Auxiliary Facilities under orders, scheduled mission personnel, scheduled passengers, and unscheduled passengers embarked on Coast Guard and non-Coast Guard vessels, and shoreside personnel. Additionally, this Manual applies to operations conducted on or near the water where there is uncontrolled risk of entering the water.

5. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.

6. MAJOR CHANGES. Major changes to the Rescue and Survival Systems Manual are as follows.

   a. Modified Manual composition to include Parts, matching format of Reference (a).

   b. Added mission-specific Rescue and Survival Systems (R&SS) gear guidance that was removed from References (a) and (b).

   c. Removed Chapter 2 Personal Survivability.

   d. Removed Chapter 4, B.2. Thermal Protection Principles.

   e. Added entire Part 2, Chapter 1 Authority and Responsibility.

   f. Added entire Part 2, Chapter 2 R&SS Equipment Lifecycle Management.

   g. Added new Sections covering Personal Protective Equipment (PPE) for Deployable Specialized Forces (DSF) Standard Clothing and Equipment, and Ice Rescue Equipment and Protective Clothing.

   h. Added paragraphs prescribing the MINIMUM gear required to be issued to and/or worn by persons on boats and shore.

   i. Added Mustang Survival MD-1250 paragraph in Part 3 Equipment.

   j. Clarified helmet wear requirements, including requirement on all underway vessel to vessel transfers, and when operating alongside a vessel where risk from falling objects is a factor, as well as stipulation that helmet wear is at the discretion of unit CO/OIC in circumstances outside those in which wear is explicitly required.

k. Added when maintenance is not completed before the end of the inspection interval, items must be removed from service and built back up.

l. Clarified a Ready Service Locker may be used to store returnable items that can be checked out by personnel who do not frequently wear the items, such as Sector Boarding Team, Inspections personnel, etc.

m. Added it is the applicable program manager who determines the specific color for anti-exposure or Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) dry suit coveralls for each DSF unit.

n. Added crew restraint systems requirements language.

o. Added Boat Crew Knife paragraph.

p. Modified “Maintenance Log” to “Maintenance Record” to comply with new STAN framework and shift to electronic record keeping.

q. Removed wording on now-obsolete Class A, B, C, and S EPIRBs.

r. Added cold weather boots to “Returnable Items” from “Non-Returnable Items” in Reclamation Control table.

s. Added the requirement for the neoprene hood to be stored in the thigh pocket of the dry suit.

t. Removed PS50 nomenclature from Watch Cap wording.

u. Removed Mustang Survival MD-3031 from Chapter 5.

v. Added CBRNE language throughout.

w. Removed the specific “8 and 25 person” requirement for Coast-Guard-approved cutter life rafts.

x. Added guidance to manually inflate all auto-inflate personal flotation devices.

y. Removed hoisting from all stokes litter considerations.

z. Added Auxiliary Facilities under orders as a party to which the policies in this Manual apply.

7. IMPACT ASSESSMENT. No impact assessment warranted.

8. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental aspects and impact considerations were examined in the development of this Manual and have been determined to be not applicable.

   a. The development of this Manual and the general policies contained within it have been thoroughly reviewed by the originating office in conjunction with the Office of Environmental Management, and are categorically excluded (CE) under current USCG CE #33 from further

environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series). Because this Manual contains guidance documents that implement, without substantive change, the applicable Commandant Instruction and other guidance documents, Coast Guard categorical exclusion #33 is appropriate.

b. This directive will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this Manual shall be individually evaluated for compliance with the National Environmental Policy Act (NEPA), DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates. Due to the administrative and procedural nature of this Manual, and the environmental guidance provided within it for compliance with all applicable environmental laws prior to promulgating any directive, all applicable environmental considerations are addressed appropriately in this Manual.

9. DISTRIBUTION. No paper distribution will be made of this Manual. An electronic version will be located on the following Commandant (CG-612) web sites.
Internet: http://www.uscg.mil/directives/,
and CGPortal: https://cgportal2.uscg.mil/library/directives/SitePages/Home.aspx.

10. PROCEDURE. The standard policy presented in this Manual apply to all near- or on-water operations.

11. RECORDS MANAGEMENT CONSIDERATIONS. This Manual has been thoroughly reviewed during the directives clearance process, and it has been determined there are not records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 ct seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTlNST M5212.12 (series).

12. FORMS/REPORTS. The forms referenced in this Manual are available in USCG Electronic Forms on the Standard Workstation or on the Internet: http://www.uscg.mil/forms/; CGPortal at https://cgportal.uscg.mil/delivery/Satellite/uscg/Reference; and Intranet at http://cgweb.comdt.uscg.mil/CGForms.

13. REQUESTS FOR CHANGES. To recommend edits and changes to this Manual, please e-mail the Office of Boat Forces (CG-731) writer – Ames Holbrook, ames.a.holbrook@uscg.mil – to obtain the proper feedback form.

MARK E. BUTT /s/
Assistant Commandant for Capability

Record of Changes

CHANGE NUMBER	DATE OF CHANGE	DATE ENTERED	ENTERED BY
CH-1	26 MAY 2015	26 MAY 2015	Ames Holbrook, CG-731

TABLE OF CONTENTS

PART 1 INTRODUCTION **1-1**

Section A. Purpose of this Manual *1-1*
Section B. How to Use this Manual *1-2*
Section C. Program Management *1-3*

PART 2 POLICY **2-1**

CHAPTER 1 AUTHORITY AND RESPONSIBILITY 2-2
Section A. Responsibilities and Requirements *2-3*
A.1. Command Responsibility 2-3
A.2. Roles and Responsibilities 2-4
A.3. Required Issued PPE 2-5
A.4. Minimum Wear Requirements Non-Crewmember 2-7
A.5. Training 2-8
A.6. R&SS Petty Officer Designation 2-8
A.7. Deviation without Authorization 2-8
Section B. Systems and Equipment Configurations *2-9*
B.1. Systems and Equipment Configurations 2-9
B.2. Configuration Control Board 2-9
CHAPTER 2 R&SS EQUIPMENT LIFECYCLE MANAGEMENT 2-10
Section A. Logistics *2-11*
A.1. Acquisitions Policy Statement 2-11
A.2. Unit Allowances 2-11
A.3. Procurement Policies 2-11
A.4. Maintenance 2-12
A.5. MPC Hierarchy 2-12
A.6. System of Entry 2-13
A.7. Maintenance Documentation Instructions 2-13
Section B. Property Management and Disposal *2-14*
B.1. Property Management 2-14
B.2. Property Disposal 2-14
CHAPTER 3 ISSUE AND INSPECTION POLICY 2-15
Section A. Standard Issue Personal Protective Equipment (PPE) Issue Policy for Crewmembers *2-16*
A.1. Standard Issue Personal Protective Equipment (PPE) Crewmembers 2-16
A.2. Minimum Issue Cold Weather PPE Crewmembers 2-17
Section B. Protective Clothing and Equipment Policy *2-18*
B.1. Required Equipment 2-18
B.2. Minimum Cold-Weather Equipment Tables 2-19
B.3. Anti-Exposure Coveralls 2-19
B.4. Outer Garment Comparison 2-20
B.5. Ready Service Locker 2-21
B.6. Government Property and Personal Issue Documentation 2-21
Section C. Swimmer Equipment Policy *2-25*
C.1. Cutter Surface Swimmer Equipment Issue and Management 2-25
C.2. Boat Swimmer Equipment Issue and Management 2-25
Section D. Deployable Specialized Forces (DSF) Equipment Policy *2-26*
D.1. Overview 2-26
D.2. Discussion 2-26
D.3. Tactical Operators and TDT Members 2-27
D.4. Deployable Specialized Forces (DSF) Standard Clothing and Equipment 2-27
D.5. Tactical Operator Standard Clothing Issue 2-28
D.6. TDT Standard Clothing Issue 2-29

D.7. TDT Equipment 2-29
Section E. Ice Rescue Equipment and Protective Clothing Policy 2-30
E.1. Station and Cutter Ice Rescue Equipment List 2-30
Section F. Cutter Life Raft Policy 2-31
F.1. Required Capacity 2-31
F.2. Service Life Limit 2-31
F.3. Life Raft Gripes 2-31
F.4. Life Float 2-31
Section G. Waivers and Documentation 2-32
G.1. Hypothermia Protective Device Waivers and Documentation 2-32
G.2. DSF Waivers 2-34
CHAPTER 4 WEAR POLICY 2-35
Section A. Personal Flotation Device (PFD) Wear Policy 2-36
A.1. Minimum Required Gear 2-36
A.2. Stearns® Model I600 Type I 2-36
A.3. Type III 2-36
A.4. Survivors Type I 2-36
A.5. Type III Flotation Jacket 2-37
A.6. Cold Weather Diving Topside Ensemble (CWDTE) 2-37
A.7. Standard Navy PFD with Collar 2-37
A.8. Abandon Ship Life Preserver 2-37
A.9. Non-Coast Guard Approved Automatic/ Manual Inflatable PFDs 2-37
Section B. Standard Issue Personal Protective Equipment (PPE) Wear Policy 2-39
B.1. Helmets 2-39
B.2. Layering 2-39
B.3. Rain Gear 2-40
B.4. Intermediate Gloves 2-40
B.5. Goggles 2-40
B.6. R&S Gear Bag 2-40
B.7. Sunglasses 2-40
B.8. Boat Crew Safety Boot 2-40
B.9. Boat Shoes 2-40
B.10. Boat Crew Survival Vest 2-40
B.11. Anti-Exposure Coveralls 2-41
B.12. Crew Restraint Systems 2-41
B.13. Boat Crew Safety Belt 2-41
B.14. Gunner Restraint System 2-41
Section C. Cold Weather Equipment Wear Policy 2-42
Overview 2-42
C.1. Dry Suits 2-42
C.2. Thermal Socks 2-42
C.3. Cold Weather Glove Layers 2-43
C.4. Cold Weather Boots 2-43
C.5. Balaclava 2-43
C.6. Watch Cap 2-43
C.7. Immersion Suit 2-43
Section D. Swimmer Equipment Wear Policy 2-44
D.1. Surf Cap 2-44
D.2. Booties 2-44
D.3. Neoprene Gloves 2-44
D.4. Mask and Snorkel 2-44
D.5. Fins 2-44
D.6. Cutter Surface Swimmer Dry Suit 2-44
D.7. Cutter Surface Swimmer Rapid Don Rescue Suit 2-44
D.8. Cutter Surface Swimmer Wet Suit 2-44

D.9. Cutter Surface Swimmer Harness Flotation Vest 2-44
D.10. Cutter Surface Swimmer Harness and Tending Line 2-45
D.11. Boat Swimmer Harness and Tending Line 2-45
D.12. Thermal Underwear 2-45
Section E. Ice Rescue Equipment Wear Policy 2-46
E.1. Ice Rescuer Headlamp 2-46
E.2. Layer I Thermal Underwear 2-46
E.3. Layer I Thermal Socks 2-46
E.4. Layer II Thermal Socks 2-46
E.5. Ice Rescue Gloves 2-46
E.6. Ice Rescue Footwear 2-46
E.7. Ice Rescue Dry Suit 2-46

PART 3 EQUIPMENT 3-1

CHAPTER 1 PERSONAL FLOTATION DEVICES 3-2
Section A. Personal Flotation Device 3-3
A.1. Risk Management and PFD Selection 3-3
A.2. Minimum Flotation Requirements 3-3
Section B. Coast Guard Approved Inherently Buoyant PFDs 3-6
B.1. Stearns® Model I600 Type I 3-6
B.2. Type III 3-8
B.3. Survivors Type I 3-9
B.4. Type III Flotation Jacket 3-10
B.5. Cold Weather Diving Topside Ensemble (CWDTE) 3-11
Section C. Non-Coast Guard Approved Cutter Specific PFDs 3-12
C.1. Standard Navy PFD with Collar 3-12
C.2. Abandon Ship Life Preserver 3-14
Section D. Non-Coast Guard Approved Automatic/Manual Inflatable PFDs 3-15
D.1. Mustang Survival MD-3183 v22 with Survival Equipment Pockets 3-16
D.2. Lifesaving Systems Life Preserver Survival Vest 3-17
D.3. Mustang Survival MD-1250 3-19
D.4. Mustang Survival MD-0450-v22 3-20
CHAPTER 2 LIFE RAFTS, GRIPES, RELEASES, LIFE FLOAT AND MULTIPLE PERSON RECOVERY SYSTEM 3-21
Section A. Boat Installed Life Rafts 3-22
A.1. 6-Person Coastal Service Life Raft 3-22
Section B. Coast-Guard-Approved Cutter Life Rafts 3-24
B.1. Coast Guard Approved Cutter Life Rafts 3-24
Section C. Cutter Specific Gripes and Hydrostatic Releases 3-27
C.1. Life Raft Gripes 3-27
Section D. Life Floats 3-28
D.1. Life Float 3-28
CHAPTER 3 STANDARD RESCUE EQUIPMENT AND PROTECTIVE CLOTHING 3-29
Section A. Rescue Equipment 3-30
A.1. Stokes Litter 3-30
A.2. Ring Buoys 3-33
A.3. Floating Electric Marker Light 3-34
A.4. Rescue Line Throw Bag 3-35
A.5. 406 MHz Category I and II EPIRBS 3-36
A.6. Other EPIRB Variants 3-37
Section B. Standard Clothing and Equipment 3-38
B.1. Helmets 3-39
B.2. Rain Gear 3-42
B.3. Boat Crew Knife 3-43
B.4. Intermediate Gloves 3-44
B.5. Goggles 3-45

B.6. R&S Gear Bag 3-46
B.7. Sunglasses 3-47
B.8. Boat Crew Safety Boot 3-48
B.9. Boat Shoes 3-49
B.10. Anti-Exposure Coveralls 3-50
CHAPTER 4 COLD WEATHER EQUIPMENT AND PROTECTIVE CLOTHING 3-52
Section A. Dry Suits 3-53
A.1. Maritime Cold Weather Suit System (MCWSS) 3-53
A.2. MCWSS Wear Procedures 3-56
A.3. Industrial Style Dry Suit 3-59
A.4. Thermal Socks 3-63
A.5. Neoprene Hood 3-64
A.6. Cold Weather Glove Layers 3-65
Section B. Cold Weather Accessories 3-67
B.1. Cold Weather Boots 3-67
B.2. Balaclava 3-68
B.3. Watch Cap 3-69
CHAPTER 5 ADDITIONAL EQUIPMENT 3-70
Section A. Boat Crew Equipment 3-71
A.1. Boat Crew Survival Vest 3-71
A.2. Boat Crew Safety Belt 3-73
A.3. Crew Restraint Systems 3-74
A.4. Gunner Restraint System 3-75
Section B. Cutter Equipment 3-77
Overview 3-77
B.1. Immersion Suit 3-77
Section C. Deployable Specialized Forces (DSF) Standard Clothing and Equipment 3-79
C.1. Overview 3-79
Section D. Ice Rescue Equipment and Protective Clothing 3-80
D.1. Station and Cutter Ice Rescue Equipment List 3-80
D.2. SKF-ICE 3-83
D.3. MARSARS Shuttle Board 3-85
D.4. MARSARS™ Cold-Water Rescue Sling 3-86
D.5. White Bear™ Water Rescue Sling 3-87
D.6. Ice Awls 3-88
D.7. Ice Anchor 3-89
D.8. Hypothermia Recovery Capsule 3-90
D.9. 150’ or 200’ and 550’ Ice Rescue Tethers 3-91
D.10. Ice Rescuer Safety Harness 3-92
D.11. Ice Rescuer Headlamp 3-93
D.12. Moisture Wicking Underwear 3-94
D.13. Fleece Underwear 3-95
D.14. Layer I Thermal Socks 3-96
D.15. Layer II Thermal Socks 3-96
D.16. Ice Rescue Gloves 3-97
D.17. Ice Rescue Footwear 3-98
D.18. Ice Rescue Dry Suit 3-99
D.19. Wool Blanket 3-102
Section E. Dewatering Pump 3-103
E.1. CG-P6 Dewatering Pump 3-103
CHAPTER 6 BOAT SWIMMER AND CUTTER SURFACE SWIMMER EQUIPMENT 3-104
Section A. Swimmer Equipment 3-105
A.1. Surf Cap 3-105
A.2. Booties 3-106
A.3. Neoprene Gloves 3-107

A.4. Mask and Snorkel 3-108
A.5. Fins 3-109
A.6. Cutter Surface Swimmer Dry Suit 3-110
A.7. Cutter Surface Swimmer Rapid Don Rescue Suit 3-113
A.8. Cutter Surface Swimmer Wet Suit 3-114
A.9. Cutter Surface Swimmer Harness Flotation Vest 3-115
A.10. Cutter Surface Swimmer Tending Line 3-116
A.11. Boat Swimmer Harness and Tending Line 3-117

APPENDIX A RESCUE & SURVIVAL SYSTEMS/EQUIPMENT MAINTENANCE RECORD A-1

APPENDIX B SAMPLE EQUIPMENT MAINTENANCE RECORD B-1

APPENDIX C PERSONAL CLOTHING AND EQUIPMENT RECORD C-1

APPENDIX D SAMPLE PERSONAL CLOTHING AND EQUIPMENT RECORD D-1

Table of Tables

Table 2-1 Role Definitions 2-3
Table 2-2 Standard Clothing Issue for Crewmembers 2-16
Table 2-3 Cold Weather Clothing Issue 2-17
Table 2-4 Required Hypothermia Protective Devices 2-18
Table 2-5 50/50 Box 2-19
Table 2-6 Flat 60 Box 2-19
Table 2-7 Reclamation Control 2-24
Table 2-8 Tactical Operator Standard Clothing Issue 2-28
Table 2-9 TDT Standard Clothing Issue 2-29
Table 3-1 6-Person Coastal Life Raft Container Contents 3-22
Table 3-2 Coast Guard Helmets 3-41

Table of Figures

Figure 2-1 Outer Garment Comparison 2-20
Figure 3-1 Member in Type III PFD 3-8
Figure 3-2 Passenger in Survivors Type I PFD 3-9
Figure 3-3 LPSV with Pyrotechnics 3-18
Figure 3-4 Stokes Litter 3-30
Figure 3-5 ATON / Line Handler in Blue Hardhat 3-40
Figure 3-6 Anti-Exposure Coverall 3-50
Figure 3-7 Proper MCWSS Wear 3-56
Figure 3-8 Cold Weather Glove Layers 3-65
Figure 3-9 Boat Crew Survival Vest 3-71
Figure 3-10 Immersion Suit Polyvinyl Chloride Foam (Left) and Nylon-lined Neoprene (Right) 3-77
Figure 3-11 Ice Rescue Personnel 3-81
Figure 3-12 Self-Rescue Using Ice Awls 3-88
Figure 3-13 150' and 200' Line Bag 3-91
Figure 3-14 550' Rescue Tether 3-91
Figure 3-15 LED Headlamp 3-93
Figure 3-16 (left) Cleats with Affixed Wingnuts (middle) Korkers™ boot (right) IceTrac Extreme Cleats 3-98
Figure 3-17 MSD640 Dry Suit 3-99
Figure 3-18 Cutter Surface Swimmer Dry Suit 3-110
Figure 3-19 Cutter Surface Swimmer Wet Suit 3-114

PART 1
Introduction

Section A. Purpose of this Manual

Introduction

This Manual establishes Coast Guard personal protective equipment policy and requirements for all Coast Guard personnel and passengers conducting Coast Guard missions while embarked on Coast Guard boats as well as on non-Coast Guard vessels. Additionally, this Manual applies to operations conducted on or near the water where there is uncontrolled risk of entering the water.

Procedures

This Manual directs Rescue and Survival gear issuance, maintenance, and wear requirements for the conduct of Coast Guard operations. Every effort has been made to identify the proper gear to outfit and equip Coast Guard members for our full range of environmental and operational conditions. Situations may arise that are not anticipated by this Manual. Successful operations require the exercise of good safey practices, sound judgment and common sense at all levels of command.

Deviation

When the need arises, special instructions or waivers may be issued by the Office of Boat Forces (CG-731). 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 preservation of life.

NOTE

Units not required to have cold weather gear required elsewhere in this manual may operate underway in cold weather when, in the judgment of the CO or OIC, the risk of not having required equipment on the boat is outweighed by the benefits of getting underway without the prescribed equipment. When the decision is made by the CO/OIC to get underway without the proper PPE, this decision will be briefed to the Sector Commander/OPCON.

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

Section B. How to Use this Manual

Part Layout

The first page of each *Part* includes an *Introduction*, and an *In this Part* (which lists each chapter title).

The first page of each chapter includes an *Introduction*, an *In this Chapter*, and *References for this Chapter*, as applicable.

The first page of each section includes an *Introduction*, an *In this Section*, and *References for this Section*, as applicable.

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.

Warnings, Cautions, and Notes

The following definitions apply to "Warnings, Cautions, and Notes" found throughout the Manual.

WARNING

Operating procedures, techniques or steps that must be followed to avoid personal injury or loss of life.

CAUTION!

Operating procedures, techniques or steps that must be carefully followed to avoid equipment damage.

NOTE

Operating procedures, techniques or steps that require additional emphasis.

Generalization

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 situations or circumstances that should not be encountered.

Section C. Program Management

Program Manager

This Rescue and Survival Systems Manual is prepared and released under the authority of the Commandant, United States Coast Guard. The Office of Boat Forces (CG-731) is the Rescue and Survival Systems Program Manager.

Manual Recommendations

The Office of Boat Forces (CG-731) promulgates this Manual and its changes. Submit change recommendations that include new or changed requirements and supporting rationale or justification via the chain of command to the Office of Boat Forces (CG-731) using the standard Memo format.

The address for the Office of Boat Forces (CG-731) is:

COMMANDANT (CG-731)
ATTN: RESCUE AND SURVIVAL SYSTEMS MANAGER
US COAST GUARD STOP 7324
2703 MARTIN LUTHER KING JR AVE SE
WASHINGTON DC 20593-7324

Problem Reports

In an effort to track trends and safety issues in PPE, the Office of Boat Forces (CG-731) has posted a PPE Problem Report atop the RSS Information page on the Office of Boat Forces website:

http://cgweb.comdt.uscg.mil/G-RCB/RSS_information.htm.

Personnel in the field are encouraged to complete the PPE Problem Report for flaws in issued PPE, in order to help CG-731 in the early identification and repair of equipment defects. Examples of problems that should be reported are:

(01) PPE design flaws that compromise its integrity and/or function,

(02) PPE that fails before reaching the end of its scheduled life cycle,

(03) PPE problems causing significant safety issues.

NOTE

The above report link should NOT be used to report PPE problems resulting from wear and tear (i.e. hole in glove appearing after extended use).

PART 2
Policy

Introduction

This Part contains the information necessary for the proper administration of the unit's rescue and survival systems program. It defines operational requirements, and directs specific policies related to procurement, required maintenance, procedures, and documentation necessary to meet Coast Guard personnel survivability and operational safety needs.

In this Part

This Part contains the following Chapters:

Chapter	Topic	Page
1	Authority and Responsibility	2-2
2	R&SS Equipment Lifecycle Management	2-10
3	Issue and Inspection Policy	2-15
4	Wear Policy	2-35

CHAPTER 1
Authority and Responsibility

Introduction

This Chapter contains policy regarding Authority, Responsibility, Logistics, Maintenance and Disposal of Rescue and Survival Systems equipment.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Responsibilities and Requirements	2-3
B	Systems and Equipment Configurations	2-9

Section A. Responsibilities and Requirements

A.1. Command Responsibility

The Chain of Command shall ensure strict compliance with the Personal Protective Equipment (PPE) requirements directed in this Manual. All personnel will be categorized as one of five roles listed below in **Table 2-1.**

Role	Definition
Crewmember	Person that is filling a boat crew position.
Scheduled Mission Personnel	Person conducting a CG mission and not fulfilling crewmember role (e.g. Boarding Team Member, Inspectors, Investigators, and Training Teams).
Scheduled Passenger	Person not conducting a CG mission and not fulfilling crewmember role, yet whose passage was specifically anticipated (e.g. VIP, Boy Scouts).
Unscheduled Passenger	Person not specifically scheduled for movement, but placed on CG asset due to circumstances (e.g. SAR case survivor, prisoner).
Shoreside Personnel	Personnel conducting pierside inspections and line handlers.

NOTE When being transferred by boat, Shoreside Personnel fall under Scheduled Passenger requirements.

NOTE Personnel in other government agencies (OGA) shall follow their own agencies' PPE policies when operating on USCG platforms.

Table 2-1
Role Definitions

A.2. Roles and Responsibilities

Commanding Officers, Officers in Charge, and Coxswains responsible for shore and cutter based boats have particular responsibilities and considerations when it comes to Rescue and Survival.

A.2.a. Command Responsibility

Commanding Officers, Officers in Charge and Coxswains shall ensure that all CG personnel understand and comply with the following requirements:

(01) The Commanding Officer, Officer-In-Charge, or (for Auxiliary facilities) the Order-Issuing Authority (OIA) must carefully weigh the urgency of each mission. Mission planning for underway operations shall include an assessment of personnel survivability and risk management. This analysis shall be based on the possibility that personnel might be forced into a survival situation during any phase of the mission. If sea and weather conditions are unknown, CG personnel should always be prepared for the most adverse conditions by carrying extra thermal protection.

(02) Personnel shall be appropriately outfitted for the environmental conditions expected to be encountered.

A.3. Required Issued PPE

Coast Guard personnel who routinely operate on or near the water shall be issued at a minimum the required PPE listed below.

A.3.a. Crewmember / Scheduled Mission Personnel Standard Issue Personal Protective Equipment (PPE)

Crewmembers and Scheduled Mission Personnel shall be issued:

(01) Helmet*,
(02) Rain jacket and pants (exceptions in 1st NOTE below),
(03) Boat crew knife (optional),
(04) Intermediate gloves*,
(05) Goggles (Ballistic Goggle requirements are found in Reference (b)),
(06) R&S gear bag*,
(07) Sunglasses (optional for scheduled mission personnel),
(08) Boat crew safety boots,
(09) Boat shoes (optional),
(10) Anti-exposure coverall* (exceptions in 2nd NOTE below),
(11) Type III PFD* (issued to Auxiliarists only).

*Asterisked items are the only required issue for Auxiliarists. Only Auxiliarists who might engage in activities outlined in **PART 2CHAPTER 4B.1. Helmets** require helmet issue.

NOTE

Units shall issue rain jacket and pants to all members who request them. When member does not request rain gear, its issue is optional.

NOTE

Anti-exposure coveralls are optional for cold weather units and other units listed in Part 2, Chapter 3, B.3. **Anti-Exposure Coveralls.** Units that don't exceed 30 days of anti-exposure coverall weather requirements per **Table 2-5** should follow requirements in **Table 2-6**.

A.3.a.1. Crewmember / Scheduled Mission Personnel Cold Weather Issue

In addition to the above, Crewmembers and Scheduled Mission Personnel at cold-weather units shall be issued:

(01) Dry suit (optional for Inspectors and Investigators),
(02) Layer I undergarment (optional for Inspectors and Investigators),
(03) Layer II garment (optional for Inspectors and Investigators),
(04) Cold weather boots (optional for Inspectors and Investigators),
(05) Thermal socks (optional for Inspectors and Investigators),
(06) Balaclava,
(07) Watch cap,
(08) Cold weather glove layers,
(09) Neoprene hood (optional for Inspectors and Investigators).

NOTE

Auxiliarists shall be issued only Personal Protective Equipment (PPE) appropriate to the mission parameters and environment in which they operate.

NOTE

Scheduled mission personnel gear may be kept in a Ready Service Locker. If Ready Service Locker is used, the unit is not required to issue this gear to individual personnel, and the unit shall maintain quantities as needed.

A.4. Minimum Wear Requirements Non-Crewmember	While performing designated non-crewmember roles, personnel shall wear at a minimum the required PPE listed below.
NOTE	Coast Guard personnel onboard other government-agency platforms shall be in compliance with Coast Guard PPE requirements.
A.4.a. Scheduled Mission Personnel Wear Requirements	Scheduled mission personnel shall wear the same gear as required of crew members. Commands may authorize Inspectors and Investigators to wear anti-exposure coveralls in lieu of a dry suit without a waiver. Inspectors and Investigators shall perform thorough Operational Risk Management when conducting cold weather operations.
A.4.b. Scheduled Passenger Wear Requirements	Scheduled passengers shall wear PFD. Scheduled passengers in cold weather shall wear anti-exposure coverall when possible.
A.4.c. Unscheduled Passenger Wear Requirements	Unscheduled passengers shall wear PFD when possible.

A.5. Training

Commands shall train each member required to wear or use PPE in the following:

(01) What/When PPE is necessary,

(02) How to properly don, doff, adjust and wear PPE,

(03) PPE limitations,

(04) Proper care, maintenance, storage and disposal of PPE,

(05) Ability to recognize defective or damaged PPE and remove from service.

Members shall demonstrate an understanding of the training specified, and the ability to use PPE properly before being allowed to perform work requiring the use of PPE.

A.6. R&SS Petty Officer Designation

In accordance with Reference (a), Commanding Officers and Officers-In-Charge shall designate, in writing, a Rescue and Survival Systems Petty Officer (R&SS PO), E-5 or above, who possesses the judgment, professionalism, and maturity required to handle the administrative demands that come with managing the unit's rescue and survival equipment. The R&SS PO is responsible for the administration of the requirements detailed in this Manual, and is effectively the unit's expert for this equipment; however, it is not intended that this individual personally inspect or maintain all equipment, but ensures that inspection and maintenance requirements are completed accurately and on-time.

NOTE

Officers-In-Charge shall designate at least one Auxiliarist recommended by the Flotilla Commander in writing as the Rescue and Survival Systems Officer within each flotilla to manage PPE issuance, training, and maintenance. OIAs shall train and guide the designated flotilla members on how to conduct maintenance of rescue and survival equipment.

A.7. Deviation without Authorization

Members shall not add additional items or deviate from their equipment lists. Members shall verify they are in compliance with either Reference (d) or (e), depending on the mission they are performing. Compliance with this Manual and References (d) and (e) ensure such factors as equipment weight and bulk will not adversely affect performance, thermal stress, mission accomplishment, or safety.

NOTE

Any deviations to weight requirements established in References (d) or (e) shall be routed through the Office of Boat Forces (CG-731).

Section B. Systems and Equipment Configurations

B.1. Systems and Equipment Configurations

The equipment and system configurations identified in this Manual are found to be the most compatible with Coast Guard operations. Deviations or modifications to configurations of the equipment or systems identified in this Manual are prohibited unless specifically authorized by the Assistant Commandant for Capability (CG-7).

B.2. Configuration Control Board

The Office of Boat Forces (CG-731) leads the Rescue and Survival Systems Configuration Control Board (RSS CCB). CCB consists of the Rescue and Survival Systems Manager, Special Missions Training Center (SMTC), National Motor Lifeboat School, Boat Forces Training Center Yorktown, and, when needed, an Auxiliary subject matter expert. Any unit desiring to modify existing gear, or conduct testing and/or development of new gear is required to obtain written permission from the CCB, in accordance with Reference (f). This safeguard is intended to ensure adequate safety and systems testing standards, as well as to eliminate redundant efforts while leveraging lessons learned.

CHAPTER 2
R&SS Equipment Lifecycle Management

Introduction

This Chapter contains Lifecycle Systems Management policy regarding the Logistics, Maintenance and Disposal of Rescue and Survival Systems equipment.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Logistics	2-11
B	Property Management and Disposal	2-14

Section A. Logistics

A.1. Acquisitions Policy Statement

Personal Protective Equipment (PPE) is procured under the statutory authority of 29 U.S.C. § 668 and 14 U.S.C. § 477 and is managed in accordance with Reference (g). General safety equipment/PPE item selection criteria is based on 29 CFR §1910.132(a) (29 U.S.C. 653, 655, 657). Lifesaving/personnel survivability equipment and clothing selection criteria are based on 46 CFR Part 160 and CG policy. All items herein comply with USCG and OSHA regulations.

A.2. Unit Allowances

Unit allowances for rescue and survival equipment and systems shall be determined by platform type, mission to be accomplished, number of crewmembers assigned or passengers embarked, and geographical location or range the platform is capable of operating in.

A spare allowance may be necessary for augmentation during surge operations and to allow scheduling flexibility for equipment or systems out of service for rework or awaiting replacement.

Commanding Officers and Officers-In-Charge may procure additional allowance items as necessary to ensure the unit maintains the directed readiness status.

A.3. Procurement Policies

Rescue and survival equipment listed in this Manual are procured in accordance with Reference (h), and either the applicable Maintenance Procedure Cards (MPC). Equipment on Headquarters managed contracts shall only be procured following the provisions on those contracts. Equipment on General Services Administration (GSA) schedules shall be procured from among all qualified GSA vendors. Many equipment items presented are procured from commercial sources and the salient characteristics are described with known sources identified. Units are required to procure brand name or equal equipment that meets all the salient characteristics. Some commercially procured equipment that is of a standard configuration critical to mission safety, platform configuration or law enforcement jurisdiction shall only be procured from the identified sources. Commanding Officers and Officers-In-Charge shall refer all procurement questions to the local Contracting Officer for guidance.

NOTE

Boat Force units shall use object class code 3131 for all rescue and survival system program purchases.

A.4. Maintenance

Initial build-up, inspection and periodic maintenance activities ensure that rescue and survival equipment function properly during its life cycle. Specific guidance is provided on MPCs.

Equipment and systems requiring extensive build up, inspection and maintenance use MPCs. Maintenance shall be completed before the end of the inspection interval. If the inspection cannot be completed, then the items must be removed from service and built back up.

Conduct regularly scheduled preventive maintenance of PPE in accordance with MPC. Scheduled maintenance requirements include pre-use inspections, periodic leakage tests, functional tests, and repair procedures. Damaged PPE shall be repaired or replaced immediately.

Regular visual inspection is necessary prior to operation. Prior to each use, a visual inspection must be conducted.

A.5. MPC Hierarchy

MPCs can be found at multiple sources (NE-TIMS and the Office of Boat Forces (CG-731) website). The hierarchy of sources is as follows:

(01) Naval Engineering Technical Information Management System (NE-TIMS) website: http://cgweb.netims.uscg.mil:1088/cgi-bin/WebObjects/Tims.

a. Sign in as guest and click “Submit”
b. Click “Enter NE-TIMS”
c. Click “MPCs”
d. R&S MPCs can be found in two locations under Boat/Cutter Class (Asset Type).
   i. Class or size of boat.
   ii. All others click “MSR”
e. Then click Search.

(02) The Office of Boat Forces (CG-731) website (units utilizing Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) gear, or any MPCs that are not in NE-TIMS): http://cgweb.comdt.uscg.mil/G-RCB/SurvivalMPCs.htm.

a. Click on Rescue and Survival,
b. Select one of the categories for your particular MPC.

NOTE

Any gear referenced in the MPC is an option, but the gear can be different from the stock number provided, so long as it meets the salient characteristics in this Manual AND the word “equivalent” is next to the items in the MPC.
To identify salient characteristics for consumable and expendable items that feature the word “equivalent”in the MPC and whose salient characteristics are not listed in this Manual, look up the listed part number on the MPC.
Items purchased as “equivalent” should be close to the same price as what is on the MPC, because the Office of Boat Forces (CG-731) will provide no additional funding.

WARNING

Failure to comply with the directed build up, inspection or periodic maintenance of equipment or systems may result in injury or loss of life.

A.6. System of Entry

ALMIS will track maintenance schedule and will hyperlink to NE-TIMS for the MPC. For MPCs not in ALMIS that direct you to "record maintenance action by completing appropriate signoff," units shall use the maintenance record located in **APPENDIX A**. Non-modernized units shall use the maintenance record located in **APPENDIX A** for all required record maintenance.

Officers-In-Charge shall ensure up-to-date MPCs are available to their Auxiliarists to help facilitate the completion of preventative maintenance and build-up procedures. Because Auxiliary PPE is not recorded in ALMIS, paper maintenance records are required to be maintained for each piece of equipment. **APPENDIX A** contains the only maintenance records that are authorized to be used.

A.7. Maintenance Documentation Instructions

Enter the name of the item on the first line. Model, Serial Number and the date placed in service are required. The date placed in service is when the member builds up a new piece of equipment for the first time. This date is used to track the total time it has been used and will never change even if member takes it out of service and builds it up again. When performing both scheduled and unscheduled maintenance to the item, record the inspection date, and type (W – Weekly (7 days), M – Monthly (30 days), Q – Quarterly (90 days), S – Semiannually (180 days), A – Annually (365 days), P – Post Use, O – Other, and MX for maintenance only activities). There are no grace periods for inspection frequencies. Remarks section shall always be filled out. Minimum information shall include MPC number and date revised. For other than scheduled inspections, when circling "O" and "MX," specify the action taken in the Remarks section. Attach additional forms or work orders if necessary. If the item is sent to a servicing facility, ensure the Inspection Facility block is recorded. A servicing facility stamp may be used in this block. A template can be found in **APPENDIX A**, and a sample can be found in **APPENDIX B**.

Lot numbers and sub-assembly serial numbers can be recorded on page one of multiple page documents. Repeating this information on subsequent pages is not necessary providing a running total of pages exist for that item at the bottom right of the page. Lots or serial numbers that are replaced must be corrected in this Section and noted in the Remarks block.

NOTE

The initial in-service date for the item NEVER changes, it remains constant until the item is removed from service and disposed.

Section B. Property Management and Disposal

B.1. Property Management

Rescue and survival systems and equipment shall be managed in accordance with this Manual, as well as References (a) through (n). Rescue and Survival Equipment is managed as Direct Turnover (DTO) Material unless otherwise specified in this Manual. Extra gear is considered expended. There is no requirement to place these items into an inventory tracking system. Extra gear is defined as any equipment above that which is minimally required to be maintained by the unit. Inventory gear is that which is on the shelf and not issued. Inventory gear is not expended.

Only limited amounts of inventory should be maintained by the unit. If a unit keeps an inventory of equipment it shall be managed in accordance with Reference (i).

B.2. Property Disposal

Equipment that is no longer serviceable shall be disposed of in accordance with Reference (j). Particular caution must be exercised when considering use of Defense Reutilization Marketing Office (DRMO) functions to prevent expended and/or unreliable equipment from being repurposed in life-saving capacities. Furthermore, PPE with USCG marking shall not be transferred to DRMO.

CHAPTER 3
Issue and Inspection Policy

Introduction

This Chapter contains policy regarding waivers and documentation of Rescue and Survival Systems equipment.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Standard Issue Personal Protective Equipment (PPE) Issue Policy for Crewmembers	2-16
B	Protective Clothing and Equipment Policy	2-18
C	Swimmer Equipment Policy	2-25
D	Deployable Specialized Forces (DSF) Equipment Policy	2-26
E	Ice Rescue Equipment and Protective Clothing Policy	2-30
F	Cutter Life Raft Policy	2-31
G	Waivers and Documentation	2-32

Section A. Standard Issue Personal Protective Equipment (PPE) Issue Policy for Crewmembers

A.1. Standard Issue Personal Protective Equipment (PPE) Crewmembers

Items listed in **Table 2-2** are presented and shall be issued in the quantities shown below. For Auxiliarist issue, see asterisked items in Part 2, Chapter 1, **A.3.a. Crewmember / Scheduled Mission Personnel Standard Issue Personal** Protective Equipment (PPE).

QTY	ITEM
1 each	Helmet
1 set	Rain Jacket and Pants (see first Note below)
1 each	Boat Crew Knife (optional)
1 pair	Intermediate Gloves
1 pair	Goggles (prescription lens procured with unit funds)
1 each	R&S Gear Bag
1 pair	Sunglasses (prescription lenses may be available from medical)
1 pair	Boat Crew Safety Boots
1 pair	Boat Shoes (optional)
1 each	Anti-Exposure Coverall (optional for cold-weather units)

Table 2-2
Standard Clothing Issue for Crewmembers

NOTE

Units shall issue rain jacket and pants to all members who request them. When member does not request rain gear, its issue is optional.

NOTE

FOR CUTTERS ONLY- Break-in personnel should have only the necessary PPE for the operating environment issued to them during the break-in period. Once fully qualified, the member will be issued a full boatcrew kit.

A.2. Minimum Issue Cold Weather PPE Crewmembers

This paragraph describes issue policy for the minimum outfit of cold weather clothing and equipment required to safely perform the duties required of personnel operating shore and cutter based boats in areas where the air and water temperatures both fall below 50 degrees Fahrenheit. The cold weather clothing and equipment items presented in this paragraph are the standard by which funding is justified. These items represent the minimum inventory cold weather survival clothing and equipment required by personnel engaged in waterborne operations. Other equipment may be required at individual units. Cold weather clothing and equipment are issued to all personnel meeting the criteria and operating in the following geographic regions:

(01) District 1, 5, 9, 11 (except Sector San Diego units), 13 and 17 station and aids to navigation units, and Sector Charleston,
(02) District 8 station and aids to navigation units and sectors, MSDs and MSUs with boat detachments located north of 31 Degrees Latitude,
(03) Cutters operating in district 1, 5, 9, 11 (except Sector San Diego units), 13 and 17,
(04) Cutters operating in district 7 north of Florida and district 8 north of Louisiana,
(05) All DSF units.

Items noted on **Table 2-3** shall be issued in the quantities shown below, in accordance with Part 2, Chapter 1, A.3. **Required Issued PPE**

QTY	ITEM
1 each	Maritime Cold Weather Suit System (MCWSS) (provides Layer III protection) or Industrial type Dry Suit (provides Layer III & II protection)
3 sets	Thermal underwear (2 set Layer I moisture wicking material and 1 set Layer II polar fleece) (Layer II is not required to be issued when an Industrial type Dry Suit is issued.)
1 each	Neoprene hood
2 pair	Thermal socks
1 each	Cold weather glove layers (1 pair of each Layers I-III)
1 pair	Cold weather boots
1 each	Balaclava
1 each	Watch cap
1 each	R&S gear bag

Table 2-3
Cold Weather Clothing Issue

Section B. Protective Clothing and Equipment Policy

B.1. Required Equipment

All crewmembers and scheduled mission personnel carried in boats shall wear hypothermia protective devices as follows:

If Units utilizing the optional Anti-exposure Coveralls (AEC) as per MPC?	**Then**
Yes	See **Table 2-5** 50/50 Box
No	See **Table 2-6** Flat 60 Box

Table 2-4
Required Hypothermia Protective Devices

B.2. Minimum Cold-Weather Equipment Tables

The following tables reflect the minimum required equipment. Additional protection may be worn at the crewmembers discretion. Use either table as follows:

(01) Draw a horizontal line across the table that is equal to the water temperature for the mission.
(02) Draw a vertical line up the table that is equal to the air temperature for the mission.
(03) Don the equipment identified in the shaded area where the lines intersect.

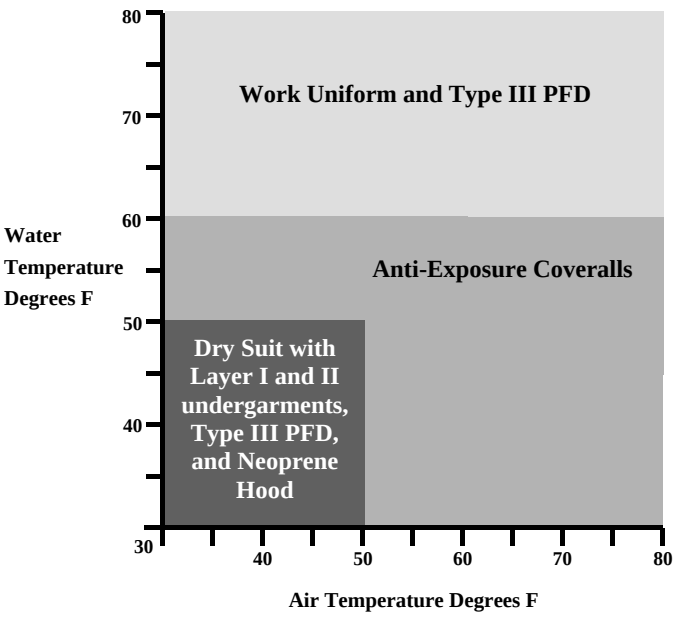


Table 2-5
50/50 Box

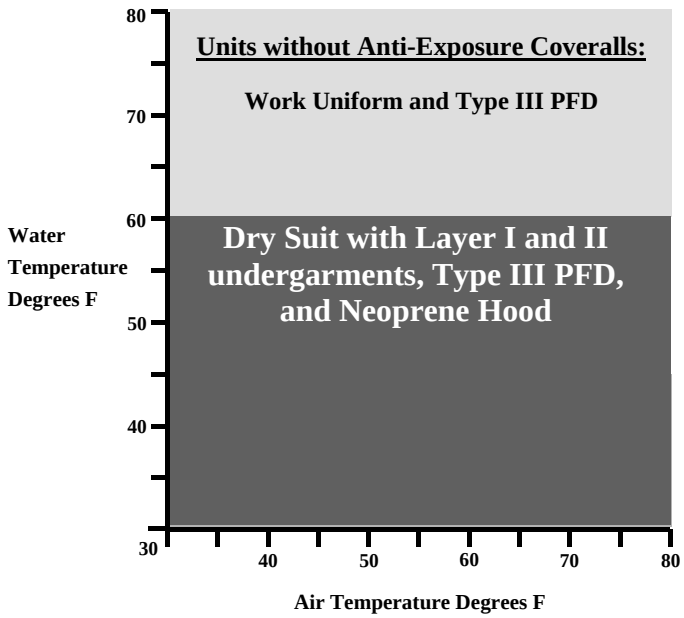


Table 2-6
Flat 60 Box

B.3. Anti-Exposure Coveralls

Personnel shall wear anti-exposure coveralls when operating in conditions requiring anti-exposure coverall use. Refer to **Table 2-5** and **Table 2-6** to determine when anti-exposure coverall use is required.

Anti-exposure coveralls are no longer required to be personally issued at units (shore or cutters) assigned to CG Sectors Guam, Honolulu, Key West, Miami and San Juan. If personnel assigned to cold weather units have been issued an authorized Maritime Cold Weather Suit System (MCWSS) or Industrial Dry Suit, per appropriate MPC, the personal issue of the anti-exposure coveralls is optional.

B.4. Outer Garment Comparison

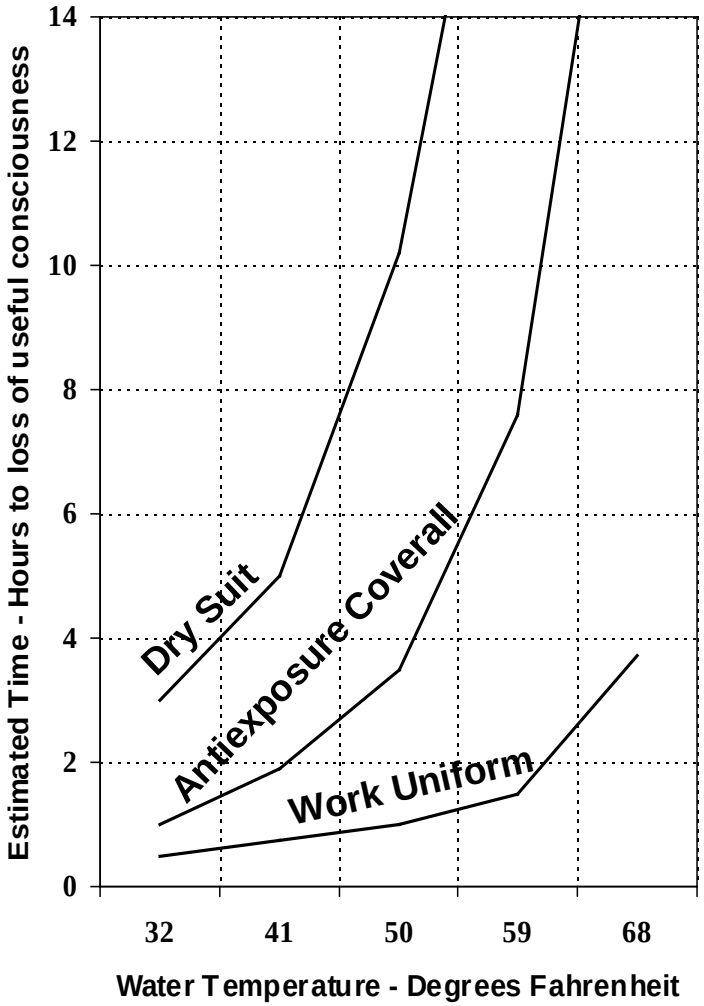


Figure 2-1
Outer Garment Comparison

B.5. Ready Service Locker

A Ready Service Locker – a stockpile of shared gear and equipment that can be used by scheduled mission personnel during each mission – may be used to store returnable items that can be checked out by personnel who do not frequently wear the items, such as Sector Boarding Team, Inspections personnel, etc. This will prevent excess numbers being issued to individuals who will not wear them after departing the unit. All gear placed in service that is maintained in the Ready Service Locker shall be labeled with a unit-generated serial number in accordance with MPC. Each unit shall generate a local record for equipment issued out to personnel. The local record shall note equipment condition upon issue and return, and who the gear was issued to.

To find what Ready Service Locker may contain, see **Table 2-7** Reclamation Control.

B.6. Government Property and Personal Issue Documentation

All Coast Guard PPE requires special procedures for accounting, inspection, and documentation.

B.6.a.Government Property

All PPE items required by the policies listed in this Manual remain the property of the Coast Guard.

B.6.b. Inspection

The protective clothing and equipment identified in this Manual are subject to inspection and associated maintenance procedures to ensure high quality is maintained, and prolong product longevity. Each section identifies inspection and maintenance requirements for the clothing or equipment discussed. Personnel issued PPE are responsible for maintaining that issue, including performing the required inspection and associated maintenance. Prior to each use, personnel who are issued PPE shall inspect each item for any discrepancies that would compromise integrity. Discrepancies shall be corrected prior to use. Seawater rapidly degrades protective clothing and equipment. After each use, protective clothing and equipment shall be fresh-water rinsed, at a minimum, to remove all traces of seawater and allowed to completely dry before stowage.

NOTE

Maintaining good PPE condition and maintenance is a shared responsibility between the wearer and the R&SS Petty Officer. Each wearer must maintain, take due care of, and identify any equipment failures or deficiencies with the assistance of the R&SS Petty Officer.

B.6.c. Issue

This Manual in conjunction with Reference (g) provides authority to individually issue personal protective equipment. The guidelines for accountability of personally issued protective clothing and equipment contained in this Manual shall be strictly adhered to. Personal protective equipment is the responsibility of the individual it is issued to. Individuals shall be responsible for the replacement of any gear that is damaged or lost due to negligence. See Reference (j) for disciplinary actions and pecuniary liability.

B.6.d. Issue Documentation and Accountability

Personal Clothing and Equipment Record, Form AF-538, shall be used to document all issuances of personal PPE items. Accountability is maintained by the issuing command through periodic inventory inspections and documented annually on Form AF-538. These annual inventory inspections are useful in determining unit needs for maintaining an inventory of protective clothing and equipment for issue, recurring replacement costs associated with personally issued clothing and equipment, and to ensure that periodic inspection and associated maintenance procedures are being accomplished. The unit's Rescue and Survival Systems Petty Officer shall perform the annual inventory inspection. The inspection shall be entered into AOPS /TMT by the unit AOPS administrator.

B.6.e. Personnel Transfer

It is required that personal clothing and equipment issued to personnel be transferred with personnel to cutters and shore units when permanent change of station occurs. If the new assignment does not require the use of boat crew clothing and equipment, all returnable items issued shall be returned to the issuing command prior to personnel transfer. For example, if a member who is issued an anti-exposure coverall transfers to a unit that is not using the anti-exposure coveralls, then the coveralls are required to be returned before transferring.

NOTE

Members transferring to BM A School shall take only their nonreturnable items (see **Table 2-7**) from their home units to the school. BM A school will issue returnable items to students on a temporary basis until graduation.

B.6.f. Personal Clothing and Equipment Record, Form AF-538

Document all issues and returns of protective clothing and equipment on Personal Clothing and Equipment Record, Form AF-538. Lines 1 through 20 of the form are used to identify each item issued by article name, serial number (if applicable), quantity issued, size, and date of issue or turn-in. Any mistakes can be corrected by lining through and initialing next to the error. If a block is not used, mark through it with horizontal or vertical lines that are typed or handwritten. Use lines 23 through 27 to identify the unit and the individual receiving the issue. Users shall enter their Employee Identification Number (EMPLID), not their Social Security Number (SSN), in block 25. Section 28 on the second page shall be used to document annual inventory inspections and shall be signed by the individual performing the inspection and the individual accountable for the items. Block 28 is not to be signed upon initial issue, but for annual inventory only. Maintain the unit's Personal Clothing and Equipment Record, Form AF-538, file in a controlled area.

NOTE

For privacy protection, member shall not enter SSN on the Personal Clothing and Equipment Record, Form AF-538.

R&SS petty officers may use an additional page 1 of the Form AF-538 as a continuation page for listing all gear that is issued.

APPENDIX C contains a blank Personal Clothing and Equipment Record, Form AF-538. **APPENDIX D** contains a filled-out sample of the Personal Clothing and Equipment Record, Form AF-538. An electronic version of Form AF-538 is available on the CG-731 website at http://cgweb.comdt.uscg.mil/G-RCB/RSS/af_538.pdf.

B.6.h. Reclamation Control

The R&SS Petty Officer will reclaim items based on **Table 2-7** below when the individual assigned the equipment is either transferred to a non-Boat-Forces unit or when separating from the service.

Returnable items issued to non-boat crew Cutter personnel should remain with the Cutter.

RETURNABLE ITEMS	NON-RETURNABLE ITEMS
Helmet	Boat Shoes
Raingear Jacket and Pants	Gloves
R&S Gear Bag	Boat Crew Safety Boots
Boat Crew Knife	Layer I Thermal Protection
Anti-Exposure Coverall	Layer II Thermal Protection
Dry Suit	Cold Weather Glove Layer I
Cold Weather Gloves Layers II and III	Thermal Socks
Cold Weather Boots	Neoprene Hood
Goggles	Balaclava
Sunglasses	Watch Cap
	Intermediate Gloves

Table 2-7
Reclamation Control

Unit may store Returnable Items, except the Boat Crew Knife and Dry Suit, in a Ready Service Locker.

Non-returnable items shall not be shared. Non-returnable items shall be issued individually to crew members and scheduled mission personnel.

B.6.i. Equipment Sizing

Equipment is normally available in sizes ranging from the fifth percentile female to ninety-fifth percentile male. If standard sized equipment does not provide the proper fit and the manufacturer is unable to provide special sizing to meet personnel needs, units are authorized to purchase an alternative item that most closely meets the characteristics of the standard issue PPE.

Section C. Swimmer Equipment Policy

C.1. Cutter Surface Swimmer Equipment Issue and Management	Cutter surface swimmer issued to personnel are government properties considered to be organizational uniform items. Refer to Part 2, Chapter 3, B.6. **Government Property and Personal Issue Documentation** and its subparagraphs for management of cutter surface swimmer equipment. All issued items of cutter surface swimmer equipment shall be returned to the unit stock when cutter surface swimmer equipment are reassigned to other duties or units.
C.2. Boat Swimmer Equipment Issue and Management	Boat Swimmer Equipment is not issued to personnel. Some platforms are equipped with boat swimmer gear.

Section D. Deployable Specialized Forces (DSF) Equipment Policy

D.1. Overview

This Section describes wear policy for the minimum outfit of standard clothing and equipment required to meet CG personnel survivability strategy for the DSF community. The standard clothing and equipment items presented in this Section are the basis for funding. These items represent the minimum inventory of survival clothing and equipment required by individual personnel. Other equipment may be required at individual units and is specified by the applicable program. Addressed below are the requirements and outfitting for specifically the DSF tactical operator and/or tactical delivery team (TDT) member.

D.2. Discussion

Standard clothing and equipment are issued to all persons engaged in waterborne initial and sustainment training and operations to include: coxswains, crewmembers, boarding officers and boarding team members assigned to Maritime Safety Security Teams (MSST), Port Security Units (PSU), the Maritime Security Response Team (MSRT), Strike Teams, Tactical Law Enforcement Teams (TACLET), and designated inspection/examination team members. This same equipment shall be issued to any member performing in a “break-in” or an annual requalification capacity, to include DSF and Boat Forces instructional cadre who support and sustain essential capabilities that directly support NCVP, PWCS, and homeland security and defense operations.

Waterside and Maritime Law Enforcement / Force Protection (MLE/FP) elements of the MSRT, TACLET's, MSSTs, PSUs, and Strike Teams shall use the same standard and cold weather clothing and equipment as a standard Coast Guard boat crew unless authorized by the Office of Specialized Capabilities (CG-721) and the Office of Boat Forces (CG-731). This equipment includes the use of CG-CB Dry suit (both operational and recapitalized (non-CB)) for DSF units. Exceptions to certain items are identified throughout this Manual.

D.3. Tactical Operators and TDT Members

A Tactical Operator is a DSF member assigned to the MSRT Direct Action Section, MSRT CBRNE, MSRT Precision Marksman – Observer Team (PM-OT), MSST MLE-FP, or TACLET Law Enforcement Detachment (LEDET) per Reference (f). Due to the unique scope of work, the MSRT TDT has different equipment needs, some of which are addressed elsewhere in this Manual.

Items in this Section are listed under two separate lists: Tactical Operator and TDT. It is clear that tactical operators require different clothing and equipment to conduct their missions. The outfit lists in this Section set the minimum equipment each operator shall be issued to cover Rescue and Survival only. Equipment such as carabineers, safety runners, and other mission-specific items will be purchased through other programs.

NOTE

Regardless of the program requiring clothing or equipment, all issued items shall be documented on an AF-538.

All DSF units are worldwide-deployable, therefore they shall be issued Standard and Cold Weather Clothing. LEDETs are only required to purchase Cold Weather Clothing when specific operations or training evolutions require its use. TACLETs shall maintain on-hand a minimum of 25 sets of Cold Weather gear for emergent operations. This gear will not be issued until it is ready for use.

Tactical operators and TDT members shall be issued each piece of clothing or equipment listed. When ordering, all salient characteristics descriptions shall be followed and equipment shall be procured in accordance with the applicable program.

D.4. Deployable Specialized Forces (DSF) Standard Clothing and Equipment

All build up, issuance, and documentation of required DSF equipment items shall be conducted IAW current maintenance procedure cards (MPC).

NOTE

For DSF units, boat crew survival pouch or leg pouch is authorized in lieu of the boat crew survival vest.

D.5. Tactical Operator Standard Clothing Issue

Items listed in **Table 2-8** are presented and shall be issued in the quantities shown below.

QTY	ITEM
1 each	Helmet
1 set	Tactical Flotation System (TFS)
1 each	Wheeled Duffle/Equipment Bag
1 pair	Eye Protection (prescription lens procured from unit funds)
1 each	Shooting Gloves
1 each	Fixed Blade Knife
1 pair	Tactical Boots
1 each	Tactical dry suit or chem-bio dry suit
2 pair	Moisture wicking layer I undergarment (top and bottom)
1 each	Stretch fleece blend layer II undergarment
2 pair	Thermal socks
1 each	Standard/infrared combo strobe light
1 each	SAR ACR personal locator beacon
1 each	SAR whistle
1 each	SAR mirror
1 each	Tactical PFD Rescue Equipment Pouch

Table 2-8
Tactical Operator Standard Clothing Issue

NOTE

DSF Commanding Officers may authorize additional mission-specific Rescue and Survival PPE (e.g. signaling pyro) to be carried by the tactical operator as determined in mission planning, so long as the requirements of Reference (e) are met.

NOTE

Wheeled duffle, shooting gloves, and tactical boot are managed by DOL-42. Contact them for salient characteristics.

D.6. TDT Standard Clothing Issue

Items listed in **Table 2-9** are presented and shall be issued in the quantities shown below.

QTY	ITEM
1 each	Helmet
1 each	Wheeled Duffle/Equipment Bag
1 pair	Eye Protection (prescription lens procured from unit funds)
1 each	Shooting Gloves
1 each	Fixed Blade Knife
1 pair	Tactical Boots
1 each	Tactical dry suit or chem-bio dry suit
2 pair	Moisture wicking layer I undergarment (top and bottom)
1 each	Stretch fleece blend layer II undergarment
2 pair	Thermal socks
1 each	Standard/infrared combo strobe light
1 each	SAR ACR personal locator beacon
1 each	SAR whistle
1 each	SAR mirror
1 each	Ballistic Goggles
1 each	Tactical PFD Rescue Equipment Pouch

Table 2-9
TDT Standard Clothing Issue

D.7. TDT Equipment

All build up, issuance, and documentation of required TDT equipment items shall be conducted IAW current maintenance procedure cards (MPC) with the exception of the fixed blade knife.

NOTE

Refer to Reference (e) for definition of Tactical Operator.

D.7.a. Fixed Blade Knife

The fixed blade knife shall be carried in a sheath and affixed to the tactical operators' or TDT members' LE belt or drop leg holster in a manner that facilitates immediate access for use in an emergency.

Section E. Ice Rescue Equipment and Protective Clothing Policy

E.1. Station and Cutter Ice Rescue Equipment List

Each Ice Rescue station and cutter is required to have the minimum equipment:

(01) SKF-ICE,
(02) Shuttle Board (2) – one RFI and one for training,
(03) Cold Water Sling (2),
(04) Ice Awls **(**Minimum: Stations, 6; Cutters, 3**)**,
(05) Hypothermia Recovery Capsule,
(06) 150 FT Tending Line (2),
(07) 550 FT Line Reel,
(08) Ice Rescuer Safety Harness,
(09) Head Lamp (Stations, 6; Cutters, 3),
(10) Wool blanket (4),
(11) Flashlight (2),
(12) AOR maps/charts,
(13) M127A1 Ground Illumination Signal (6),
(14) Handheld GPS (2),
(15) VHF-FM radio – (3),
(16) Cellular phone - to remain in GV (1),
(17) Extra batteries - to remain in GV,
(18) Victim PFD (4),
(19) Night Vision Device (NVD) (2),
(20) Automatic External Defibrillator (AED) (1),
(21) Binoculars,
(22) Compass,
(23) First Aid Kit (with pocket CPR mask).

Section F. Cutter Life Raft Policy

F.1. Required Capacity

The number of life rafts carried by a cutter is based on the cutter's total available berthing. Life raft capacities shall be equal to or greater than 125% of the cutter's available berthing. For cutters whose configurations contain liferaft stowage in clusters, life raft capacity shall not be less than 100% of available berthing in the event the ship largest cluster is destroyed. A cluster is defined as life rafts being supported by a common stowage structure. Life rafts shall be kept in a ready status at all times.

F.2. Service Life Limit

Coast Guard-approved life rafts have a service life of 20 years. No life raft or component part of a life raft shall remain in service after 20 years from the date of manufacture. If a life raft exceeds the 20 year service life prior to the expiration of the annual recertification sticker, it shall be removed from service and replaced.

F.3. Life Raft Gripes

Life raft gripes shall be configured and installed in accordance with Reference (m). Gripes shall be plastic covered corrosion resistant steel or nylon covered stainless steel strap. Coast Guard Drawing FL-8201-86 shall be used as the standard installation guidance. View Coast Guard drawing FL-8201-86 at the following Naval Engineering Technical Information Management System web site: http://10.38.16.120:1088/NE-Tims/index.html.

F.3.a. Configuration

Life raft release systems used aboard all cutters shall be configured in accordance with Navigation and Vessel Inspection Circular (NVIC) Number 4-86, titled "Hydraulic Release Units For Life Rafts, Life Floats and Buoyant Apparatus, and Alternative Float-Free Arrangements." The circular summarizes the requirements for installing and maintaining Coast Guard approved hydraulic release units used with life rafts. Units may obtain NVIC 4-86 from this internet site: http://www.uscg.mil/hq/g-m/nvic/.

NOTE

Specific configurations for each cutter class may be obtained from the applicable Surface Forces Logistics Center product line.

F.4. Life Float

Life floats are used on WLR class cutters on inland navigable water where the cutter's operating area precludes the need for a life raft.

NOTE

Some cutters carry life floats for migrant operations. These life floats should be inspected using the same requirements.

Section G. Waivers and Documentation

G.1. Hypothermia Protective Device Waivers and Documentation

Commanding Officers and Officers-In-Charge, on a single mission basis only, may waive the requirement for wearing a hypothermia protective device only after a determination that the risk associated with crew performance degradation, thermal stress, and environmental considerations are offset by the benefits associated with the waiver. **Figure 2-1** is provided to assist with risk management decisions associated with waiver consideration. Documentation of the factors used to grant a waiver for wearing hypothermia protective devices shall be logged in the unit logbook and signed (written or electronically) by the unit Commanding Officer or Officer-in-Charge for each waiver granted. OOD shall initial inside the waiver log when an oral waiver has been granted by the CO/OIC. CO/OIC shall sign the waiver at earliest opportunity. XO/XPO may sign the waiver log if acting under "By Direction" authority. However, the waiver provision is not authorization to justify granting blanket waivers as unit standard operating procedure. Cutter operational smooth log or other unit equivalents may be used in lieu of waiver log, provided information is recorded.

NOTE

Sector Commanders may delegate waiver authority for Sector personnel to the Deputy Sector Commander, the Response Department Head, and the Prevention Department Head. Delegation shall be in writing.

Units shall record all waivers with the following information: Date, Boat number, Coxswain, air temperature, water temperature, wind speed, mission, PPE required, PPE being worn, OOD signature and CO/OIC signature (written or electronic). In each case covered by a waiver, the CO/OIC shall decide whether waived equipment shall be carried aboard the boat while underway.

NOTE

During ATON missions, crew members may use an anti-exposure coverall in lieu of a dry suit when air and water temperatures are both below 50 degrees at the discretion of the officer in charge. If the industrial dry suit is used then units shall wear the dry suit in cold weather environments because purchasing the sacrificial shell is roughly the same cost as purchasing an anti-exposure coverall.

NOTE

Cutter boarding officers and boarding team members are not required to carry hypothermia protective devices on board cutter boats during waiver conditions authorized by the commanding officer or officer in charge. Conditions of waiver shall be logged in unit PPE waiver log.

G.1.a. Exceptions

There are certain times when boat crew survival vests may be removed:

(01) Aids to navigation (ATON) teams, operating a standard boat, are permitted to remove the boat crew survival vest while actively engaged in deck operations or working on structures. ATON teams shall don the boat crew survival vest upon securing from deck operations and before putting way on for transit. For the purposes of this guidance only, deck operations is defined as working an aid or series of aids in a single mission. Team members would not be required to don the vest while transiting from aid to aid in a series. In addition, aids to navigation teams underway on standard boats at anchor for crew rest may relax the requirements directed by **Table 2-5** or **Table 2-6** at the coxswain's discretion.

(02) While conducting Ice Rescue training, personnel in survivor role may remove the vest just prior to entering the water to act as the survivor.

NOTE

Personnel who have not been formally trained to use military specification pyrotechnics shall not wear equipment that contains MK 79 or MK 124 pyrotechnics. Each passenger shall be outfitted with a PFD that contains a whistle and personal marker light or strobe light.

G.2. DSF Waivers

DSF Commanding Officers may waive cold weather PPE requirement on a case-by-case basis when a determination that the risk associated with tactical operator performance degradation, thermal stress, and environmental considerations are offset by the benefits associated with granting a waiver. This waiver authority includes allowing the wear of only a single-layer undergarment with the CBRNE dry suit.

NOTE

DSF Commanding Officers may delegate waiver authority to Deployable Team Leaders designated in writing when deployed away from home unit.

CHAPTER 4
Wear Policy

Introduction

This Chapter describes policy for the minimum outfit of standard clothing and equipment required to meet CG personnel survivability strategy. The standard clothing and equipment items presented in this Section are the standard by which funding is justified. These items represent the minimum inventory of survival clothing and equipment required by individual personnel. Other equipment may be required at individual units. Standard clothing and equipment are issued to all persons engaged in waterborne operations to include: coxswains, crewmembers, boarding officers and boarding team members assigned to cutters, stations, aids to navigation teams, DSF units, MFPUs, and designated inspection/examination team members.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Personal Flotation Device (PFD) Wear Policy	2-36
B	Standard Issue Personal Protective Equipment (PPE) Wear Policy	2-39
C	Cold Weather Equipment Wear Policy	2-42
D	Swimmer Equipment Wear Policy	2-44
E	Ice Rescue Equipment Wear Policy	2-46

Section A. Personal Flotation Device (PFD) Wear Policy

Overview

This Section describes wear policy for Personal Flotation Devices (PFD). All personnel embarked in shore and cutter based boats and those personnel engaged in specific deck operations on cutters shall wear PFDs as required in this Manual.

A.1. Minimum Required Gear

If the boat crew survival vest is not worn over an authorized PFD, a personal marker light or strobe light and whistle shall be required

NOTE

ATON units shall include the fixed-blade knife as part of their minimum gear when the boat crew survival vest is not worn.

A.2. Stearns® Model I600 Type I

The Stearns® Model I600 Type I may be used by Coast Guard boat and cutter crews as directed by the unit Commanding Officer/Officer-In-Charge, based on conditions encountered that may require a higher level of flotation characteristics than the Coast Guard-approved Type III device.

A.3. Type III

The Coast Guard-approved Type III PFD or equivalent shall be used by Coast Guard boat and cutter crews as directed by the unit Commanding Officer/Officer-In-Charge, based on conditions not requiring the use of a Type I device.

When the Type III is selected for use on shore and cutter based boat missions, the boat crew survival vest shall be worn over it by all crewmembers.

A.4. Survivors Type I

The Coast Guard approved survivors Type I PFD is intended for use by unscheduled passengers. Coast Guard boat and cutter crews shall not use this device as their standard PFD because of the mobility restricting nature of this device.

A.5. Type III Flotation Jacket

The Coast Guard-approved Type III flotation jacket (Float Coat) may be used in lieu of vest type, Type III PFDs when air and water temperatures are not cold enough to warrant the use of anti-exposure coveralls or dry suits (Refer to **Table 2-5** and **Table 2-6**).

When Type III flotation jackets are selected for use on shore and cutter based boat missions, all crewmembers shall wear the flotation jacket under the boat crew survival vest.

A.6. Cold Weather Diving Topside Ensemble (CWDTE)

The CWDTE is intended for use by diving personnel performing diving operations in cold water (37˚ F or colder) or ice-covered environments. It is authorized only for icebreaker dive teams.

A.7. Standard Navy PFD with Collar

The standard Navy PFD with collar is required for use by cutter crewmembers at general quarters or engaged in underway replenishment, towing, and abandon ship operations. The standard Navy PFD with collar is also routinely used on weather decks during heavy weather.

A.8. Abandon Ship Life Preserver

The Abandon Ship Life Preserver is used by cutter crewmembers in high heat areas and/or confined spaces during general emergency conditions.

A.9. Non-Coast Guard Approved Automatic/ Manual Inflatable PFDs

Non-Coast Guard approved automatic/manual inflatable devices require completion of an associated performance qualification standard (PQS) that is unique to the specific device. **The performance qualification standard shall be completed and placed in the member's training record prior to using the PFD**, and kept on file with the R&SS Petty Officer**.** Applicable PQS is located on the Office of Boat Forces website RSS PQS page:

http://cgweb.comdt.uscg.mil/g-rcb/RSS_PQS.htm.

WARNING

Damaged preservers shall be repaired or replaced immediately. Torn or punctured buoyancy chambers shall be replaced and not repaired.

WARNING

Harnesses of all types, such as the boat swimmer harness and other climbing safety harnesses, but excluding Gunner Restraint System, shall not be used with automatically inflating PFDs. Harnesses worn over inflatable PFDs can restrict the outward inflating action and may prevent breathing or cause crushing injuries to the upper torso.

WARNING

Automatically inflatable PFDs are known to hinder egress in an enclosed cabin environment and are not authorized for use on helicopters. The exception is the Mustang Survival MD-1250, which is authorized onboard helicopters for trained users.

A.9.a. Mustang Survival MD-3183 v22 with Survival Equipment Pockets

The Mustang Survival MD-3183 v22 with survival equipment pockets is optional equipment that can be used in lieu of inherently buoyant PFDs and boat crew survival vest combination. It may be used on shore and cutter based boat missions by crewmembers who have completed the Mustang Survival MD-3183 v22 performance qualification standard. Boarding officers and boarding team members who have completed the Mustang Survival MD-3183 v22 performance qualification standard may wear the MD-3183 v22, but a personal marker light or strobe light and the whistle are required.

A.9.b. Lifesaving Systems Life Preserver Survival Vest

The Life Preserver Survival Vest (LPSV) is optional equipment that can be used in lieu of the inherently buoyant PFD and survival vest combination. It may be used on shore and cutter based boat missions by coxswains, crewmembers, boarding officers and boarding team members who have completed the LPSV performance qualification standard.

A.9.c. Mustang Survival MD-1250

The MD-1250 is required to be worn when wearing a ballistic plate carrier over the water. Configuration of the MD-1250 and the Tactical PFD Rescue Equipment Pouch shall be in accordance with appropriate MPC. In order to wear the MD-1250, user must successfully complete the Water Survival Training Program (WSTP) in accordance with Reference (k).

A.9.d. Mustang Survival MD-0450-v22

The MD-0450-v22 may be worn when conditions call for a low profile flotation system that does not interfere with LE gear. When worn, the MD-0450-v22 shall be the outermost garment, with the waist belt adjusted to remove all slack so that it fits snugly around the torso.

NOTE

The MD-0450-v22 can be fitted with the MA7219 manual conversion cap when authorized.

Section B. Standard Issue Personal Protective Equipment (PPE) Wear Policy

Overview

This Section describes wear policy for Coast Guard Standard Issue Personal Protective Equipment (PPE). Characteristics of the gear are discussed in Part 3 **Equipment** of this Manual.

B.1. Helmets

CG personnel shall wear head protection during hazardous conditions such as:

(01) Boat lowering and recovery detail,
(02) Heavy weather,
(03) Surf,
(04) Ice rescue,
(05) Helicopter operations,
(06) Ports, Waterways and Coastal Security (PWCS) missions,
(07) Pursuit missions,
(08) When operating alongside a vessel where risk from falling objects is a factor, or
(09) During underway vessel-to-vessel transfers at the discretion of the coxswain.

A hardhat with chin strap meets the head protection requirement for:

(10) ATON personnel,
(11) Boat lowering and recovery detail personnel, and
(12) Scheduled mission personnel (excluding boarding teams and training teams).

NOTE

Helmet wear is at the discretion of the unit CO/OIC for the following personnel:

(01) Crews traveling at speed of 30 knots or greater or
(02) ATON or
(03) other crews engaged in activities OTHER THAN:
  a) SZ enforcement,
  b) NCV pursuit activities,
  c) those activities described in paragraph **B.1. Helmets** above.

CO/OIC should provide additional guidance in the unit's SOP.

B.2. Layering

As discussed in Reference (c), protective clothing can be categorized by layers. In this Manual, Layer I is a wicking layer worn closest to the skin, Layer II is an insulating layer, and Layer III is a moisture barrier. These three layers are usually used together in cold weather ensembles, such as the MCWSS (discussed in Chapter 4, Section A.1. **Maritime Cold Weather Suit System (MCWSS)**), however, the moisture barrier may be worn alone, as with Layer III items such as rain gear and gloves.

B.3. Rain Gear

Rain gear should be worn as the primary Layer III garment when exposure to intermittent sea spray or rain is encountered.

B.3.a. Alternate Issue

Units authorized to wear the camouflage utility uniform (CUU) may issue the CUU compatible GORE-TEX to requesting personnel.

ATON units may issue a PVC style rain gear meeting all other above mentioned SPECS for wear during ATON specific work when increased risk of destroying the rain gear is likely.

B.4. Intermediate Gloves

Intermediate Gloves shall be worn as required to provide thermal protection in intermediate cold/wet weather.

B.5. Goggles

Goggles provide benefits for personnel in various Coast Guard roles, and in some conditions their wear is required.

B.6. R&S Gear Bag

Personnel issued protective clothing and equipment shall use this bag for gear storage.

B.7. Sunglasses

Sunglasses should be worn by personnel to prevent radiation trauma.

B.8. Boat Crew Safety Boot

Personnel shall wear the temperate/wet weather boots in air and water temperatures above 50 degrees Fahrenheit.

B.9. Boat Shoes

Boat shoes may be worn when working aboard boats where non-slip traction and non-marking soles are required, such as when boarding recreational boats and during vessel inspection where appropriate.

B.10. Boat Crew Survival Vest

The boat crew survival vest shall be worn by all crewmembers over a Type III Coast Guard-approved PFD, Anti-Exposure Coverall, or Float Coat on all missions. The components of the boat crew survival vest shall not be removed unless needed.

Directors of Auxiliary may issue boat crew survival vests with required non-pyrotechnic equipment to crewmembers, or Auxiliarists may carry their non-pyrotechnic equipment in pockets built into the authorized Type III or inflatable PFD. The waist belt pocket part number found on the Inflatable PFD Maintenance Procedure Card (MPC) is the only authorized model.

WARNING

The boat crew survival vest provides no buoyancy and shall be worn by all crewmembers over a Type III Coast Guard approved PFD or over anti-exposure coveralls.

B.11. Anti-Exposure Coveralls

Personnel shall wear anti-exposure coveralls when operating in conditions requiring anti-exposure coverall use. Refer to **Table 2-5** and **Table 2-6** to determine when anti-exposure coverall use is required. If the boat crew survival vest is not worn over this PFD, a personal marker light or strobe light and the whistle are required.

B.12. Crew Restraint Systems

Crew restraint systems are designed to prevent crew injury and/or ejection. These systems are specific to each boat type, are covered in the appropriate Operator's Handbook, and include:

(01) Quick release seatbelts,

(02) Seatbelts/seat harnesses,

(03) Foot straps, and

(04) Heavy weather belts (Motor Life Boats (MLB) only).

Anytime Boat Forces assets engage in SZ enforcement or Non-Compliant Vessel (NCV) pursuit activities, (including training), all crewmembers are required to use crew restraint systems and/or gunner restraint systems. Boats conducting SZ enforcement or Non-Compliant Vessel Pursuit (NCVP) activities shall not get underway with more personnel than available restraint systems.

B.12.a. Exceptions to Policy

The 25' Transportable Port Security Boat (TPSB) (Boston Whaler) and the 41' Utility Boat (UTB) are not equipped with crew restraint systems. These crews are exempt from use of crew restraints; however, the gunner is required to wear the gunner restraint system.

Resident School Instructors, unit Designated Trainers, and Standardization Team Evaluators are exempt from crew restraint requirements if *both* hands are free and it is a training/evaluation mission as governed by their SOP.

B.13. Boat Crew Safety Belt

For all boats outfitted with crew safety belts: coxswains, crewmembers, boarding officers, boarding team members and scheduled mission personnel shall use the boat crew safety belt as a safety restraint system during hazardous conditions such as heavy weather and surf as defined in Reference (c).

B.14. Gunner Restraint System

Personnel manning the MAW on boats are required to use the gunner restraint system. Personnel firing shoulder fired small arms shall be either tethered or restrained by a crew restraint system. Prior to deployment, Boat Forces personnel shall become thoroughly familiar with the proper attachment points, wear, and operation of the boat gunner restraint system explained in Reference (c).

Section C. Cold Weather Equipment Wear Policy

Overview	This Section describes wear policy for the minimum outfit of cold weather clothing and equipment required to safely perform the duties required of personnel operating shore and cutter based boats in areas where the air and water temperatures both fall below 50 degrees Fahrenheit.
C.1. Dry Suits	A dry suit is the primary Layer III garment worn when a constant-wear suit designed to preclude the entry of water upon immersion is needed.
C.1.a. Maritime Cold Weather Suit System (MCWSS)	The MCWSS is the primary dry suit worn by CG personnel. Refer to **Table 2-5** and **Table 2-6** to determine when dry suit use is required.
C.1.a.1. Required Layering	Personnel shall wear Layer I and Layer II thermal underwear as part of the dry suit, unless water temperatures exceed 60 degrees, in which case personnel may wear, in lieu of Work Uniform, a Dry Suit with Layer I or Layer II (wearing both Layer I and II are not required in this instance).
C.1.a.2. Neoprene Hood	The neoprene hood is an integral component of the MCWSS and shall be carried by all personnel.
C.1.b. Industrial Style Dry Suit	Coxswains, crewmembers, boarding officers and boarding team members may use the Industrial breathable marine survival system in lieu of the MCWSS when operating in conditions requiring dry suit use. Refer to **Table 2-5** and **Table 2-6** to determine when dry suit use is required.
C.2. Thermal Socks	Thermal socks are an integral part of the MCWSS and Industrial Style Dry Suit. Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold environments where added thermal protection to the feet is necessary shall wear thermal socks. Cotton socks shall not be worn for thermal protection. Cotton absorbs and retains moisture, robs the body heat, and can cause rapid onset of hypothermia.

C.3. Cold Weather Glove Layers	Gloves are an integral part of the MCWSS and Industrial Dry Suit. Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold/wet environments where added thermal protection for the hands is required should use cold weather glove layers. Boarding Teams should choose a glove that allows them the maximum protection against the elements while allowing access and use of weapons and equipment.
C.4. Cold Weather Boots	Coxswains, crewmembers, boarding officers, boarding team members, and inspection teams working in a cold, wet environment aboard boats shall wear the cold weather boot.
C.5. Balaclava	Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold environments where added thermal protection for the head is necessary may wear the Balaclava.
C.6. Watch Cap	Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold environments where added thermal protection for the head is necessary may wear the watch cap.
C.7. Immersion Suit	Immersion suits are required for each person aboard cutters operating on the ocean or Great Lakes in all areas north of 32 degrees north latitude and south of 32 degrees south latitude.

Section D. Swimmer Equipment Wear Policy

D.1. Surf Cap	The surf cap is worn by cutter surface swimmers during all deployments at night and when the water temperature is below 72 degrees Fahrenheit. Use of the surf cap is optional for all other deployments.
D.2. Booties	Booties are worn by cutter surface swimmers over the dry suit sock foot and/or over the bare foot on all deployments. Two pairs of booties of different size shall be part of the cutter surface swimmer kit.
D.3. Neoprene Gloves	Neoprene gloves are worn by cutter surface swimmers during all deployments where the water temperature is below 72 degrees Fahrenheit.
D.4. Mask and Snorkel	A mask and snorkel is used by cutter surface swimmers for all deployments. This equipment is considered cutter/boat outfit and is not personally issued. Various boat platforms have this as part of the boat outfit list.
D.5. Fins	Fins are used by the cutter surface swimmer for all deployments. This equipment is considered cutter/boat outfit and is not personally issued. Various boat platforms have this as part of the boat outfit list.
D.6. Cutter Surface Swimmer Dry Suit	The cutter surface swimmer dry suit is worn by cutter surface swimmer personnel when deployed into water that is 50 degrees Fahrenheit and below.
D.7. Cutter Surface Swimmer Rapid Don Rescue Suit	The cutter surface swimmer rapid don rescue suit may be used by cutter surface swimmers in lieu of the dry suit and harness flotation vest combination. This suit may also be worn by Ice Rescue units.
D.8. Cutter Surface Swimmer Wet Suit	The “shorty” or the full-length portion of the wet suit ensemble is worn by cutter surface swimmer personnel at their discretion when required to deploy into water that is above 50 degrees Fahrenheit.
D.9. Cutter Surface Swimmer Harness Flotation Vest	The harness flotation vest is worn by the cutter surface swimmer on all deployments.

WARNING

Do not jump into the water with the harness flotation vest inflated. If the flotation cell has been orally inflated, actuating the beaded inflation lanyard will cause the cell to rupture, possibly causing injury to the swimmer.

D.10. Cutter Surface Swimmer Harness and Tending Line

The cutter surface swimmer harness and tending line is worn by the cutter surface swimmer on all deployments.

D.11. Boat Swimmer Harness and Tending Line

The boat swimmer harness and tending line is worn by the boat swimmer on all deployments from platforms equipped with this gear.

WARNING

Harnesses of all types, such as the cutter surface swimmer harness and other climbing safety harnesses, shall not be used with automatically inflating PFDs unless designed as one unit. Harnesses worn over inflatable PFDs can restrict the outward inflating action and may prevent breathing or cause crushing injuries to the upper torso. Inflatable Rescue Swimmer Vest and Harness is the only authorized inflatable PFD to be worn.

D.12. Thermal Underwear

Cutter surface swimmers and boat swimmers shall wear thermal undergarments appropriate for the climate conditions expected to be encountered during a deployment in accordance with Chapter 3 **Issue and Inspection Policy** of this Part.

Section E. Ice Rescue Equipment Wear Policy

Overview

This Section describes wear policy for the Coast Guard approved ice rescue personal protective clothing and equipment.

E.1. Ice Rescuer Headlamp

All ice rescuers shall wear a multi-LED headlamp on all helmets during any night ice rescue operation or training exercise.

E.2. Layer I Thermal Underwear

All ice rescuers shall wear Layer I thermal underwear under the dry suit when performing ice rescue operations or training exercises. Layer I is light and/or medium weight moisture wicking thermal underwear worn directly against the skin as the first layer of protection.

E.3. Layer I Thermal Socks

All ice rescuers shall wear layer I polypropylene socks when performing ice rescue operations or training exercises.

WARNING

Cotton socks shall **not** be worn for thermal protection. Cotton absorbs and retains moisture, robbing the body of heat which can cause rapid onset of hypothermia**.**

E.4. Layer II Thermal Socks

All ice rescuers shall wear layer II polypropylene socks when performing ice rescue operations or training exercises.

E.5. Ice Rescue Gloves

All ice rescuers shall wear approved gloves for all ice rescue operations or training exercises.

E.6. Ice Rescue Footwear

All Ice Rescuers shall wear appropriate footwear while conducting ice rescue operations or training exercises. Select footwear appropriate for use in the unit's conveyances (e.g. SPC-AIR, SKF-ICE) and when driving a Government Vehicle. When transiting ice on foot, footwear shall be equipped with ice cleats.

E.7. Ice Rescue Dry Suit

Ice rescue personnel shall wear one of two dry suits approved for ice rescue operations:

(01) The MSD 640 dry suit, or
(02) The MSD 630 dry suit.

The MSD 900, MSD585 and Kokatat™ dry suits in current inventory may be utilized for ice rescue until unserviceable. No other dry suits are authorized for ice rescue.

WARNING

Dry suits alone provide inadequate insulation for hypothermia protection. Personnel shall wear thermal underwear beneath the dry suit to provide protection from cold temperature, wind, sea spray and rain. Dry suits are not inherently buoyant. The harness flotation vest shall be worn over the dry suit for all cutter swimmer deployments.

PART 3
Equipment

Introduction

This Part contains the information necessary for the proper administration of the unit's rescue and survival systems program. It defines salient characteristics and configuration of safety gear, and directs specific policies related to procurement, required maintenance, procedures, and documentation necessary to meet Coast Guard personnel survivability and operational safety needs.

In this Part

This Part contains the following Chapters:

Chapter	Topic	Page
1	Personal Flotation Devices	3-2
2	Life Rafts, Gripes, Releases, Life Float and Multiple Person Recovery System	3-21
3	Standard Rescue Equipment and Protective Clothing	3-29
4	Cold Weather Equipment and Protective Clothing	3-52
5	Additional Equipment	3-70
6	Boat Swimmer and Cutter Surface Swimmer Equipment	3-104

CHAPTER 1
Personal Flotation Devices

Introduction

This Chapter contains information about personal flotation devices (PFDs) used aboard cutters and boats. The Sections in this Chapter reflect approved PFDs and their authorized uses.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	See Page
A	Personal Flotation Device	3-3
B	Coast Guard Approved Inherently Buoyant PFDs	3-6
C	Non-Coast Guard Approved Cutter Specific PFDs	3-12
D	Non-Coast Guard Approved Automatic/Manual Inflatable PFDs	3-15

Section A. Personal Flotation Device

Overview

This personal flotation device policy section establishes operational polices and the minimum personal flotation requirements for specific evolutions on Coast Guard vessels. The following policies are established:

(01) Command responsibility and risk management
(02) Minimum flotation requirements

A.1. Risk Management and PFD Selection

The minimum flotation standards required for most Coast Guard vessel operations can be achieved by using the inherently buoyant Coast Guard approved Type III PFD. Specific cutter deck operations require a different flotation standard. Commanding Officers and Officers-In-Charge, in conjunction with the crew, shall determine the most appropriate PFD type to be used during each operational mission or evolution. Mission planning for underway operations as well as dockside maintenance periods shall include an assessment of personal survivability and risk management. This analysis shall be based on the possibility that the crew might be forced into a survival situation during any phase of operations. If the conditions are unknown, personnel shall be prepared for the most adverse conditions by selecting the inherently buoyant Coast Guard approved Type I PFD.

A.1.a. Minimum Required Gear

A personal marker light or strobe light and whistle are not required to be attached when worn with the boat crew survival vest. If the boat crew survival vest is not worn over any authorized PFD, a personal marker light or strobe light and the whistle shall be required.

NOTE

ATON units only shall include the knife as part of their minimum gear when the boat crew survival vest is not worn.

A.2. Minimum Flotation Requirements

It is not possible to identify all operational evolutions and assign or establish a minimum flotation requirement for each.

The risks associated with some operations have been evaluated and the following minimum flotation requirements shall be complied with for the given operations identified. Commanding Officers and Officers-in-Charge shall evaluate all operations not presented for risk at the unit level and apply the appropriate flotation requirements.

A.2.a. Shore and Cutter Based Boat Operations

The Coast Guard approved Type III PFD is established as the inherently buoyant minimum flotation requirement for shore and cutter based boat operations. This policy includes law enforcement boarding operations. Alternatives to this requirement include:

(01) Stearns® Model I600 Type I,
(02) Mustang Survival MD-3183 v22 with survival equipment pockets,
(03) Mustang Survival MD-0450 v22,
(04) Lifesaving Systems Life Preserver Survival Vest 485-CG,
(05) Lifesaving Systems 481CG,
(06) Anti-exposure Coveralls with boat crew survival vest,
(07) Flotation Jacket with boat crew survival vest.

A.2.b. Cutter Towing and Buoy Deck Operations

The minimum flotation requirement for cutter towing and buoy deck operations is established as the inherently buoyant Coast Guard approved Type III PFD. Alternatives to this requirement include:

(01) Stearns® Model I600 Type I,
(02) Flotation Jacket,
(03) Anti-exposure Coveralls.

A.2.c. Markings

PFDs, anti-exposure coveralls, and float coats shall be orange and/or orange-black in color and marked as follows:

(01) On the left breast, with a Coast Guard emblem as described in Title 33 CFR Subpart 23. The emblem shall have a diameter of three inches, plus or minus ¼ inch.
(02) On the right breast, with a Coast Guard ensign as described in Title 33 CFR Subpart 23. The ensign shall measure 2½ inches in height and 3½ inches in width, plus or minus ¼ inch. This right-breast ensign is not authorized for Auxiliary members.
(03) In the center of the back, with the words “U.S. COAST GUARD” in block letters measuring 2½ inches plus or minus ½ inch. Lettering shall be solid black or white against the international orange background. For Auxiliary members, “AUX” or “AUXILIARY” shall be placed, in the same style of lettering, after the “U.S. COAST GUARD” lettering.

Identification markings should be applied using a silk-screen process or embroidered patch. Silk-screened markings are available from manufacturers or distributors. The embroidered patch may be procured locally and sewn or attached to the garment using adhesive.

A.2.d. Tactical Operations

The minimum flotation requirement for Tactical operations is established as the inherently buoyant Coast Guard Approved Type III PFD. Options to this requirement include the following:

(01) Tactical Flotation System, MD-1250 (worn only with Ballistic Protection System),
(02) Stearns® Model I600 Type I,
(03) Mustang Survival MD-0450 v22,
(04) Mustang Survival MD-3183 v22 with survival equipment pockets,
(05) Lifesaving Systems Life Preserver Survival Vest,
(06) Anti-exposure Coveralls with boat crew survival vest,
(07) Flotation Jacket with boat crew survival vest.

Section B. Coast Guard Approved Inherently Buoyant PFDs

Overview

This Section describes the Coast Guard approved inherently buoyant devices and the policies pertaining to their use. The following items are presented:

(01) Stearns® Model I600 Type I
(02) Type III
(03) Survivors Type I
(04) Type III Flotation Jacket
(05) Anti-Exposure Coveralls (see chapter 3)

B.1. Stearns® Model I600 Type I

The Stearns® Model I600 Type I PFD is used as the standard abandon ship PFD and is intended to replace the Navy Standard PFD with Collar on an attrition basis.

B.1.a. Application

This PFD may be used by Coast Guard boat and cutter crews as directed by the unit Commanding Officer/Officer-In-Charge, based on conditions encountered that may require a higher level of flotation characteristics than the Coast Guard-approved Type III device. This device provides greater mobility than the survivors Type I when the use of law enforcement or other types of gear are required. When the Stearns® model I600 is selected for use on shore and cutter based boat missions, the boat crew survival vest shall be worn over it by crewmembers.

The Stearns® Model I600 is the only Coast Guard-Approved Type I PFD authorized for military law enforcement/boat crewmember's use.

B.1.b. Salient Characteristics	The Stearns® Model I600 Type I PFD is a low profile, inherently buoyant, and universally sized device that will turn an unconscious or exhausted crewmember face up while in the water and wearing law enforcement equipment such as weapons and ballistic panel inserts. It provides 22 pounds of buoyancy. A harness D-ring slit is cut into the back panel to facilitate the tending harness D-ring. A pocket is installed on the front to hold a strobe light and whistle. Two models are available: (01) The Stearns® model I600 ORG NLT includes the flat orange whistle and the ACR Firefly III strobe light. (02) The Stearns® model I600 ORG NAV does not include the strobe light or the flat orange whistle.
B.1.c. Inspection	Build-up, semi-annual and post use inspection procedures are contained in the applicable MPC.
B.1.d. Supply Sources	Procure the USCG approved Type I PFD, meeting any salient characteristics and other requirements specified above, in accordance with Reference (h).

B.2. Type III

The Coast Guard-approved Type III PFD is used by Coast Guard boat and cutter crews as directed by the unit Commanding Officer/Officer-In-Charge, based on conditions not requiring the use of a Type I device.

B.2.a. Application

This device provides the best mobility for cutter crewmembers working over the side and boat crewmembers as the normal outfit. When the Type III is worn by crewmembers for use on shore and cutter based boat missions, the boat crew survival vest shall be worn over it.

Figure 3-1
Member in Type III PFD

WARNING ✋

The Coast Guard-Approved Type III PFD will not turn an unconscious or exhausted crewmember face up in the water.

B.2.b. Salient Characteristics

The Type III vest shall be USCG approved, international orange in color, have SOLAS-grade reflective tape installed for increased visibility in low-light environments, and a D-ring for attachment of a Lanyard/Kill-switch. The vest may be of a solid nylon or mesh on the upper half design. The vest shall be marked in accordance with Part 3, Chapter 1, Paragraph A.2.d. **Markings** of this Manual. This is a low profile, vest type and inherently buoyant PFD that provides the most mobility. The vest provides 15 ½ pounds of buoyancy. A personal marker light or strobe light and whistle are not required to be attached when worn in conjunction with the boat crew survival vest. If the boat crew survival vest is not worn over this PFD, a personal marker light or strobe light and the whistle are required.

B.3. Survivors Type I

The Coast Guard approved survivors Type I PFD is intended for use by passengers, prisoners, and other non-mission essential personnel. Coast Guard boat and cutter crews shall not use this device as their standard PFD because of the mobility restricting nature of this device.

B.3.a. Salient Characteristics

Any reversible Coast Guard Approved Type I PFD certified in accordance with 46 CFR 160.001. SOLAS tape is required. The color of the vest shall be international orange.

Figure 3-2
Passenger in Survivors Type I PFD

B.4. Type III Flotation Jacket

The Coast Guard-approved Type III flotation jacket (Float Coat) may be used by Coast Guard personnel working on or near the water.

B.4.a. Application

This jacket can be used in lieu of vest type, Type III PFDs when air and water temperatures are not cold enough to warrant the use of anti-exposure coveralls or dry suits. Refer to **Table 2-5** and **Table 2-6**. When Type III flotation jackets are selected for use on shore and cutter based boat missions, all crewmembers shall wear the flotation jacket under the boat crew survival vest.

WARNING

The Type III flotation jacket will not turn an unconscious or exhausted crewmember face up in the water.

B.4.b. Salient Characteristics

The Type III flotation jacket is a bomber style, waist length inherently buoyant jacket that provides 15 1/2 pounds of buoyancy. The jacket shall be international orange or international orange and black with SOLAS grade retro-reflective tape applied for increased visibility in low light environments. The jacket shall be marked in accordance with paragraph A.2.e. A personal marker light or strobe light and whistle are not required to be attached when worn with the boat crew survival vest. If the boat crew survival vest is not worn over this PFD, a personal marker light or strobe light and the whistle are required.

B.5. Cold Weather Diving Topside Ensemble (CWDTE)

The CWDTE is intended for use by diving personnel performing diving operations in cold water (37°F or colder) or ice-covered environments.

NOTE

CWDTE is authorized only for icebreaker dive team.

B.5.a. Salient Characteristics

The CWDTE provides readily adjustable thermal protection that allows divers to add or remove thermal protection according to physical activity in order to prevent sweating. The CWDTE consists of the Mustang ThermoSystem Plus Coat (MC1534 v22) and the Mustang Integrity HX (MP4225) Bib/pant. The Coat is high visibility ANSI green with an integrated hood and beaver tail. The bib-pant is black with leg zips for ventilation.

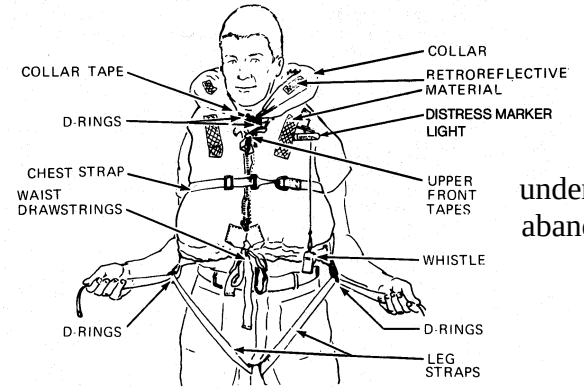
Section C. Non-Coast Guard Approved Cutter Specific PFDs

Overview

This Section describes the Non-Coast Guard approved inherently buoyant devices and the policies pertaining to their use. The following items are presented:

(01) Standard Navy PFD with Collar
(02) Abandon Ship Life Preserver

C.1. Standard Navy PFD with Collar



The standard Navy PFD with collar is required for use by cutter crewmembers at general quarters or engaged in underway replenishment, towing, and abandon ship operations.

NOTE

The Navy PFD will be replaced by the Stearns model I600 Type I.

C.1.a. Application

When available, ship's personnel are required to use survival suits during abandon ship operations. The standard Navy PFD with collar is also routinely used on weather decks during heavy weather.

C.1.b. Salient Characteristics

The standard Navy PFD with collar is an inherently buoyant international orange, sleeveless, vest type PFD constructed of a nylon or cotton outer shell filled with removable unicellular plastic pads or kapok. Adjustment straps and ties allow for sizing over a wide range. Leg straps are incorporated to keep the PFD from riding up on the wearer and keeping the PFD on when jumping into the water from high freeboard vessels. It will turn an exhausted or unconscious crewmember face up while in the water while providing 32 pounds of buoyancy. This PFD allows for complete relaxation while in the water and enables the wearer to assume positions that preserve body heat and extend survival time. A personal marker light or strobe light and a whistle shall be attached to the device.

C.1.c Donning

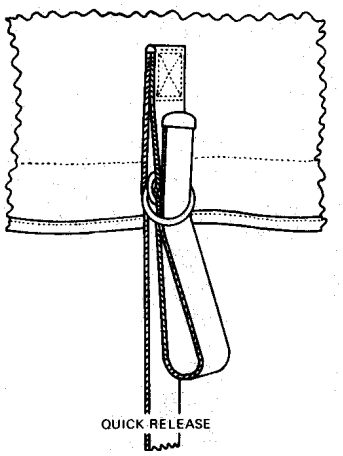
Use the following procedure to put on the standard Navy PFD with collar:

(01) Don the PFD as you would a vest.

(02) Secure the chest-strap snap hook on the right side to the D-ring on the left and pull strap tight around the chest.

(03) Extend the leg straps hanging from the rear waist area and route through legs from the rear to the front.

(04) Insert the right leg strap through the right double D-rings hanging from the side waist area and route the bitter end over the top D-ring and through the bottom. Pull all slack from the strap. Rig strap for quick release as shown in the figure below. Repeat for the left leg strap.



(05) Pull waist drawstrings tight and secure with a bowknot.

(06) Tie upper front tapes together with a bowknot.

Secure collar tapes through collar D-rings and tie with a bowknot.

C.2. Abandon Ship Life Preserver

The Abandon Ship Life Preserver is used by cutter crewmembers in high heat areas and/or confined spaces during general emergency conditions.

C.2.b. Salient Characteristics

The Abandon Ship Life Preserver is a single chambered, manual CO_2 or orally inflated device constructed of urethane-coated nylon cloth. When properly donned and fully inflated this preserver provides 35 pounds of buoyancy. The assembly consists of an integrated adjustable waist belt with buckle, storage pouch, and inflatable chamber. A strip of pile tape is installed on the inflatable chamber for attachment of a strobe light after inflation. Enclosed in the storage pouch is a toggle line and loop assembly used for securing survivors together or securing the wearer to a liferaft, a personal strobe light, and a whistle.

C.2.c. Donning, Adjusting and Inflating

Use the following procedures to don, adjust, and inflate the Abandon Ship Life Preserver:

(01) Buckle the waist belt around the waist with the pouch to the rear.

(02) Adjust the waist belt to allow rotation of the pouch to the stomach area.

(03) When required, unsnap the pouch, unroll the inflatable chamber, and pass head through yoke opening.

(04) Inflate the preserver by pulling the yellow inflation lanyard with a slow steady pull until the inflation assembly actuates.

(05) If the CO_2 inflation assembly fails, orally inflate preserver by unscrewing the knurled ring, depressing the mouthpiece, and blowing into the oral inflation tube.

Section D. Non-Coast Guard Approved Automatic/Manual Inflatable PFDs

Overview

This Section describes the Non-Coast Guard approved automatic/manual inflatable devices and the policies pertaining to their use. Each of the devices presented requires completion of an associated performance qualification standard that is unique to the specific device. **The performance qualification standard shall be completed and placed in the member's training record prior to using the PFD**, and kept on file with the R&SS Petty Officer**.** PFD PQS can be found on the Boat Forces website: http://cgweb.comdt.uscg.mil/g-rcb/RSS_PQS.htm. Similar products from other vendors may be available; however, prior to procurement and use, similar products shall be evaluated and approved for use by the Rescue and Survival Systems Program Manager. The following items are presented:

(01) Mustang Survival MD-3183 v22 with survival equipment pocket,
(02) Lifesaving Systems Life Preserver Survival Vest 485 CG,
(03) Mustang Survival MD-1250 (required when wearing a ballistic plate carrier),
(04) Mustang Survival MD-0450 v22,
(05) Lifesaving Systems 481CG.

WARNING ✋ Damaged preservers shall be repaired or replaced immediately. Torn or punctured buoyancy chambers shall be replaced and not repaired.

WARNING ✋ Automatically inflatable PFDs are known to hinder egress in an enclosed cabin environment and are not authorized for use on helicopters. The exception is the Mustang Survival MD-1250, which is authorized onboard helicopters for trained users.

WARNING ✋ Personnel wearing automatically inflatable PFD shall pull handle to deploy actuator as soon as they are in the water. Do not wait for auto-activation when in water.

D.1. Mustang Survival MD-3183 v22 with Survival Equipment Pockets

The Mustang Survival MD-3183 v22 with survival equipment pockets may be used on shore and cutter based boat missions by coxswains, crewmembers, boarding officers and boarding team members who have completed the Mustang Survival MD-3183 v22 performance qualification standard.

D.1.a. Application

The Mustang Survival MD-3183 v22 is optional equipment that can be used in lieu of inherently buoyant PFDs and boat crew survival vest combination. The Mustang Survival MD-3183 v22 is an automatic/manual inflatable PFD and with survival equipment pockets for carrying survival items required during operational missions. The Mustang Survival MD-3183 v22 can be worn over ODU, anti-exposure coveralls, dry suits or float coats on all missions. The survival items of the Mustang Survival MD-3183 v22 survival equipment pockets shall not be removed to other devices.

WARNING

Harnesses of all types, such as the boat swimmer harness and other climbing safety harnesses, shall not be used with automatically inflating PFDs. Harnesses worn over inflatable PFDs can restrict the outward inflating action and may prevent breathing or cause crushing injuries to the upper torso.

WARNING

Automatically inflatable PFDs are known to hinder egress in an enclosed cabin environment and are not authorized for use on helicopters. The exception is the Mustang Survival MD-1250, which is authorized onboard helicopters for trained users.

CAUTION!

Personnel wearing automatically inflatable Mustang PFD shall pull handle to deploy actuator as soon as they are in the water. If the handle is not pulled manually, the actuator will not automatically trigger until it has been deeper than four inches for up to ten seconds.

D.1.b. Salient Characteristics

The Mustang Survival MD-3183 v22 is a low profile inflatable buoyancy chamber and a survival equipment pockets attached to a nylon webbing support harness. The buoyancy chamber and equipment pockets are orange nylon material with Coast Guard markings and SOLAS grade retro-reflective tape is applied for increased visibility in low-light environments. An automatic/manual inflatable flotation chamber provides 35 pounds of buoyancy. The inflation assembly is a carbon dioxide cylinder actuator that is manually inflated by pulling the beaded inflation lanyard or automatically inflates upon submersion in fresh water or seawater. The Mustang Survival MD-3183 v22 is available as one size fits all and has a waist adjustment strap for fitting to individual comfort.

D.2. Lifesaving Systems Life Preserver Survival Vest

The Life Preserver Survival Vest (LPSV) may be used on shore and cutter based boat missions by coxswains, crewmembers, boarding officers and boarding team members who have completed the LPSV performance qualification standard.

D.2.a. Application

The LPSV is optional equipment that can be used in lieu of the inherently buoyant PFD and survival vest combination. The LPSV is an automatic/manual inflatable PFD with pockets for carrying survival items required during operational missions. The LPSV can be worn over the ODU, anti-exposure coveralls, dry suits or float coats on all missions. The survival items of the LPSV shall not be removed to other devices.

WARNING

Harnesses of all types, such as the boat swimmer harness and other climbing safety harnesses, shall not be used with automatically inflating PFDs. Harnesses worn over inflatable PFDs can restrict the outward inflating action and may prevent breathing or cause crushing injuries to the upper torso.

WARNING

Automatically inflatable PFDs are known to hinder egress in an enclosed cabin environment and are not authorized for use on helicopters. The exception is the Mustang Survival MD-1250, which is authorized onboard helicopters for trained users.

CAUTION!

Personnel wearing automatically inflatable PFD shall pull handle to deploy actuator as soon as they are in the water. Do not wait for auto-activation when in water.

D.2.b. Salient Characteristics

The LPSV is an orange nylon mesh vest with Coast Guard markings and SOLAS grade retro-reflective tape is applied for increased visibility in low-light environments. When properly donned and fully inflated the LPSV provides 28 pounds of buoyancy. Incorporated in the vest are 2 stowage pockets used to store the following:

Figure 3-3
LPSV with Pyrotechnics

(01) MK 124 Marine Smoke and Illumination Signal,
(02) Strobe Light,
(03) Signal Mirror,
(04) Whistle,
(05) MK 79 Personnel Distress Signal Kit,
(06) Personal Locator Beacon.

D.3. Mustang Survival MD-1250

The MD-1250 is required to be worn when wearing a ballistic plate carrier over the water. Configuration of the MD-1250 and the Tactical PFD Rescue Equipment Pouch shall be in accordance with appropriate MPC. In order to wear the MD-1250, user must successfully complete the Water Survival Training Program (WSTP) in accordance with Reference (k). MD-1250 is a low profile flotation system that provides flotation capability with minimum bulk or interference using separate, independently operated left and right side pouches.

D.3.a. Method of Carry

The MD-1250 pouches shall be worn on the enforcement belt in accordance with the MPC. The configuration of the MD-1250 and pyro pouch, when applicable, shall also be in accordance with the appropriate MPC.

NOTE

MD-1250 qualifies as a tactical flotation system and is authorized onboard helicopters for trained users. Refer to Reference (l) for specific helicopter insertion and extraction guidance.

D.3.b. Salient Characteristics

Using Hydrostatic Inflator Technology, each pouch will automatically inflate when submerged in 4 or more inches of water but not inadvertently due to rain, spray or humidity. Each unit contains 35lb buoyancy for combined 70lb buoyancy.

When fitted with the manual conversion cap, the automatic hydrostatic function can be disabled. Each pouch can still be inflated by pulling the beaded handle. An oral inflation tube provides backup inflation or emergency infield deflation.

CAUTION!

Personnel wearing automatically inflatable Mustang PFD shall pull handle to deploy actuator as soon as they are in the water. If the handle is not pulled manually, the actuator will not automatically trigger until it has been deeper than four inches for up to ten seconds.

D.4. Mustang Survival MD-0450-v22

The MD-0450-v22 is an inflatable life preserver survival vest. It combines the life preserver and boat crew survival vest into one unit. MD-0450-v22 is a low profile flotation system that does not interfere with LE gear. It provides pockets with lanyard attachment points to secure & store all required survival gear. Using the LIFT bladder design the MD-0450-v22 provides 40-lb buoyancy when inflated increasing freeboard and reducing underwater mouth immersions by 80%.

D.4.a. Method of Carry

The MD-0450-v22 shall be worn as the outermost garment with the waist belt adjusted to remove all slack so that it fits snugly around the torso.

NOTE

The MD-0450-v22 can be fitted with the MA7219 manual conversion cap when authorized.

D.4.b. Salient Characteristics

Using Hydrostatic Inflator Technology, the MD-0450-v22 will automatically inflate when submerged in 4 or more inches of water but not inadvertently due to rain, spray or humidity.

When fitted with the manual conversion cap, the automatic hydrostatic function can be disabled. The vest can still be inflated by pulling the beaded handle. An oral inflation tube provides backup inflation or emergency infield deflation.

CAUTION!

Personnel wearing automatically inflatable Mustang PFD shall pull handle to deploy actuator as soon as they are in the water. If the handle is not pulled manually, the actuator will not automatically trigger until it has been deeper than four inches for up to ten seconds.

CHAPTER 2

Life Rafts, Gripes, Releases, Life Float and Multiple Person Recovery System

Introduction

This Chapter contains information about life rafts, gripes, releases, embarkation nets, life floats and the multiple person recovery system.

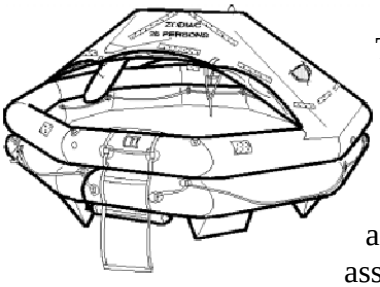
In this Chapter

This Chapter contains the following Sections:

Section	Topic	See Page
A	Boat Installed Life Rafts	3-22
B	Coast-Guard-Approved Cutter Life Rafts	3-24
C	Cutter Specific Gripes and Hydrostatic Releases	3-27
D	Life Floats	3-28

Section A. Boat Installed Life Rafts

A.1. 6-Person Coastal Service Life Raft



The 6-Person Coastal Service Life Raft is a Coast-Guard-approved life raft used aboard the 49' BUSL, 41' UTB, 52' SPC-HWX, and 55' ANB for crew survival in the event the boat is rendered not seaworthy. In addition, the raft may be used for rescue and assistance at the coxswain's discretion.

A.1.a. Salient Characteristics

The life raft is packed in a rectangular fiberglass container. The raft meets or exceeds all requirements for Coast Guard approval in accordance with 46 CFR 160.051. **Table 3-1** below lists items contained within the provided container.

Qty	Item	Qty	Item
1	Bailer	1	Repair Kit
1	Flashlight	1	Signal Mirror
2	Leak Stopper	1	Spare Batteries/Bulb
2	Over Pressure Valve Plug	1	Sponge
2	Paddles	1	Survival Instruction Card
1	Pump	1	Whistle

Table 3-1
6-Person Coastal Life Raft Container Contents

A.1.b. Deployment for Survival

Use the following procedure to deploy the raft for use by the crew.

(01) Cut or untie painter line from the hydrostatic release unit.
(02) Secure painter line to a strong point on ship deck.
(03) Lift the container and toss overboard.
(04) Pull painter line to actuate inflation cylinder, life raft will inflate.
(05) Time permitting, place extra equipment and supplies aboard the raft such as immersion suits, water, food, and EPIRBs.
(06) If practical, keep raft close to the boat and board raft directly from the boat.
(07) Deploy sea anchor.
(08) Pull the canopy over the support tubes and secure.
(09) If the boat begins to sink, cut the painter line to free the raft to drift.
(10) Follow the “Immediate Actions” instruction booklet located inside the equipment container.

CAUTION!

In the event of upside-down inflation, right the raft from the end opposite of the inflation assembly and CO2 bottle. This end is marked “here to right.”

Section B. Coast-Guard-Approved Cutter Life Rafts

B.1. Coast Guard Approved Cutter Life Rafts	Coast-Guard-approved life rafts are used for crew survival in the event the cutter is rendered not seaworthy.
B.1.a. Application	In addition, the rafts may be used for rescue and assistance at the Commanding Officer's and Officer in Charge's discretion.
B.1.b. Required Capacity	The number of life rafts carried by cutters is based on the cutters total available berthing. Life rafts shall be provided for 125-percent of the available berthing. The number of life rafts shall be sufficient to retain life raft capacity of 100-percent of available berthing in the event the largest cluster of life rafts is destroyed. A cluster is defined as life rafts being supported by a common stowage structure.
B.1.c. Configuration	Coast-Guard-approved life rafts may be configured differently. All are Coast Guard approved and meet the requirements of 46 CFR 160.151. Specific configurations and arrangements for each cutter class may be obtained from the applicable Surface Forces Logistics Center product line. For platforms carrying rafts that contain the SOLAS A pack, the Abandon Ship Signal Kit shall contain: Six (6) MK 124 and Two (2) MK 79 Kits.
B.1.d. Service Life Limit	Coast-Guard-approved life rafts have a service life of 20 years. No life raft or component part of a life raft shall remain in service after 20 years from the date of manufacture. If a life raft exceeds the 20 year service life prior to the expiration of the annual recertification sticker, it shall be removed from service and replaced.

B.1.e. Deployment for Crew Survival

Use the following procedure to deploy the raft for use by the crew.

(01) Cut or untie the painter line from the weak link.

(02) Trigger the hydrostatic release and remove the raft container from the stowage rack.

(03) Secure the painter line to a cleat or bitt.

(04) Drop the raft into the water on the leeward side of the cutter.

(05) Pull the remaining painter line (approximately 50 feet) from the raft container to actuate the inflation assembly. As the raft inflates, tend the painter line to keep the raft close. Fend off the inflating raft to prevent damage to the raft from the cutter.

(06) Time permitting; place extra equipment and supplies aboard the raft such as signals, portable radios, immersion suits, water and food.

(07) If practical, pull the raft alongside the embarkation net and board the raft directly from the net.

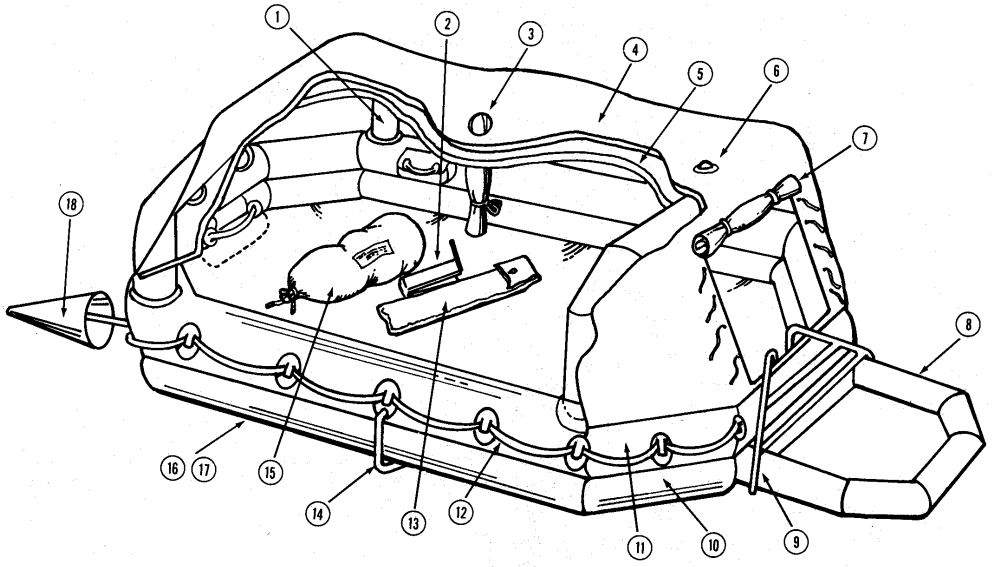
(08) Set a watch on the cutter and painter line. If the cutter begins to sink, cut the painter line to free the raft to drift.

B.1.f. Deployment for Rescue and Assistance

Follow steps 1 through 5 in paragraph B.1.e. Tie two lines to the raft tow bridle. Heave one line to survivors and retain the other for tending. Launching of the cutter boat or deployment of the swimmer may be required to assist survivors into the raft.

B.1.j.
Typical Life Raft

1. Canopy Arch
2. Pump
3. Rain Catcher with Tie-Down Line
4. Exterior Canopy
5. Inner Canopy
6. Outside Light (Recognition)
7. Canopy Closure
8. Boarding Ramp
9. Boarding Handles
10. Hull Tube
11. Gunwale Tube
12. Life Line
13. Paddle Bag
14. Righting Line
15. Equipment Container
16. Hull CO_2 Bottle
17. Gunwale CO_2 Bottle
18. Sea Anchor



NOTE

Cutters that have been transitioned to the Navy MK series life raft may obtain policy and guidance for periodic inspection and maintenance of the Mark series life rafts from the applicable Surface Forces Logistics Center product line.

Section C. Cutter Specific Gripes and Hydrostatic Releases

C.1. Life Raft Gripes

Life raft gripes shall be configured and installed in accordance with Reference (m). Gripes shall be plastic covered corrosion resistant steel or nylon covered stainless steel strap. Coast Guard Drawing FL-8201-86 shall be used as the standard installation guidance. View Coast Guard drawing FL-8201-86 at the following Naval Engineering Technical Information Management System web site: http://10.38.16.120:1088/NE-Tims/index.html.

C.1.a. Configuration

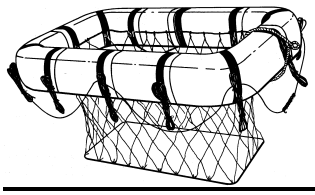
Life raft release systems used aboard all cutters shall be configured in accordance with Navigation and Vessel Inspection Circular (NVIC) Number 4-86, titled "Hydraulic Release Units For Life Rafts, Life Floats and Buoyant Apparatus, and Alternative Float-Free Arrangements". The circular summarizes the requirements for installing and maintaining Coast Guard approved hydraulic release units used with life rafts. Units may obtain NVIC 4-86 from the following world wide web site: http://www.uscg.mil/hq/g-m/nvic/.

NOTE

Specific configurations for each cutter class may be obtained from the applicable Surface Forces Logistics Center product line.

Section D. Life Floats

D.1. Life Float



The life float is used as an alternative to the life raft and provides a means of crew flotation after abandoning ship.

D.1.a. Application

Life floats are used on WLR class cutters on inland navigable water where the cutter's operating area precludes the need for a life raft.

D.1.b. Salient Characteristics

The 6 person life float provides 240 pounds of buoyancy and is constructed of either fiberglass reinforced plastic laminate around a rigid cellular polyurethane core or unicellular plastic foam with a fiberglass or vinyl cover. The platform has a polyethylene mesh netting strung on an aluminum frame suspended from the float by straps of fiberglass or metal. Retro-reflective tape is applied for increased visibility in low-light environments.

NOTE

Some cutters carry life floats for migrant operations. These life floats should be inspected using the same requirements.

CHAPTER 3
Standard Rescue Equipment and Protective Clothing

Introduction

This Chapter contains information about standard rescue equipment and protective clothing used afloat and ashore. The Sections in this Chapter reflect approved equipment and their authorized configurations.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Rescue Equipment	3-30
B	Standard Clothing and Equipment	3-38

Section A. Rescue Equipment

Overview

This Rescue Equipment Section provides information for the following equipment:

(01) Stokes litter
(02) Ring buoy
(03) Float light
(04) Rescue line throw bag
(05) Emergency Position Indicating Radio Beacons (EPIRBs)
(06) EPIRB Variants

A.1. Stokes Litter

The stokes litter (rigid or folding) is a mobile transportation device designed to safely transport non-ambulatory personnel onboard ships and boats.

Figure 3-4
Stokes Litter

A.1.a. Application

The basic stokes litter is configured for surface operations. Discussion in this Section pertains to the stokes litter.

Tending lines shall be kept from interfering with patient restraint straps. The gray, red, blue, and green restraint straps shall be disconnected and secured to the right side of the litter prior to loading a patient. The black restraint strap with flotation pads shall be buckled.

A.1.b. Flotation Characteristics

When the litter is configured in accordance with the MPC, it will float face-up at a 45-degree angle with the foot end submerged. The top 18 to 24 inches at the head end of the litter will be above the surface of the water. The stokes litter is self-righting.

WARNING

Patients wearing buoyant garments, such as exposure suits or PFDs will affect and possibly negate the flotation and self-righting characteristics of the litter. Diligent attention to flotation characteristic changes when patients are secured in the litter.

WARNING

If the patient is secured to a backboard or spinal immobilization device, do not remove it.

NOTE

When securing the black restraint strap with flotation pads, difficulty may be encountered with patients wearing buoyant garments. Buoyant garments are not to be removed; instead place as much slack in the restraint strap as possible and attempt to connect the buckle.

A.1.c. In-Water Patient Restraint

Use the following procedure to secure a patient in the litter while in the water.

(01) Disconnect the black restraint strap.
(02) Guide the patient into the litter with a collar or equipment tow.
(03) Pull the gray restraint strap loose from the right side of the litter and route it under the patient's arms and over the patient's chest. Connect the buckle pulling the slack from the strap.
(04) Pull the red restraint strap loose from the right side of the litter and route it over the patient's arms and torso. Connect the buckle pulling the slack from the strap.
(05) Secure the remaining restraint straps around the patient, working from head to toe, using the same procedure.

WARNING

The in-water patient restraint procedure must be trained prior to use. Crew coordination between the boat swimmer and crew is critical to evolution success. Recurrent training of this procedure is highly recommended.

A.1.d. Salient Characteristics

The stokes litter is constructed of high strength stainless steel or titanium alloy. Its construction includes stainless steel slats, which provide longitudinal support and strength. Aluminum litters are no longer authorized for use. The basic design includes ballast weight at the foot end and a removable flotation assembly. Five restraining straps and smooth plastic mesh netting are incorporated for patient restraint. The litter may be a rigid one-piece or foldable two-piece design.

A.1.e. Flotation Kit Requirements

The flotation kit assembly with ballast weight shall be installed for operations on cutters and boats. Stokes litter flotation shall consist of a chest pad, flotation tubes, ballast bar and restraint straps. More recent flotation kit designs incorporate a back pad installed over the plastic mesh netting in the upper portion of the litter. Stokes litters used ashore do not require flotation and ballast, patient restraining straps are required.

A.1.f. Configuration Kits

A surface kit containing four tending lines is used primarily for surface operations.

A.2. Ring Buoys

Ring buoys are primarily used for a crewmember overboard. Procedures for its use can be found in Reference (c).

A.2.a. Application

The ring buoy can be easily deployed from stowage brackets to mark an object or person in the water during daytime or nighttime operations. The floating electric marker light and rescue line throw bag are generally stowed adjacent to the ring buoy.

A.2.b. Salient Characteristics

The standard ring buoy is available in three sizes, 20, 24, and 30 inches. Ring buoys are constructed of molded unicellular plastic or vinyl coated polypropylene or nylon skin over urethane foam core, are inherently buoyant and nylon line is attached around the outside circumference. The ring buoy is colored international orange for high visibility.

A.3. Floating Electric Marker Light

The floating electric marker light is primarily used to mark the location of a crewmember overboard. Procedures for its use can be found in Reference (c).

A.3.a. Application

The floating electric marker light can be easily deployed from stowage brackets to mark an object or person in the water during daytime or nighttime operations.

An attachment line is used to attach the light to the ring buoy. Units shall keep this line attached at all times. If use of the ring buoy without the light is desired, the attachment line can be quickly disconnected.

The floating electric marker light is designed to operate for a minimum continuous duration of 36 hours.

The ring buoy and rescue line throw bag are generally stowed adjacent to the Floating Electric Marker Light.

A.3.b. Salient Characteristics

Any suitable, Coast Guard Approved, floating Electric Marker Light meeting the specifications and certified as outlined in 46 CFR 161.010.

A.4. Rescue Line Throw Bag

The rescue line-throw bag is used as a survivor retrieving line or to assist in boat handling. It is easy to use and provides quick and accurate deployment of 70-100 feet of floating line.

A.4.a. Application

The line is easily repacked and can be quickly re-deployed as required. It can be used safely for throwing to survivors in the water. The user opens the bag and extracts the looped end of the rope from inside the bag. The loop end, with attached snap hook, is grasped and held firmly as the bag is tossed towards the target. The end loop protrudes through the bottom of the bag and provides a handhold for the survivor to grasp while being rescued. In addition, the snap hook may be attached to the ring buoy and the rescue line deployed as the ring buoy is thrown towards the survivor.

A.4.b. Salient Characteristics

The line bag is constructed of an international orange nylon cloth or mesh. Hardware or elastic is used to close the bag. A carrying strap is attached and has a quick release buckle or snap to allow for easy release. A foam disk is incorporated in the bag for flotation. The nylon line stowed in the bag is 3/8-inch double braid construction with multi-filament polypropylene core and is 70 to 100 feet long. The nylon provides strength and is abrasion and U/V resistant. The line is brightly colored for high visibility and has excellent flotation characteristics. The nylon line has a working load of 500-pounds.

WARNING

Repacking: hand coiling the line before repacking may result in the line being tangled or knotted when the line is deployed. Loosely hand feed the line into the bag for proper line release.

A.5. 406 MHz Category I and II EPIRBS

The 406-MHz Category I EPIRB is used aboard cutters.

A.5.a. Application

The 406-MHz Category I EPIRB transmits a data signal to aid vessel/crew relocation in the event of capsizing, sinking, or abandon ship.

A.5.b. Salient Characteristics

406-MHz Category I EPIRB's are constructed of high impact resistant plastics and are usually brightly colored. Generally, a four-position switch is incorporated that allows the unit to be armed, tested, disabled, or manually activated. A strobe light and antenna are also incorporated. The EPIRB is stored in a bracket that uses a hydrostatic release mechanism designed to allow automatic float-free deployment and activation from the vessel when submerged to an approximate depth of 13 feet. The EPIRB may also be manually released and activated.

A.5.c. Category I, Internal GPS Equipped

Category I, internal GPS equipped EPIRBs combine the features of the Category I EPIRB with the features of the global positioning system to provide near instantaneous position information from geo-stationary satellites.

A.5.d. Category II

406-MHz Category II EPIRBs are configured the same as Category I EPIRBs; however, they must be manually deployed and activated. Water activated models are available.

A.5.e. Registration

EPIRBs shall be registered when bringing into service and unregistered when sending out for maintenance. See applicable MPC for details.

A.6. Other EPIRB Variants	This Section contains information about different types of EPIRBs commercially available. This data is provided for informational purposes only and does not establish requirements for use of the items discussed.
A.6.a. 406 MHz Personal Locating Beacon (PLB)	The 406 MHz Personal Locator Beacon (PLB) is a handheld version of the 406 EPIRB. It must be Cosmicheskaya Sistyema Poiska Avariynich Sudov - Search and Rescue Satellite-Aided Tracking (COSPAS-SARSAT) and Federal Communications Commission (FCC) -certified and manufactured for use in the marine environment. It operates on 406MHz and 121.5 MHz. operating temperature of a Class 1 is -40°F to 131°F. Operating temperature of a Class 2 is -4°F to 131°F.
A.6.a.1. PLB 30-Day Check	The 30-day check for the PLB, if not already performed within the past 30 days, shall be performed immediately prior to getting underway. If the PLB fails this pre-underway check, the PLB shall be removed from service and replaced prior to getting underway.

Section B. Standard Clothing and Equipment

Overview

This Standard Clothing and Equipment Section provides information for the following equipment:

(01) Helmets,
(02) Rain gear,
(03) Boat crew knife,
(04) Intermediate gloves,
(05) Goggles,
(06) R&S Gear Bag,
(07) Sunglasses,
(08) Boat crew safety boot,
(09) Boat shoes,
(10) Anti-exposure coveralls.

B.1. Helmets

CG personnel shall wear head protection during hazardous conditions such as:

(01) Boat lowering and recovery detail,
(02) Heavy weather,
(03) Surf,
(04) Ice rescue,
(05) Helicopter operations,
(06) Ports, Waterways and Coastal Security (PWCS) missions,
(07) Pursuit missions,
(08) When operating alongside a vessel where risk from falling objects is a factor, or
(09) During underway vessel-to-vessel transfers at the discretion of the coxswain.

A hardhat with chin strap meets the head protection requirement for:

(10) ATON personnel,
(11) Boat lowering and recovery detail personnel, and
(12) Scheduled mission personnel (excluding boarding teams and training teams).

NOTE

Helmet wear is at the discretion of the unit CO/OIC for the following personnel:
(01) Crews traveling at speed of 30 knots or greater or
(02) ATON or
(03) other crews engaged in activities OTHER THAN:
a) SZ enforcement,
b) NCV pursuit activities,
c) those activities described in paragraph **B.1. Helmets** above.
CO/OIC should provide additional guidance in the unit's SOP.

B.1.a. Application

Several models of helmets are authorized, interchangeably, for all surface missions. ATON units are authorized hardhats. Coxswains shall ensure all crewmembers wear head protection with chinstraps securely fastened snuggly around the chin during hazardous conditions or when, in the judgment of the coxswain, the situation warrants head protection use.

NOTE

Authorized helmets are in the appropriate MPC card.

NOTE

Waterside sections of MSRT, MSSTs and PSUs shall wear helmets that provide both impact and ballistic protection. Specific helmets are decided by applicable program.

Figure 3-5
ATON / Line Handler in Blue Hardhat

USCG Helmets					
Boat Operations					
	MANGO		SOHAH		SOHAH Ballistic
DSF Operations					
	Advanced Combat Helmet (ACH) See Note 1 right.		Ops-Core Helmet	Note 1: Cloth cover authorized.	

Table 3-2
Coast Guard Helmets

B.2. Rain Gear

Rain gear should be worn as the primary Layer III garment when exposure to intermittent sea spray or rain is encountered.

B.2.a. Application

This suit is not designed to preclude the entry of water upon immersion and provides little protection from the cooling effects of unintended immersion in water.

NOTE

Port Security Units purchasing rain gear shall ensure that the rain gear is the color prescribed by the Combatant Commander in accordance with Unit Allowance List (UAL).

B.2.b. Salient Characteristics

Rain gear consists of a coat and pants constructed of Pantone Color® Warm Red C or 172 C waterproof and breathable tri-laminate fabric. Seams are stitched and sealed from water intrusion with seam tapes. Jackets shall have an attached hood with drawstring closure, adjustable wrist cuffs, SOLAS grade retro-reflective tape and “U. S. COAST GUARD” printed on the back in 1 ½ to 3 inch high white or black solid block lettering. Pants shall have an elastic waistband with drawstring closure and adjustable ankle cuffs.

B.3. Boat Crew Knife

Coxswains and crewmembers are issued knives.

B.3.a. Application

The boat crew knife is appropriate for use during daily activities as well as during operational missions.

B.3.b. Salient Characteristics

Spring-assisted folding knives with stainless steel serrated blades of 4 inches or less provide the best service. However, knives may be non-spring-assisted, straight edge, serrated, or a combination of straight edge and serrated. Folding knife blades shall lock in the open position to avoid inadvertent folding during use. Switchblade knives are not authorized. A switch blade knife is defined as having a blade which opens automatically by hand pressure applied to a button or other device in the handle of the knife or by operation of gravity.

Spring-assisted knives are required to have a locking function that prevents the knife from being accidentally deployed.

WARNING

When handling a knife, use extreme caution to avoid inadvertently cutting or puncturing a person or object.

B.4. Intermediate Gloves

Intermediate Gloves shall be worn as required to provide thermal protection in intermediate cold/wet weather.

B.4.a. Application

The intermediate glove should be adequate for a variety of general purpose or individual unit missions. The intermediate glove should be durable enough to withstand the marine environment.

B.4.b. Characteristics

The intermediate glove should be constructed of non-water impregnable material. The intermediate glove may be of a full finger, long-finger or short-finger style. Weapon and tool use should be considered when selecting intermediate glove style. Palm and fingers should be constructed of durable materials.

NOTE

Intermediate gloves will provide limited protection from hypothermia when wet inside. During operations where additional protection from hypothermia is required, a cold weather glove system shall be used.

WARNING

The wearer should exercise extreme care when wearing gloves to avoid catching fingers or hands between a line and a cleat, capstan or bitt.

NOTE

Cold weather gloves shall not be used for standard work gloves.

B.5. Goggles

Goggles provide benefits for personnel in various Coast Guard roles, and in some conditions their wear is required.

B.5.a. Application

Personnel operating in an environment where wind, spray and water may cause injury or hamper vision, such as during helicopter operations and heavy weather operations, shall wear goggles.

B.5.b. Salient Characteristics

Goggles consist of a black synthetic rubber or foam face frame with plastic non-fogging and 100% UV protective lenses. Goggles are universally sized and come equipped with an adjustable elastic headband. When required, the goggles shall be of a design that allows prescription lenses to be fitted.

B.5.c. Prescription Lenses

Personnel needing prescription eyewear are authorized to have corrective lenses procured for their goggles. Over the glasses type goggles do not provide the level of protection necessary to perform boat crew duties.

NOTE

If the goggles come as a kit with multiple lenses (i.e. clear and shaded) then the kit shall be issued and maintained as such.

B.6. R&S Gear Bag

Personnel issued protective clothing and equipment shall use this bag for gear storage.

B.6.a. Salient Characteristics

The R&S Gear Bag is made of nylon or canvas duck material. It has a slide fastener opening and two webbing carrying handles. It is large enough to stow all standard and cold weather clothing.

B.7. Sunglasses

Sunglasses should be worn by personnel to prevent radiation trauma.

B.7.a. Application

Sunglasses provide crewmembers protection from the sun's glare and reflection off the water. Use sunglasses during searches to enhance search operations.

NOTE

Prescription sunglasses may be available from the Naval Ophthalmic Support & Training Activity (NOSTRA). Contact your MTF or HBA for assistance.

B.7.b. Characteristics

Sunglasses shall meet or exceed ANSI Z87.1+ (impact) standards. Sunglasses shall be impact resistant and provide at least 98 percent UVA and 100 percent UVB protection. Lenses should be Neutral/Neutral, Slate/Green, or Smoke/ Gray in color. Sunglasses shall conform to the guidelines set forth in Reference (n) for Military appearance. Polarized sunglasses are authorized but must be worn with caution due to 'display blackout' experienced when viewing certain polarized displays.

CAUTION

Wearing polarized sunglasses can result in an inability to see through other forms of polarized material (E.G. Windshields, charting displays, etc.)
When wearing polarized sunglasses, boat crews must check that all displays are viewable. Do not wear polarized sunglasses if any displays are found not viewable.

B.8. Boat Crew Safety Boot

Personnel shall wear the temperate/wet weather boots in air and water temperatures above 50 degrees Fahrenheit.

B.8.a. Application

The boot is designed to protect the wearer's foot from immersion, thermal injury and impact.

B.8.b. Salient Characteristics

The boot shall meet salient characteristics listed in Reference (n).

NOTE

This boot offers protection from the cold wet environment, but is not intended to replace the insulated boot designated for use as extended hypothermia protective equipment in extreme cold temperatures, heavy weather and surf.

B.9. Boat Shoes

Boat shoes are worn when working aboard boats where non-slip traction and non-marking soles are required, such as when boarding recreational boats and during vessel inspections where appropriate.

B.9.a. Application	Boat shoes provide little protection from hypothermia and no crush protection for the toes. Commanding Officers and Officers-In-Charge shall evaluate the need to outfit boat crewmembers to meet the expected operational mission. Purchase boat shoes only if operational mission requires their use.
B.9.b. Salient Characteristics	The shoe shall meet salient characteristics listed in Reference (n).
B.9.c. Maintenance and Repair	Maintenance is limited to cleaning and polishing. Laces can be replaced as needed. It is usually not cost advantageous to repair boat shoes. If repair is considered, use local repair shops but do not exceed the cost of replacement shoes. Replace boat shoes with soles worn beyond tread depths.
B.9.d. Inspection	Inspect boat shoes for general condition. Replace as necessary.
B.9.e. Supply Sources	Boat shoes shall be procured in accordance with Reference (h) through the Coast Guard Uniform Distribution Center using a Procurement Request, DOT Form 4200.1.2CG.

B.10. Anti-Exposure Coveralls

Personnel shall wear anti-exposure coveralls when operating in conditions requiring anti-exposure coverall use. Refer to **Table 2-5** and **Table 2-6** to determine when anti-exposure coverall use is required.

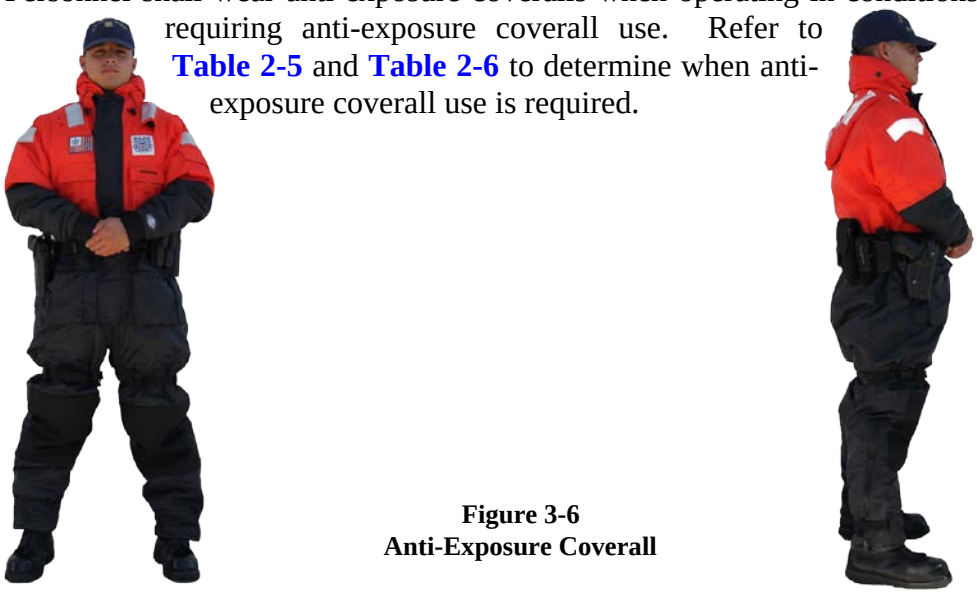


Figure 3-6
Anti-Exposure Coverall

B.10.a. Application

The anti-exposure coverall is the primary Layer III garment worn when member is exposed to intermittent sea spray or rain and thermal protection is also required. This suit is designed to permit the entry and exit of water upon immersion.

B.10.b. Salient Characteristics

Anti-exposure coveralls are constructed of a urethane coated nylon fabric with a closed cell foam interlining. Sleeve and leg openings can be closed tightly around the wrist and ankles; however they do not provide a watertight seal. Anti-exposure coveralls provide 22 to 45 pounds of buoyancy (depending on size) and feature, an attached orally inflated pillow to support the wearer's head in the water, an attached hood for extra thermal protection, and retro-reflective tape on the hood and shoulders is applied for increased visibility in low-light environments. Seven sizes range from XS to 3XL. If the boat crew survival vest is not worn over this PFD, a personal marker light or strobe light and the whistle are required.

B.10.c. Salient Characteristics

Anti-exposure coveralls shall be USCG approved per the requirements set forth in 46 CFR 160.053. The suit shall incorporate 62 sq. inches of SOLAS grade retro-reflective material that would be visible above the water’s surface from all directions while the wearer is floating upright with legs and torso submerged in chest deep water. The suit shall be orange or orange and black.

NOTE

Specific color for anti-exposure coveralls for each DSF unit is per program manager.

Manufacturers marking should be kept to a minimum and not distract from the military appearance of the garment.

CHAPTER 4
Cold Weather Equipment and Protective Clothing

Introduction

This Chapter contains information about cold weather equipment and protective clothing used afloat and ashore. The Sections in this Chapter reflect approved equipment and their authorized configurations.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Dry Suits	3-53
B	Standard Clothing and Equipment	3-67

Section A. Dry Suits

Overview

This Dry Suits Section provides information for the following equipment:

(01) Maritime Cold Weather Suit System (MCWSS),
(02) Thermal underwear,
(03) Industrial style dry suit,
(04) Intermediate gloves,
(05) Thermal socks,
(06) Neoprene hood.

A.1. Maritime Cold Weather Suit System (MCWSS)

The Maritime Cold Weather Suit System (MCWSS) is a three-layer system consisting of:

(01) Layer I – Light and/or medium weight moisture wicking thermal underwear worn directly against the skin.

(02) Layer II – Light and/or medium weight fleece worn over the first layer.

(03) Layer III – The primary dry suit worn over the first two layers by CG personnel when operating in conditions requiring dry suit use.

Refer to **Table 2-5** and **Table 2-6** to determine when dry suit use is required.

NOTE

The Heavy Duty dry suit is primarily intended for the ATON and Ice Rescue communities or whenever a more rugged (wear and tear) suit is required.

A.1.a. Layer I Application

Personnel shall wear Layer I thermal underwear as part of the MCWSS. Layer I is light and/or medium weight moisture wicking thermal underwear worn directly against the skin as the first layer of protection. See **Figure 3-7**.

Refer to **Table 2-5** and **Table 2-6** for policy on when to use thermal underwear.

A.1.a.1. Layer I Salient Characteristics

First layer light and medium weight moisture wicking thermal underwear are separate shirt and long drawers.

A.1.b. Layer II Application

Personnel shall wear Layer II thermal underwear as part of the MCWSS. Layer II is light and medium weight fleece worn over the first layer as the second layer of protection. See **Figure 3-7.**

Refer to **Table 2-5** and **Table 2-6** for policy on when to use thermal underwear.

A.1.b.1. Layer II Salient Characteristics

Second layer light and medium weight fleece are single piece jumper style. Two-piece fleece configurations are available for use under drop seat dry suits.

WARNING

Cotton shall not be worn for thermal protection under the dry suit. Cotton absorbs and retains moisture, robbing body heat and can cause rapid onset of hypothermia.

A.1.c. Layer III Application

A dry suit is the primary Layer III garment worn when a constant-wear suit designed to preclude the entry of water upon immersion is needed.

WARNING

All new or refurbished dry suits shall be leak tested by the member that the dry suit is issued to prior to being placed into service. Refer to the proper MPC for guidance.

A.1.c.1. Layer III Salient Characteristics

The MCWSS dry suit is constructed in accordance with the dry suit specifications maintained on file at U. S. Coast Guard Headquarters, Office of Boat Forces. The MCWSS dry suit is orange and black color combination, waterproof and breathable (moisture vapor permeable) fabric. Seams are stitched and sealed with seam tapes. Sleeve and neck openings maintain watertight integrity from latex rubber/neoprene seals. Sock type feet are integrated into the legs. The knee and seat portions of the suit are reinforced. Retro-reflective material is applied for increased visibility in low-light environments. The MCWSS is available in sizes ranging from small to extra-extra large. Custom sizing may be available. The neoprene hood, described in D.7., is required to be carried on the person when wearing the dry suit.

NOTE

Dry suits in ready service locker shall have adjustable neck seals and neoprene wrist seals, and shall be tested prior to use in accordance with MPC.

NOTE

CBRNE dry suit requirements and limitations shall be in accordance with appropriate MPC.

NOTE

The MCWSS or other dry suit may be authorized in additional color schemes for authorized mission types.

WARNING

Dry suits alone do not provide adequate insulation for hypothermia protection. Personnel shall wear Layer I synthetic and Layer II fleece thermal underwear beneath the dry suit to provide protection from cold temperature, wind, sea spray and rain.

WARNING

Dry suits are not inherently buoyant. Personal flotation devices shall be worn with dry suits.

A.2. MCWSS Wear Procedures

Specific procedures apply to both the donning and doffing of the MCWSS.

Layer I Layer II Layer III

Figure 3-7
Proper MCWSS Wear

A.2.a. Donning

Use the following procedure to put on the Maritime Cold Weather Suit System. Follow the steps closely to ensure proper sealing of neck and wrist seals.

(01) Lubricate inside of the neck and wrist seals with unscented talc.

(02) Don Layer I moisture wicking followed by Layer II fleece insulating undergarments.

(03) Don the MCWSS in the same fashion as donning coveralls, entering it one leg at a time.

(04) Pull the bottom section of the suit up to the waist and place arms into the sleeves.

(05) Gently push one hand through the wrist seal at a time using the index finger of the opposite hand to stretch the seal as you push your hand through. Repeat for opposite hand. Make sure insulating undergarments are not sandwiched between seal and skin and flatten any folds or rolls of the seal flat against the skin.

(06) Bring the upper portion of the suit over the head, aligning the neck opening with the top of the head. Reach inside the top of the neck

seal with the fingers and gently pull the seal outward and down as you push your head through. Ensure insulating undergarments are not sandwiched between seal and skin, and flatten any folds or rolls of the seal flat against the skin.

(07) Close the entry and relief slide fasteners. Have a fellow crewmember double check all fasteners to ensure it is closed completely against the sealing plug.

(08) Remove excess air from the suit by sliding fingers under the neck seal and squatting down, pull arms tight against the chest and release seal

WARNING

Use of comfort devices to stretch the neck or wrist seals away from the skin such as neck rings or O-ring comfort device are not authorized and shall not be used.

CAUTION!

Use extreme caution when donning the MCWSS. Prior to donning the MCWSS, remove all rings, watches, earrings, necklaces and eyeglasses that will cause damage to wrist and neck seals.

A.2.b.
Doffing Procedure

Use the following procedure to take off the dry suit:

(01) Remove all other equipment donned over the dry suit before removing the dry suit.

(02) Wash down the dry suit while wearing it paying particular attention to entry and relief slide fasteners. Remove all traces of salt.

CAUTION!

Failure to completely open slide fastener will damage the suit when it is removed.

(03) Completely open the entry slide fastener.

(04) Insert fingers between neck seal and neck. Gently stretch the seal outward and upward while pulling head from seal and shoulders and head out of the suit.

(05) Insert two fingers under wrist seal and gently pull seal outward. Cup the hand, fingertips and thumb together, and gently pull hand from seal. Repeat for other hand.

(06) Remove legs from suit. Insert a wide dry suit hanger out through the neck seal, close entry slide fastener half way and hang until dry.

(07) Completely open the entry slide fastener.

(08) Insert fingers between neck seal and neck. Gently stretch the seal outward and upward while pulling head from seal and shoulders and head out of the suit.

(09) Insert two fingers under wrist seal and gently pull seal outward. Cup the hand, fingertips and thumb together, and gently pull hand from seal. Repeat for other hand.

(10) Remove legs from suit. Insert a wide dry suit hanger out through the neck seal, close entry slide fastener half way and hang until dry.

(11) Completely open the entry slide fastener.

(12) Insert fingers between neck seal and neck. Gently stretch the seal outward and upward while pulling head from seal and shoulders and head out of the suit.

(13) Insert two fingers under wrist seal and gently pull seal outward. Cup the hand, fingertips and thumb together, and gently pull hand from seal. Repeat for other hand.

(14) Remove legs from suit. Insert a wide dry suit hanger out through the neck seal, close entry slide fastener half way and hang until dry.

A.3. Industrial Style Dry Suit

Coxswains, crewmembers, boarding officers and boarding team members may use the Industrial breathable marine survival system in lieu of the MCWSS when operating in conditions requiring dry suit use. Refer to **Table 2-5** and **Table 2-6** to determine when a dry suit is required.

A.3.a. Application

The Industrial Style / Heavy Duty dry suit is designed for more industrial applications such as aids to navigation maintenance, buoy deck operations, fisheries boardings, ice rescue and other applications where damage to the suit is likely to occur. The Industrial dry suit provides an outer shell to protect the inner waterproof shell, and can be replaced if damaged. A PFD shall be worn over the suit by all personnel. All crewmembers shall also wear a boat crew survival vest.

For Mustang 900 and 901 series dry suits, Layer I moisture wicking thermal underwear is required against the skin beneath the suit.

For Mustang 640 series dry suits, Layer I and II are required.

A.3.b. Salient Characteristics

The Industrial dry suit provides hypothermia protection and inherent buoyancy using three interconnected modules to form a single system. Insulation layer is secured with zippers at each wrist, above and below the beltline, and at the neck The thermal/flotation module is a breathable foam thermal liner which functions as layer two protection and provides inherent buoyancy. The immersion module is constructed of a waterproof and breathable (moisture vapor permeable) fabric that provides the suit with watertight integrity. **Sleeve openings maintain watertight integrity from neoprene seals and the neck opening is constructed of a waterproof stretch nylon material that seals water out when the elastic drawstring is pulled tight.** Sock type feet are integrated into the legs. The outer shell module is constructed with an orange and black urethane-coated nylon that provides a durable water-resistant barrier to wind, sea spray and rain. Knee and seat portions of the outer shell are reinforced and an attached foam-lined thermal hood is required to be worn if a crewmember enters the water.

NOTE

Port Security Units shall follow guidance set by Combatant Commander for manner of wear for clothing and equipment. This may change the color but not the salient characteristics of the dry suit.

A.3.c. MSD901 Donning Procedure

Use the following procedure to put on the MSD901. **Follow the steps closely to ensure proper sealing of neck and wrist seals**.

(01) Ensure the MSD901 is completely assembled in accordance with MPC.
(02) Completely loosen the neck seal.
(03) Ensure the wrist, thigh and ankle adjustments are loose.
(04) Completely open the chest zipper.
(05) Completely open the waterproof circumference zipper.
(06) Don Layer I moisture wicking undergarment.
(07) Fold the upper portion of the suit forward at the waist and slide one leg at a time into the suit until your toes reach the end of the socks.
(08) Pull the bottom section of the suit up to the waist and place arms into the sleeves.
(09) Gently push one hand through the wrist seal at a time using the index finger of the opposite hand to stretch the seal as you push your hand through. Repeat for opposite hand. Make sure insulating undergarments are not sandwiched between seal and skin and flatten any folds or rolls of the seal flat against the skin.
(10) Bring the upper portion of the suit over the head, aligning the neck opening with the top of the head. Reach inside the top of the neck seal with the fingers and gently pull the seal outward and down as you push your head through. Make sure insulating undergarments are not sandwiched between seal and skin and flatten any folds or rolls of the seal flat against the skin.
(11) Fold the waterproof zipper cover out of the way.
(12) Grasp the end of the waterproof zipper on your right side and the zipper pull with the opposite hand.

(13) Pull the zipper closed completely around the waist circumference ensuring the zipper is tight against the sealing plug.

WARNING

Failure to completely close the waterproof entrance and relief zippers to the sealing plug will allow water to leak into the suit resulting in drastic loss of survival time.

(14) Pull relief zipper closed completely ensuring the zipper is tight against the sealing plug.
(15) Fold the waterproof zipper cover closed over the zipper.
(16) Buckle the waist belt and adjust to a comfortable fit.
(17) Adjust and close the ankle and thigh adjustment straps.
(18) Grasp and pull the neck seal drawstring to **ensure a watertight and comfortable fit**.

(19) Secure the end of the neck seal drawstring to the tab under the outer collar.
(20) Buddy-check all fasteners and zippers.

WARNING

Use of comfort devices to stretch the neck or wrist seals away from the skin such as neck rings or O-ring comfort devices are not authorized and shall not be used.

WARNING

The MSD901 shall be worn with all three modules completely assembled.

CAUTION!

Use extreme caution when donning the MSD901. Prior to donning the MSD901, remove all rings, watches, earrings, necklaces and eyeglasses that will cause damage to wrist and neck seals.

A.3.d. Doffing Procedure

Use the following procedure to take off the MSD901:

(01) Remove all other equipment donned over the MSD901 before proceeding.
(02) Wash down the MSD901 while wearing it paying particular attention to entry and relief slide fasteners. Remove all traces of salt.
(03) Unbuckle the waist belt and release the ankle, wrist and thigh adjustment straps.

CAUTION!

Failure to completely open slide fastener will damage the suit when it is removed.

(04) Fold the waterproof zipper cover out of the way. Completely open the waterproof zipper.
(05) Completely loosen the neck seal drawstring and open the chest zipper.
(06) Insert fingers between neck seal and neck. Gently stretch the seal outward and upward while pulling head from seal and shoulders and head out of the suit.
(07) Insert two fingers under wrist seal and gently pull seal outward. Cup the hand, fingertips and thumb together, and gently pull hand from seal. Repeat for other hand.
(08) Remove legs from suit. Hang the suit by the hanging loop, close waterproof zipper half way and hang until dry.

A.4. Thermal Socks

Thermal socks are an integral part of the MCWSS and Industrial Style Dry Suit.

A.4.a. Application

Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold environments where added thermal protection to the feet is necessary shall wear thermal socks.

WARNING

Cotton socks shall not be worn for thermal protection. Cotton absorbs and retains moisture, robbing the body heat and can cause rapid onset of hypothermia.

A.4.b. Salient Characteristics

Thermal socks are made of a fleece material similar to the fleece jumper, wool or a moisture-wicking fabric. Thermal socks with legs 12 inches long are preferred.

A.5. Neoprene Hood

The neoprene hood is an integral component of the MCWSS and shall be carried by all personnel.

A.5.a. Application

Neoprene hoods shall be donned anytime a crewmember enters water that is 50°F or lower. Units shall ensure the Velcro and retro-reflective tape are sewn and not glued to the hood.

NOTE

Personnel in possession of neoprene hood with glued Velcro and/or retro-reflective tape shall sew the Velcro and/or tape in place to secure it.

The neoprene hood is required to be stored in a pocket of the dry suit.

A.5.b. Salient Characteristics

The neoprene hood is constructed of international orange, 2 to 5-millimeter closed cell neoprene fabric that covers the entire head and neck area except for the face opening. An adjustable mouth guard is attached to the hood. No less than 24 inches of SOLAS grade retro-reflective tape is applied for increased visibility in low-light environments. A pile tape patch is installed for attachment of the strobe light/PLB. Contact the manufacturer for sizing requirements.

A.6. Cold Weather Glove Layers

Gloves are an integral part of the MCWSS and Industrial Dry Suit. Authorized gloves also conform to the three-layer system, however, while Layer I typically is a glove of its own, Layers II and III are often built into the same glove, as shown in **Figure 3-8** below. As long as salient characteristics are met, two gloves can meet a Layer I-III requirement.

NOTE

Members should not wear two Layer I gloves on the same hand, as each layer in that case would not offer a different level of protection.

Layer I
Manzella TSU-10

Layer I
Manzella TSU-40

Layers II +III
Manzella TEC-250

Figure 3-8
Cold Weather Glove Layers

A.6.a. Application

Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold/wet environments where added thermal protection for the hands is required should use cold weather glove layers.

A.6.b. Salient Characteristics

A modular glove system offers the widest degree of thermal management. The glove system will determine the number of layers. The material for Layers I and II shall both be wicking. Materials that currently meet this standard are Thermolite® or Lycra®. In a three layer system, Layer I (made of Thermolite® or Lycra®) is a thin lightweight liner. This liner may be worn alone in mild conditions or as a first layer. Layer II (made of Thermolite® or Lycra®) is a thermal protective layer of wind stopping fleece and is designed to provide the user with thermal protection and the ability to transfer body moisture and block out wind. Layer III must stop wind and be waterproof and breathable. Materials that currently meet this standard are Gore-Tex™ or Thinsulate™ outer shell with Grip-Tex™ palm and wrist strap closure. Layer III is a gauntlet type moisture barrier. This layer offers protection from water, wind and sea spray. Layer II and Layer III may be incorporated into one glove. The glove system is comprised of either a 3-glove 3-layer system or a 2-glove 3-layer system. All glove components shall be from the same manufacturer.

NOTE

Any changes to these fabrics or associated standards described above will be noted in an MPC.

NOTE

Boarding Teams should choose a glove that allows them the maximum protection against the elements while allowing access and use of weapons and equipment.

Section B. Cold Weather Accessories

Overview

This Dry Suits Section provides information for the following equipment:

(01) Cold weather boots,
(02) Balaclava,
(03) Watch cap.

B.1. Cold Weather Boots

Crewmembers and scheduled mission personnel shall wear the cold weather boot when the dry suit is required to be worn.

B.1.a. Application

Boot design includes thermal insulation and protects the wearer's foot from immersion, thermal injury and impact.

B.1.b. Salient Characteristics

The cold weather boot is 8 to 16 inches high, slip-on or lace-up closure, 100% waterproof with a non-marking/non-slip waterproof outsole. Acceptable colors for the boot are black, brown, navy, or dark green.

The cold weather boot is constructed of waterproof material and thermal insulation. It has an impact-reducing sole, a composite safety toe, and a composite or metal shank.

B.2. Balaclava

Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold environments where added thermal protection for the head is necessary shall wear the Balaclava.

B.2.a. Salient Characteristics

The Balaclava is black in color and is available in small, medium and large sizes. The balaclava is polypropylene or fleece, may be worn in conjunction with the watch cap or protective helmet and provides protection from wind, rain and sea spray.

B.3. Watch Cap

Coxswains, crewmembers, boarding officers and boarding team members and inspection teams operating in cold environments where added thermal protection for the head is necessary shall wear the watch cap.

B.3.a. Salient Characteristics

The watch cap is black in color and is available in small, medium and large sizes. The watch cap is stretch fleece, and may be worn in conjunction with the balaclava or protective helmet and provides protection from wind, rain and sea spray.

CHAPTER 5
Additional Equipment

Introduction

This Chapter contains information about additional equipment used afloat and ashore. The Sections in this Chapter reflect approved equipment and their salient characteristics.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Boat Crew Equipment	3-71
B	Cutter Equipment	3-77
C	Deployable Specialized Forces (DSF) Standard Clothing and Equipment	3-79
D	Ice Rescue Equipment and Protective Clothing	3-80
E	Dewatering Pump	3-103

Section A. Boat Crew Equipment

Overview

This Section describes additional equipment required to safely perform the duties required of coxswains, crewmembers, boarding officers and boarding team members operating shore and cutter based boats. The following items are presented:

(01) Boat crew survival vest
(02) Boat crew safety belt
(03) Crew restraint systems
(04) Gunner Restraint System

A.1. Boat Crew Survival Vest

The boat crew survival vest is used to store survival items methodically selected for use in the majority of survival scenarios.

A.1.a. Application

The vest is worn by all crewmembers over a Type III Coast Guard-approved PFD, Anti-Exposure Coverall, or Float Coat on all missions. The components of the boat crew survival vest shall not be removed unless needed.

Figure 3-9
Boat Crew Survival Vest

Numbers 1-7 in image above correspond to listing in A.1.b. Configuration.

WARNING

The boat crew survival vest provides no buoyancy and shall be worn by all crewmembers over a Type III Coast Guard approved PFD or over anti-exposure coveralls.

WARNING

When donning the Boat Crew Survival Vest over the Anti-Exposure coverall and Industrial Dry suit, ensure that the inflatable head support is placed outside of the Survival Vest.

A.1.b. Salient Characteristics

The boat crew survival vest is orange nylon mesh with Coast Guard markings and retro-reflective tape applied for increased visibility in low-light environments. Incorporated in the vest are 5 stowage pockets used to store the following:

(01) Signal mirror,
(02) Strobe light,
(03) MK 79 Personnel Distress Signal Kit,
(04) Whistle,
(05) MK 124 Marine Smoke and Illumination Signal,
(06) Survival knife,
(07) Personal Locator Beacon.

Survival items are secured to the vest pockets in accordance with the applicable MPC. The vest is available in two sizes, regular and large, and has a waist adjustment strap for fitting to individual comfort. Instructions for use of attached survival equipment can be found in Reference (c).

A.2. Boat Crew Safety Belt

All coxswains, crewmembers, boarding officers and boarding team members and scheduled mission personnel aboard MLB, RB-M, SPC-HWX, and SPC-NLB shall use the boat crew safety belt as a safety restraint system during hazardous conditions such as heavy weather and surf as defined in Reference (c).

A.2.a. Application

The belt is designed to restrain the user to the boat should a knockdown or rollover occur.

A.2.b. Salient Characteristics

The boat crew safety belt is a padded adjustable nylon-webbing belt that is secured around the waist with a quick release buckle constructed of high strength stainless steel and molded plastic. Attached to the belt are two adjustable webbing restraint straps each with a locking snap hook used to secure the user to an anchor point. The belt is available in two sizes, small and regular.

WARNING

A properly adjusted belt should fit snugly low around the hips when buckled. Restraint straps shall be adjusted to allow freedom of movement, but without excessive slack.

NOTE

The characteristics of the locking snap hook require that users be thoroughly familiar with the operation of the hook. While wearing gloves, users shall practice locking in and disconnecting the hook from all possible attachment points paying particular attention to working the latch gate release. Prior to operational use of the belt, each user shall don the belt and practice locking in and disconnecting from point to point around the boat deck. Operation should become second nature.

NOTE

Existing inventories of part number 218 or 218-S boat crew safety belts with the Wichard® non-locking and Talon locking snap hooks may be used until no longer serviceable. All new requisitions for the 218 and 218-S boat crew safety belts will be supplied with the new Super Talon locking snap hook, part number 511.

A.3. Crew Restraint Systems

Crew restraint systems are designed to prevent crew injury and/or ejection. These systems are specific to each boat type, are covered in the appropriate Operator's Handbook, and include:

(01) Quick release seatbelts,
(02) Seatbelts/seat harnesses,
(03) Foot straps,
(04) Gunner restraint system,
(05) Heavy weather belts (MLB, SPC-HWX, and SPC-NLB only).

Anytime Boat Forces assets engage in SZ enforcement or Non-Compliant Vessel (NCV) pursuit activities, (including training), all crewmembers are required to use crew restraint systems and/or gunner restraint systems. Boats conducting SZ enforcement or Non-Compliant Vessel Pursuit (NCVP) activities shall not get underway with more personnel than available restraint systems.

NOTE

The 25' Transportable Port Security Boat (TPSB) (Boston Whaler) and the 41' Utility Boat (UTB) are not equipped with crew restraint systems. These crews are exempt from use of crew restraints; however, the gunner is required to wear the gunner restraint system.

NOTE

Resident School Instructors, unit Designated Trainers, and Standardization Team Evaluators are exempt from crew restraint requirements if *both* hands are free and it is a training/evaluation mission as governed by their SOP.

A.4. Gunner Restraint System

Personnel manning the MAW on boats are required to use the gunner restraint system.

A.4.a. Application

Personnel firing shoulder fired small arms shall be either tethered or restrained by a crew restraint system. Prior to deployment, Boat Forces personnel shall become thoroughly familiar with the proper attachment points, wear, and operation of the boat gunner restraint system explained in A.4.b. below.

A.4.b. Salient Characteristics

The gunner restraint system is the approved, two-part harness which tethers the gunner to the boat. The gunner restraint system attaches to each boat at a different location. A listing and photographs of these attachment points may be found in the specific boat Operator's Handbook for each MAW capable boat or at:

http://cgweb.comdt.uscg.mil/G-RCB/Instructions/Tether%20Draft.pdf.

A.4.c. Shock Reduction Tether

The purpose of the Shock Reduction Tether (SRT) System is to maintain safety tethering while at the same time mitigating potential surge forces involved in a sudden stop.

Similar to a 'Z brake' used in fall arrest systems, at the core of the SRT is a patented, energy absorbing sacrificial strap that is folded and secured within a protective sleeve forming the shock reduction element.

When a force over 800 lbs is experienced, the tether incrementally releases up-to 18 inches of additional strap to mitigate the shock-load experienced by the person.

The design of the tether includes a 'tripped' self-indicating warning label that becomes exposed if the system has been subjected to a force over 800 lbs.

Ultimate breaking limit of the tether is 3300 lbs.

A.4.d. SRT Adjustment Guidelines	The SRT is adjustable (18-72 inches). Adjustment of the SRT straps involves two considerations: (01) Maintaining movement necessary to swing gun through full range of weapon motion (Stop to Stop), (01) Limiting SRT maximum length. Maximum length is the current adjusted length plus the additional 18 inches released during a sudden stop event. Factoring the current length plus the 18 inches ensures the member stays in the boat.
A.4.e. Prohibition	Do not use the SRT as a means of personal support to mitigate fatigue. Using the device in this way may cause 'tripped' warning indicator to become exposed or partial deployment of the device.
A.4.f. Harness	Uses Type 12 and 13 nylon webbing; (01) Parachute Harness D-ring has a 5,000 lb. proof load; over 7,500 lb. breaking load, (02) Friction buckles exceed 2,500 lb. proof and 4,600 lb. break loads, (03) Fully adjustable waist and leg straps, (04) One size fits all.

Section B. Cutter Equipment

Overview

This Section describes additional equipment required on board cutters.

B.1. Immersion Suit

The immersion suit is worn when abandoning ship.

Figure 3-10
Immersion Suit
Polyvinyl Chloride Foam (Left) and Nylon-lined Neoprene (Right)

B.3.a. Application

Immersion suits are required for each person aboard cutters operating on the ocean or Great Lakes in all areas north of 32 degrees north latitude and south of 32 degrees south latitude.

The number of immersion suits available on cutters is based on 125% of available berthing.

B.3.b. Salient Characteristics

Immersion suits shall be USCG approved in accordance with 46 CFR 160.171. The immersion suit is a one-piece international orange garment constructed of 3/16-inch nylon lined neoprene or polyvinyl chloride foam. It has a front entry slide fastener for easy fast entry. The garment is hooded and gloved and is available as a one size fits all suit. The immersion suit provides 35 pounds of buoyancy.

NOTE

Once the immersion suit is donned the mobility and dexterity of the user is somewhat diminished. During abandon ship drills, don the immersion suit and practice moving about and manipulating signaling devices with gloved hands.

Section C. Deployable Specialized Forces (DSF) Standard Clothing and Equipment

C.1. Overview	Each tactical operator position functions differently and requires a certain amount of variance in minimum outfit list. Members shall refer to the applicable DSF Configuration Baseline managed by the Office of Specialized Capabilities (CG-721).
C.1.a. Specific Authorized Equipment for Tactical Operators	Tactical operators are authorized to use the following equipment that departs from standard-issue PPE and Cold Weather PPE: (01) Wheeled duffle/equipment bag, (02) Fixed blade knife, (03) Tactical boots, (04) Shooting gloves.
C.1.b. Specific Authorized Equipment for DSF Units	DSF units are authorized to use the following equipment that departs from the Cold Weather dry suit: (01) CBRN dry suit or reconditioned CBRN dry suit.

Section D. Ice Rescue Equipment and Protective Clothing

Overview

This Section describes the Coast Guard approved ice rescue equipment, devices, personal protective clothing and the policies pertaining to their use.

D.1. Station and Cutter Ice Rescue Equipment List

Each Ice Rescue station and cutter is required to have the minimum equipment:

(01) SKF-ICE,
(02) Shuttle Board (2) – one RFI and one for training,
(03) Cold Water Sling (2),
(04) Ice Awls **(**Minimum: Stations, 6; Cutters, 3**)**,
(05) Hypothermia Recovery Capsule,
(06) 150 FT Tending Line (2),
(07) 550 FT Line Reel,
(08) Ice Rescuer Safety Harness,
(09) Head Lamp (Stations, 6; Cutters, 3),
(10) Wool blanket (4),
(11) Flashlight (2),
(12) AOR maps/charts,
(13) M127A1 Ground Illumination Signal (6),
(14) Handheld GPS (2),
(15) VHF-FM radio – (3),
(16) Cellular phone - to remain in GV (1),
(17) Extra batteries - to remain in GV,
(18) Victim PFD (4),
(19) Night Vision Device (NVD) (2),
(20) Automatic External Defibrillator (AED) (1),
(21) Binoculars,
(22) Compass,
(23) First Aid Kit (with pocket CPR mask).

Figure 3-11
Ice Rescue Personnel

Figure 3-11 above shows Ice Rescue personnel in approved gear. The following items are presented in this section:

(01) SKF-ICE,
(02) MARSARS© Shuttle Board,
(03) MARSARS© Cold Water Rescue Sling,
(04) White Bear© Rescue Sling,
(05) Ice Awls,
(06) Ice Anchor,
(07) Hypothermia Recovery Capsule,
(08) 150 foot Tending Line,
(09) 550 Foot Line Reel,
(10) Ice Rescuer Safety Harness,
(11) Ice Rescuer Headlamp,
(12) Layer I Moisture Wicking Thermal Underwear,
(13) Layer II Fleece Thermal Underwear,
(14) Layer I Thermal Socks,
(15) Layer II Thermal Socks,
(16) Ice Rescue Gloves,
(17) Ice Rescue Footwear,
(18) Ice Rescue Heavy Duty Dry Suit,
(19) Wool Blanket.

D.2. SKF-ICE

The SKF-ICE is an inflatable conveyance and is primarily used for ice rescue "short haul" cases (less than 1000 yards from shore or cutter) in enclosed ports, waterways, and bays or from a cutter.

D.2.a. Application

The construction and inherent design of the SKF-ICE makes this conveyance an ideal platform for performing soft or hard water rescues. The SKF-ICE may be used to transport the ice rescue team to a location to affect the rescue and may be used to pull a victim from the water. Additionally, the SKF-ICE is used as a rescue sled similar to a "MARSARS" rescue shuttle board.

Detailed information pertaining to the operation and maintenance is found in the SKF-ICE Operator's Handbook DRAFT posted on the Office of Boat Forces website: http://cgweb.comdt.uscg.mil/G-RCB/Manuals.htm.

D.2.b. Salient Characteristics

The SKF-ICE is an open layout, three chamber inflatable craft. It has upturned ends with openings fore and aft allowing two entry points, thus enabling a rescuer to easily pull a victim into the boat from either end. The SKF-ICE's fabric is a PU/PVC/polyester alloy material. All the seams are welded and taped for maximum strength and air retention. The seams do not have glue or adhesive holding them together which keeps them just as strong as the fabric. It is coated with UV protected urethane allowing prolonged sun exposure. When fully inflated, the SKF-ICE is 15' 4" in length and can be fitted with an optional motor mount to accommodate a 3.5HP outboard motor.

D.2.c. Outfit List

The SKF-ICE is outfitted with the following equipment:

(01) Paddles (2)
(02) Ice Rescue Kit as required for mission
(03) Inflation tank (2) and hose assembly
(04) Tow Shield – optional
(05) Engine and mount - optional
(06) Carpet decking (installed upon receipt)
(07) Ice anchor (2)
(08) Storage Bag

D.2.d. Maintenance and Repair

Follow the maintenance and repair procedures as specified by the manufacturer or as outlined in the SKF-ICE Operator's Handbook.

For outboard motor preventive maintenance, follow the procedures found in the 3.5HP Mercury Outboard Motor Owner's Manual.

D.2.e. After-Use Care

The following after-use care is provided:

(01) Wash with a soft bristle brush or soft cloth in mild soap and warm water.
(02) Deflate in accordance with manufacturer's procedures.
(03) Lay the SKF-ICE flat on a clean/dry surface and allow it to dry.
(04) Inspect all seams and hardware for damage.
(05) Ensure outfit contents are complete, clean and serviceable.
(06) Ensure stowage bag is free of damage
(07) Fold and place SKF-ICE in stowage bag as per SKF-ICE Manual.

CAUTION!

Do not apply wax, Armor-All or any other chemical substance to the SKF-ICE.

D.2.f. Supply Sources

Contact the District Boat Manager for issues relating to unit boat allowances and procurement of the SKF-ICE.

D.3. MARSARS Shuttle Board

The MARSARS™ shuttle board is a skill-based ice rescue shuttle used for short haul ice rescue.

D.3.a. Application

The MARSARS™ shuttle board is designed to minimize patient handling and physical stress. It features a built-in 4:1 ratio hauling system that extricates victims of all sizes from the ice and provides protection for victim and rescuer.

WARNING

Victims wearing buoyant garments such as exposure suits or PFDs will affect, and possibly negate, the flotation and self-righting characteristic of the board. When victims are secured on the shuttle board, careful attention to flotation characteristic changes must be maintained.

D.3.b. Salient Characteristics

The MARSARS™ shuttle board hull is constructed of fiberglass reinforced plastic filled with closed-cell urethane foam. The board is configured to float and can support two rescuers or the victim and one rescuer. The rounded end is designed to ride high in the water and easily remounts ice with or without the victim. The outbound "rescue end" holds the "victim forearm sling", ice awls, carry handles, and a built-in body roller to minimize stress to the victim during extraction. The shuttle features riveted fastened runners constructed of high-strength aluminum, hard coated for maximum protection.

D.3.c. Maintenance and Repair

After each use stand shuttle on roller end to dry. Drain water from ice awls, hang and point down to dry. Carry handles should remain erect. Tighten handle fasteners as required. If foam cord is loose, locate cord's end, pull to tighten. Tuck remainder beneath foam. Wax bottom of hull after heavy use. Spray interior of ice awls and "victim forearm sling" snap fasteners with silicone. Protect runners by placing stored shuttle on carpet or within a storage bag. Hull damage is repairable with fiberglass repair kits. Foam, runners, and pulley system haul cord are replaceable.

D.3.d. Inspection

After each use, or at least weekly, visually inspect the overall condition of the shuttle and all associated hardware for damage.

D.4. MARSARS™ Cold-Water Rescue Sling	The MARSARS™ cold-water rescue sling is used to support and/or pull a victim out of the water and onto the ice.
D.4.a. Alternate Application	The MARSARS™ cold-water rescue sling is also used with the MARSARS shuttle board and pulley system to extract a victim from the ice.
D.4.b. Salient Characteristics	The MARSARS™ cold-water rescue sling has a nylon strap sewn in a loop with a stainless steel carabiner hook on the end and a yellow foam collar around the loop. An adjustable Velcro™ strap is on one side for adjusting the sling to the size of the victim.
D.4.c. Maintenance and Repair	Wash with mild soap and warm water. To dry, suspend sling hook down and rewrap MARSARS™ sling's adjustable victim sizing strap.
D.4.d. Inspection	After each use, or at least weekly, visually inspect the sling for tears and the nylon strap for wear. Inspect carabiner for proper function and apply thin coat of silicone to the spring loaded gate as needed

D.5. White Bear™ Water Rescue Sling

The White Bear™ water rescue sling is used to support and/or pull a victim out of the water and onto the ice.

WARNING

White Bear™ water rescue sling cannot be used with the MARSARS™ shuttle board and pulley system when in the cinch or choking mode.

D.5.a. Salient Characteristics

The White Bear™ rescue sling has a nylon strap, a stainless steel carabiner, a red foam collar, and a "choking" loop. The carabiner end of the strap is run through the "choking loop" to form a closed loop system. The sling is then adjusted to the victim's size. When configured in this manner the White Bear sling allows for greater security of the victim, but cannot be used with the MARSARS™ shuttle board due to excessive length for the pulley system to be effective.

When the carabiner is connected to the nylon web loop, it can be used in a manner consistent with the MARSARS™ Cold Water Rescue Sling, but without the sizing features.

D.5.b. Maintenance and Repair

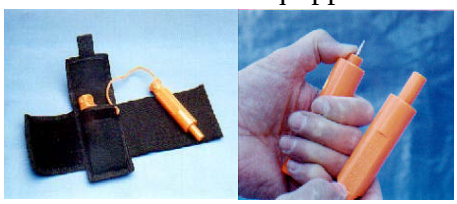
Wash with mild soap and warm water and hang to dry.

D.5.c. Inspection

After each use, or at least weekly, visually inspect the sling for tears and the nylon strap for wear. Inspect carabineer hook for proper function and apply thin coat of silicone to the spring loaded gate as needed.

D.6. Ice Awls

All ice rescuers are equipped with manufactured ice awls with spring-loaded plastic covers.



D.6.a. Application

Ice awls are used to assist the rescuer to gain traction on the ice for self-rescue or to manually propel the shuttle board. Ice awls are stowed in a wrist case that is affixed to the rescuer's lower forearm by an elastic Velcro™ strap.

D.6.b. Salient Characteristics

Ice awls have a metal pick in each handle. The awls (picks) are surrounded by plastic shrouds, which retract, into the handles when pressed into the ice. Ice awls are constructed of polypropylene plastic and are designed to float. The lanyard is attached to the wrist case or is secured to the rescuer's vest.

Figure 3-12
Self-Rescue Using Ice Awls

D.6.c. Maintenance and Repair

Ensure plastic case is free of cracks or damage. Plastic shrouds should be fully operational and must retract to closed position. No repairs are authorized.

D.6.d. Inspection

After each use, or at least weekly, visually inspect ice awls for cracks in the plastic and bent spikes. Ensure proper operation of plastic spring loaded spike shroud.

D.7. Ice Anchor	The ice anchor is 7.6” tubular screw device used to establish an anchor point in the ice during an ice rescue.
D.7.a. Application	As the ice anchor is screwed into the ice, excess ice is extruded through the top of the tube.
D.7.b. Salient Characteristics	The ice anchor is a 7.6” threaded tubular chrome alloy steel device originally developed for ice climbing and rescue operations in an ice environment. The ice anchor handle is equipped with an opening to attach the rescue tending line carabiner.
D.7.c. Maintenance and Repair	Repairs to the ice anchor are not authorized. Replace when defective.
D.7.d. Inspection	Inspect for damage after each use and prior to ice season.

D.8. Hypothermia Recovery Capsule

The hypothermia recovery capsule is used to prevent further heat loss of a hypothermic victim for transport to emergency medical services.

D.8.a. Application

Each ice rescue kit shall be equipped with one capsule stored in the compression stuff sack.

D.8.b. Salient Characteristics

The hypothermia recovery capsule is a user-friendly product. The interior and exterior fabric is waterproof. The bottom is 1000-denier Cordora™ and the lining and top is 200-denier oxford nylon. The bottom and lining material is black, the top is international orange. The top half of the bag separates completely from the bottom half to easily place a victim inside. The zippers can be opened from either end or side. There are zipper access panels for the rescuer to access the victim's torso and extremities. It weighs approximately eight pounds and fits in a compression stuff sack that is 11 inches x 23 inches.

D.8.c. Maintenance and Repair

The hypothermia recovery capsule should be washed in a mild detergent and dried after each use. Replace bag if rips or tears are observed.

D.8.d. Inspection

Inspection shall be accomplished following use and prior to the ice season. Visually inspect hypothermia recovery capsule for rips and tears. Replace as needed.

D.9. 150’ or 200’ and 550’ Ice Rescue Tethers

Ice Rescue Tethers or “Tending Lines” are secured to an anchor point and to the ice rescuer for safety and to allow the line tenders to assist with the recovery of the rescuer and victim.

Figure 3-13
150’ and 200’ Line Bag

Figure 3-14
550’ Rescue Tether

D.9.a. Salient Characteristics

The 150’or 200’ line bag and 550’ line reel are equipped with pre-rigged 9mm low stretch biopolymer ice rescue line, asymmetric carabineer and hook float. They are anchored in place utilizing either an ice anchor screw or attached to a fixed object utilizing a 5’ nylon sling.

D.9.b. Maintenance and Repair

After each use, line shall be thoroughly dried and carefully repacked in the bag or neatly rewound on the reel. Return to manufacturer for major repairs.

D.9.c. Inspection

After each use and prior to the ice season, visually inspect line for wear and damage. Inspect carabiner and ensure it is serviceable.

D.10. Ice Rescuer Safety Harness	All ice rescuers shall use the Lifeguard Systems safety harness when conducting any ice rescue operation or training exercise.
D.10.a. Application	The harness is to be worn between the dry suit and the boat crew survival vest over the dry suit. Two sizes are available. When worn, the Velcro Strap and the stainless steel rings are to be in front of the chest. To ensure correct fit, a closed fist should fit between the lower strap and the chest with the D-ring falling slightly below the boat crew survival vest.
D.10.b. Salient Characteristics	The Lifeguard Systems safety harness is constructed of black nylon webbing. The harness has torso and shoulder straps with stainless steel adjustment hardware. The Velcro strap is fed into two small stainless steel tensioners. The strap Velcro's back onto itself. Next to the tensioners is a stainless steel D-ring used to attach the tending line to the ice rescuer.
D.10.c. Maintenance and Repair	Fresh water rinsing and complete drying is required after each use. Repairs to the harness webbing are not authorized. Contact the manufacturer for repairs.
D.10.d. Inspection	Visually inspect after each use and prior to the ice season. If discrepancies are found, the harness shall be removed from service until discrepancies are corrected.

D.11. Ice Rescuer Headlamp

All ice rescuers shall wear a multi-LED headlamp on all helmets during any night ice rescue operation or training exercise.

Figure 3-15
LED Headlamp

D.11.b. Salient Characteristics

Multiple super-bright LEDs offer smooth, usable light that is directional and long lasting. An IC chip provides three brightness settings as well as strobe illumination for emergency situations. This low-profile lamp fits snugly on the helmet with a slip-resistant, adjustable headband that keeps it secure.

D.11.c. Maintenance and Repair

Ensure that your lamp is clean and dry before and after each use and before storage. Do not store a wet lamp. To dry turn the lamp off and remove the battery cover and batteries. Allow the housing to air dry thoroughly and then reassemble.

(01) Do not artificially heat the headlamp to dry.
(02) If the headlamp has been exposed to salt water, disassemble and rinse with fresh water, dry, and reassemble to prevent corrosion.
(03) Use a mild soap and fresh water to clean the elastic strap.
(04) Do not clean in a washing machine, dishwasher, or with a high-pressure hose.
(05) Do not scrub with abrasive substances.
(06) If the battery contacts are corroded remove the corrosion by sanding lightly with a fine-grain emery cloth.
(07) Replace batteries after 8 hours of use.

D.11.d. Inspection

Visually inspect all head lamps for proper operation. Replace lamps and batteries as required.

D.12. Moisture Wicking Underwear	All ice rescuers shall wear Layer I thermal underwear under the dry suit when performing ice rescue operations or training exercises. Moisture wicking thermal underwear is first layer protection worn directly against the skin.
D.12.a. Salient Characteristics	First layer light and medium weight moisture wicking thermal underwear are separate shirt and long drawers.

D.13. Fleece Underwear

All ice rescuers shall wear Layer II thermal underwear under the dry suit when performing ice rescue operations or training exercises. Layer II is light and medium weight fleece worn over the first layer as the second layer of protection.

D.13.a. Salient Characteristics

Second layer light and medium weight fleece are single piece jumper style. Two-piece fleece configurations are available for use under drop seat dry suits.

WARNING

Cotton shall not be worn for thermal protection under the dry suit. Cotton absorbs and retains moisture, robbing body heat and can cause rapid onset of hypothermia.

D.14. Layer I Thermal Socks	All ice rescuers shall wear layer I polypropylene socks when performing ice rescue operations or training exercises.
D.14.a. Salient Characteristics	Layer I socks shall be made of 100% moisture wicking material.
D.14.b. Maintenance and Repair	Maintenance is limited to laundering. Launder in cold water and hang dry or tumble dry in cool air to avoid shrinkage. Using a commercial fabric softener in the rinse cycle removes body oils during laundering.
D.14.c. Inspection	Visually inspect socks for tears or holes. If discrepancies are found, replace the socks.

WARNING

Cotton socks shall **not** be worn for thermal protection. Cotton absorbs and retains moisture, robbing the body of heat which can cause rapid onset of hypothermia**.**

D.15. Layer II Thermal Socks	All ice rescuers shall wear Layer II polypropylene socks when performing ice rescue operations or training exercises.
D.15.a. Salient Characteristics	Thermal socks are made of either a fleece Bootie I material similar to the fleece jumper or wool. Thermal socks with legs twelve (12) inches long are preferred.
D.15.b. Maintenance and Repair	Maintenance is limited to laundering. Launder in cold water and hang dry or tumble dry in cool air to avoid shrinkage. Using a commercial fabric softener in the rinse cycle removes body oils during laundering.
D.15.c. Inspection	Visually inspect socks for tears or holes. If discrepancies are found, replace the socks.

D.16. Ice Rescue Gloves	All ice rescuers shall wear approved gloves for all ice rescue operations or training exercises.
D.16.a. Salient Characteristics	Any suitable 5 - 7 millimeter neoprene, five-finger glove locally procured is authorized.
D.16.b. Maintenance and Repair	Maintenance is limited to cleaning. Cleaning is required after each use. Hand-wash gloves in a solution of water and disinfectant/detergent, national stock number 7930 01 346 4289. Rinse completely and hang dry.
D.16.c. Inspection	Visually inspect all gloves for rips and tears. Replace gloves as necessary

D.17. Ice Rescue Footwear

All Ice Rescuers shall wear appropriate footwear while conducting ice rescue operations or training exercises.

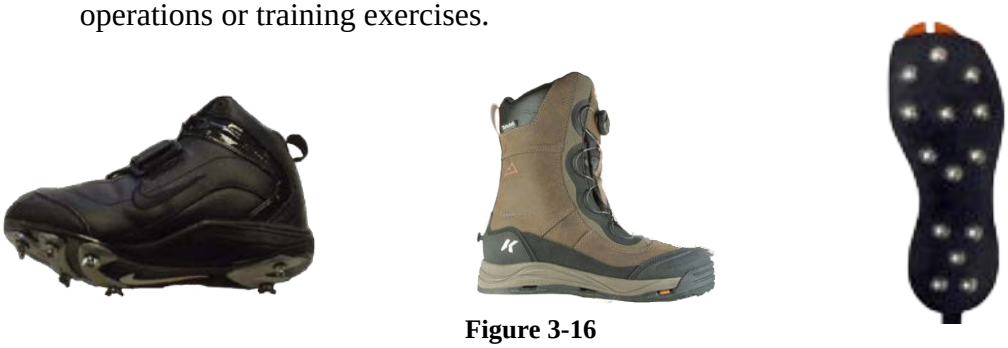


Figure 3-16
(left) Cleats with Affixed Wingnuts (middle) Korkers™ boot (right) IceTrac Extreme Cleats

D.17.a. Application

Select footwear appropriate for use in the unit's conveyances (e.g. SPC-AIR, SKF-ICE) and when driving a Government Vehicle. When transiting ice on foot, footwear shall be equipped with ice cleats.

D.17.b. Salient Characteristics

Footwear such as waterproof /water resistant cold weather boots that do not retain water, with affixed ice traction; 7mm Neoprene Bootie with an overshoe with permanently affixed ice traction; wading boots made for stocking foot waders (not waders) with a rubber sole and affixed spiked traction; or football cleats with stainless steel screws and wing nuts, usually two (2) sizes larger than normal shoe size; should be used. For cleats, the existing spikes should be replaced with screws and stainless steel wing nuts. For all footwear, color should be mainly black with minimal markings and striping.

D.17.c. Maintenance and Repair

Maintenance and Repair. Maintenance is limited to cleaning the outsole and replacing spikes with screws and stainless steel wing nuts. Screws and stainless steel wing nuts should be replaced when they are 50% worn. Use locktite™ or an equivalent adhesive to affix screws in place.

D.17.d. Inspection

Visually inspect football cleats for holes, worn soles, and missing or damaged wing nuts weekly and after each use. Replace if discrepancies are found.

D.18. Ice Rescue Dry Suit

Two dry suits are approved for ice rescue operations:

(01) The MSD 640 dry suit, and
(02) The MSD 630 dry suit.

The MSD 900, MSD585 and Kokatat™ dry suits in current inventory may be utilized for ice rescue until unserviceable. No other dry suits are authorized for ice rescue.

Figure 3-17
MSD640 Dry Suit

D.18.a. Salient Characteristics

The MSD640 (Sentinel Series™) heavy duty dry suit is a 2-Layer heavy duty waterproof & breathable constant wear dry suit with increased abrasion protection and durability. The 2-layer design makes it lighter to wear, easier to don and improves user mobility while providing the heavy duty protection.

D.18.b. Maintenance and Repair

Maintenance is limited to cleaning and lubrication of all slide fasteners in accordance with USCG MPC RSS583020.0. Stitch type repairs can be made to the outer shell and thermal/flotation module. Contact the manufacturer for repairs to the immersion module.

D.18.c. Inspection

Personal issue build-up procedures, after use and semi-annual inspections are contained in USCG MPC RSS583020.0.

D.18.d. MSD640 Donning Procedure

Before donning the MSD-640, ensure appropriate polypropylene undergarments are worn.

CAUTION!

Always don the dry suit on a clean surface such as a towel or tarp to avoid attracting debris. Pebbles, sand, dirt and other debris on the ground can cause damage to dry suit sock and compromise the suit's integrity.

CAUTION!

Use extreme care when donning the dry suit. Prior to donning, remove all rings, watches, earrings, necklaces and eyeglasses that will cause damage to the wrist and neck seals. Footwear other than thermal socks must not be worn inside the drysuit.

Use the following procedures to put on the MSD640. **Follow the steps closely to ensure proper sealing of the neck and wrist seals.**

(01) Ensure that Velcro® wrist covers and ankle covers are unfastened.
(02) Ensure waist adjusters are loosened.
(03) Ensure that both the outer shell entry zipper and waterproof entry zipper are fully opened.
(04) Ensure the suspenders are pulled out of the suit legs.
(05) Slide your legs into the suit until your toes reach the ends of the socks.
(06) Don the suspenders. Ensure they are crossed in the back but not twisted.
(07) Apply unscented talcum powder to the inside of the wrist seals.
(08) Place right arm into right sleeve.
(09) Carefully place the right hand into the right cuff by pointing the fingers straight, tucking the thumb underneath and inserting the hand through the seal. Do not make a fist when putting your wrist through the seal.
(10) Roll the Velcro® wrist covers back and refasten to a snug fit.
(11) Repeat steps 7-10 for the left arm.
(12) Bring the upper portion of the suit over your head, aligning the neck opening with the top of the head. Reach inside the top of the neck seal with fingers and gently pull the seal outward and down as you push your head through. Flatten any folds or rolls of the seal against the skin.
(13) Close the waterproof entry zipper. Reach over your left shoulder with your right hand and grasp the zipper toggle. While holding the top of the zipper, pull the toggle down until the zipper is completely fastened.
(14) Ensure the waterproof relief zipper is completely closed and the slider is fully engaged with the zipper stop. Stow the zipper toggle in the yellow loop located under the zipper cover

WARNING

Dry suits alone provide inadequate insulation for hypothermia protection. Personnel shall wear thermal underwear beneath the dry suit to provide protection from cold temperature, wind, sea spray and rain. Dry suits are not inherently buoyant. The harness flotation vest shall be worn over the dry suit for all cutter swimmer deployments.

(15) Close the outer shell entry zipper. Reach over your left shoulder with your right hand and grasp the zipper toggle. While holding the top of the zipper, pull the zipper down until the zipper is completely fastened.
(16) Tighten the ankle Velcro® covers to a snug fit.
(17) Prior to water entry, cross arms in front and gently slide finger between neck seal and your neck, squat down and force excess air through the neck opening.

D.18.e. Doffing Procedure

Use the following procedure to take off the MSD640:

(01) Remove all equipment worn over the suit.

(02) Thoroughly rinse down the exterior of the suit while wearing it, paying special attention to the seals and zippers. Remove all dirt, salt and debris.

(03) Loosen Velcro® waist and ankle adjustment tabs.

(04) Completely open the outer shell entry zipper and the inner immersion layer waterproof zipper.

CAUTION!

Placing undue force on the zipper may damage the seal and harm the integrity of the suit. Never forcefully yank on the zipper.

(05) Insert fingers between neck seal and neck. Gently stretch the seal outward and upward while pulling neck seal over your head.

(06) With an unclenched fist, slowly pull each hand through the wrist seals while holding the rubber seal open.

CAUTION!

Pulling on the wrist seal may damage the seal.

NOTE

If wearing suspenders, remove suspenders prior to proceeding.

(07) Pull suit down past hips and slide legs from the suit.

D.19. Wool Blanket	Wool blankets are used to re-warm a semi-hypothermic victim to prevent further heat loss from a hypothermic victim. Each ice rescue kit shall be equipped with four (4) tightly wrapped wool blankets stored in individual plastic bags.
D.19.a. Maintenance and Repair	Wool blankets should be thoroughly washed and dried after each use. Sewing repairs are authorized for small holes. Replace blanket if large rips or tears are observed.
D.19.b. Inspection	Visually inspect blankets for rips and tears. Replace as needed.
D.19.c. Supply Source	Wool blankets are available from the National Stock System using 7210-00-205-2804 as the stock number.

Section E. Dewatering Pump

E.1. CG-P6 Dewatering Pump

The CG-P6 dewatering pump is used primarily for emergency dewatering of vessels in danger of sinking.

E.1.a. Application

The CG-P6 model has a rated output of 250 gallons per minute at a 12-foot suction lift. Under load this pump will dewater for approximately 4 to 5 hours on a full tank of gasoline.

WARNING

Dewatering pumps shall not be used to pump flammable liquids or water contaminated with petroleum products.

E.1.b. Salient Characteristics

The CG-P6 dewatering pump consists of a 6 ½-horsepower, 4-cycle gasoline driven engine attached to a straight centrifugal pump impeller. The 3-inch diameter suction and discharge hoses connect to the pump casing via color coded quick connect cam-lock style fittings. Priming is accomplished by actuating a manual, positive-displacement priming hand pump assembly. Priming at a 12-foot suction lift takes less than a minute. An integrated discharge check valve aids in priming and operating the pump. If the pump is stopped while dewatering, the impeller case will remain primed as long as the suction hose end strainer remains submerged. The CG-P6 uses a detachable portable fuel tank that mounts on the side of the engine and incorporates a quick disconnect fitting enabling rapid tank changes. Other features of this pump include a high degree of corrosion resistance in oceanic environments, a double lip pump shaft seal designed to survive loss of suction damage and continue to function at rated capacity and on-condition based maintenance instead of interval based. The CG-P6 is packed in the standard round aluminum container.

E.1.c. Accessory Equipment

A discharge outlet adapter is available that allows coupling a 1 ½-inch fire hose to the discharge for limited fire suppression capability. A suction inlet adapter is available that allows coupling a CG-P1B suction hose to the suction inlet. A 25-foot suction hose is available for deep compartment dewatering.

NOTE

Many parts for maintaining the pump assembly are available from the Surface Forces Logistics Center (SFLC).

CHAPTER 6
Boat Swimmer and Cutter Surface Swimmer Equipment

Introduction

This Chapter contains information about approved and authorized equipment used by boat or cutter surface swimmers. In some instances, the cutter surface swimmer equipment is different from the boat swimmer equipment. Refer to the appropriate Section B or C below. Cutter and boat swimmer equipment issued to personnel are government properties considered to be organizational uniform items. The principles, concepts and procedures discussed in this Section apply to cutter and boat surface swimmer equipment. Refer to Part 2, Chapter 3, B.6. **Government Property and Personal Issue Documentation** and its subparagraphs for management of cutter and boat surface swimmer equipment. All issued items of cutter and boat surface swimmer equipment shall be returned to the unit stock when cutter and boat swimmers are reassigned to other duties or units. Cutter and boat swimmers shall wear thermal undergarments appropriate for the climate conditions expected to be encountered during a deployment in accordance with Part 2, Chapter 2 **R&SS Equipment Lifecycle Management**.

In this Chapter

This Chapter contains the following Sections:

Section	Topic	Page
A	Swimmer Equipment	3-105

Section A. Swimmer Equipment

Overview

This swimmer equipment policies Section establishes the operational requirements, describes the salient characteristics, and discusses maintenance requirements for equipment that may be used by cutter and boat surface swimmers:

(01) Surf cap,
(02) Booties,
(03) Neoprene gloves,
(04) Mask and snorkel,
(05) Fins,
(06) Cutter surface swimmer dry suit,
(07) Cutter surface swimmer rapid don rescue suit,
(08) Cutter surface swimmer wet suit,
(09) Harness flotation Vest,
(10) Cutter surface swimmer tending line,
(11) Boat swimmer harness and tending line.

Cutters shall maintain the suit that best meets their needs for their operational area.

Surface swimmers deployed from shore-based boats are deployed wearing the same organizational clothing and PFD they get underway with.

A.1. Surf Cap

The surf cap is worn by cutter surface swimmers during all deployments at night and when the water temperature is below 72 degrees Fahrenheit. Use of the surf cap is optional for all other deployments.

A.1.a. Salient Characteristics

The surf cap is constructed of a vivid reddish orange or similar hue, 2-millimeter neoprene fabric that covers the top of the head and ears. The neck strap uses a hook and pile type or other suitable closure and SOLAS grade retro-reflective tape is applied for increased visibility in low-light environments.

A.2. Booties

Booties are worn by cutter surface swimmers over the dry suit sock foot or over the bare foot on all deployments. Two pairs of different size booties are worn, one pair over the bare foot and a larger pair over the dry suit sock foot and any thermal socks worn under the dry suit. Two pairs of booties of different size shall be part of the shore based boat swimmers kit.

A.2.a. Salient Characteristics

Booties are constructed of black 5-millimeter neoprene fabric welded to hard rubber traction soles. The booties use a slide fastener type closure and are nominally 5 inches high. Booties are available in 9 sizes. Contact the manufacturer for sizing requirements.

A.3. Neoprene Gloves

Neoprene gloves are worn by cutter surface swimmers during all deployments where the water temperature is below 72 degrees Fahrenheit.

A.3.a. Salient Characteristics

Any suitable 3 or 5-millimeter neoprene five-finger glove locally procured is authorized.

A.4. Mask and Snorkel

A mask and snorkel is used by cutter surface swimmers for all deployments and by boat swimmers on platforms that carry that gear. This equipment is considered boat or cutter outfit and is not personally issued.

A.4.a. Salient Characteristics

The mask is a low-volume clear silicone window design with unbreakable UV-protected lenses and an attached chemical light bar. Mask should be equipped with a clamp to attach personal marker light. The snorkel is a free-hanging black or clear silicone straight plastic tube with corrugated mouthpiece. The top of the tube is wrapped with SOLAS Grade reflective tape for increased visibility in low-light environments.

A.4.b. Prescription Lenses

Cutter surface swimmers requiring prescription eyewear are authorized to procure corrective lenses for their mask. Contact the manufacturer for prescription requirements.

NOTE

If prescription eyewear is required, member will be issued own mask.

A.5. Fins

Fins are used by cutter surface swimmers for all deployments, and by boat swimmers on platforms that carry that gear, to assist the swimmer in leg kicking motion and to reduce fatigue. This equipment is considered boat or cutter outfit and is not personally issued.

A.5.a. Salient Characteristics

Fins are open heel design. Adjustable straps allow for a wide range of foot sizes.

A.6. Cutter Surface Swimmer Dry Suit

The cutter surface swimmer dry suit is worn by cutter surface swimmer personnel when deployed into water that is 50 degrees Fahrenheit and below.

Figure 3-18
Cutter Surface Swimmer Dry Suit

A.6.a. Salient Characteristics

The cutter surface swimmer dry suit is constructed of black or orange-and-black waterproof tri-laminate fabric that provides excellent mobility and superior environment protection for the swimmer. The dry suit incorporates a front entry slide fastener, wear area padding, sock type feet and latex neck and wrist seals. The sizing is universal and incorporates internal suspenders that adjust to fit women and men in ranges from 5 feet 5 inches, 125 pounds to 6 feet 3 inches, 250 pounds.

WARNING

Dry suits alone provide inadequate insulation for hypothermia protection. Personnel shall wear Layer I and Layer II beneath the dry suit to provide protection from cold temperature, wind, sea spray and rain. Dry suits are not inherently buoyant. The harness flotation vest shall be worn over the dry suit for all cutter swimmer deployments.

CAUTION!

Use extreme caution to avoid damaging the dry suit when donning. Prior to donning, remove all rings, watches, earrings, necklaces and eyeglasses that could cause damage to wrist and neck seals.

A.6.b. Donning Procedure

Use the following steps to put on the cutter surface swimmer dry suit:

(01) Lubricate the inside of the neck and wrist seals with unscented talcum powder.

(02) Don insulating undergarments as required.

(03) Pull the bottom section of the suit up to the waist and place arms into the sleeves.

(04) Gently push one hand through the wrist seal at a time using the index finger of the opposite hand to stretch the seal as the hand pushes through. Repeat for opposite hand. Make sure insulating undergarments are not sandwiched between seal and skin and flatten any folds or rolls of the seal flat against the skin.

(05) Bring the upper portion of the suit over the head, aligning the neck opening with the top of the head. Reach inside the top of the neck seal with the fingers and gently pull the seal outward and down as the head pushes through. Make sure insulating undergarments are not sandwiched between seal and skin and flatten any folds or rolls of the seal flat against the skin.

NOTE

Use only one or two fingers to pull the entry and relief slide fasteners closed. If more force is required, the slide fastener may not be properly aligned or lubricated. If difficulty is encountered when closing slide fasteners, stop immediately, back the slide up and check for the cause of the interference. Correct the problem before proceeding. The slide fastener must be snug tight against the sealing plug. Use paraffin to lubricate the slide fastener.

(06) Close the entry and relief slide fasteners. Have a fellow crewmember double check slide fastener to ensure it is closed completely against the sealing plug.

(07) Remove excess air from the suit by sliding fingers under the neck seal and squatting down, pull arms tight against the chest and release seal.

A.6.c. Doffing Procedure

Use this procedure to take off the cutter surface swimmer dry suit.

(01) Remove all other equipment before removing the dry suit.
(02) Wash down the dry suit while wearing it; pay particular attention to entry and relief slide fasteners. Remove all traces of salt.

CAUTION!

Failure to completely open slide fastener will damage the suit when it is removed.

(03) Completely open the entry slide fastener.
(04) Insert fingers between neck seal and neck. Gently stretch the seal outward and upward while pulling head from seal and shoulders and head out of the suit.
(05) Insert two fingers under wrist seal and gently pull seal outward. Cup the hand, fingertips and thumb together, and gently pull hand from seal. Repeat for other hand.
(06) Remove legs from suit.

A.7. Cutter Surface Swimmer Rapid Don Rescue Suit

The cutter surface swimmer rapid don rescue suit may be used by cutter surface swimmers in lieu of the dry suit and harness flotation vest combination. This suit may also be worn by Ice Rescue units.

A.7.a. Application

This suit is faster to don because the inherent thermal insulating properties alleviate the need to don thermal undergarments. The primary use for this suit would be for very cold water environments where immediate retrieval of a person overboard is necessary to prevent death.

WARNING

The rapid don rescue suit has permanently attached bulky 5-finger gloves that limit dexterity. Swimmers will not be able to manipulate litter straps or other tools that require fine dexterity to operate.

A.7.b. Salient Characteristics

The cutter surface swimmer rapid don rescue suit is constructed of closed cell neoprene foam or welded urethane coated nylon outer shell with closed cell foam inner lining insulation. The suit has an integrated lifting harness, 5 finger gloves and neoprene padding for the knees.

WARNING

The rapid don rescue suit is a non-breathable suit

A.8. Cutter Surface Swimmer Wet Suit

The "shorty" or the full-length portion of the wet suit ensemble is worn by cutter surface swimmer personnel at their discretion when required to deploy into water that is 50 degrees Fahrenheit and above.

Figure 3-19
Cutter Surface Swimmer Wet Suit

A.8.a. Salient Characteristics

The wet suit ensemble consists of the full-length 5- or 5/3-millimeter and the 3-millimeter "shorty" wet suits. They are constructed of international orange or black color combination neoprene fabric. Both suits incorporate rear entry slide fasteners that can be closed by the wearer. Retro-reflective tape is applied for increased visibility in low-light environments. Contact the manufacturer for sizing requirements.

A.9. Cutter Surface Swimmer Harness Flotation Vest

The harness flotation vest is worn by the cutter surface swimmer on all deployments. The vest provides flotation and holds items of equipment that may be used during the deployment.

A.9.a. Salient Characteristics

The harness flotation vest serves as the swimmer's tethered harness and flotation. The harness is constructed of heavy-duty nylon webbing and stainless steel hardware. Slide fasteners and snaps are corrosion resistant, high strength plastic. The swimmer's tending line is attached to a quick releasing snap shackle that is released by a beaded handle. The flotation cell is installed inside an abrasion and puncture resistant nylon case that is attached to the harness. The cell is manually inflated by actuating a CO_2 cylinder beaded handle or orally inflated using the oral inflation tube providing up to 35 pounds of buoyancy.

WARNING

Do not jump directly into the water with the harness flotation vest inflated. If the flotation cell has been orally inflated, actuating the beaded inflation lanyard will cause the cell to rupture, possibly causing injury to the swimmer.

A.10. Cutter Surface Swimmer Tending Line

The cutter surface swimmer tending line is used by the cutter surface swimmer on all deployments.

A.10.a. Salient Characteristics

The cutter surface swimmer tending line is 300-500 feet long and has a tender's hand loop spliced in one end and a stainless steel ring spliced into the other.

A.11. Boat Swimmer Harness and Tending Line

The boat swimmer harness and tending line is worn by the boat swimmer on all deployments from platforms equipped with this gear.

WARNING

Boat crews aboard platforms that do not have tending line and harness shall exercise extreme caution before putting a swimmer in the water.

The Office of Boat Forces is working toward making the swimmer harness and tending line minimum equipment on all platforms.

WARNING

Harnesses of all types, such as the boat swimmer harness and other climbing safety harnesses, shall not be used with automatically inflating PFDs unless designed as one unit. Harnesses worn over inflatable PFDs can restrict the outward inflating action and may prevent breathing or cause crushing injuries to the upper torso. Inflatable Rescue Swimmer Vest and Harness is the only authorized inflatable PFD to be worn.

NOTE

Some Boat Operator's Handbooks require a swimmer's harness. If units choose to wear an inflatable PFD while underway, they shall carry either a Type III PFD or the Inflatable Rescue Swimmer Vest and Harness for the rescue swimmer. Prior to entering the water, the inflatable rescue swimmer vest will be inflated orally or manually.

A.11.a. Salient Characteristics

The boat swimmer harness is constructed of black nylon webbing. The harness has torso and shoulder straps with stainless steel adjustment hardware. A rescue knife is attached to the harness waist strap. A quick release snap shackle is incorporated into the shoulder strap for quick release of the attached tending line. The tending line is 70 feet long and has a tender's hand loop spliced in one end and a stainless steel ring spliced into the other.

APPENDIX A Rescue & Survival Systems/Equipment Maintenance Record

ITEM: _____ **MODEL:** _____ **S/N:** _____ **IN-SERVICE DATE:** _____

Inspection Date	Inspection Type	Signature	Inspection Facility	Remarks
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			

W – Weekly, M – Monthly, Q – Quarterly, S – Semi Annually, A – Annually, P – Post Use, O – Other, and MX for maintenance only activities.

Lot Numbers & Sub Assembly Serial Numbers

ITEM	LOT	ITEM	LOT

ITEM: _____ **Page** _____ **of** _____

APPENDIX B Sample Equipment Maintenance Record

ITEM: Dry Suit **MODEL:** Kokatat **S/N:** NOR6928 **IN-SERVICE DATE:** 01 Jul 2013

Inspection Date	Inspection Type	Signature	Inspection Facility	Remarks
01 Jul 2013	W M Q S A P O MX	Steve Norquist		Built up in accordance with MPC# KB0045.0 dated 03/31/13
28 Dec 2013	W M Q S A P O MX	Steve Norquist		Conducted inspection in accordance with MPC# KB0045.0.
14 Jun 2014	W M Q S A P O MX	Steve Norquist		Conducted inspection in accordance with MPC# KB0045.0.
05 Feb 2014	W M Q S A P O MX	Steve Norquist		Taken out of service for missed inspection.
05 Feb 2014	W M Q S A P O MX	Steve Norquist		Built up in accordance with MPC# KB0045.0 dated 03/31/13
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			
	W M Q S A P O MX			

SAMPLE

Lot Numbers & Sub Assembly Serial Numbers

ITEM	LOT	ITEM	LOT
MK 124 Marine Smoke and Illumination signal	PSI07K002-003	MK 79 Personnel Distress Signal Kit	JPA95G001-010

ITEM: _____ **Page** _____ **of** _____

SAMPLE

APPENDIX C Personal Clothing and Equipment Record

PERSONAL CLOTHING AND EQUIPMENT RECORD

Use ink for all "signature" entries.
Use of "Balance on Hand" column is MAJCOM option.
Use ink/typewriter for remaining entries.

	S/N AND ARTICLE *(Noun)*	AUTHORIZED ALLOWANCE ASC	AUTHORIZED ALLOWANCE QNTY	SIZE	ISSUE DATE 1	ISSUE DATE 2	ISSUE DATE 3	ISSUE DATE 4	ISSUE DATE 5	TURN-IN DATE 1	TURN-IN DATE 2	TURN-IN DATE 3	TURN-IN DATE 4	TURN-IN DATE 5	BALANCE ON HAND
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

21. OPTIONAL

22. RATED FSC AFSC

23. ORGANIZATION

24. GRADE | 25. SSAN | 26. DUTY TEL

27. NAME *(Last, First, Middle Initial)*

SIG OF INDIVIDUAL | SIG OF SUP REP | PAGE OF

AF FORM 538 APR 74 PREVIOUS EDITION WILL BE USED

Reset

PAGE 2 OF AF-538 (Rev. 4-74)

28. INVENTORY			
I certify that items and quantities shown hereon are correct as indicated. *(Applicable only when physical inventory is accomplished.)*		I certify that items and quantities shown hereon are in my possession. *(Applicable only when physical inventory is accomplished.)*	
DATE	SIGNATURE *(Individual Performing Inventory)*	DATE	SIGNATURE *(Individual Accountable for Items)*

29. STATEMENT OF RATED FLYING STATUS CODE/HAZARDOUS DUTY STATUS				
A. FLYING STATUS CODE		B. HAZARDOUS DUTY STATUS CODE		
CURRENT AERONAUTICAL RATING	FLYING STATUS CODE	PAFSC	DAFSC	HAZARDOUS DUTY STATUS CODE

I will give notification of any change in my flying status code/hazardous duty status code.

DATE	SIGNATURE

VALIDATION					
BASE	DATE	INITIALS	BASE	DATE	INITIALS

REMARKS

Reset

APPENDIX D Sample Personal Clothing and Equipment Record

PERSONAL CLOTHING AND EQUIPMENT RECORD

Use ink for all "signature" entries.
Use of "Balance on Hand" column is MAJCOM option.
Use ink/typewriter for remaining entries.

	S/N AND ARTICLE (Noun)	AUTHORIZED ALLOWANCE ASC	AUTHORIZED ALLOWANCE QNTY	SIZE	ISSUE DATE 1 (01FEB13)	ISSUE DATE 2 (08FEB13)	ISSUE DATE 3	ISSUE DATE 4	ISSUE DATE 5	TURN-IN DATE 1 (08FEB13)	TURN-IN DATE 2	TURN-IN DATE 3	TURN-IN DATE 4	TURN-IN DATE 5	BALANCE ON HAND
1	HELMET	EA	1	M	X	X				X					
2	RAIN GEAR	SET	1	M	X	___				___					
3	BASIC GLOVES	PR	1	M	X	___				___					
4	GOGGLES	PR	1		X	___				___					
5	PARACHUTE BAG	EA	1		X	___				___					
6	SUNGLASSES	PR	1		X	___				___					
7	KNIFE	EA	1		X	___				___					
8	SAFETY BOOTS	PR	1	10	X	___				___					
9	ANTI-EXPOSURE COVERALL	EA	1	M	X	___				___					
10	DRYSUIT (specify model)	EA	1	M	X	___				___					
11	INSULATED BOOTS	PR	1	10	X	___				___					
12	THERMAL UW LAYER 1 POLY	SET	2	M	X	___				___					
13	THERMAL UW LAYER 2 BUNNY	EA	1	M	X	___				___					
14	THERMAL SOCKS	PR	2	M	X	___				___					
15	BALACLAVA	EA	1	M	X	___				___					
16	PS 50 WATCH CAP	EA	1	M	X	___				___					
17	COLD WX GLOVES LAYER 1	PR	1	M	X	___				___					
18	COLD WX GLOVES LAYER 2	PR	1	M	X	___				___					
19	COLD WX GLOVES LAYER 3	PR	1	M	X	___				___					
20	NEOPRENE HOOD	EA	1		X	___				___					

21. OPTIONAL
G006956(or next to required gear)

22. RATED FSC AFSC

23. ORGANIZATION
USCG and UNIT

24. GRADE	25. SSAN	26. DUTY TEL
BM1	1106956	OPTIONAL

27. NAME *(Last, First, Middle Initial)*
GOOD, JOHNNY, B

SIG OF INDIVIDUAL | SIG OF SUP REP | PAGE OF

AF FORM 538 APR 74 PREVIOUS EDITION WILL BE USED

PAGE 2 OF AF-538 (Rev. 4-74)

28. INVENTORY

I certify that items and quantities shown hereon are correct as indicated. *(Applicable only when physical inventory is accomplished.)*		I certify that items and quantities shown hereon are in my possession. *(Applicable only when physical inventory is accomplished.)*	
DATE	**SIGNATURE** *(Individual Performing Inventory)*	**DATE**	**SIGNATURE** *(Individual Accountable for Items)*
08 Jan 14	Sta Maguist	08 Jan 14	Johnny B. Good

29. STATEMENT OF RATED FLYING STATUS CODE/HAZARDOUS DUTY STATUS

A. FLYING STATUS CODE		B. HAZARDOUS DUTY STATUS CODE		
CURRENT AERONAUTICAL RATING	**FLYING STATUS CODE**	**PAFSC**	**DAFSC**	**HAZARDOUS DUTY STATUS CODE**

I will give notification of any change in my flying status code/hazardous duty status code.

DATE	SIGNATURE

VALIDATION

BASE	DATE	INITIALS	BASE	DATE	INITIALS

REMARKS