The NOAA Small Boat Standards and Procedures Manual

4.2 Edition

January 2024

This page intentionally left blank.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OFFICE OF MARINE AND AVIATION OPERATIONS
1315 East-West Highway, 10th Floor
Silver Spring, Maryland 20910-3282

January 3, 2024

MEMORANDUM FOR: Rear Admiral Nancy Hann, NOAA
Director, NOAA Corps and
Office of Marine and Aviation Operations

FROM: Michael Hendon
Chair, Small Boat Safety Board

HENDON.MICHAEL.DOUGLAS.1381459655 Digitally signed by HENDON.MICHAEL.DOUGLAS.1381459655 Date: 2024.01.03 12:43:18 -06'00'

SUBJECT: Request to Approve Changes to NOAA Small Boat Standard and Procedure Manual, 4th Edition

REFERENCES: NOAA Small Boat Standards and Procedures Manual, 4th Edition (v4.2, January 2024)

ACTION-FORCING EVENT:

The NOAA Small Boat Safety Board requests concurrence and approval of the following changes to the NOAA Small Boat Standard and Procedure Manual 4th Edition (v4.1) issued April 30, 2018. This is the second revision of the original 4th Edition and once approved, these changes would be issued as Edition 4.2 and distributed to the NOAA Small Boat community.

ANALYSIS:

Section 1 - Introduction

1.03 – Scope

- Bullet #3: Expanded SECD charter review requirement to include "All charters (renting of small boats and operated by NOAA) of any type must be approved by OMAO Safety and Environmental Compliance Division (SECD)."

Rationale: To ensure all vessels being operated by NOAA are in compliance with the NOAA Manual 209-10: Occupational Safety and Health Manual. Specifically Section 10.4.3: Marine Vessel Charters.

Section 3 – General Policies

3.04 – Requirements for Operations of Non-NOAA Vessels

- Added: "Limited to Class II and below. Multi-day charters require LOSBO approval. Chartered vessels must be entered into VIM and float plans filed with VOP."

Rationale: The language is to reiterate that if chartering a small boat, it must still comply with the SBS&PM sections listed and provides an extra authorization from the LOSBO.

3.14 – Review of Applicability and Interpretation of Requirements

- New subsection.

Rationale: To provide the SBSB the authority, as described 5.2 of the SBSB Charter, the ability to interpret the manual and apply it to unique circumstances that may not be fully covered in the SBS&PM.

Section 6 – Operator Qualification, Evaluation, and Design

6.01 – Operator Credentials and Training Requirements Overview Changed Table 1 frequency requirements to apply only to Class III and SRVs.

- Added training requirement for Small Boat Operators: Bloodborne Pathogen (BBP) Training

Rationale: This training was added as a result of the implementation of the BBP Exposure Plan developed in response to an incident that occurred aboard a NOAA small boat.

Section 7 – Safe Manning and Underway Requirements

7.02 e – Extended Operations

- Added: "Must have adequate qualified personnel aboard to staff SBO, lookout, and roving watch duties."

Rationale: This addition added further direction to align with STCW watchstanding requirements.

7.03 – Solo Operations Requirements

- Three types (subcategories) of solo operations were created: Completely Solo, Mission Progression Solo, and Solo Ops During Diving.
- Added requirement: "These operations must be approved by the Program Director (or equivalent) along with the appropriate LOSBO(s) and LESCO(s) from all involved Line Offices. The period and frequency of solo operations approval must be at minimum annually but may be required more frequently as determined by the LOSBO and LESCO."
- Moved guidance regarding Solo Ops During Diving to new Section 20: Other Regulated Operations.

Rationale: Expanded the guidance on Solo Operations Requirements to address particular mission related situations and the associated safety risks and added approval by Program Director, and LOSBO/LESCO to ensure the responsibility for authorizing the increased safety risk sits at the appropriate level.

Section 8 – Mission Planning

8.01 – Float Plan via Vessel Operations Program (VOP)

- Added requirement of filing all float plans in VOP

Rationale: To ensure vessel activities are accurately tracked for safety and utilization metrics purposes.

Section 9 – Stability, Design, and Construction

9.03 – Exceptions and Special Operating Area Designations

- Added: HAWAII: Due to the complexity of operational routes, contact the SBP Staff for further guidance.

Rationale: Addresses an operating area (Hawaii) that was not addressed in previous versions of the SBS&PM. Hawaii has unique circumstances, conditions, and missions that are not easily covered in this manual.

Section 10 – Lifesaving Equipment and Small Boat Equipment

10.01 – Tables 1-3 Minimum Carriage Requirements: Non-Motorized; Class A, I & II; Class III, SRV

- Updated tables' requirements for thermal protection and immersion suits to allow: "Dry, wet, or anti-exposure suits as appropriate for the mission may be worn in lieu of carriage of immersion suits. Additional PFDs must be worn if anti-exposure gear is not rated as Type III or Type V." for Class A, I and II boats.

Rationale: Allows for mission related complexities and limitations in the usage of dry, wet, or anti-exposure suits versus immersion suits.

10.01 – Table 4. Operational Matrix for Motorized Class A, I, and II Small Boats

- Changed Boat Class Operating Area categories from: "Protected", "Near Coastal", "Coastal", and "Open Waters"

Rationale: This was changed to standardize terminology. Operating areas referred to in Section 9 are used in prescribing the carriage requirements for Section 10 rather than requiring field units to handle with two different classification schemes.

10.03 – Inflatable Life Rafts (ILR) and Inflatable Buoyant Apparatus (IBA)

- Update to Inflatable Life Raft and Inflatable Buoyant Apparatus requirements to include manufacturer requirements.

Rationale: To provide field units clear direction on IBAs suitable for use aboard NOAA Small Boats.

10.07 – Fire Closure Requirements

- New subsection to specifically address fire closure requirements for machinery spaces.

Rationale: In response to M/V Conception fire findings. To ensure all spaces using fixed fire suppression systems have proper closures to seal space for effective administering of extinguishing agent.

Section 11 – Emergency Readiness

11.03 - Response Training and Emergency Procedures

- Added to required list of emergency procedures: Lithium Battery Hazard Response

11.04 - Pre-mission Brief – Orientation

- Added to bulleted list of required pre-mission brief items to cover: Primary and secondary emergency egress route orientation and drill

Rationale: Lithium ion batteries pose a significant fire risk and have been known to be the source of on-board fires. With their increased usage aboard small boats, comes increased risk, and field units must be prepared to respond to a lithium ion battery fire.

Section 14 – Inspections

14/14.03 – Introduction paragraph/ Inspection Procedures for Class III and SRVs

- Added: "All vessels 100 GT and over acquired after the promulgation date of this manual shall comply with the requirements of Title 46 Subchapter U (Oceanographic Research Vessels)."

Rationale: To ensure all new vessels are built to a known industry standard that is most applicable to NOAA Small Boat missions.

Section 15 – Hazardous Materials

15.05 – Lithium Batteries

- Added subsection: Requirements for carrying Lithium ion batteries.

Rationale: Lithium ion batteries pose a significant fire risk and have been known to be the source of on-board fires. With their increased usage aboard small boats, comes increased risk, and field units must be prepared to respond to a lithium ion battery fire.

Section 17 – Accident and Damage Reporting

17.01 – Definitions

- Revised incident/accident/near miss definitions and reporting requirements with SECO

Rationale: Aligns NOAA small boat incident/accident reporting requirement categories with SECO reporting requirement categories.

Section 20 – Other Regulated Operations

20 – Other Regulated Operations

- New section that includes guidance on diving and uncrewed systems aboard NOAA small boats.

Rationale: These operations are unique in that they also follow regulations outside of the NOAA Small Boat Program and Small Boat Safety Board purview.

RECOMMENDATION:

The NOAA Small Boat Safety Board recommends you approve the changes as noted above.

APPROVAL:

Concur X Don't Concur_____ Let's discuss_____

Nancy Hann, RADM/NOAA JAN 0 5 2024

Rear Admiral Nancy Hann, NOAA
Director, Office of Marine and Aviation Operations

ISSUANCE MEMO

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OFFICE OF MARINE AND AVIATION OPERATIONS
Silver Spring, Maryland 20910

JUL 14 2017

MEMORANDUM FOR: Distribution

FROM: Rear Admiral David A. Score, NOAA
Director, NOAA Corps and
Office of Marine and Aviation Operations

SUBJECT: NOAA Small Boat Standards and Procedures Manual, 4th Edition

As authorized in NOAA Administrative Order (NAO) 209-125, NOAA Small Boat Program, I hereby issue the NOAA Small Boat Standards and Procedures Manual, 4th Edition (Manual). A six month phase-in timeline for compliance with newly updated requirements is allotted, from the date this memo is signed.

The Manual augments and supplements the policies, procedures, and guidelines in the Small Boat Program NAO. It applies to all individuals and programs involved with NOAA's small boats and have the same force, effect, and authority as the NAO itself. The Manual will be maintained by the Small Boat Safety Board, which has representation from organizational components across NOAA. An electronic edition of the Manual will be available at the link to the Small Boat Program found on the Office of Marine and Aviation Operations webpage at https://www.omao.noaa.gov/learn/small-boat-program.

The Chairman of the NOAA Small Boat Safety Board is hereby directed to disseminate the Manual within the NOAA small boat community.

Distribution:
UNSEC
OAR AA
NOS AA
NWS AA
NMFS AA
NESDIS AA
NOAA CFO
NOAA CAO
NOAA A&G
NOAA WFMO
NOAA GC
NOAA SECO
OMAO SECD
OMAO MO

Printed on Recycled Paper

RECORD OF CHANGES **4.2 Edition**

SECTION	DETAIL
1	● 1.02: Added subsection "Statement from the Director" ● 1.03: Changed "owned and operated" to "owned and/or operated" ● 1.03: Expanded requirements for 'charters' of non-NOAA owned small boats. All charters/rentals must be approved by SECD using NF 57-11-02. ● 1.03: Added Note: The provisions above do not apply to NOAA Employees (not as operators) aboard non-NOAA vessels. Those employees are governed by NAO 209-115." ● 1.04: Refer to Small Boat Program Office (SBPO)

2	● Removed "This authority is established in the DAO 25.2."
	● 2.01 b: updated language for SBP Inspection, Engineering, and Training Coordinator.
	  ○ Inspection coordinator: Removed "maintaining SBP files for inspections and status"
	  ○ Engineering Coordinator: Minor rewording
	  ○ Training Coordinator: New bullet describing duties
	● 2.02 e: updated definition of 'Operator-in-Charge', added "OIC must be on board vessel" and added that OIC must be identified in float plan.
	● 2.02 f: updated definition of 'Small Boat Operator'. Moved dive operations requirement language to Section 20 (new).
	● 2.02 g SBO: Shoreside Point of Contact: Added "or requires operational or emergency assistance."

3	● 3.01: Consolidated all government regulations (operational and environmental) into single bullet, added to include tribal regulations. ● 3.04: Added subsection "Requirements for Operations of Non-NOAA Vessels" (moved from 1.03 on Scope). ● 3.04: added "Limited to Class II and below. Multi Day charters require LOSBO approval. Chartered vessels must be entered into VIM and float plans filed in VOP." Further explained NOAA employees on non-NOAA boats ● 3.05: added "External References" subsection. ● 3.09: Harassment, Sexual Harassment, and Related Offenses: added links/resources for NAO's provided ● 3.09: added gender neutral language ● 3.10: 'Smoking restrictions' language updated ● 3.12: 4th bullet changed from "Supervisor" to "OIC" regarding written notification of medical non-clearance.

SECTION	DETAIL
	• 3.15: Waivers: added "If there is no VPC, the VOC will submit waiver requests directly to the LOSBO" • 3.14: Added Review of Applicability and Interpretation of Requirements. • Updated Waivers to 3.15 and updated language.
4	• 4.02: Small Boat Status: Added status categories to match VIM.
5	• Updated GAR Form used in linked reference • 5.02 c: 1st bullet removed text "for any GAR ≥ to 7" to read "Mitigating factors must be documented"
6	• 6: Operator Qualification, Evaluation, and Designation: Added to opening paragraph, "All documentation must be reflected in Vessel Training Records (VTR)." • 6.01: Added Bloodborne Pathogen (BBP) Training (for Class A, I, II, and III, SRV) • 6.01: Added "Note: Training refresher intervals can be found on NF-57-19-04 Small Boat Operator and Crewmember Authorization Form.". "Crewmember" added to form. • 6.02 a: removed remark about '24 hour', emphasized 'instructor-led'. • 6.02 b: Added "The Component Course is required for all VPCs, VOCs, SBOs and recommended for all crewmembers and personnel involved in small boat operations." • 6.02 c: PQS: Added "Completion of the Small Boat Standards and Procedures Manual Policy Test" • 6.02 d: FA, CPR, AED, BBP: BBP language/explanation added, including CLC. • 6.02 e: "Program-specific Training", changed to "Mission-specific Training" • 6.02 f: Changed from Refresher Training to "Additional Training". Note: SBSPM Policy Test every 3 years is annotated on the Training Form (not in SBSPM).
7	• First paragraph: Changed to "All small boats must be manned by personnel with the appropriate knowledge, skills, and abilities to ensure that operations are conducted in a safe, efficient, and professional manner." • 7.02 a: Minimum Safe Manning Levels: Added "The OIC shall ensure the other person has the appropriate knowledge, skills, and abilities to perform the required duties of the mission." • 7.02 e: Extended Operations: Added "Must have adequate qualified personnel aboard to staff SBO, lookout and roving watch duties" • 7.03: Solo Operations Requirements: Three subcategories of solo ops added. Dive Operations Manning Requirements now addressed in Section 20. Solo

SECTION	DETAIL
7	ops without close support require Program Director (or designee), LOSBO and LESCO approval (minimum annually). ● 7.04 a: Updated Underway Requirements, added "Lookout and Roving Watch Requirements", replaced "Daily Missions" language. ● 7.04 b: Changed to "Extended Operations" from "24 hours operations". Minimally reworded some content. Added last bullet "Extended pre and post mission operations, like trailering, should be taken into account when determining proper work/rest periods"
8	● 8.01: Float Plan/ VOP (added to title): Makes online float plan a requirement. Changed "Every SBP" to "Every small boat unit". ● 8.01: Paragraph two: Added language on VOP. ● 8.01: Float plans must contain the GAR category in addition to the values.
9	● 9.03: Hawaii added to Special Designation areas ● 9.04: Small Boat Stability and Construction Considerations (see last paragraph): Clarified: "General design, construction, and stability requirements…" ● 9.06 Table 9.1: changed language in 'Class A, All Waters', 'Class I and Class II, All Waters' ● 9.06 Table 9.1: Added note: Class II vessels that aspire to operate beyond 20nm, must be reviewed by the VOAR Working Group for Exposed Water operations and approved by the SBSB. ● 9.07: Renamed "Vessel Operating Area Review (VOAR) Working Group" (formerly Stability Working Group (SWG)) ● 9.07: Paragraph added to ensure request were routed from VOC through VPC or LOSBO ● 9.07: Added link to Operating Area Review Request Form ● 9.08: Small Boat Acquisition Criteria: Minor language change ● 9.09: Modifications of Small Boats: Language change
10	● Tables (all): language simplified ● Table 10.1: Removed Throwable Flotation Device ● Table 10.2: Minimum Carriage Requirements, Damage/Emergency Response: change authorization by "LOSBO". ● Table 10.3: Bridge Requirements: Updated 'Compass' language; specified deviation. ● Table 10.3: Communication: remove SPOT, EPIRB, added "two-way communication" ● Table 10.4 Summary: Grouped columns by operating area instead of vessel class.

SECTION	DETAIL
10	• Table 10.4: Removed Class A 'Coastal' and 'Open Waters' because it is not authorized • Table 10.4: 'Emergency Steerage Plan' removed because it is not a carriage requirement • Table 10.4: MOB Recovery Procedure, changed to "MOB - Recovery Procedures and/or gear" • Added Immersion Suit section to Table 10.1, Table 10.2, and Table 10.3. Thermal protection and immersion suit language updated in Tables 10.1–10.4. • Table 10.4: vocabulary/terminology changes: • Table 10.4: 'Protected' and Near Coastal' combined as "Protected" • Table 10.4: 'Coastal' changed to "Partially Protected". "(in waters not more than 20nm of the mouth of a harbor of safe refuge, except Special Operating Area Designations)" • Open Waters is now "Exposed Waters". Changed from 12nm → >20nm. • Table 10.5: Portable Fire Extinguisher Minimum Requirements. Updated with new type terminology and added authorization for 10B type extinguishers in Accommodations/Berthing spaces. • 10.03: Inflatable Life Rafts (ILR) and Inflatable Buoyant Apparatus (IBA) paragraph added, including manufacturer requirements. • 10.03: Other Considerations: (including inflatables) language added for 'small boats operating >50nm…' Moved location. • 10.06: Fixed Fire Systems: added requirements • 10.07: Fire Closure Requirements, added 46 CFR 182.465 • 10.08: Personal Protective Equipment and Clothing: language changed (after bullets) • Removed SBP guidance website link to Anchor rode document. Document is non-existent. Specifications is beyond purview of the SBSPM.
11	• 11.03: Response Training and Emergency Procedures: added Emergency Egress and Lithium Battery Hazard Response to bullet list • 11.04: Pre-mission Brief – Orientation: added "Primary and secondary emergency egress route orientation and drill" to bullet list • Table 11.1: Class III and SRV's emergency topics and frequencies: added Emergency Egress (quarterly) and changed Diver accident to quarterly (if capable of conducting dive ops)
12	• 12.01: updated acquisition flow chart • 12.03: Title Change to 'Accountable Property Management'

SECTION	DETAIL
12	• 12.03: Language change "An overview of how NOAA tracks accountable property is available on the NOAA Personal Property Management Branch homepage." • 12.03: small boat checklist for property revised • 12.03: Removed "Before sale or disposal, ensure all identifying stickers, emblems, NOAA hull numbers, and other forms of identification are removed. Unregister any safety equipment such as EPIRBs and DSC radios."
13	• 13.03: Hull number size chart: "minimum" letter size
14	• 14: Inspections: Added Subchapter U • 14.02 d: Delinquent Examination and Inspections moved here • 14.03: Added Subchapter U • 14.03 f: Category 1 Deficiencies and "No Sail" Order: 'Reporting Category 1 deficiencies' updated
15	• Title: Change from Hazardous Materials to 'Environmental Compliance' • 15.01 d: SOPEP updated • 15.05: Lithium Batteries: added (new)
17	• 17.01 (a & b): Definitions: "Incident" and "accident" separated and definitions updated. • 17.01 c: Near miss definition rewritten • 17.03 Table 17.1: Property Damage: under 'Property Damage >$1M and Loss of Asset": Added "Note: an occupational related fatality shall be reported to the local OSHA office within 8 hours." • 17.03 Table 17.1, 17.2, and 17.3: NOAA Reporting Mechanism: Link to Online incident reporting system updated. • 17.04: Investigative Authority (2.d paragraph): added "for Class A and B small boat incidents consistent with NAO 209-1A, Section 7.09 – NOAA Occupational Safety and Health. For all Class A investigations an investigator from NOAA SECO will be part of the investigation team."
20	• New section on "Other Regulated Operations" to include 20.01: Dive Operations and 20.02: Uncrewed Aircraft Systems (UAS), • Dive Operations Requirements: DPIC explanation/language added • Dive Operations Requirements: SBO & DPIC 'same person' explanation added • Solo Operations Requirements: Mission-Based Risk Assessment language and standards updated to include LOSBO and LESCO approval

ACRONYMS

AA	Assistant Administrator
AED	Automatic External Defibrillator
ASBE	Annual Small Boat Evaluation
BBP	Blood Borne Pathogen
COR	Contracting Officer's Representative
CPR	Cardiopulmonary Resuscitation
GAR	Green-Amber-Red
JHA	Job Hazard Analysis
IBA	Inflatable Buoyant Apparatus
ILR	Inflatable Life Raft
LO	Line Office
LOSBO	Line Office Small Boat Officer
MOCC	Motorboat Operators Certification course
MSD	Marine Sanitation Device
NAO	NOAA Administrative Order
NCC	NOAA Component Course
NDP	NOAA Dive Program
NOAA	National Oceanic and Atmospheric Administration
OEM	Original Equipment Manuals
OIC	Operator-in-Charge/Officer-in-Charge
OMAO	Office of Marine and Aviation Operations
OOD	Officer of the Deck
ORM	Operational Risk Management
OSHA	Occupational Safety and Health Administration
PQS	Personnel Qualification Standards
SBEX	Small Boat Examination
SBO	Small Boat Operator
SBOM	Small Boat Operations Manual
SBP	Small Boat Program
SBPM	Small Boat Program Manager
SBPO	Small Boat Program Office
SBSB	Small Boat Safety Board
SBSP	Small Boat Supplemental Policies
SBSPM	Small Boat Standard and Procedures Manual
SECD	Safety & Environmental Compliance Division

SRV	Small Research Vessel
USCG	United States Coast Guard
VIM	Vessel Inventory Management
VOC	Vessel Operations Coordinator
VPC	Vessel Program Coordinator
WLL	Working Load Limit
XO	Executive Officer

NOAA SMALL BOAT STANDARDS AND PROCEDURES MANUAL
TABLE OF CONTENTS

SECTION 1 INTRODUCTION 1

.01 Purpose 1

.02 Statement from the Director, Office of Marine and Aviation Operations (OMAO) 1

.03 Scope 2

.04 Manual Review and Distribution 2

SECTION 2 ROLES AND RESPONSIBILITIES 3

.01 Programmatic Roles and Responsibilities 3

.02 Operational Roles and Responsibilities 5

SECTION 3 GENERAL POLICIES 9

.01 Applicable Policies 9

.02 Command Designation 9

.03 Personnel Authorized to Operate NOAA Small Boats 10

.04 Requirements for Operations of Non-NOAA Vessels 10

.05 External References 10

.06 Minimum Age Requirements 10

.07 Foreign Nationals and Controlled Technologies 11

.08 Seamanship and Personal Conduct 11

.09 Harassment, Sexual Harassment, and Related Offenses 11

.10 Smoking Restrictions 12

.11 Alcohol, Drugs, and Narcotics 12

.12 Medical and Fitness Considerations 13

.13 Deviations from the Manual 13

.14 Review of Applicability and Interpretation of Requirements 13

.15 Waivers 14

SECTION 4 CLASSIFICATIONS AND STATUS 15

.01 Small Boat Categories 15

.02 Small Boat Status 15

SECTION 5 PROCEDURES FOR RISK ANALYSIS AND MANAGEMENT 16

.01 Key Principles of Risk Management 16

.02 Process for Managing Risk 16

.03 Risk Elimination and Mitigation 19

.04 Reassessment 19

SECTION 6 OPERATOR QUALIFICATION, EVALUATION, AND DESIGNATION 20

.01 Operator Credentials and Training Requirements Overview 20

.02 Operator Credentials and Training Requirements Information 20

.03 Crewmember Training Information 22

.04 Documentation 22

.05 Delinquency 23

.06 Advanced and Continuing Education 23

SECTION 7 SAFE MANNING AND UNDERWAY REQUIREMENTS 24

.01 Succession to Command 24

.02 Minimum Safe Manning Levels 24

.03 Solo Operations Requirements 25

.04 Underway Requirements 26

SECTION 8 MISSION PLANNING 28

.01 Float Plan via Vessel Operations Program (VOP) 28

.02 Small Boat and Equipment Inspections 29

.03 Start-Up Checklist 29

.04 Mission and Safety Orientation Briefing 30

.05 Underway Requirements 30

.06 Float Plan Updates 31

.07 Post Mission Requirements 31

.08 Procedures for Overdue Boats 31

.09 Documentation 32

SECTION 9 STABILITY, DESIGN, AND CONSTRUCTION 33

.01 Construction and Stability Criteria for Designated-Operating Areas 33

.02 General Operating Area Definitions 33

.03 Exceptions and Special Operating Area Designations 33

.04 Small Boat Stability and Construction Considerations 34

.05 General Stability Requirements 34

.06 Mission Stability Requirements 35

.07 Special Case Class I and II Mission Conditions and Operating Area 37

.08 Small Boat Acquisition Criteria 37

.09 Modifications of Small Boats 37

SECTION 10 LIFESAVING EQUIPMENT AND SMALL BOAT EQUIPMENT 39

.01 Determine Carriage Requirement 39

.02 Guidance for Personal Flotation Devices and Immersion Suits 51
.03 Inflatable Life Rafts (ILR) and Inflatable Buoyant Apparatus (IBA) 54
.04 Emergency Radio Beacon 55
.05 Ring Life Buoy and Water Light Considerations 56
.06 Fixed Fire Extinguishing Systems 56
.07 Fire Closure Requirements 56
.08 Personal Protective Equipment and Clothing 58
SECTION 11 EMERGENCY READINESS 59
.01 Responsibility 59
.02 Emergency Response Plan Requirements 59
.03 Response Training and Emergency Procedures 60
.04 Pre-mission Brief – Orientation 61
.05 Emergency Exercises and Drills 61
SECTION 12 ACQUISITIONS, ALTERATIONS, AND DISPOSAL 64
.01 Acquisition of New, Used, Surplus, or Transferred Small Boat 64
.02 Considerations for Alterations and Modifications 65
.03 Accountable Property Management 66
SECTION 13 VISUAL IDENTIFICATION AND REGISTRATION 67
.01 Responsibility 67
.02 NOAA Hull-Registration Numbers and Trailer License Plates Registration 67
.03 Visual Identification Scheme 68
.04 Examples of Small Boat Visual Identifications 69
.05 Flags 73
.06 Exemptions 73
SECTION 14 INSPECTIONS 74
.01 Responsibility 74
.02 Examination Procedures for Class A, Class I, and Class II small boats and boat trailers 74
.03 Inspection Procedures for Class III and SRVs 76
SECTION 15 HAZARDOUS MATERIALS 79
.01 Environmental Compliance 79
.02 Pollution Prevention Control 80
.03 Marine Sanitation Devices (MSD) 80
.04 Vessel General Permits 81
.05 Lithium Batteries 81

SECTION 16 MAINTENANCE PLAN 83
.01 Maintenance Plan Elements 83
.02 Responsibilities 84
.03 SBP Support for Small Boat Maintenance 84
SECTION 17 ACCIDENT AND DAMAGE REPORTING 85
.01 Definitions 85
.02 Reporting Responsibilities 86
.03 Notification Chain and Timelines 87
.04 Investigation Authority 89
.05 SBSB Review 90
SECTION 18 WEIGHT LIFTING EQUIPMENT CERTIFICATION AND MAINTENANCE 91
.01 Applicability 91
.02 Definitions 91
.03 Boom, Crane, Davit, Frame, and Winches Inspections 92
.04 Overhauls 95
.05 New or Altered Structures and Equipment 95
.06 Stability Documentation 95
.07 Documentation of Test Results 96
SECTION 19 RIGGING AND PROOF TESTING 97
.01 Identification and Traceability 97
.02 Inspection 97
.03 System Review and Risk Management 98
SECTION 20 OTHER REGULATED OPERATIONS 100
.01 Dive Operations 100
.02 Uncrewed Aircraft Systems (UAS) Operations 102
Appendix A NAO 209-125: NOAA SMALL BOAT SAFETY PROGRAM
Appendix B SMALL BOAT SAFETY BOARD CHARTER

SECTION 1 INTRODUCTION

.01 Purpose

This Manual incorporates the required provisions defined by NOAA Administrative Order (NAO) 209-125. All small boat operators (SBOs) and crewmembers involved in NOAA small boat operations are required to read and comply with the Small Boat Standards and Procedures Manual (the Manual) and operate small boats per the provisions of this Manual. The standards and procedures in this Manual are the minimum requirements that must be met; they may be exceeded but not diminished.

.02 Statement from the Director, Office of Marine and Aviation Operations (OMAO)

NOAA maintains an active safety management system with the primary intention to prevent accidents and incidents. An important aspect of this goal is the open sharing of information. The Small Boat Safety Program supports the open sharing of information on all safety issues and encourages all employees to report significant errors, safety hazards, and concerns. Safety is core to our operations, and at no time should an employee be asked to compromise our safety standards to get the job done.

Safety is paramount to everything we do and every decision we make in our organization. Success depends on every employee complying with a safety mindset, adhering to all safety policies, and continually looking for ways to improve in all that we do. Additionally, an environment of inclusivity and respect relates to every team member's ability to feel safe, be safe, and to speak out when safety concerns arise. All employees are expected to act in accordance with the values of inclusivity and respect.

Our overall safety objective is the proactive management of identifiable hazards and associated risks. Eliminating safety risks, injuries to people, damage to equipment, and potential harm to the environment is a constant effort. To that end, we will continuously examine our operations for hazards, identify mitigations, and work together to continually improve. We will encourage the reporting of hazards and incidents, train staff on safety management, document our findings, and execute mitigation actions.

Overall responsibility for the NOAA Small Boat Safety Program lies with me as Director, OMAO. Responsibility for making our operations safer for everyone lies with each one of us – from the Safety Board to front-line employees. Each manager is responsible for implementing the safety management system in his or her area of responsibility and will be held accountable to ensure that all reasonable steps are taken.

For the purposes of the Manual, "small boats" are defined as crewed boats less than 300 gross tonnage (GT). The Manual provides policy and guidance to enhance safety and promote operational readiness by implementing general operating standards and procedures for all NOAA small boats. It is intended to supplement best management practices and risk management principles.

.03 Scope

The contents of this Manual apply to the following:

- Small boats owned and/or operated by NOAA.
- Small boats owned by NOAA, and operated by other entities.
- All charters (renting of small boats and operated by NOAA) of any type must be approved by OMAO Safety and Environmental Compliance Division (SECD). Employees must submit a NOAA Form (NF) 57-11-02 and receive clearance before the execution of the charter. Submission and approval information can be found on the SBP intranet website under the Resource Guidance, Manual & Policies Tab. Additional equipment and operational requirements for chartered vessels can be found in Section 3.04 of this manual.

Notes:

The provisions above do not apply to NOAA Employees (not as operators) aboard non-NOAA vessels. Those employees are governed by NAO 209-115.

This manual does not apply to NOAA Employees chartering vessels with operator and crew provided. See NOAA Form (NF) 57-11-02 for guidance.

.04 Manual Review and Distribution

The Small Boat Safety Board (SBSB) is responsible for reviewing the Manual annually. The small boat community is encouraged to review the Manual annually, and propose written changes to their Line Office Small Boat Officer (LOSBO) or the SBPO. Proposed changes will be elevated to the SBSB.

Changes to the Manual are approved by the SBSB, then sent to the Director, Office of Marine and Aviation Operations (OMAO) for concurrence. Once approved, the Small Boat Program Manager (SBPM) will work in conjunction with the LOSBOs to promulgate the most current edition.

Revisions to the current edition of the Manual will be implemented via the issuance of either technical directives or a new edition of the Manual, as required. A current version of the Manual is available on the SBP intranet website. All Operators are responsible for ensuring that a current version of the Manual is accessible.

SECTION 2 ROLES AND RESPONSIBILITIES

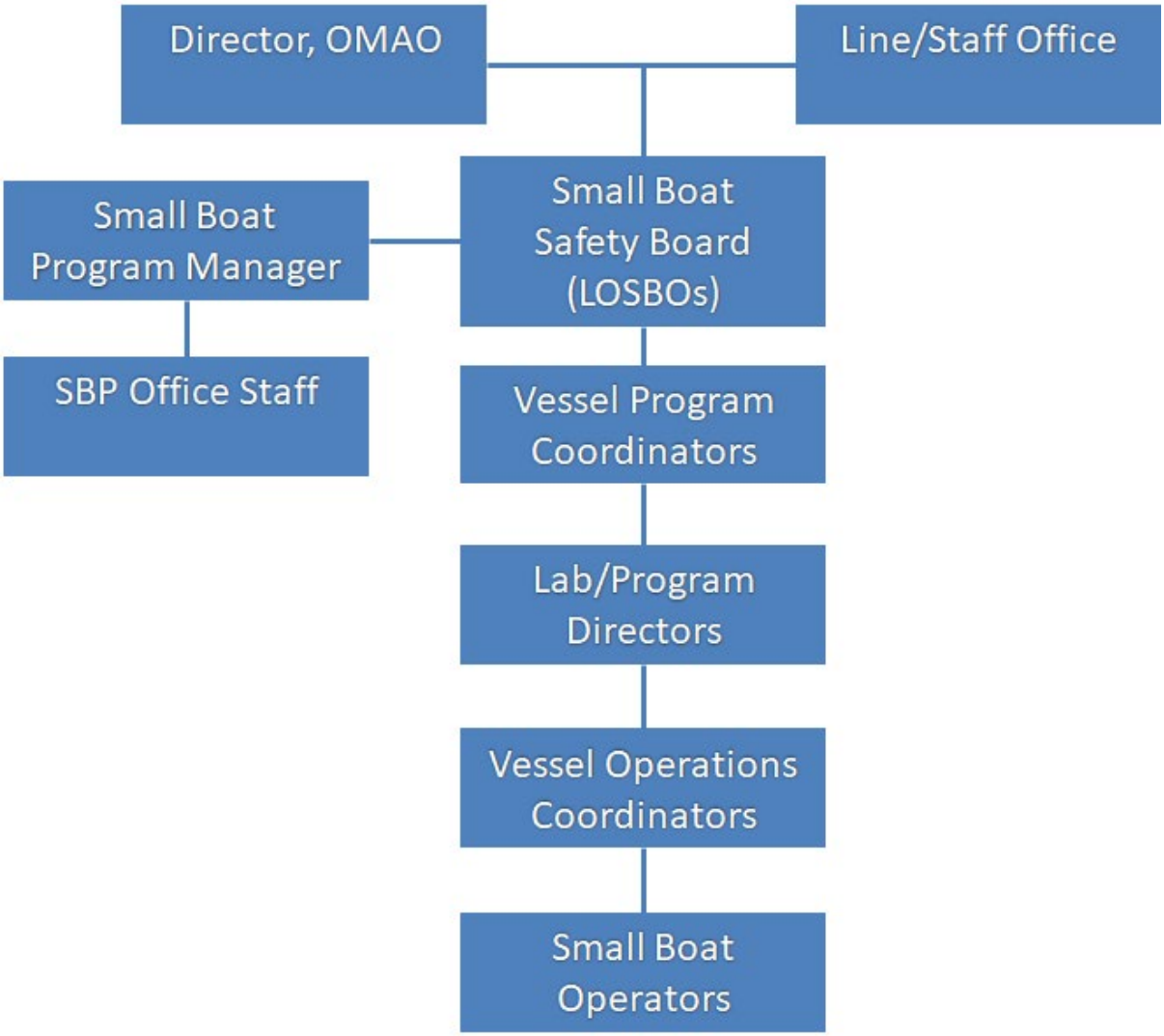


Chart 2.01 NOAA SBP Function Organization Chart

.01 Programmatic Roles and Responsibilities

The Office of Marine and Aviation Operations (OMAO) has administrative authority over NOAA's Small Boat Safety Program.

a) Director, OMAO

The Director, OMAO is the individual within OMAO charged with administering the Small Boat Safety Program (SBP), per the NOA 209-125. The Director, OMAO, is the final administrative authority for all matters pertaining to the NOAA Small Boat Safety Program and its policies, procedures, and standards.

b) SBP

The SBP consists of the Small Boat Safety Board (SBSB), the Small Boat Program Office (SBPO), and the small boat community.

The responsibilities of the SBSB are outlined in the NOAA Small Boat Safety Board Charter (Appendix B). The SBSB advises the Director, OMAO on all policies pertaining to NOAA small boat safety and management.

The SBPO works in conjunction with the SBSB to create safety and management policies for NOAA small boats. The SBPO supports small boat inspections, engineering, and training. The SBPO is comprised of:

- SBP Manager is appointed by the Director, OMAO under the Safety Environmental Compliance Division (SECD) of OMAO. The Manager is the focal point for the Program Office, and is a voting member on the Safety Board.
- SBP Executive Officer is the administrative focal point for the Program Office.
- SBP Inspection Coordinator is responsible for coordinating, scheduling, and conducting boat inspections of Class III boats and Small Research Vessels (SRVs) and can perform Annual Small Boat Evaluations and Small Boat Examinations for Class I and II boats as requested by operating units.
- SBP Engineering Coordinator is responsible for reviewing and providing engineering and technical guidance for new boat construction, acquisition, boat alterations, and repairs. Additionally, they assist Vessel Operations Coordinators with new construction, contracted repairs, and maintenance specifications.
- SBP Training Coordinator is responsible for coordinating, reviewing, and scheduling required SBP Training courses; maintaining SBP training events and sessions within the Commerce Learning Center; evaluating Small Boat courses to ensure they provide the proper content; providing technical guidance related to SBP training practices and procedures.

c) Program Directors

The Program Directors (i.e., Science Center Directors, Lab Directors, Sanctuary Superintendents, Director of Law Enforcement), or the responsible management position for each Vessel Operations Coordinator ensure implementation of, and compliance with, all policies for the safe use and management of small boats within a Program. Each program director must delegate, in writing, operational authority to a Vessel Operations Coordinator.

.02 Operational Roles and Responsibilities

a) Line Office Assistant Administrator

Each Line Office Assistant Administrator (AA) or Deputy AA is charged with ensuring all small boat operations within their Line Office comply with established safety and management policies. Each Line Office AA will appoint at least one LOSBO to oversee small boat operations within the respective Line Office. The LOSBOs serve as voting members on the SBSB.

b) Line Office Small Boat Officer

The LOSBO represents individual programs, as well as the Line Office as a whole. The LOSBO provides oversight and assistance to Line Office Programs to carry out safe and effective small boat operations, and coordinates Line Office compliance with NAO 209-125, as well as the requirements as set by this Manual and Supplemental Small Boat Policy. The LOSBO has authority from their corresponding Director or AA to issue "No Sail" orders to all boats within his/her purview, operating out of compliance with NAO 209-125, this Manual, or any Supplemental Small Boat Policies.

c) Vessel Program Coordinator (VPC)

LOSBOs may identify VPCs with approval by the Program Directors. The VPC assists LOSBO with communication and implementation of policies and requirements; reports issues up to the LOSBO; and provides assistance as needed by the LOSBO.

d) Vessel Operations Coordinator (VOC)

The VOCs are appointed by their respective Program Directors. The authority of the VOC is derived from the Program Director. VOCs may be a Federal employee or a contractor. VOCs have operational authority over the small boats assigned to their rosters. VOCs ensure operations adhere to the safety and management policies laid out in this Manual. VOCs have the authority to issue "No Sail" orders to a boat found to be non-compliant to the Manual.

A VOC's Programmatic Responsibilities include:

- Ensuring accurate data is entered into Vessel Inventory Management (VIM) database for each small boat under their authority
- Tracking and report operational metrics
- Attending VOC Summits and associated training
- Reporting incidents, accidents, and near misses to proper authority

A VOC's Administrative Responsibilities include:

- Maintaining copies of training certificates for the SBOs and Crewmembers using the VOC's small boats
- Maintaining copies of certification letters for the SBO and Crewmembers using the VOC's small boats
- Ensuring SBO and crewmember meet certification currency
- Scheduling continuing education opportunities for SBO and Crewmembers
- Developing, conducting, and documenting appropriate drills specific for individual boat operations
- Annually reviewing, updating, and approving each small boat's Baseline Assessment
- Conduct Risk Assessment to review and approve new operations, platforms, and proposed personnel
- Verifying proper Float Plan usage
- Tracking active Float Plans
- Maintaining a record of completed Float Plans (3 years retention requirement)

A VOC's Administrative Authorities include:

- Developing Personal Qualifications Standards for each small boat
- Certifying that Operator-in-Charge (OIC) and SBOs pass Personal Qualification Standards evaluation
- Removing delinquent operators from the active list
- Revoking an SBO's qualification, even if the SBO was certified by a previous VOC
- Requiring additional training for an SBO, even if the SBO was certified by a previous VOC
- Elevating unresolved boat/operational issues to the VPC, then LOSBO and finally SBSB

A VOC's Responsibilities for Operation, Maintenance, and Inspection include:

- Scheduling required inspections
- Reporting inspection results to SBP Office, LOSBO, and others as directed by local policy
- Documenting completion of required preventative and corrective maintenance to small boats
- Coordinating with the designated Contracting Officer Representative (COR) or SBP Engineering Coordinator for boat-contracted construction, repairs, or maintenance as required
- Documenting equipment malfunctions and corrective actions taken

A VOC's Authority over Operation, Maintenance, and Inspection include:

- Stopping any small boat operation due to safety or weather concerns
- Taking boats out of service, that is inactive (Section 4.02), due to required repairs or condition concerns
- Issuing Category I safety deficiencies
- Approving corrective measures taken to fix Category I deficiencies
- Ensure all small boat modifications comply with guidelines in Section 9 of this Manual
- Conduct risk assessment for development of a requirements document for procurement/acquisition of newly acquired boats (i.e., be actively involved in new purchases or acquiring excessed small boats)

e) Operator-in-Charge (OIC)

An OIC is a required singular designation of authority and responsibility for the vessel, as directed by the VOC. An OIC must be on board the vessel and is responsible for the safe operation of a small boat and all embarked personnel while underway. The OIC is responsible for ensuring operational risk assessments (Green-Amber-Red (GAR) model), safety briefings, risk mitigation, and risk condition monitoring are properly conducted. The OIC has authority and responsibility to modify or cancel operations based on changing risk assessments. The OIC is responsible for the oversight of all personnel aboard and to ensure that operations are conducted safely and efficiently, per the Manual, Program, and VOC instructions. The OIC will be clearly identified to all embarked personnel and must be noted in the float plan.

f) Small Boat Operator

An SBO is a qualification based on demonstrated skills and documented training. An SBO must meet all requirements for certification and be designated per this manual. When two or more small boat operators are on board a vessel, the OIC retains the ultimate responsibility.

g) Shoreside Point of Contact

The Shoreside Point of Contact (POC) is responsible for maintaining and monitoring active Float Plans within their Line Office Program. The POC must be available by phone or radio throughout the duration of the mission. The POC must take action if a small boat is overdue or requires operational or emergency assistance.

h) Crewmember

Crewmembers are persons required to be engaged in the safe operation of the small boat, including (but not limited to) navigation and maintenance of the small boat, its machinery, systems, and arrangements essential for propulsion and safe navigation or to provide services for other persons on board. Crewmembers must

participate in the required drills referenced in Section 11 of this Manual. Additional crewmembers are required onboard during longer, more complex voyages, and/or those voyages requiring the carriage of a large number of people, as defined in Section 7 of this Manual. Crewmembers report directly to the OIC or SBO currently on watch. Crewmembers may also participate in mission activities, as long as crew duties are prioritized.

i) Persons in Addition to Crewmembers

Persons in addition to crewmembers are any person on board the small boat who are not required to be engaged in the safe operation of the small boat. Persons in addition to crew include scientific researchers, persons in support of the mission, interns, or other personnel on board to participate directly in the planned scientific operations. This may include individuals whose presence heightens the public's awareness of the mission of NOAA such as outreach groups, NOAA stakeholders, members of the media, educators, students, or personnel engaged in the repair or servicing of the small boat. All persons in addition to crew must comply with this Manual and follow the instructions and guidance of the OIC, SBOs, and Crewmembers.

SECTION 3 GENERAL POLICIES

All NOAA small boats must be used only for official government purposes.

.01 Applicable Policies

The operational requirements of NOAA small boats are governed by:

- NAO 209-125
- The Small Boat Standards and Procedures Manual
- Supplemental Small Boat Policies (as applicable)
- Small Boat Operations Manual (SBOM)
- Baseline and Mission Risk Assessment
- Applicable federal, state, and tribal regulations

Supplemental Small Boat Policies

Line Offices and their subordinate programs may issue policies and procedures relating to small boat safety and small boat operations in addition to the standards and procedures set in this Manual. A Supplemental Small Boat Policy cannot diminish the requirements of this Manual.

Small Boat Operations Manual

A boat-specific operation manual is required for each small boat. The SBOM is a compilation of instructions, operational and stability limitations, procedures, regulations, and guidelines derived from the particulars of each small boat, the Baseline Assessment, and the Mission-Based Risk Assessment. A template outlining the minimum topics to be included in an SBOM can be found on the SBP intranet website. An SBOM does not diminish the requirements of the Manual or any Supplemental Small Boat Policies.

Risk Assessment

VOC conducts, documents, and reviews Baseline and Mission Risk Assessments for each small boat under their responsibility. Boats of the same design, propulsion, operational and stability capabilities, and mission may be grouped together for this purpose. The assessment is based on an evaluation of operational risks to personnel, small boat, environment, and mission. Guidelines for performing a risk assessment can be found in Section 5 of this Manual. The Baseline and Mission Risk Assessments are included in each SBOM. A Baseline Assessment template can be found on the SBP intranet website.

.02 Command Designation

A Program Director is responsible for delegating authority of small boat operations to the VOC. The VOC is responsible for ensuring all underway operations have a designated OIC. The OIC has command authority over the small boat's operation and all embarked personnel while underway. The OIC is also responsible for ensuring the

safe conduct of the mission and compliance with all SBP, Line Office, and regulatory policies and procedures.

.03 Personnel Authorized to Operate NOAA Small Boats

Only those personnel whose credentials meet training and certification requirements as per this Manual will be authorized to operate NOAA small boats. A Small Boat Operator and Crewmember Authorization form (NOAA Form 57-19-04, available on the SBP intranet website) must be completed for each qualified SBO, identifying the specific operations and small boats, or class of boats, for which that SBO is qualified. The authorization form must be signed and maintained on file by the VOC. Personnel-in-training for SBO or Crewmember designation may control the small boat under the direct supervision of an OIC.

.04 Requirements for Operations of Non-NOAA Vessels

NOAA Employees operating private small boats Class II and below: Small boats must meet all federal, state, and local regulations as applicable to the small boat and operation. NOAA personnel must comply with the lifesaving requirements outlined in Section 10 in this Manual to include Personal Flotation Devices (PFDs), communication, distress signals, and first aid equipment. This may require NOAA personnel to bring this equipment if not provided by the small boat. NOAA Personnel operating these small boats must follow the requirements in Sections 5, 6, 7, and 8 of this Manual. Operations more than 12 hours require LOSBO approval. All vessels must be entered into VIM and float plans filed in VOP.

NOAA Employees operating other government agency, university, non-governmental agencies small boats: Small boats must meet the host agency's regulations and operations under a prearranged and defined agreement. The agreement must state equipment carriage, operational parameters, and maintenance responsibilities. Operations and equipment carriage must meet or exceed NOAA's requirements outlined in this Manual. NOAA Personnel operating these small boats must follow requirements in Sections 5, 6, 7, and 8 of this Manual. This is limited to Class A, I, and II small boats. Operations more than 12 hours require LOSBO approval. All vessels must be entered into VIM and float plans filed in VOP.

.05 External References

The Small Boat Program uses standards derived from the Code of Federal Regulations (CFR), OSHA, and American Boat and Yacht Council (ABYC), International Standards Organization (ISO). Particularly 46 CFR Subchapter T for vessels below 100 GT and 46 CFR Subchapter U for vessels more than 100 GT. These external sources ensure that NOAA small boats are held to and above industry standards leading to the highest level of safety for embarked personnel.

.06 Minimum Age Requirements

The minimum age requirement is 13 years old. Some small boats may not be suitable for the carriage of personnel due to the configuration and or small boat size. The SBOM contains specific prohibitions or procedures if carrying personnel and specific

risks identified in the baseline assessment. One additional adult must be aboard for each six minors. Only daytime operations are authorized. Night time or overnight operations are not authorized. Personnel must be included in the safety brief required in Section 8 of this Manual. Provide properly sized lifesaving gear for each person onboard. If needed, carry additional gear to meet this requirement. Do not, at any time, exceed the carrying capacity or minimum lifesaving gear as outlined in the SBOM. Vessels must adhere to life raft capacity, PFDs, and stability limitations without exception.

.07 Foreign Nationals and Controlled Technologies

Foreign Nationals and Controlled Technology onboard small boats must comply with NAO 207-12 – *Technology Controls and Foreign National Access*.

.08 Seamanship and Personal Conduct

Small boat operations shall be conducted in such a manner as to avoid unnecessary risk, based on best management practices and risk management principles. At all times, operations are conducted to promote a professional and positive public image. All SBO and Crewmembers must exercise prudent judgment at all times and take proper action when dictated by emergencies that endanger life or property.

.09 Harassment, Sexual Harassment, and Related Offenses

The Department of Commerce (DOC) and NOAA do not tolerate discrimination based on race, color, religion, sex (including sexual harassment and pregnancy discrimination), sexual orientation, gender identity, national origin, age (40 years of age and over), genetic information, or disability (physical or mental), including the provision of reasonable accommodations for qualified applicants and employees with disabilities or genetic information. Retaliation against those who initiate discrimination complaints, serve as witnesses, or otherwise oppose discrimination and harassment is strictly prohibited.

Harassment of any type is a serious issue and will not be tolerated aboard NOAA small boats. Unwelcome comments, gestures, physical contact, or any other behavior that is directed at an individual because of the individual's membership in a protected class (as described above) is prohibited.

Sexual harassment is a serious issue and will not be tolerated aboard any small boats. Unwelcome sexual advances, requests for sexual favors and other verbal, nonverbal, or physical conduct of a sexual nature may constitute sexual harassment when the behavior is:

- Directed at a person because of their sex;
- Unwanted; and
- So severe or pervasive that it interferes with the terms or conditions of employment.

It is prohibited for any employee to use implicit or explicit coercive sexual behavior to control, influence, or affect the career, salary, or job of an employee.

Any unwanted touching that is sexual in nature is strictly prohibited. Non-physical conduct that is based on sex and unwanted is also prohibited. Sexual harassment may include such actions as:

- Offensive jokes, slurs, epithets, or name calling;
- Intimidation, ridicule, or mockery;
- Insults or put-downs;
- Offensive objects or pictures;
- Interference with work performance;
- Physical contact such as patting, pinching, or brushing against another's body;
- Physical assaults or threats; or
- Pressure (subtle or overt) for sexual activity or demands for sexual favors, including demands that are accompanied by implied or overt promises of preferential treatment or threats concerning an individual's employment status.

Space constraints in the small boat environment may result in inadvertent physical contact from time to time. However, purposeful physical contact directed at another person because of his or her sex is prohibited in the workplace. Likewise, any intimate physical contact is prohibited in the workplace, even where such contact is consensual in nature.

Additional guidance can be found under DAO 202-955 and NAO 202-1106

.10 Smoking Restrictions

The VOC or OIC may restrict smoking aboard at their discretion. If smoking is allowed aboard the vessel, the VOC or OIC must designate an exterior location that will reduce the impacts to the greatest extent possible to the health and safety of the personnel aboard and mission-related work.

Smoking is not permitted in the vicinity of fuel, flammable/combustible material, or battery storage areas and, such areas must be labeled accordingly. Smoking is not permitted in the vicinity of any ventilation intake ducts. Smoking is prohibited within 50 feet of all NOAA small boats during fueling operations.

.11 Alcohol, Drugs, and Narcotics

The OIC and all Crewmembers must not operate a boat or assist with operations within 8 hours of having consumed alcoholic beverages, narcotics, or drugs that may detrimentally impact cognitive or motor abilities. The consumption of these substances is prohibited on board small boats. With the exception of prescribed narcotics (see Section 3.11), any person under the influence of alcohol, drugs, or narcotics will not be permitted aboard the small boat.

.12 Medical and Fitness Considerations

All persons onboard a small boat must be physically and medically qualified for performing the duties to which they are assigned. Some factors to be considered in making work assignments are strength, endurance, agility, coordination, and visual and hearing acuity. The nature of work onboard small boats can pose significant safety hazards to personnel.

- At a minimum, persons must meet the physical requirements for specific job tasks and hazards as required by the position, the job description, applicable DOC regulations, applicable Manual standards, Occupational Safety and Health Administration (OSHA) guidelines, or applicable USCG requirements for those licensed mariners.
- Embarked persons with a personal health condition, allergies, or medication that may impact medical response and treatment must provide a health questionnaire form in a sealed envelope to the OIC. This information must remain sealed and confidential unless that individual authorizes its release, or is incapacitated and it is deemed relevant to treatment or first responders in accordance with 5 CFR 293 – *Personnel Records* and Privacy Act requirements. An example of a health questionnaire is available on the SBP intranet website.
- Any person under a physician's treatment and taking prescribed narcotics or any medication that may prevent one from being ready, willing, and able to safely perform position duties must provide a medical clearance statement from a physician to their supervisor.
- Written notification to the OIC must be provided if a person is not cleared for assigned duties onboard.
- While onboard, no person shall use or be under the influence of alcohol, narcotics, intoxicants, or similar performance or mind-altering substances.

The OIC must assure that potential personal safety, expected environmental conditions, and physical requirements are evaluated and communicated through mission planning and be included in the GAR assessment.

.13 Deviations from the Manual

Emergency situations may warrant actions not addressed in this Manual. Emergency situations consist of conditions that could result in death, physical harm, property loss, or where environmental damage is likely, but only to the extent that the action is immediately necessary in order to prevent or minimize harm. Any deviations from the guidelines in this Manual must be reported to the respective Program Director, LOSBO and VOC within 24 hours.

.14 Review of Applicability and Interpretation of Requirements

This manual is structured to provide standard requirements and guidance across NOAA's diverse Small Boat fleet and missions. Most of the requirements are

presented by a practical grouping of vessel size, distance from shore, broad mission types, and generalized environmental conditions.

Situations may arise where specific boat configurations, mission details, operating environments, or mitigating circumstances are not adequately addressed in the format of this Manual. In these cases, requests for clarification and interpretation of a requirement or applicability may be elevated to the LOSBO for SBSB consideration. The Board may also initiate a review of compliance to ensure that the intent of the manual requirements are not misinterpreted or used in a way that compromises overall safety. The Board shall evaluate the specific circumstances and make a final determination based upon equivalency, intent of the manual requirement, and overall safety risk.

.15 Waivers

Waivers may be requested if the standards and procedures prescribed in this Manual cannot be met, or to appeal an Applicability and Interpretation of Requirements decision made by the SBSB, all waivers must be routed through the SBSB. No legally applicable standard or procedure may be waived. To initiate the process, the VOC must submit a written request for a waiver to the Program Director and VPC. The VPC will make any applicable comments and submit the waiver request to their LOSBO. If there is no VPC, the VOC will submit waiver requests directly to the LOSBO. The LOSBO will elevate the waiver request to the SBSB. The SBSB will give their recommendations to the Director, OMAO for final approval.

SECTION 4 CLASSIFICATIONS AND STATUS

.01 Small Boat Categories

Small Boat Category	Definition
Class A	Less than 16 feet overall length
Class I	16 to less than 26 feet overall length
Class II	26 to less than 40 feet overall length
Class III	40 to 65 feet overall length
SRV	More than 65 feet overall length but less than 300 GT

Overall length is determined by 33 CFR 183.3 – Definitions.

.02 Small Boat Status

Small boat status is maintained as part of the Vessel Inventory Management database. The VOC is responsible for updating the status of a small boat.

- Active: Fully NOAA compliant and currently in service
  - Only active vessels are listed and available for creating float plans in VOP.
- Reserve: Ready state but may not be fully compliant
  - Able to return to active status with minor modifications or updates
- Storage: No immediate requirement but future use probable, not compliant, still listed in inventory
- Pending Surplus/Excessed: No longer operational or required by the program
  - Vessels should not be included in the VIM inventory but must be retained in the database if associated with a float plan.

SECTION 5 PROCEDURES FOR RISK ANALYSIS AND MANAGEMENT

The goal of operational risk management (ORM) is to eliminate incidents and minimize risk so that missions can be fulfilled with the minimum amount of exposure to potential harm or loss. The first priority of conducting a risk assessment is to identify factors or conditions that could pose a threat to the safety of personnel and equipment involved in executing a mission. It is also applied to mission success and quality. In order to minimize incidents and mission failures, personnel must be cognizant of the inherent risk of any evolution, ensure all personnel and equipment are properly prepared, and mitigate or eliminate any risks that are found to be unacceptable.

.01 Key Principles of Risk Management

- Do not accept unnecessary risk. Taking unnecessary risks not related to successful mission completion is unacceptable.
- Make risk decisions at the appropriate level. Risk-based decisions are made directly by the person in charge of an operation. Prudence, experience, judgment, intuition, and situational awareness of the person in charge of an operation are critical elements in making effective risk management decisions.
- All persons involved have the responsibility to report, to the person in charge, any identified risk associated with the operation and mission.
- Anticipate and manage risk by planning. Risks can be mitigated or eliminated when they are identified early. Integrate risk management into all operations and at every level of planning. Involve personnel who will be performing these duties or tasks.

.02 Process for Managing Risk

The SBP requires that ORM be conducted using a specific process and tools. This process includes detecting hazards, assessing risks, mitigating or eliminating any risks that are found to be unacceptable, and maintaining situational awareness as risks change throughout an evolution.

Due to the diversity and complexity of most small boat operations, the risk management process is best implemented by a stepped approach to evaluate components of small boat, mission, and environmental conditions.

- The small boat and components of operational personnel, systems, material condition, and capabilities are reviewed annually in a *Baseline* assessment.
- The measures of success and potential hazards of a project or task, and the associated mission requirements, tools, gear and personnel are considered in a *Mission* assessment.
- The *GAR* assessment is then used to evaluate and prioritize the total risks of a cruise plan by combining inputs from the Baseline and Mission assessments in the context of the on the water conditions.

This three-step approach effectively combines the perspectives of boat operations and mission objectives to best support underway decision making. It recognizes that small boat, mission, and cruise risks have different drivers and change at different time scales. Overall risk can be managed through these individual assessments by understanding the limits of small boat capabilities in relation to mission requirements, with adjustments and mitigations for prevailing environmental conditions.

a) Baseline Assessment

Risk management is a progression and refinement of operational boundaries to maintain acceptable safety margins. The capabilities and limitations established by boat manufacturers, designers, or builders are often general or optimum values. Guidance under the SBP provides further restrictions to the range and use of the small boat according to the class and operating area. The details unique to specific NOAA operations, small boat particulars, and firsthand-operator experience must also be considered. A critique of these operational limits and concerns are captured in the Baseline Assessment

The Baseline Assessment is a tool to communicate practical limitations of the boat. This process refines the broad capabilities of a boat to better support operational decision making and reflect existing onboard conditions. Because material condition and the status of installed systems change over time, Baseline Assessments must be updated annually to reflect equipment age, installation, and familiarity of new systems, changing crew skills sets, and refinement of standard-operating procedures.

Starting with the boat design characteristics, systems inventory and the requirements of this Manual, further refinements and constraints are established based on prudent and responsible operation. This should be a team effort including operators that have firsthand knowledge of the boat and an understanding of underway operations. The format, narrative or table, can be tailored to best communicate limitations based on the boat and system complexity. Small boat characteristics, resources, and capacity information, as well as the GAR risk categories can be used as an assessment framework. Examples of Baseline Assessments can be found on the SBP website.

Baseline considerations are critical to effective project and mission planning. This comprehensive evaluation communicates the unique aspects of the boat and systems, instrumentation, skills of the operator and crew, range, lift capacities, handling characteristics, and the resources available for embarked personnel.

The output from this exercise helps define and narrow the range of acceptable risk in each of the GAR risk categories. For example, the GAR risk category for weather, without refinement, would have a range from calm to gale force. The Baseline Assessment might establish 2- to 3-feet waves as the maximum acceptable operating condition, resulting in an acceptable GAR weather range of calm to 3-feet waves.

The Baseline Assessment must be included in the SBOM and reviewed annually by the VOC.

b) Mission-Based Risk Assessments

The Mission-Based Risk Assessment considers the risks associated with mission equipment, operations, and personnel. Effective Mission-Based Risk Assessments should be accomplished through a cooperative effort, including mission subject matter experts, along with field and small boat personnel. This review encompasses the measures of mission success, quality, critical elements, operating parameters, risks, and limitations of a particular mission. It communicates requirements such as: Expectations for small boat infrastructure, speed and position control, deck space, lifting, cruise duration, and operating area.

Mission-Based Risk Assessments can help with the selection of a boat for a particular mission by articulating what resources and capabilities are limiting or critical. Boats in the same class, configured and outfitted differently, may provide different safety and mission success margins. Once the boat is selected, the mission risks identified will better define aspects of that boat that will have an elevated risk or narrowed operating margin. Examples of Mission-Based Assessments can be found on the SBP website.

The findings from this exercise further define and narrow the range of acceptable risk, from a science perspective, in each of the GAR categories. For example, the GAR category for weather on a particular boat might have a maximum Baseline limit of 3-feet waves, but mission success could limit operation to 2-feet waves, resulting in an acceptable GAR weather range of calm to 2-feet waves.

Findings of the Mission-Based Risk Assessment must be communicated to all personnel involved in the mission to provide focus on key cruise elements. Changes in the scope, content, or operational area may warrant reevaluation of the Mission Risk Assessment.

c) GAR Assessment

The GAR must consider all elements of both the Baseline and Mission Risk Assessments in the context of predicted weather, team selection and the status of all resources. The GAR Assessment is a tool to help identify probable risks that may pose a threat during a specific mission or evolution. It is effective in communicating priorities to focus the entire cruise team on critical parameters. The GAR Assessment must be completed and communicated before getting underway. In all cases, the GAR should be updated to reflect changes in the environment, mission, equipment, or personnel. The GAR form can be found on the SBP intranet website.

To conduct a GAR Assessment, the OIC must:

- Ensure all mission personnel are involved in the GAR process
- Refer to the limitations identified in the Baseline Assessment;
- Refer to the hazards and limitations identified in the Mission-Based Risk Assessment; and
- Evaluate any increase in risk to equipment or personnel based on current conditions.

Risk Acceptance Authority:

- Mitigating factors must be documented;
- If the risk remains elevated ≥7 despite mitigation, or mitigation cannot be identified, the OIC must notify the VOC (or the next higher level of authority); and
- A cumulative GAR score ≥45 (or a predetermined score, as determined by the VOC) despite mitigation requires the OIC to alert the VOC (or the next higher level of authority).

.03 Risk Elimination and Mitigation

Elimination and mitigation can be identified at all levels of ORM. The elimination of risk is the ideal.

Mitigation steps (in order of priority)

1. Substitution – using different small boats, equipment, personnel to reduce risk
2. Engineering Controls – use mechanical protection and isolation
3. Administrative Controls – training, reducing exposure times, changing mission timeline
4. Personal Protective Equipment

.04 Reassessment

An important element to NOAA's approach to ORM is to continually evaluate changes to the initial risk assessments. Significant changes to the small boat, mission, or environment warrant a reassessment of hazards and associated risk.

SECTION 6 OPERATOR QUALIFICATION, EVALUATION, AND DESIGNATION

This section establishes standards and provides guidance for the evaluation, qualification, and designation of personnel involved in the operation of small boats. Each VOC ensures that personnel are trained to achieve the stated qualifications and maintain the level of proficiency and currency necessary to safely and effectively accomplish their assigned duties. All documentation must be reflected in Vessel Training Records (VTR). The requirements described in this Manual are regarded as the minimum standard of personnel qualification. For training questions contact the SBP Training Coordinator.

.01 Operator Credentials and Training Requirements Overview

Class A, I, and II Boat Operators

- USCG Auxiliary (USCGA) Boating Skills and Seamanship or Equivalent (Section 6.02)
- NOAA Component Course
- Personal Qualification Standards
- First Aid, Cardiopulmonary Resuscitation (CPR), and Automatic External Defibrillator (AED) Training
- Bloodborne Pathogen Training
- Program-specific training

Class III and SRV Boat Operators

- Current appropriate USCG license or active Uniformed Service Officer of the Deck
- NOAA Component Course
- Personnel Qualification Standard
- First Aid, CPR, and AED Training
- Bloodborne Pathogen Training
- Program-specific training

Note: Training refresher intervals can be found on NF-57-19-04 Small Boat Operator and Crewmember Authorization Form.

.02 Operator Credentials and Training Requirements Information

a) Operator and Seamanship Courses

The minimum standard is the USCG Auxiliary Boating Skills and Seamanship Course. Any equivalent course must cover all of the significant topics of the USCG Auxiliary Boating Skills and Seamanship curriculum and must be instructor-led training (in-person or virtual). A current list of approved equivalent courses can be found on the Training section of the SBP intranet website.

- The SBSB has the authority to approve courses as an equivalent to the USCG Auxiliary Boating Skills and Seamanship course. Requests for Boating Skills

and Seamanship equivalency should be sent to LOSBO or the SBPM for review.

- For cases where a prospective SBO has previous training, the SBSB may consider this as fulfilling the USCG Auxiliary Boating Skills and Seamanship or equivalent requirement on a case-by-case basis.
- Non-Motorized Watercrafts: The VOC conducts a risk assessment to determine the type of hands-on training required for operators of non-motorized watercrafts. The VOC assures that the appropriate training is provided. This training may be in lieu of the Boating Skills and Seamanship requirement for non-motorized boat operators. All other training requirements must be completed (i.e., NOAA component, First Aid/CPR, Personnel Qualification Standard (PQS)).

b) NOAA Component Course (NCC)

The NCC is required for all VPCs, VOCs, SBOs and recommended (not required) for all crewmembers and personnel involved in small boat operations. Once completed, the individual is not required to retake the course as a refresher; however, a SBS&PM Policy Test (DOC CLC) is required every3 years. The course is managed by the SBPO and updated as policies, procedures, and standards change. The course should include location and mission considerations.

Sections include:

- NOAA small-boat policy, procedures, and standards
- Operational Risk Assessment
- Team Coordination

If the Component Course is unavailable due to remote geography or lack of timely local instruction, the VOC presents the major elements of the Component Course with a focus on risk management (GAR assessment) and NOAA policy. The date the VOC conducts the overview must be recorded on the qualification form. This one-time extension is valid for 6 months. Contact the SBP Training Coordinator for more information.

c) Personal Qualification Standards

All SBO candidates must demonstrate proficiency, as determined by the VOC, to be designated as an SBO. The class of boat, operating area(s), and the mission is taken into account when determining an appropriate level of experience.

Personal Qualification Standards evaluation must include, at minimum:

- Demonstrate knowledge of small boat characteristics, limitations, and equipment

- Demonstrate proficiency of small boat handling skills, based on mission requirements
- Demonstrate proficiency in communicating risk management
- Completion of the Small Boat Standards and Procedures Manual Policy Test

Boat Operators must successfully complete a Personal Qualification Standards process with their VOC (or designee) for each type of mission and for each type of small boat.

Template Personal Qualification Standard checklists can be found on the SBP website, with separate forms for Class A and Class I boats, and for Class II boats.

d) First Aid, CPR, AED, and Bloodborne Pathogen (BBP) Training

All SBOs must have current certification from industry recognized First Aid and CPR courses. SBO working aboard small boats with an AED on board must have AED training. All SBO must complete BBP training from either Commerce Learning Center (CLC) or an industry recognized course. The BBP Exposure Control Plan can be found on the SBP intranet website. These courses are not required for crewmembers but are recommended.

e) Mission-specific Training

If applicable, mission-related, local, or program-specific training is provided (e.g., surf operations, dive operations, towing nets, survey launch, ice, marine mammal operations).

f) Additional Training

The VOC can require additional or refresher training to provide continuous education and career development.

.03 Crewmember Training Information

Crewmembers are required to receive small boat-specific on the job training and must demonstrate to their OIC, knowledge of the procedures and equipment carried aboard the small boat(s) on which they will be employed.

Additional requirements can be found in Section 7. Template Crewmember Qualification Standard checklists can be found on the SBP website, with separate forms for Class A and Class I boats, Class II, and for Class III/SRV boats.

.04 Documentation

A current Small Boat Operator and Crewmember Authorization form (NOAA Form 57-19-04, available on the SBP intranet website), Personal Qualification Standard

checklists, and copies of all training certificates must be completed for each Boat Operator and maintained by the VOC for each Line Office Program.

Small Boat Operator and Crewmember Authorization forms must be reviewed and validated annually by the VOC to ensure currency of certifications, training requirements, and a measure of proficiency. Operators are responsible for tracking their own training and currency requirements in conjunction with the VOC.

.05 Delinquency

If the required training and certifications are not maintained per this Manual, SBO are considered delinquent and will be restricted from duties on their designated small boat(s).

.06 Advanced and Continuing Education

Boat operators should continue to advance their boating skills and knowledge. VOCs should look for opportunities to provide their boat operators with advanced training and education. VOCs may contact the SBP for advice and support for training and education programs and can look at the training section of the Training section of the SBP intranet website.

SECTION 7 SAFE MANNING AND UNDERWAY REQUIREMENTS

All small boats must be manned by personnel with the appropriate knowledge, skills, and abilities to ensure that operations are conducted in a safe, efficient, and professional manner. Personnel who are on board primarily to support the mission may assume crew duties only if the OIC has determined that the individual possesses the necessary skills and qualifications before assuming those duties. In this case, the highest priority is assigned to the safe operation of the small boat. Small boat designated crewmembers may assist with the mission at the discretion of the OIC.

All personnel are trained and qualified to perform the duties expected of them. This can include, but is not limited to:

- Cranes
- A-frames
- Hydraulic units
- Anchor windlass/winches
- Davits
- Compressors
- All small boats carried aboard, and their engines

In cases that threaten loss of life or damage to property, deviations from safe manning regulations may be allowed, with notification to the appropriate responsible party.

.01 Succession to Command

Address Chain of Command during the pre-departure briefings. Identify an individual who is in charge should the OIC become incapacitated. Should the OIC become incapacitated, the designated individual must take the lead in maneuvering the small boat to safety and contacting emergency services to make necessary arrangements

.02 Minimum Safe Manning Levels

a) Class A, Class I, and Class II Boats

All Class A, Class I, and Class IIs must be manned at a minimum by two people, one of whom must be the OIC. The OIC shall ensure the other person has the appropriate knowledge, skills, and abilities to perform the required duties of the mission. Additional manning requirements are determined by the VOC. These levels are based on each small boat's SBOM and Operational Risk Assessment (GAR).

Under some circumstances, a small boat may be exempt from carrying a second person. In these cases, operations must comply with Section 7.03 of this Manual.

b) Class III and SRVs Boats

All Class III small boats and SRVs must be manned at a minimum by one OIC and one crewmember. Additional manning requirements are determined by the

VOC, with notification to the Program Director (or designee). These levels are based on the complexity of the small boat, complexity of the mission, and the length of the voyage.

c) Outreach Events

For outreach events, additional crewmember or person other than crew familiar with the boat and its emergency procedures is required for every 10 embarked persons aboard, in addition to the OIC and a crewmember.

When carrying minors (under 18), see Section 3.04 of this Manual

d) Duration of Operations

When planning an operation, consider the total elapsed time and take actions to avoid fatigue. For planned operations exceeding 12 hours in duration, an additional SBO and enough qualified crewmembers must be onboard.

e) Extended Operations

Must have adequate qualified personnel aboard to staff SBO, lookout and roving watch duties.

.03 Solo Operations Requirements

Solo operations can be divided into three subcategories:

- Completely Solo - There is only one person aboard for the entire evolution
- Mission Progression Solo - The boat embarks with personnel, but over the course of the mission, personnel disembark to conduct some operation leaving the OIC alone in the boat. The personnel then come back aboard when finished.
- Solo Ops During Diving - Similar to Mission Progression Solo where the divers transit to dive site, and the OIC is alone on board when divers are down. Solo operations during diving are addressed in Section 20 - Other Regulated Operations.

Completely Solo and Mission Progression Solo operations are allowed on Class A, I, and II small boats as long as the small boat has close support, either from shore or from a nearby platform. Close support is where rescuers can be immediately notified by someone other than the OIC in the event of an emergency.

If solo operations without close support is necessary, a risk assessment is completed and mitigating factors are incorporated in the mission-based risk assessment. These operations must be approved by the Program Director (or equivalent) along with the appropriate LOSBO(s) and LESCO(s) from all involved Line Offices. The period and frequency of solo operations approval must be at minimum annually but may be required more frequently as determined by the LOSBO and LESCO.

.04 Underway Requirements

a) Lookout and Roving Watch Requirements

- All NOAA small boats must maintain a lookout while underway or anchored.
- COLREGS Navigation Rules state that every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.
- A single person may perform the duties of SBO and Line Office when operations and conditions do not interfere with satisfying the COLREGs requirement for a Line Office.
- All NOAA small boats must maintain a roving watch while underway or at anchor. The roving watch must monitor in the vicinity of berthing areas for early detection of fire, flooding, and other relevant safety concerns. Each vessel's SBOM must include vessel-specific roving watch requirements and method of documentation.
- A single person may fulfill the anchor lookout and roving watch duties provided a risk assessment that evaluates local traffic, probability of dragging anchor, and other pertinent factors has been completed and approved by the OIC and VOC.
- All NOAA small boats with overnight accommodations must have carbon monoxide and smoke alarms in berthing and common spaces. By no later than 01MAY2024, alarms must be audible in all occupied spaces. Use of repeaters or integrated alarms may be necessary.
- A risk assessment evaluating escape routes must be completed. Orientation training is required for persons embarking on overnight operations. The orientation training must detail the hazards of fire, primary and secondary egress routes, and emergency responses. Drills utilizing secondary egress routes are recommended.
- The requirements above must be incorporated into each vessel's Small Boat Operator's Manual (SBOM).

b) Extended Operations

For planned operations exceeding 12 hours in duration, an additional SBO and enough qualified crewmembers must be onboard to meet crew rest requirements to ensure safe operation and navigation of the vessel. Fatigued embarked personnel impacts operational safety. Structure work schedules that allow adequate rest for personnel and crewmembers.

c) During missions that require personnel to be underway for more than 12 hours and multi-day missions, the following applies:

- No SBO or crewmember may exceed 12 hours of watch standing in a 24-hour period.
- Accommodations must be provided for all SBO and crewmembers if the small boat is operated more than 12 hours in a 24-hour period, unless the crew is put ashore and the small boat is provided with a new crew. Accommodations must be adequate to provide for an effective rest period, and the personnel capacity of the accommodations must be stated in the SBOM.
- All persons who are assigned as operator or crew must be provided a minimum of 10 hours of rest in any 24-hour period;
- The hours of rest may be divided into no more than two periods, one of which is at least 6 hours in length.
- The requirements for rest periods in 7.04(b) and 7.04(c) above need not be maintained in the case of an emergency or other overriding operational conditions.
- Extended pre- and post-mission operations, like trailering, should be taken into account when determining proper work/rest periods.

d) Other requirements when applicable:

- Watch schedules are to be posted by the OIC where they are easily accessible
- When required, a Crewmember may be assigned duties as a watch stander either when the small boat is underway or at anchor. As a watch stander, the primary task is to stand a proper lookout, free of distractions, so that full focus can be applied to the environment of the small boat.

SECTION 8 MISSION PLANNING

Compliance with each of the following procedures is mandatory for all trips, whether planned or unplanned.

.01 Float Plan via Vessel Operations Program (VOP)

The primary purpose of a float plan is to assure that there is a predefined responsibility and emergency response protocol for an overdue small boat. Every small boat unit must have the ability to track small boats underway and confirm their safe return.

The Vessel Operations Program (VOP) is a web-based tool for NOAA small boat units and the required system for NOAA float plans. The SBP XO is the point of contact for account set up and questions. In addition to monitoring personnel on the water, VOP provides a valuable record of the small boat's activity. These metrics help the SBP validate the role small boats play in carrying out NOAA's mission. Tracking small boat operations and personnel involved allows the SBP and individual Line Offices to evaluate safety records and detect trends. Documenting time underway and the number of embarked personnel provides critical measures of exposure and allows for calculating accident rates.

Float plans must contain the following information:

- Small boat name and NOAA Hull Registration Number
- Name of OIC
- Names of all persons on board, with their emergency contact information
- Departure time, date, and location
- Expected return time, date, and location (if location different from departure)
- A primary shoreside POC,
- Emergency response contact information (e.g., USCG, local emergency response units)
- General location of operational area
- Mission/Project
- The category and final values from the GAR
- Communication plan

POC Requirements:

All float plans identify a shoreside POC. The shoreside POC must be available by phone, email, or radio throughout the duration of the mission. A back-up method of contacting the shoreside POC must be included in the event the primary means of communication fails.

Communication Plan Requirements:

Establish a schedule of communications to report the small boat's status to the shoreside POC. Multi-day trips require at least one daily check-in.

Submission Requirements:

All Float Plans must be submitted in VOP. If access to VOP is limited by the mission, Float Plans must be entered in VOP at the earliest opportunity. Before departure, the OIC submits the Float Plan to the VOC (or designated shoreside POC). The float plan is updated when modifications to the mission, personnel, or boat are made.

In situations that involve immediate danger to life, property, or natural resources, a Float Plan may be submitted verbally to the VOC or designee. The VOC or designee must put the information in writing and manage the Float Plan as required by this Manual.

.02 Small Boat and Equipment Inspections

The OIC is responsible for checking boat conditions and safety equipment before departure. At a minimum, the OIC should:

- Inspects records (e.g., logs, float plans, trip reports) for maintenance discrepancies that have not been addressed;
- Ensures that all equipment identified as not operational have been corrected;
- Ensures that all required safety, survival, communication, and navigation equipment specified in this Manual are onboard, maintained in operational condition, and are tested;
- Ensures that the boat is properly fueled for the mission. Consider weather conditions and tides carefully at a planned destination and when calculating distances to alternate ports;
- Ensures all fluid levels are normal (e.g., oil, coolant, steering) and that adequate reserves are onboard;
- Inspects bilges for standing water or evidence of fluid leaks;
- When applicable, ensures that the back-up motor or secondary means of propulsion is operational;
- When applicable, ensures the back-up or secondary means of steering is operational;
- Visual inspection of all lifting apparatus, and mission critical equipment.

.03 Start-Up Checklist

All small boats are required to have a written checklist of start-up procedures, specific to each small boat, to ensure safe operations. The OIC is responsible for completing the checklist.

.04 Mission and Safety Orientation Briefing

The OIC conducts a briefing with all embarked personnel. The briefing is conducted far enough in advance so the crew can prepare adequately for any last-minute adjustments.

The mission briefing should review previous mission planning and preparation, and include any updates. The safety briefing includes general small boat familiarity and the location of all safety systems and equipment carried aboard (e.g., fire extinguishers, life rafts, life rings, personal flotation devices, immersion suits, Emergency Positioning-Indicating Radio (EPIRB), Very High Frequency (VHF) radio, flares). Embarked personnel must be briefed on procedures to follow during fire, abandon ship, man overboard, and other emergencies. An example template of a Safety Orientation Briefing checklist is available on the SBP website. A vessel specific safety briefing shall be available and used for consistency. Safety briefings shall be documented in the vessel's logbook on each occasion it is given.

The briefing should also include potential impacts of weather such as current conditions, sea state and tides when applicable, trends, and forecasts for the departure location, proposed route, destination, and any alternate working areas.

All personnel onboard must participate in the ORM. The ORM must be done using the GAR form, and must confirm that the mission, personnel, and small boat meet the operational parameters of the Baseline and Mission Risk Assessments. The GAR must also address the weather conditions discussed during the weather briefing.

During the briefing, the OIC communicates and receives a verbal response from all embarked personnel that:
The team is well rested and ready to work
Everyone understands the mission, and is capable of performing it
All potential risks and obstacles are mitigated
Identify an individual who is in charge should the OIC become incapacitated

The OIC has the authority and responsibility to cancel the operations if risks cannot be mitigated to a level that will ensure the safety of all personnel onboard, and the successful outcome of the mission.

.05 Underway Requirements

a) Equipment Monitoring

OICs must monitor critical systems while underway. Consider the malfunction's effect on the ongoing GAR assessment and adjust accordingly. Log all equipment malfunctions in the logbook (or trip report) on the day of discovery. The OIC reports the malfunction to the VOC on the day of discovery. The VOC ensures corrective actions are taken in an acceptable time frame.

Monitor weather forecasts and warnings at appropriate intervals, as well as any time the weather conditions appear threatening or conflict with forecasted conditions.

Do not operate small boats in known or forecasted weather conditions that exceed small boat or personnel limitations.

The OIC has the authority and responsibility to cancel the operations or seek shelter if risk cannot be mitigated to a level that will ensure the safety of all personnel onboard, and the successful outcome of the mission.

.06 Float Plan Updates

Float Plans must be modified to reflect changes in underway operations. The OIC communicates amendments to the Float Plan with the shoreside POC.

.07 Post Mission Requirements

a) Float Plan Closure

The Float Plan must be closed at the end of the trip. The OIC closes the Float Plan and notifies the shoreside POC of arrival.

b) Shut Down Procedures

All small boats are required to have a written shut down checklist. The OIC is responsible for completing the checklist and logging any deficiencies found.

c) Small Boat Clean-Up Procedures

Conduct a post-mission clean up and inspection after the boat has returned. Leave the small boat in a professional, mission ready condition.

.08 Procedures for Overdue Boats

If a small boat is overdue, the POC must execute all steps below:

- Attempt to contact the small boat by satellite/cell phone or HF/VHF radio;
- Check the destination point (e.g., boat slip, launch ramp) personally or ask any on-site personnel to check;
- Notify the appropriate VOC and Program Director of the situation. The VOC notifies the LOSBO (and VPC as applicable) if Search and Rescue Operations are initiated.
- Notify the emergency response contact of overdue boat and be prepared to provide Float Plan information.

- Remain available until the boat has been contacted and either returns to the dock or has reached an alternate safe location.

.09 Documentation

Small boat activities, conditions, and mission information must be documented to effectively support vessel usage metrics, track deficiencies, and serve as an official record of actions taken to mitigate risk. The VOC must retain documentation for 3 years.

Class A and Class I small boats must retain post mission documents using either a float plan, or a post mission trip report, or a logbook:

- Float Plan that are also used for mission documentation must provide all the information in Section 8.01 of this Manual. The information listed below must be filled in after the mission is completed.

- Trip Reports are completed after the mission is completed and must include all the information listed below.

- Logbooks for Class A and Class I small boats may be kept ashore and completed after the mission is completed.

Class II, III, and SRV small boats must use a logbook to record information real-time. Minimum documentation includes all of the following:

- Name of OIC, SBO, and embarked personnel
- Name/Description of the mission
- GAR values
- Fuel level information
- Starting engine hours (if available)
- Date and Time departure
- Operational area and/or Destination
- Training conducted
- Drills conducted
- Problems, conditions or incidents encountered
- Actual time of arrival
- Final fuel information
- Ending engine hours (if available)
- Document mechanical issues or discrepancies found during shutdown inspection

SECTION 9 STABILITY, DESIGN, AND CONSTRUCTION

.01 Construction and Stability Criteria for Designated-Operating Areas

Small boat construction and stability evaluations are essential to assure safe operation under prevailing conditions. NOAA uses standard definitions found in the Code of Federal Regulations to categorize hazards associated with operating areas and apply the appropriate stability requirements. Design and construction details are critical elements of mission risk assessments and seaworthiness.

All small boats have a designated operating area noted in the SBOM and operate within the established limitations associated with the designation.

.02 General Operating Area Definitions

A small boat's operating area designation dictates the minimum stability and construction elements required. The following general definitions apply to all small boat classes. These definitions apply only to this Section of the Manual.

EXPOSED: Operation in waters more than 20 nautical miles from the mouth of a harbor of safe refuge. Harbor of safe refuge is determined by 46 CFR 175.400 – *Definitions*.

PARTIALLY PROTECTED: Operation in waters not more than 20 nautical miles of the mouth of a harbor of safe refuge, except waters determined Section 9.03 below.

PROTECTED WATERS: Operation in sheltered waters presenting no special hazards such as most rivers, bays, harbors, lakes, except waters determined Section .03 below.

.03 Exceptions and Special Operating Area Designations

It is recognized that hazards presented by local, regional, and seasonal conditions require special designation. The USCG Officer in Charge, Marine Inspections (OCMI) determines areas of increased hazard due to prevailing conditions and refines the general operating area definitions listed above. These designations can be provided by contacting SBPM.

Known areas of special designations:

- All waters off the Pacific Northwest (anywhere offshore) from Chetco River OR to Race Rocks, WA in the Strait of Juan De Fuca are EXPOSED WATERS. This is due to the dangers of the Pacific Ocean.
- Operating on the Chesapeake Bay with the exception of selected tributaries are PARTIALLY PROTECTED WATERS. This is due to the large geographical size of the bay and prevailing conditions.
- Operating anywhere on Puget Sound is PARTIALLY PROTECTED WATERS with the exception of Elliot Bay which is PROTECTED WATERS.

- Operating anywhere on Alaskan waters is EXPOSED WATERS. This is due to the inherent dangers and prevailing conditions of Alaskan waters. (Exceptions are Kachemak Bay, Auke Bay, and Tongass Narrows. These waters are considered partially protected.)
- Operating on all areas of the Great Lakes from October 1st to April 15th is EXPOSED WATERS.
- HAWAII: Due to the complexity of operational routes, contact the SBP Staff for further guidance.

.04 Small Boat Stability and Construction Considerations

Evaluation principals for stability and construction:

- Small boat design, construction, mission gear, and operation determine operating area limitations.
- Small boat loading conditions and mission tasks significantly impact the stability characteristics of small boats.
- Maintain reserve buoyancy, freeboard, righting arm, and seaworthiness under all prevailing conditions and missions.

As these attributes can be very complex, the SBP has grouped criteria by General Stability and Mission Stability requirements. General design, construction, and stability requirements apply to all small boats by class. Mission Stability requirements are derived from mission gear and operation.

.05 General Stability Requirements

Class A, I, and II	Vessels must have posted load limitations including engine horsepower, number of persons, and gear weight. This is provided by the small boat manufacturer, naval architect, professional engineer, or established with guidance from the SBP. Under no circumstances must small boat operations exceed those limits.
Class III and SRV	Stability characteristics must be documented and meet the requirements of 46 CFR 178 and 179 for the small boat type, intended service, and operating area. A manufacturer or naval architect issued stability letter will provide instructions to the OIC and a statement of compliance to the specific requirements of the Designated Operating Area must be included in the SBOM. Depending upon the complexity of the small boat, a full stability booklet with hydrostatic curves and voyage analysis may be of value in managing future changes to the small boat configuration.
All	The SBOM for each small boat must clearly state the small boat's Designated Operating Area(s).

Loading limitations, proper stowage of gear, and sea state limitations must be noted in the SBOM and included in a small boat's Personal Qualification Standards training.

Maintain material condition of hull, water tight spaces, buoyant material, and freeing ports.

Include a small boat weight log in all SBOM to track hull modifications and significant weight addition or deletion. Generally, significant weight deletion or addition more than 2% of the small boat's original gross weight or displacement. An example of a weight log for each small boat class is available on the SBP website.

.06 Mission Stability Requirements

Table 9.1 reflects the impact of personnel and weight handling operations on initial stability characteristics. Mission requirements for the number of persons on board, over-the-side lifting, and towing operations are used to further refine a small boat's Operating Area designation. Table 9.1 is provided to determine operating area restrictions for typical conditions. Operating conditions in excess of those detailed in this table must comply with the requirements of Section 9.07.

Table 9.1 Mission Conditions and Operating Area Restrictions

Small Boat	Operating Conditions	Operating Area
CLASS A	Operating without a support vessel and operates within the limitations set forth on the small boat loading plate	PROTECTED and PARTIALLY PROTECTED WATERS NOT MORE THAN 3 MILES FROM LAND
	Operating with a support vessel that is compliant with the operational area, which can accommodate additional persons onboard	ALL WATERS
CLASS I and CLASS II*	Small boat carries more than six persons, **OR** conducts lifts over-the-side with static loads exceeding 200 lb., **OR** conducts bottom trawls or dredges	PROTECTED WATERS ONLY
	Small boat carries six or less persons **AND** does not conduct static lifting over-the-side of loads exceeding 200 lb. **AND** does not conduct any bottom trawls or dredges	PARTIALLY PROTECTED WATERS
	Operating with a support vessel that is compliant with the operational area and can accommodate the additional persons onboard	ALL WATERS
CLASS III and SRV	Operating within the limits of the specific individual stability evaluation that defines the boat-specific operational areas and limitations	WATERS DEFINED BY THE SMALL BOAT STABILITY EVALUATION

***Note:** Class II vessels that aspire to operate beyond 20nm, must be reviewed by the VOAR Working Group for Exposed Water operations and approved by the SBSB.

.07 Special Case Class I and II Mission Conditions and Operating Area

Small boat operating conditions that fall outside of Table 9.1 require boat specific evaluation. To assist in a timely and thorough evaluation, the SBP maintains a standing working group to evaluate the capability to meet desired operating area limitations. The Vessel Operating Area Review (VOAR) Working Group is comprised of at minimum:

- SBP Engineering Coordinator
- SBP Inspection Coordinator
- SBSB representative
- VOC representative
- Field operations representative

The Board representative, VOC representative, and field operations representative are nominated and approved by the SBSB. Nomination qualifications include individual interest and subject matter expertise.

The VOAR Working Group is tasked with applying appropriate regulatory requirements, evaluating mission details, and practical small boat characteristics consistently. The combined experiences of the NOAA small boat fleet and industry standards are used to qualify conclusions of the group. The VOAR Working Group provides technical guidance to establish operating area or mission limitations. The VOAR Working Group may require professional engineering evaluations or tests to determine small boat stability characteristics. The resources of the VOAR Working Group are available upon request to the SBPM.

For a vessel to be reviewed by the VOAR Working Group, the responsible VOC shall submit a Stability Review and Route Deviation Request form. The form shall be submitted to the applicable LOSBO via the VPC (if applicable).

Upon completion of a working group review, findings and any recommendations for limitations on loading, mission conditions, or operating area are submitted to the SBSB for approval. Once approved, the vessel operating area and any limitations or requirements are documented in the SBOM.

.08 Small Boat Acquisition Criteria

All proposed new small boat acquisitions that do not meet the provisions and limitations of Table 9.1, require review by the VOAR Working Group. This review determines the suitability of small boat design, construction, and stability for the intended designated operating area. (See Section 12)

.09 Modifications of Small Boats

Ensure any weight or engine changes in proposed modifications or alterations to Class A and Class I small boats are within the maximum limits listed on the loading placard.

Contact the SBPM to enlist the services and guidance of the SBP staff for any proposed modifications or alterations made to Class II, Class III, and SRVs with stability data derived from inclining or calculated methods. Professional marine engineering or naval architecture services may be required.

The VOC maintains records of all small boat modifications or alterations. Changes that result in weight addition or deletion must be recorded in the small boat's weight log.

Examples of criteria that require a technical review by SBP or qualified engineers are:

- Significant weight deletion or addition more than 2% of the small boat's original gross weight or displacement;
- Changes in installed tank capacities;
- Watertight bulkhead alterations;
- Tank boundary changes;
- Fishing method changes not included in the original stability evaluation. Examples are the removal or addition of fixed equipment necessary for the method of fishing operations such as outriggers, net reels, and winches.
- Freeing port alterations;
- Lifting gear changes other than equivalent equipment;
- Windage changes;
- Bilge keel area changes;
- Carrying additional personnel and various equipment;
- Repowering other than maximum rated horsepower, weight, and propulsion type.

SECTION 10 LIFESAVING EQUIPMENT AND SMALL BOAT EQUIPMENT

Given the type and complexity of operations conducted by NOAA, expanding carriage requirement considerations to include remoteness, complexity of the small boat, and operational challenges will improve overall safety. These requirements are one element of ORM and support engineering, inspection, and personnel requirements.

NOAA minimum lifesaving and small boat equipment requirements have been compiled in this section from federal regulations, industry standards, and best management practices. Additional information and references can be found in the following: CFRs 46, 33, and 29, American Boat and Yacht Council (ABYC) standards and guidance from the SBP.

.01 Determine Carriage Requirement

a) Standard Equipment Required

- Non-motorized small boats, use Table 10.1.
- Class A, I, and II small boats require a three-phase approach to determining carriage requirements:

  (i) Determine standard equipment required aboard all classes. These requirements are found in Table 10.2.
  (ii) Determine additional requirements based on both size and distance from shore. These requirements are noted with an "R" in Table 10.4.
  (iii) Define individualized requirements for each small boat, based on and ORM, mission complexity, gear deployment, and capabilities of the boat. These requirements are noted with an "O" in Table 10.4.
- Class III and SRV small boats, use Table 10.3.

Rescue boats aboard NOAA ships must comply with equipment requirements within 46 CFR 199-*Lifesaving Appliances and Arrangements*, OMAO Supplemental Small Boat Policy, and additional gear or resources required by the ship's commanding officer. For further rescue boat guidance, please contact the SBP.

b) Operational Considerations

VOCs, OICs, and scientists must consider potential impacts the mission and the intended scientific operation will have on stability, limited steerage, or lifting capability. Mission specific operations such as trawling, sampling gear deployment/recovery, fishing with hook and line, remotely operated vehicles (ROV), autonomous underwater vehicles (AUV) handling, and outreach or media events all require special considerations. Specialized tools, additional safety equipment or personal protective equipment are required for many of the operations conducted on small boats.

VOCs, OICs, and scientists must consider environmental extremes and operations that require extended periods underway. VOCs should consult with their local USCG, OCMI to determine if intended operations are in areas of special designation and require extra risk mitigation steps. Some missions require intense physical exertion that is often repeated multiple times in the course of a day or cruise. Consider every potential impact. The diversity of small boat operations make it difficult to provide an inclusive list of operational challenges and examples of risk mitigation measures. The list of examples below is by no means comprehensive and will continue to expand as VOCs and operators share their experiences. Should your scientific operation not be listed, please share it with the SBP so it can be included.

- Artic cold weather work – use of dry suits or comparable thermal protection, sunglasses, sunscreen
- Heat extremes – sun protection (e.g., canopies, hats, clothing, frequent breaks, sunglasses, sunscreen, hydration, extra water)
- Extended periods underway (fatigue) – frequent breaks, rotate operators, rest periods, suitable area for rest, provisions for food
- Heavy traffic areas – additional lookouts, backup radar and radio, AIS
- Trawling – danger areas marked, cable cutters, hardhats, closed toe shoes, protective clothing
- Longline – wire cutters, knife, snag considerations for PFDs
- Marine mammal and turtle live capture – net precautions, people in the water, traffic
- Overhead lifting and handling of weights on deck – hard hats, steel toe shoes, gloves

c) Special Circumstances

If carrying equipment is deemed hazardous based on mission, contact your LOSBO or the SBP for additional information or clarification on the carriage requirements for multiple small boat operations.

When operating in conjunction with a larger support vessel (i.e., from a NOAA research vessel, chartered vessel):

- The boat must meet all stability and carriage requirements as stated in sections.
- The boat must comply with the supplemental policy for the support ship/program/office.
- Class II boats do not need to carry additional USCG or International Convention for the Safety of Life At Sea (SOLAS)-approved Type I PFD as

long as the support vessel can provide immediate response to the Class II small boat.

If operating in tandem with another small boat where carriage of safety and lifesaving equipment may create additional risks to the small boat operations (e.g., during large whale disentanglement operations, dolphin captures, emergency response), a small boat (referred to as the *primary boat* for the remainder of this section) may operate without all of the required safety and lifesaving equipment provided each of the following are met:

- The support boat maintains visual contact and communication with the primary boat at all times while the primary boat is underway
- The support boats only task is to serve as an operational platform for the primary boat;
- The support boat meets all carriage requirements as well as enough safety and survival equipment to accommodate both boats;
- The support boat has the carrying capacity to embark all personnel from both boats;
- Each small boat has sufficient PFDs for all embarked personnel

A risk assessment must be completed for the operation that specifically addresses the coordination between the support and primary boat.

Table 10.1 Minimum Carriage Requirements for Non-Motorized Small Boats

Resources to Protect Personnel	
Personal Flotation Devices (PFD)	Appropriate size and buoyancy for every person aboard with light and whistle. All components must be USCG approved and PFD type must be suited for intended operations (i.e., lake, surf, swift water)
Thermal Protection	Anti-exposure gear is required for persons working in cold weather conditions where risk of hypothermia exists. Cold weather gear includes appropriate layered foul weather gear, insulated coveralls, float coats, and dry work suits. Additional PFDs must be worn if anti-exposure gear is not rated as Type III or Type V. Gear to mitigate exposure to high temperatures and potential heat stress. This includes UV protection, breathable fabrics, sun block, and hats.
Immersion Suit	Recommended for every person if SST is = ≤59 °F. Dry, wet, or anti-exposure suits may be used in lieu of immersion suits as appropriate for the mission. Additional PFDs must be worn if anti-exposure gear is not rated as Type III or Type V.
First Aid Kit	Equipped for area of operations and personnel aboard (i.e., response time). An example inventory list is available on the SBP intranet website.
Positioning	
GPS	Cell phone GPS latitude/longitude positioning or handheld GPS
Compass	Magnetic or electronic handheld
Local Chart/Map	Current printed or electronic map that provides adequate detail to navigate the area of operation
Communication: Two different forms of communication are required at all times	
Visual	Designated standby person onshore or in another small boat able to respond
Cell Phone	Must be within cell phone range
VHF Radio	Handheld waterproof radio
Email or Text messaging	Within cell phone range or utilizing satellite service (e.g., phone, two-way communication devices)
Satellite Phone	Required when beyond cell phone range and VHF range
Damage/Emergency Response	
Emergency Beacons	EPIRB or Personal Location Beacon (PLB)
Daytime Distress Signal Flag	Approved USCG daytime signals can be used in place of distress flag
Visual Distress Signals (If operating between sunset and sunrise)	One USCG-approved electric distress light or three USCG-approved combination day/night flares

Sound Signaling Device	Whistle or air horn, must be heard at least 1/2 mile away for at least 4-6 seconds
Anchoring or securing the small boat	Depending on the operations, an anchor or sea anchor may be required
Means of Dewatering	Bailer or manually operated bilge pump on vessels that can retain water
Paddle/Paddles	Number required will depend on the small boat (i.e., kayak, raft, canoe); label with small boat's name or NOAA.
Visual Identity and Signage	
NOAA Identification and Registration	Must comply with Section 13 of the Manual
Navigation Lights	One all around white light visible from all directions or a flashlight showing a white light, which shall be exhibited in sufficient time to prevent collision
Capacity Label	Permanently affixed
Green-Amber-Red (GAR) Slate or Placard	Required
Documents on File with VOC	Baseline and Mission Risk Assessments, ASBE, PQS, OEM

Carriage requirements are waived when non-motorized craft are used only for the purpose of transporting gear and not personnel.

Table 10.2 Minimum Carriage Requirements: Motorized Class A, I, and II Small Boats

Resources to Protect Personnel	
Personal Flotation Devices (PFD)	Appropriate size and buoyancy for every person aboard with light and whistle. All components must be USCG approved. Refer to Section 10.02 of this Manual for specific PFD requirements.
Thermal Protection	Anti-exposure gear is required for persons working on deck when cold weather conditions elevate a risk of hypothermia. Cold weather gear includes appropriate layered foul weather gear, insulated coveralls, float coats, and dry work suits. Additional PFDs must be worn if anti-exposure gear is not rated as Type III or Type V. Gear to mitigate exposure to high temperatures and potential heat stress. This includes UV protection, breathable fabrics, sunblock, and hats.
Immersion Suit	For every person if SST is ≤59 °F Class II: Required as per Table 10.4 Class A and I: Recommended. Dry, wet, or anti-exposure suits as appropriate for the mission may be worn in lieu of carriage of immersion suits. Additional PFDs must be worn if anti-exposure gear is not rated as Type III or Type V.
Life Raft	Required beyond 12 nm. Refer to (life raft) Table 10.4 and Section 10.03 of this Manual for specific raft requirements.
Throwable USCG-approved Type IV PFD-Flotation Device	Float cushions are permitted on Class A and I small boats for day operations. For Class II small boats, an 18-inch ring life buoy is required.
First Aid Kit	Equipped for area of operations and personnel aboard (i.e., response time). An example inventory list is available on the SBP intranet website.
Carbon Monoxide Alarm	All small boats with enclosed cabins, number of alarms must protect all spaces occupied by personnel (e.g., berthing, galley, bridge).
MOB Recovery	Recovery gear aboard and procedure in place for conscious and unconscious victim
Positioning	
GPS or Chart plotter	Suitable for intended operational area
Compass	Magnetic or electronic with independent or backup power supply
Navigation Charts	Current printed or electronic chart that provides adequate detail to navigate the area of operation
Navigation Rules	Appropriate book, chart, or placard for the small boat class and operating area; small boats ε 12 meters (ε39 feet) must carry a current electronic or printed copy aboard.

Communication: Two different forms of communication are required at all times	
Visual	Designated standby person onshore or in another small boat able to respond
Cell Phone	Must be within reliable cell phone range
VHF Radio	One 25-watt VHF radio is recommended; Class II small boats must have at least one radio with MMSI registration and integrated with GPS.
Email or Text Messaging	Within reliable cell phone range or utilizing satellite service (two-way communication device)
Satellite Phone	Phone or other satellite communication is required when operating beyond cell phone coverage.
Damage/Emergency Response	
Emergency Beacons (EPRIB, PLB)	In lieu of EPIRBs, PLBs are permitted for protected and partially protected operations on Class A and I small boats. For Partially Protected and Exposed waters Category I (auto deployment) EPIRBs are required. Category II (manual) EPIRBs may be authorized by LOSBO.
Visual Distress Signals	Class A - one orange distress flag (day only) and one electric distress light, or three combination day/night red flares Class I and II - one orange distress flag or three hand-held or floating orange smoke signals (day only), and one electric distress light or three combination (day/night) red flares, handheld, meteor or parachute (46 CFR 28.145). Refer to Table 10.6 of this Section for additional guidance.
Sound Signaling Device	Whistle, handheld air horn, or electric horn that can be heard at least 1/2 mile for 4–6 seconds (USCG NAV RULES)
Anchor and Adequate Rode	Required for Class I and II. Class A small boat operating within a shallow river or non-navigable waterway must have a means to secure the boat.
Dewatering Device	A mechanical or manual means of dewatering is required for all small boats. On Class I and II small boats with compartments that have through hull fittings below the waterline or spaces below the main deck without watertight closures, these spaces must have an appropriate bilge pump with high water alarm installed at the operator station.
Fire Extinguishers	Marine type USCG-approved fire extinguishers minimum requirements: Class A and I - one 5-B; Class II - one 10-B or two 5-B, Fixed Fire system required for enclosed machinery space (approved as additional 5 B). Refer to Table 10.5 of this Section or contact the SBP for additional carriage (46 CFR 181.500)
Visual Identity and Signage	
NOAA Identification and Registration	Must comply with Section 13 of this Manual
Navigation Lights	Must comply with USCG NAV RULES (COMDTINST M16672.2D)

Capacity Label	Permanently affixed (if not installed by the manufacturer, contact the SBP for guidance)
GAR Slate or Placard	Required
Oil and Garbage Placards	Required on all Class I and II small boats. (33 CFR 155.450 and 151.59) Guidance on purchasing placards is available on the SBP intranet website (see Placards Required for Daily Operations).
Documents on File with VOC	Baseline and Mission Risk Assessments, ASBE, SBEX, PQS, SBOM, OEM

Table 10.3 Minimum Carriage Requirements: Class III and SRVs

Resources to Protect Personnel	
Personal Floatation Devices (PFDs)	Appropriate size and buoyancy for every person aboard with light and whistle. All components must be USCG approved. Refer to Section 10.02 of this Manual for specific PFD requirements. Type I PFD for all personnel in addition to the Types III and V permitted for deck operations
Thermal Protection	Anti-exposure gear is required for persons working on deck when cold weather conditions elevate a risk of hypothermia. Cold weather gear includes appropriate layered foul weather gear, insulated coveralls, float coats, and dry work suits. Additional PFDs must be worn if anti-exposure gear is not rated as Type III or Type V. Gear to mitigate exposure to high temperatures and potential heat stress. This includes UV protection, breathable fabrics, sun block, and hats.
Immersion Suit	Required for every person if SST is ≤59 °F.
Life Raft	USCG approved or meets SOLAS. SRVs must carry SOLAS rafts If operating >50 miles of the coastline, SOLAS A is required.
Life Ring	USCG-approved orange Ring Life (RL) buoys 24" or greater. At least one life buoy must have a MOB strobe light attached. Class III - one or more RL Buoys: One must have a minimum of 60 feet of rescue line attached. SRV - three RL Buoys. One must have a minimum of 90feet of rescue line attached
First Aid Kit	Equipped for area of operation and number of personnel aboard (exposed, remote). An example inventory list is available on the SBP intranet website.
Automatic External Defibrillator (AED)	Storage location labeled and readily accessible: Requires monthly inspections and trained personnel
Carbon Monoxide Alarm	All small boats with enclosed cabins, number of alarms must protect all spaces occupied by personnel (e.g., berthing, galley, bridge)
MOB Recovery	Recovery device or apparatus aboard and procedure in place for conscious and unconscious victim
Bridge Requirements	
Chart Plotter	Required with the most up-to-date charts and a secondary independent GPS or chart plotter that includes a dedicated antenna
AIS	Small boat registration must be up-to-date.

Compass	Magnetic compass adjusted within 5 degrees deviation, current deviation card and validated every 3 years, or satellite electronic compass with backup power.
Fathometer	Required, backup unit recommended
Radar	Required, AIS interface recommended
Navigation Charts	Up-to-date, printed or electronic charts that provide adequate detail to navigate the area of operation
Navigation Rules	Current electronic or printed version of navigation rules and NOAA U.S. Chart No.1 aboard
Coast Pilot	Current electronic or printed version aboard
Communication	
Two VHF radios with Digital Selective Calling (DSC) capability	Both radios must be mounted, 25 watt with MMSI number entered and connected to GPS input
Cell Phone	Must be within cell range
Email or Text Messaging	Within reliable cell phone range or utilizing satellite service (two-way communication device)
Satellite Phone	Either satellite phone, SSB radio, or other satellite-based communication is required when operating beyond cell phone coverage
Single Side Band Radio	Recommended for small boats operating >50 miles of the coastline
Damage/Emergency Response	
Emergency Beacons	One Category I (auto deployment) EPIRB must be installed in a float-free location. Additional Category II (manual) EPIRBs are recommended.
Visual Distress Signals	Meets SOLAS - three Parachute Flares, six night flares, three Smoke Flares
Fire Suppression	Refer to appropriate USCG regulations for small boat class; must meet minimum requirements for fixed and portable fire suppression based on small boat configuration Refer to the vessel inspection booklet or contact the SBP for additional guidance.
Sound Signaling Device	SRV requires 300-mm bell Horn must be heard at least 1/2 mile for 4-6 seconds
Anchor	Appropriate size for the small boat
Dewatering Devices	Bilge pumps with visual indicator at the operator station or bridge
High Bilge level alarm	Visual and audible indicator at operator station
Emergency Steerage	Required for single engine or single rudder small boats

Visual Identity, Signage, and Carried Documentation	
NOAA Identification and Registration	Must comply with Section 13 of this Manual
Navigation Lights	Must comply with USCG NAV RULES (COMDTINST M16672.2D)
SBOM	Maintained aboard
Waste Management Plan/Policy	Located in a visible and accessible area
Oil and Garbage Placard	Located in a visible and accessible area (33 CFR 155.450 and 151.59). Guidance on purchasing placards is available on the SBP intranet website (see Placards Required for Daily Operations).
Baseline Assessment	Aboard and dated with annual review
Marine Sanitation Device	Instruction placard on use and proper disposal
GAR Slate or Placard	Required
Day shapes	Must comply with USCG navigation rules for intended operations

Refer to small boat inspection booklet for specific requirements. These booklets are developed by the SBP and approved by the SBSB.

Before using this table below, verify that the area in which you intend to operate is not considered exposed waters by the local USCG Office of Marine Inspections and requires prior approval as per Section 9 of this Manual.

The following Operational Route definitions only apply to this Section

a) **Protected** (in sheltered waters presenting no special hazards such as most rivers, bays, harbors, lakes, except Special Operating Area Designations)

b) **Partially Protected** (in waters not more than 20 nm of the mouth of a harbor of safe refuge, except Special Operating Area Designations)

c) **Exposed** (in waters more than 20 nm from the mouth of a harbor of safe refuge)

Table 10.4 Operational Matrix for Motorized Class A, I, and II Small Boats

Boat Class Operating Area	Protected Waters		Partially Protected Waters				Exposed Waters SBSB Approval
	Class A and I	Class II	Class I		Class II		
Distance from shore limits	<3 nm	<3 nm	3-12 nm	12-20 nm	3-12 nm	12-20 nm	>20 nm
Type I PFDs[1]	O	O	O	R	O	R	R
Immersion Suits[2]	O	O	O	O	O	R	R
USCG- or SBP-approved Life Raft or IBA[3]	O	O	O	R	O	R	R
Automated External Defibrillator (AED)	O	O	O	R	O	R	R
Radar	O	O	O	O	O	O	R
Fathometer/Depth Sounder	O	R	O	O	R	R	R
Oars/Paddles	R	O	R	R	O	O	O
Additional GPS or Chart plotter	O	R	O	R	R	R	R
Additional VHF radio	O	O	O	R	R	R	R
Satellite Phone	O	O	O	O	O	O	R
Sea Anchor/Drogue	O	O	O	O	O	O	R
Emergency Ditch Bag[4]	O	O	O	O	O	O	O
MOB - Recovery Procedures and/or gear	R	R	R	R	R	R	R

R = Required; O = Operationally based; IBA = inflatable buoyant apparatus.

[1] Immersion suits may be used in place of Type I PFDs.

[2] Immersion suits or mission appropriate anti-exposure suit with additional PFDs (if anti-exposure gear is not rated as Type III or V) are required when operating where SST is ≤59 °F (15 °C) or an increased risk of hypothermia exists.

[3] A USCG- or SBP-approved life raft or inflatable buoyant apparatus (IBA) is required. Soft packs are acceptable on Class I and II small boats. Raft capacity must be 100% of personnel carried aboard.

[4] Suggested items in addition to minimum requirements: Waterproof handheld VHF radio, water, Personal Locator Beacon (PLB), signal mirror, whistle, and strobe/flashlight.

.02 Guidance for Personal Flotation Devices and Immersion Suits

This section provides additional guidance for PFDs and immersion suits to help reduce the risk of drowning and increase survivability in warm and cold waters. Cold-water thermal protection requirements are addressed in more detail and are structured to exceed minimum risk controls.

a) Carriage and Donning Requirement for PFDs

PFD includes work vests, marine buoyant devices intended to be worn, life preservers, life jackets, hybrid PFDs, and inflatable life jackets. PFDs must contain a label stating USCG approval number and type. PFD types are defined in 46 CFR §160 - *Lifesaving Equipment*. Small boats operating from NOAA Ships must comply with the OMAO Small Boat Supplemental for PFD carriage requirements.

Inflatable PFDs are designed to become buoyant either manually, automatically, or both by inflation of a sealed chamber. Inflatable PFDs are not inherently buoyant and therefore must be properly maintained, inspected, and components replaced before expiration dates.

Work vests, float coats/coveralls, anti-exposure suits, drysuit-style, and inflatable PFDs are personally assigned PFDs intended to be worn regularly on a continuous basis. All PFDs must be USCG approved or meet SOLAS. Units that issue Type III or V PFDs provide oversight to assure PFDs are serviced and that time sensitive components remain current. Only PFDs under the oversight of the VOC may be considered part of the lifesaving carriage requirements. Types III and V PFDs do not replace additional required lifesaving requirements (e.g., immersion suits, Type I PFDs).

- All persons must wear an appropriately sized and fitted approved PFD at all times and in all waters (except as stated in Section 10.02 f of this Manual).
- Personal Type III and Type V PFDs, not issued by the government, are authorized. They do not count towards the posted minimum carriage requirement.
- PFDs must be properly sized for the wearer, and for the operational and environmental conditions.
- PFDs must be fitted with a light and a whistle.
- PFDs must be maintained in a serviceable condition, per manufacturer or USCG instructions.
- Risk management should be used to determine additional PFD requirements for all operations.

b) Anti-Exposure wear

Anti-exposure gear is required for persons working on deck when cold weather conditions elevate a risk of hypothermia. Cold weather gear includes appropriate layered foul weather gear, insulated coveralls, float coats, and dry work suits. Additional PFDs must be worn if anti-exposure gear is not rated as Type III or Type V.

c) Cold Water Exposure

Cold waters are defined as operational waters where the surface temperature is 59° F (15° C) or colder. Provide cold water protection whenever operational risk analysis reveals an increased risk of hypothermia. Consider distance from shore, time to rescue, and air temperature in addition to water temperature.

An immersion suit is a protective suit that when worn reduces loss of body heat of a person in cold water. Immersion suits are also known as survival suits. All immersion suits used on NOAA boats must be USCG approved and/or meets SOLAS per 46 CFR 160.171 - *Immersion Suits*.

- If immersion suits are required to be carried onboard and intended to be worn by untrained personnel onboard in an emergency, adequate training and familiarization drills are required before departure, including donning of a suit.
- The OIC or VOC ensures all persons have adequately sized PFDs and immersion suits before departure. Size limitations are provided on each piece of lifesaving equipment for reference.

d) Type I PFD and Immersion Suit Stowage.

- Type I PFDs and immersion suits must be stowed and readily accessible. When applicable they should be distributed throughout small boat (e.g., berths, mess, working spaces, or on deck) and accessible for donning in a reasonable amount of time during an emergency.
- Do not put Type I PFDs and immersion suits in deck containers that can be locked.
- Type I PFDs and immersion suits stowed overhead must be supported in a manner that allows quick release for distribution.
- Type I PFDs and immersion suits must be clearly visible. If stowed in a locker, under seats, or in a small compartment, clearly label the PFD and immersion suit with the number, type, and size of device within (e.g., 5 Immersion Suits – 3L/2M). Do not stow PFDs in plastic bags, locked compartments, or with other gear stowed on top of them.

- Mark and stow child size PFDs (for persons weighing less than 90 lb.) in a location separate from adult PFDs so the child size PFDs are not mistaken for adult size PFDs.
- Stow Types III and V PFDs separate from the required primary Type I PFDs.

e) PFD and Immersion Suit Requirements

- PFDs and immersion suits must be equipped with USCG-approved light and whistle that are mounted to resist snagging.
  - Replace alkaline batteries in lights annually, no more than 1 year from the date installed. Date of installation must be recorded.
  - Replace lithium batteries in lights every 5 years from the date installed. Date of installation must be recorded.
  - Disposable lights must be replaced before the expiration date.
- Permanently mark PFDs and immersion suits with at least one of the following: the small boat's name, NOAA hull registration number (e.g., R6201), the word "NOAA", the NOAA emblem, or the operating organization (e.g., FKNMS, NRT 1).
- Inspect, test, and maintain immersion suits per U.S. Coast Guard Navigation Inspection Circular (NVIC) 01-08. Air test suits for leaks at least once before the 10th year from the manufacturing date stamped inside the suit. Test suits more than 10 years old every 3 years or more frequently as deemed necessary by the VOC or OIC until suit is unserviceable. Additional guidance is available as Vessel Inspection Bulletins, available on the SBP intranet website (under Vessel Inspection Bulletins section).

f) Exceptions for Wearing PFDs

- Diving – PFDs are not required to be worn by divers when they are dressed in diving gear providing positive buoyancy.
- Enclosed Spaces – PFDs are not required to be worn when a person is inside an enclosed cabin or spaces.
- Bulwarks and Rails – PFDs are not required to be worn by persons on deck when **all** of the following conditions are met:
  - The OIC grants permission not to wear a PFD on deck.
  - The person will not engage in the small boat's mission in a scientific or crew capacity.
  - The person will not be in close proximity to areas where operations are being conducted onboard or over the side of the small boat.
  - The small boat deck is configured with exterior rails or bulwarks that are at least one meter (39.5 inches) high.
  - In the case of rails, the courses of rails (or equivalent chains or wire) are installed such that no open vertical space exists that is more than 12 inches.

.03 Inflatable Life Rafts (ILR) and Inflatable Buoyant Apparatus (IBA)

SOLAS A and B ILRs are self-contained inflatable rafts with insulated floors, full canopy, hydrostatic release, and are packed in a hard case. These rafts contain additional survival equipment that meet the requirement found in 46 CFR 160.151 – *Inflatable Liferafts (SOLAS).* SOLAS B ILRs are restricted to 50nm offshore and do not contain food or water and carry half of the visual distress signals of a SOLAS A ILR.

USCG-approved coastal life rafts are compact rafts that lack provisions for long term survival and are not constructed to the same strict standards of SOLAS-approved rafts. On coastal rafts, the freeboard is typically less, floor is often a single, un-insulated layer, and the boarding ladder may be merely webbing.

An IBA is a self-contained inflatable platform or raft, with or without a canopy, is packed in a hard case or valise (soft sided bag). IBAs meet the packed item requirements found in 46 CFR 160.010-3 – *Inflatable Buoyant Apparatus*.

When small boat class or operations require an ILR, rafts must be either USCG or SOLAS approved and suited for the intended operational area. All SRVs are required to carry either a SOLAS A or B raft regardless of the area of operations.

Life rafts and IBAs must be purchased from an established manufacturer of marine lifesaving equipment. All rafts and IBAs must be designed for marine applications and intended for lifesaving use. See the SBP internal site for manufacturers that provide life rafts and IBAs suitable for NOAA use. If you locate a raft manufactured by a company not listed, contact your LOSBO for review and approval by the Small Boat Safety Board.

a) Exposure and Risk Considerations

Make sure the raft or IBA is suitable for the intended environment and expected time to rescue. A canopy or additional water and food may be required if working in remote areas or the expected response time will be more than a couple of hours. Although entering the raft directly from the boat is best, ease of boarding should be evaluated if you must enter the water first.

A ditch bag should be included near the raft, since many small lightweight rafts will include very limited safety gear. Ditch bags considerations include: flares, floating handheld VHF radio, rescue mirror, water, small first aid kit, EPIRB/PEPIRB, lights

b) Material Considerations

- Double urethane coated nylon or comparable
- Minimum thickness: .4 mm
- Single or double buoyancy tube/compartment
- Over pressure relief valve

- Color should be bright yellow or orange for visibility

c) Performance Considerations

- Auto-inflate 60 seconds or less
- Boarding stirrup or ladder
- Painter length 20 feet minimum
- Ballast pockets for stability
- 10- to 12-year service life
- Sea anchor included
- Hand pump included
- Strobe/locator light
- Bailing bucket
- Floating knife included
- Weight – able to deploy by one person
- For cold water operations a double layer bottom for insulation

d) Other considerations

- In some cases it may be more beneficial and cost effective to rent a suitable raft. Check with local dealers to determine if this is an option. Before purchasing a raft make sure it can be serviced locally.

- All small boats operating > 50nm offshore must carry a SOLAS A ILR.

- USCG-approved IBAs are acceptable for additional persons carried during media events or outreach programs as long as the small boat maximum carrying capacity is not exceeded.

- Rigid Buoyant Apparatus and life floats are not permitted for use on any NOAA vessel.

- Approved inflatable life rafts and inflatable buoyant apparatus are required to be serviced periodically at an approved servicing facility. The first servicing of a new raft is 24 months after it is first packed. After that, required servicing is not to exceed every 12 months. For valise style ILRs and IBAs, follow the manufacturer's recommended servicing interval. Contact the SBP office for questions on servicing intervals.

.04 Emergency Radio Beacon

NOAA SBP recognizes three types of emergency radio beacons:

- EPIRB
  - Category 1 – float free mounting
  - Category 2 – not float free

- PLB
  Register all radio beacons with the NOAA Search and Rescue Satellite Aided

Tracking program and maintain registrations current. Test radio beacons monthly when the small boat is in service. In addition, review EPIRB beacon identification registration information at least annually to ensure emergency contact information is still valid.

.05 Ring Life Buoy and Water Light Considerations

A ring life buoy (RLB) is an inherently buoyant, Type IV PFD that does not rely on any chemical mechanism or operator action to provide buoyancy. RLBs must be the appropriate size based on the small boat class, orange in color, and USCG or SOLAS approved. Clearly mark each buoy with reflective tape and mount in a readily accessible area that allows for rapid deployment. Inspect all RLBs annually for deterioration and replace if the material is split, badly faded, or if grab lines appear weakened.

A USCG or SOLAS, waterlight (46 CFR 161.010 – *Floating Electric Waterlight*), when used, must be attached to the RLB with a corrosion resistant clip that can be easily disconnected or with 3–6 feet (91–183 cm) of line. Line should be UV resistant and constructed for use in the marine environment. Lights must be self-righting and cannot hinder the deployment of the RLB.

.06 Fixed Fire Extinguishing Systems

All NOAA Small Boats with enclosed spaces containing internal combustion engines must have a fixed gas fire extinguishing system installed in accordance with 46 CFR 181.410. Small boats equipped with a fixed gas extinguishing system must have the system inspected annually (not more than 1 year from the previous certification) and certified using the appropriate National Fire Protection Association (NFPA) references. An inoperative or expired service interval of a fixed gas system, regardless of whether required to be installed or not, results in a Category 1 deficiency and the boat may not operate until corrected. Small boats with a fixed gas system installed by the manufacturer must preserve and maintain the system or be subject to a Category 1 deficiency. All service, repair, and installations of fixed gas fire extinguishing systems must be performed by a NFPA certified technician.

.07 Fire Closure Requirements

46 CFR 182.465 (Ventilation of spaces containing diesel machinery) contains a reference to American Yacht and Boat Council (ABYC) H-32 as an alternative standard for specific types of commercial vessels. NOAA does not accept this standard as an alternative on any of its vessels whether gas or diesel powered. Provision must be made for closing all supply duct cowls or scoops and exhaust duct discharge openings for any space protected by a fixed gas fire extinguishing system. All closure devices must be readily available and mounted in the vicinity of the vent.

NOTE: This does not apply to SOLAS-approved rescue boats carried by requirement aboard NOAA Ships. Former rescue boats used by shore-based units must retro fit a fixed gas system in compliance with the above requirements.

Table 10.5 Portable Fire Extinguisher Minimum Requirements (46 CFR 181.500(a))

Space Protected	Required	Type	Class	Size
Operating Station and/or Open Console	1	5B, 5B:C	CO2 or Dry Chemical	1.8kg (4 lb) or 0.9 kg (2 lb)
Enclosed Machinery Space (if applicable)	1	10B, 10B:C located outside exit	CO2 or Dry Chemical	6.8 kg (15 lb) or 4.5 kg (10 lb)
Accommodation/ Berthing Space/Cuddy Cabin (if applicable)	1	10A:B	Foam or Dry Chemical	9.5L (2.5 gal) or 4.5 kg (10 lb)
Galley/Pantry/Cooking Areas (if applicable)	1	10A:B	Foam or Dry Chemical	9.5L (2.5 gal) or 4.5 kg (10 lb)

For guidance concerning applicability contact the SBPM.

Table 10.6 Visual Distress Signals

VISUAL DISTRESS SIGNALS (46 CFR 28.145)	
Area	**Devices Required**
More than 50 miles from coastline	3 parachute flares, approval series 160.136, or SOLAS; plus 6 hand flares, approval series 160.121, or SOLAS; plus 3 smoke signals, approval series 160.122, or SOLAS
3–50 miles from the coastline	3 parachute flares, approval series 160.136, 160.036, or SOLAS; plus 6 hand flares, approval series 160.121, 160.021, or SOLAS; plus 3 smoke signals, approval series 160.122, 160.022, 160.037, or SOLAS
Within 3 miles of the coastline	Night visual distress signals consisting of one electric distress light, USCG or SOLAS approved, or 3 approved flares; plus Day visual distress signals consisting of one distress flag, USCG approved, or 3 approved flares, or 3 approved smoke signals

.08 Personal Protective Equipment and Clothing

Personal Protective Equipment (PPE) must:

- Comply with the applicable standard (see Executive Order 12196 – *Occupational Safety and Health Programs for Federal Employees*);
- Fit properly;
- Be stored in a convenient location that is safe from adverse conditions that could damage the equipment; and
- Be used per the manufacturer's recommendation for the equipment being used.

All persons aboard NOAA small boats shall wear closed toe footwear that is appropriate to the work that is being conducted. It is recommended that all personnel have appropriate foul-weather gear, including long-sleeve shirts, long pants, and a hat onboard the small boat for use in unexpected weather conditions or emergencies. Special operations may require the wearing of other safety equipment such as safety glasses, gloves, hard hats, safety harnesses, and safety-toed shoes based on the mission-based and GAR risk assessments.

SECTION 11 EMERGENCY READINESS

The safety of personnel and small boat integrity are the primary focus of the SBP and must be the highest priority of small boat operators and crew. The hazards presented by the marine environment, weather, and mission operations are dynamic and often unpredictable. It is critical that small boat crews are prepared to respond to emergency situations.

The nature of the small boat fleet presents additional challenges associated with the diversity of platforms, onboard resources, frequency of use, rotation of crews, and the skills and handling of embarked mission personnel.

Effective emergency response under adverse conditions is best achieved through a planned progression of frequent training exercises, pre-mission briefing, and underway drills.

These efforts provide opportunities to educate, practice, and critique standard response procedures and review the use of onboard resources and emergency gear.

.01 Responsibility

a) The VOC is responsible for establishing specific emergency procedures for their small boats and recurring training for their operational unit that best address the nature of operations, small boat complexity, and the skills of embarked personnel. The VOC must maintain records of these efforts and participants.

b) The OIC is responsible for conducting pre-mission briefings that detail the emergency roles and duties for all embarked personnel, including the location and use of safety and response gear.

c) The OIC is responsible for conducting the required drills and training, and a follow-up debrief that includes critiques and implementing corrective actions, and recording all details in the small boat log book. The entry shall include the type of drill, location of the drill relative to the vessel's layout, and whether the drill was satisfactory or unsatisfactory. Unsatisfactory drills shall include what training and corrective measures were taken to obtain a satisfactory result. A notation in the float plan shall also be made to document the completion of any drills.

d) The OIC is responsible for inspecting and testing all onboard safety gear and systems that support emergency response and survival per the manufacturer's requirements.

.02 Emergency Response Plan Requirements

a) The VOC identifies required resources and training to support effective emergency response. The plan is tailored to best reflect the unique operations, complexity of the small boats, required personnel skills, and the most probable hazards encountered.

b) This plan should include the following elements:

- Refresher safety training such as, but not limited to: classroom instruction, training videos
- Hands on training exercises such as, but not limited to: launching flares, donning Immersion Suits, parking lot trash can fire demonstration
- Small boat orientation briefs
- Drill requirements
- Boat-specific emergency procedures

c) Emergency response plans may be developed for a group of similar small boats or be small boat specific to best reflect both complexity and crew familiarity. Plans developed for smaller, less complex platforms should focus on personnel skills training. Larger, more complex platforms require detailed emergency procedures focusing on operation and deployment of emergency equipment and specific duties assigned to personnel during an actual emergency.

.03 Response Training and Emergency Procedures

a) Emergency response training is formal instruction of the embarked personnel on how to recognize hazards, execute the emergency procedures, and utilize emergency response gear. Initial SBO qualification training requirements (see Section 6.01) is best reinforced by frequent safety refreshers and hands on training exercises and drills. Contact the Training Coordinator for further guidance if needed.

b) Emergency response is best reinforced by frequent recurrent training and hands on exercises. Training media and exercises can be provided in a format to suit mission personnel, project preparation, and field schedules. Effective safety refresher training includes utilizing local unit instructors and platforms, subject matter videos, group discussion of emergency scenarios, and hands-on exercises. Deployment of expired flares and rafts, use of fire extinguishers, and wet exercises with immersion suits or PFDs are effective training opportunities and should be incorporated when practical.

c) Included in this instruction should be applicable boat-specific emergency procedures. Each field office must develop these emergency procedures for applicable emergency situations such as, but not limited to:

- Abandon Ship
- Fire Fighting Procedures
- Man Overboard and Recovery
- Flooding, Damage Control and Stability
- Cold Water Survival
- Launching a Raft
- Donning Immersion Suits and PFDs

- Making Distress Calls and Using Distress Signals
- Spill Response
- Medical Emergency
- Emergency Egress
- Lithium Battery Hazard Response

.04 Pre-mission Brief – Orientation

a) Familiarization with the small boat, including safety gear and support resources, is required to be provided during the pre-mission brief. In addition to reviewing the GAR and mission plan, the OIC must brief all embarked personnel on:

- Location of PFDs, fire extinguishers, life rafts and IBAs, first aid supplies, ditch bag
- Emergency alarms and communication.
- Emergency muster locations and gear to be assembled
- Primary and secondary emergency egress route orientation and drill
- Accounting for personnel
- Roles and responsibilities for crew and scientists
- Communication resources – VHF, EPIRB, flares
- Medical Emergencies, First Aid and resources

b) An example template of a Safety Orientation Briefing checklist is available on the SBP intranet website.

.05 Emergency Exercises and Drills

a) Due to the diversity of the fleet and skillsets of embarked personnel below describes the minimum emergency exercises and drill requirements. Operating units should choose additional boat and mission-specific activities to best prepare personnel and small boats for potential emergencies.

b) It must be recognized that training, orientation, and hands on exercises increase the value and effectiveness of underway drills. Emergency response on smaller boats is heavily dependent on personnel skill sets and should be addressed with more frequent hands on exercises to allow for practice and acquired proficiency. Emergency response on larger more complex boats is influenced more by team coordination and installed systems and may require more in-depth orientation.

c) Training exercises allow participants to practice skills, trial gear deployment, gain familiarity, and improve proficiency in a controlled, low risk environment. The controlled environment may be dockside, calm shallow water, or simulated situations.

Required elements of Emergency Training:

- Engagement of all persons
- Low risk conditions that introduce real world hazards
- Allow for hands on experiences, feedback, and instruction

- Assessment of the participant skill and familiarity
- Record of training; persons involved, date and topics covered
- Debrief, critique and follow-up corrective actions

d) Drills are conducted to evaluate the proficiency level of embarked personnel and the availability, condition and use of onboard resources. Drills also test the on board resources, personnel response, coordination, and adherence to established protocols. Drills should be conducted moored and underway, and must reflect real-world situations and the complexities posed by mission, environment, small boat operation, and embarked personnel. All drills are evaluated using the small boat's emergency procedures. In addition to crew proficiency, the emergency procedure is evaluated for effectiveness and modified by the OIC accordingly.

Required Elements of an Emergency Drill:

- Engagement of all Persons on Board
- Underway and under actual emergency conditions as practical
- Demonstrated leadership of OIC
- Demonstrate communication between the OIC and crew
- Accessing and testing (or simulation) of all support gear and equipment
- Notification/communication of emergency situation
- Onboard – Initial notification of the emergency to the OIC
- Ashore – External communications to shore-based resources
- Record of drill; persons involved, date, duration, and response time
- Debrief and critique of exercise
- Critique and follow-up corrective actions

e) Frequency of Drills:

- Because drills are an evaluation of both crew proficiency and small boat readiness, frequencies should be adjusted to optimize crew involvement and assure frequent exercise of onboard gear. Seasonal programs, occasional small boat usage, and rotating crews pose a challenge to a prescribed drill frequency or schedule.
- However, VOCs must ensure all operators and the crew get the opportunity to participate in applicable drills at a minimum annually. Frequencies should be increased with personnel turn over and small boat usage as these conditions can increase hazard exposure.
- Drills are not required if the small boat is not in use or has been made inactive in the Vessel Inventory Management (VIM) database. Upon reactivation, small boats must complete the required drills immediately before the next operational mission to ensure proficiency of the operator and crew and the status of safety gear and systems.
- Table 11.1 lists the minimum required topics and frequencies to be addressed for all Class III and SRVs. **Note:** OICs aboard more complex small boats are highly encouraged to increase frequency as appropriate.

Table 11.1 Class III and SRV's Emergency Topics and Frequencies

Emergency	Quarterly	Annually
Fire (motorized small boats)	X	
Abandon Boat Life raft/IBA Deployment Immersion Suit and PFD Type I Donning	X	
Man Overboard Recovery	X	
Emergency Communications and Visual Signaling	X	
Flooding/Swamping/Damage Control	X	
Loss of Steering		X
Diver Accident (if capable of conducting dive ops)	X	
Spill Response		X
Medical Emergency, First Aid		X
Emergency Egress	X	

IBA = inflatable buoyant apparatus; PDF = XXXX.

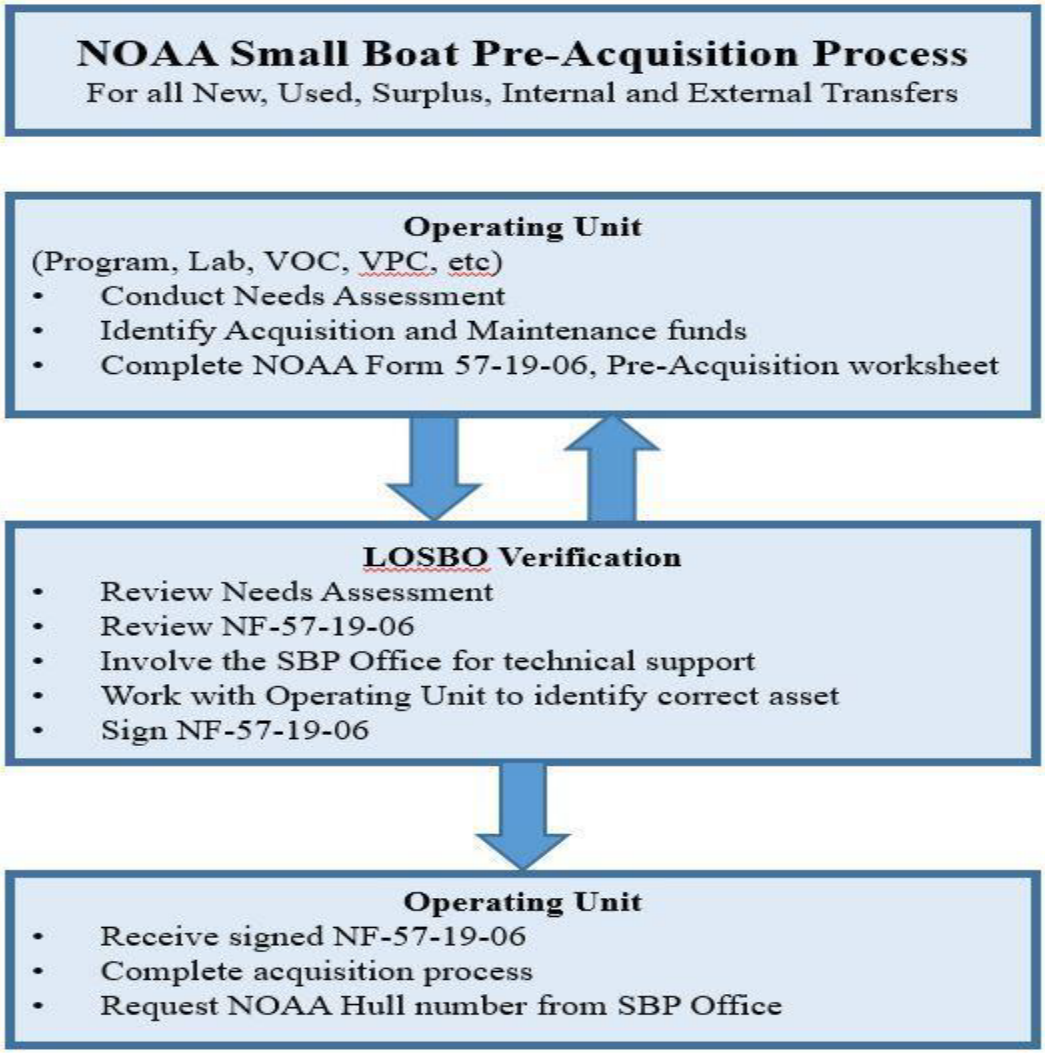
SECTION 12 ACQUISITIONS, ALTERATIONS, AND DISPOSAL

.01 Acquisition of New, Used, Surplus, or Transferred Small Boat

Program Directors (or designee) must assess the suitability of a new or used small boat in regards to design, construction, total cost, operational routes, mission requirements, risks, safety, and environmental compliance before initiating a small boat acquisition.

The review process is required for any new, used, surplus, or transferred acquisitions to a Line Office or Program. The evaluation is to assure boats added to NOAA's fleet are constructed to industry standards and fulfill the safety requirements of the SBP. The intent is to provide guidance and assistance in selecting a small boat best suited for the operational area and intended purpose. The program is sensitive to the procurement process and every attempt is made to turn around the request in a timely manner.

Chart 12.01 Flowchart for Small Boat Acquisitions



The flowchart outlines the initial steps required by Operating Units preparing to acquire a small boat. Review and complete the Pre-Acquisition Worksheet (NOAA Form 57-19-06 available on the SBP intranet website), for any new or used boats the program plans to acquire.

The worksheet is submitted to the LOSBO. The LOSBO may then seek technical support regarding construction, subdivision, and stability standards. Findings from the LOSBO's review must be submitted back to the operating unit for the Unit's consideration.

a) Considerations for Custom Designs

LOSBOs (or designee) ensure that contract specifications are written or reviewed by a professional marine engineer, or naval architect, or/and the SBP. The engineering review ensures that the small boat will be properly configured in accordance with all applicable standards in the Code of Federal Regulations, and the requirements of this Manual.

b) Considerations for Existing Platforms

A survey conducted by the SBP or a Certified Marine Surveyor may be prudent for an existing small boat, before acquisition. The marine survey can be beneficial in determining the condition and estimated life cycle of the boat as well as the structural integrity and safety for its intended use.

.02 Considerations for Alterations and Modifications

Significant alteration or modification is a change to the original configuration of a boat with regard to structural, mechanical, or electrical systems.

Examples of significant alterations include but are not limited to (exception: like-and-kind replacement):

- addition of structures or winches,
- addition of any weight handling gear (e.g., A-frame, crane, and articulated boom),
- replacement of propulsion engines,
- installation of electric generators,
- lengthening of a small boat, or
- addition of a bow pulpit

The Program Director or VOC review significant proposed modifications to small boats to assess their potential impact on the safety and mission of the boat. Program Directors, VOCs, or Line Office Engineers notify the LOSBO and SBPM to make sure work will be done per the rules, regulations, and NOAA policies, applicable to the particular class of small boat. Modifications and repairs are performed per all applicable standards in the Code of Federal Regulations, and the requirements of this Manual.

Records, such as drawings or weight and moment reports, resulting from the alteration of boats is maintained at the appropriate program office and copies are provided to the SBP when requested.

.03 Accountable Property Management

Accountable property tracking and disposal of small boats, engines, trailers, and equipment must follow Personal Property Management Branch requirements. An overview of how NOAA tracks accountable property is available on the NOAA Personal Property Management Branch homepage.

SECTION 13 VISUAL IDENTIFICATION AND REGISTRATION

A uniform identification scheme is necessary to develop and promote public recognition of small boat activities. A uniform numbering system is required by U.S. Code for the purpose of identification. All NOAA small boats must comply with the visual identification and registration requirements specified in this Manual. NOAA Small Boats are government assets and must maintain a positive public image.

.01 Responsibility

The SBPM is responsible for issuing hull-registration numbers. Programs that own small boats must:

- Comply with the visual identification guidelines listed in this Manual; and
- Register any new small boat or existing small boat not already registered by submitting a completed Small Boat Hull Registration Number Request (NOAA Form 57-19-03).
- Enter any new small boat or existing small boat not already listed in the Vessel Inventory Management database.

.02 NOAA Hull-Registration Numbers and Trailer License Plates Registration

Registration numbers are composed of up to six characters. The first character is a letter and assigned as follows:

First Character	Description
F	Any boat assigned to NOAA National Marine Fisheries Service
S	Any boat assigned to NOAA's National Ocean Service and primarily engaged in hydrographic survey.
R	Any boat assigned NOAA's Oceanic and Atmospheric Research or NOAA's National Ocean Service and primarily engaged in research.
None	Any boat assigned to a NOAA's Office of Marine and Aviation Operations

The first and second number corresponds to the length overall of the small boat measured in feet and rounded down to the nearest whole foot length.

The third, fourth, and optional fifth numbers are determined by the SBPM and assigned in sequential order. The optional fifth digit may be utilized when inventory in a specific length category exceeds 99 total boats.

Any small boat that is internally transferred between Line Offices must be re-registered through SBPM.

The SBP has no registration process for trailers. Government trailers require a General Service Administration (GSA) plate, which are requested through the local

property contact who handles Government Owned Vehicles (GOVs). SBP track trailers through the Annual Trailer Evaluation (ATE) form.

.03 Visual Identification Scheme

a) NOAA Emblem and Registration Number Display

Display of the NOAA emblem promotes public awareness of NOAA programs and is displayed in the following manner:

- All small boats must display the registration number on the port and starboard bow.
- Small boats may also display the boat's name on the port and starboard bow. If displayed, the name must be above the registration number, in a similar sized font. The name and number are left justified on the port bow and right justified on the starboard bow.
- On small boats without a cabin, deck house, or steering console, NOAA emblems are placed on the forward portion of both the port and starboard bow. Position with the small boat name and NOAA registration number.
- On boats that have a cabin, deck house, or a steering console, the NOAA emblems are placed on both the port and starboard side of either the cabin, deck house, or console at a location that is least obstructed from a clear broadside view. Emblems should be as large as possible for the available surface area.
- On small boats that have a cabin, deck house, or steering console, additional NOAA emblems may be displayed on the port and starboard bows. If displayed, the emblems must be positioned with the small boat's name and NOAA registration number.

Boats with a full and unobscured transom may display the NOAA emblem and registration number on the transom. Emblems should be as large as possible for the available surface area and account for the area required for the hull-registration number placement below the emblem.

Boats with split transoms may display the NOAA emblem offset to one side. Emblems should be as large as possible for the available surface area and account for the area required for the hull-registration number placement below the emblem.

b) Boat Name and Hull-Registration Number Convention

Boat name and hull-registration numbers are:

- Block-shaped capital letters in sans-serif (Arial) type font;
- Of a color providing contrast with the background hull color, usually black; and,
- Sized as follows:

Small Boat Category	Minimum Letter Size
Class A	3 inches
Class I	3 inches
Class II	3-6 inches
Class III	6 inches
SRV	9 inches

c) Color Scheme

Small boats should follow a white color scheme. Other colors are allowed, as long as the color scheme remains durable, serviceable, and presents a positive public image. Aluminum hull or structures are not required to be painted.

d) Specific Boat Marking

Line Offices and Programs may develop specific boat-marking schemes and graphics. Specific boat-marking schemes must not infringe upon, be similar to, or be able to be construed as being similar to any existing small boat-marking schemes in use by any small boat, or fleet of small boats, either public or private.

.04 Examples of Small Boat Visual Identifications

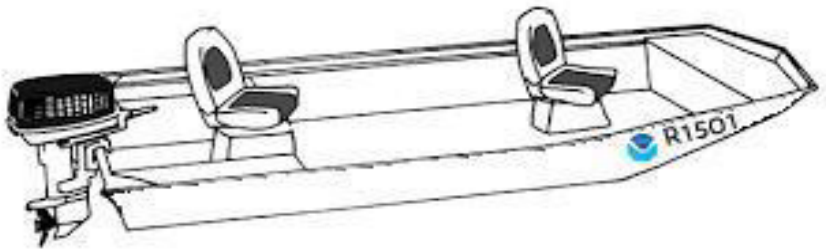


Figure 13.1 Example of visual identification for small boats without a cabin, deck house, or steering console.

Figure 13.2 Example of visual identification for small boats with a steering console

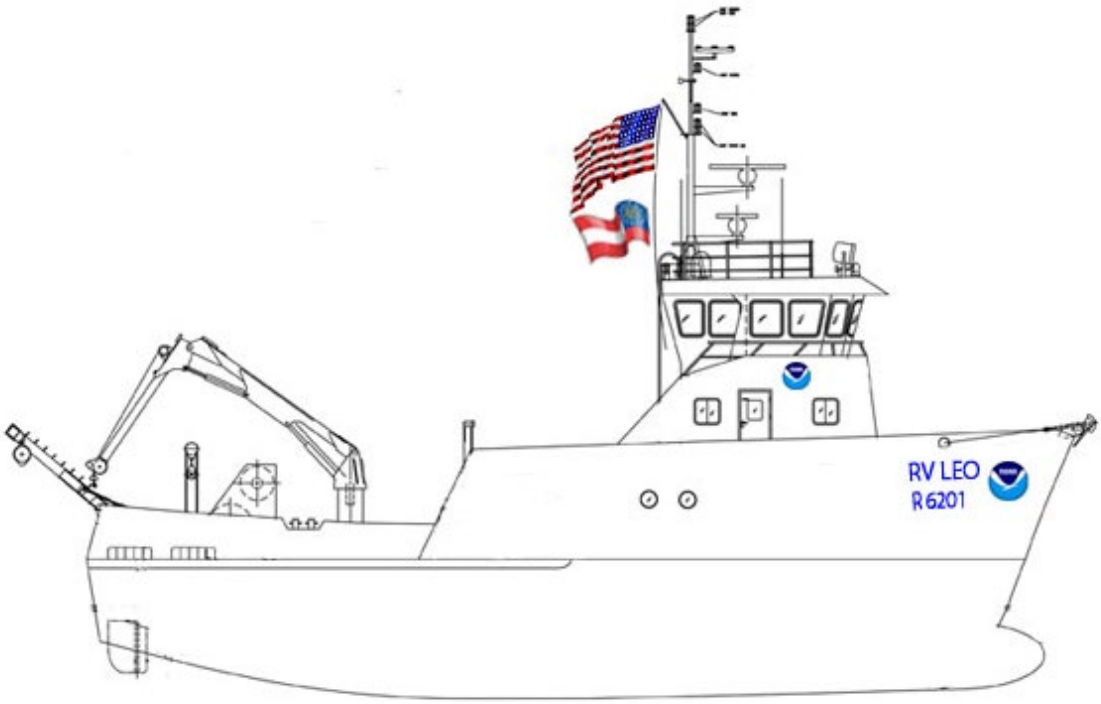


Figure 13.3 Example of visual identification for small boats with deck house

Figure 13.4 Example of NOAA emblem centered on transom

Figure 13.5 Example of NOAA emblem offset on obstructed transom

Figure 13.6 Example of NOAA emblem offset on transom due to obstruction by gear

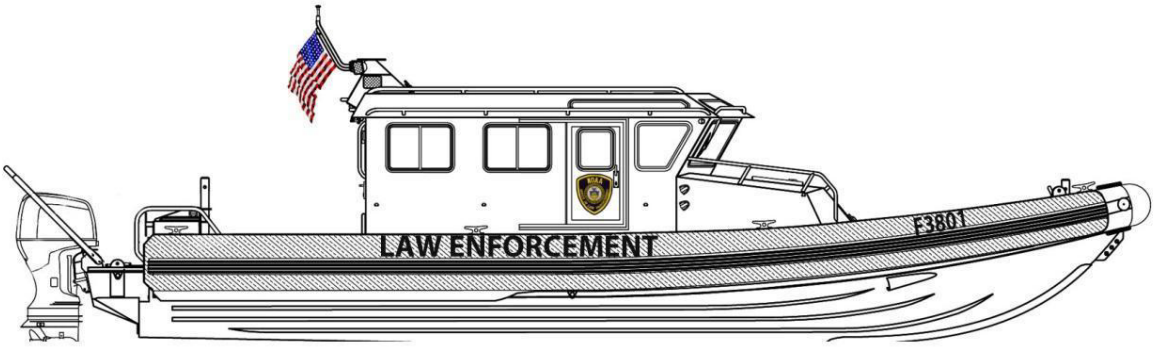


Figure 13.7 Example of Line Office or Programmatic markings

.05 Flags

NOAA small boats are allowed to display the United States ensign, national flags, the NOAA flag, state flags, and the flags of partner agencies. Small boats must follow proper etiquette for all flags being flown.

.06 Exemptions

Requests to exempt a small boat from the rules of this Section or to deviate from the standards must be transmitted to the LOSBO for review and action by the SBSB.

a) Inflatable Boats

Inflatable boats are exempt from the visual identification requirements; however, every attempt should be made to comply with the identification requirements where practicable.

b) Imminent Danger

Exemption from the visual identification requirements may be granted by the Program Director, on a temporary basis, for boats when a significant hazard to the boat or its complement is probable or perceived due to unpopular public opinion caused by NOAA regulation or policy. After the perceived or possible threat has passed, restore the boat to the visual identification requirements of this Manual as soon as possible.

SECTION 14 INSPECTIONS

The Small Boat Inspection Program is designed to ensure that safety standards are maintained to minimize risk. In addition, NOAA SBP has supplemental lifesaving requirements that combined with Subchapter T, as applicable, to provide a high level of safety and risk reduction. Other applicable Subchapters and USCG Navigation and Vessel Inspection Circulars (NVICs), are incorporated by reference throughout Subchapter T.

All vessels 100 GT and over acquired after the promulgation date of this manual shall comply with the requirements of OSHA, where applicable, and Title 46 Subchapter U (Oceanographic Research Vessels).

This Manual states the minimum requirements for all small boats. All equipment must be maintained in an operational status and inspected per this Manual, best management practices, and guidance from manufacturers. If the standards and procedures outlined in this Manual cannot be met, the VOC may request a waiver per Section 3.12 of this Manual.

.01 Responsibility

The VOC ensures all required inspections are properly conducted. VOCs will make sure that all required inspections are reported to their VPC, LOSBO, and the SBP.

The LOSBOs are responsible for conducting an oversight review of all annual inspections of small boats within their Line Office.

The SBP Inspection Coordinator conducts oversight of the Small Boat Inspection Program.

.02 Examination Procedures for Class A, Class I, and Class II small boats and boat trailers

a) Annual Small boat Evaluation (ASBE)

The VOC ensures Class A, Class I, and Class II ASBEs are performed on an annual basis. The inspection must be performed using the ASBE checklist and outline. The Annual Small Boat Evaluation for Class A and 1 Non-Motorized Boats or With Portable Outboard Motors checklist (NOAA Form 57-19-05), the Annual Small Boat Evaluation/Small Boat Examination for Class A, I, and II checklist(NOAA Form 57-19-01), and the ASBE outline are available at the SBP website.

Completed ASBE forms are submitted via the Vessel Inventory Management database.

b) Annual Trailer Evaluations (ATE)

The VOC ensures ATEs are performed on an annual basis. The inspection must be performed using the ATE checklist and outline. The Annual Trailer Evaluation Checklist (NOAA Form 57-19-02) is available on the SPB intranet website. The ATE may also be performed by a professional trailer servicing facility.

Completed ATE forms are submitted via the Vessel Inventory Management database.

c) Small Boat Examination (SBEX)

SBEX must be performed by one of the following:

- The SBP Inspection Coordinator or Engineering Coordinator. VOC contacts the SBP Inspection Coordinator to schedule a mutually acceptable date and time for an inspection. (see Biennial and Triennial Inspections)
- A certified marine surveyor, using the ASBE checklist

SBEX frequency is as follows:

- Class II small boats biennially (every 2nd year)
- Class I small boats triennially (every 3rd year)
- Non-motorized canoes, kayaks, rafts and rowboats and Class A boats do not require SBEXs

d) Delinquent Examination and Inspections

Examinations and Inspections of small boats in active status are done no later than 45 days after the 1-year anniversary. Small boats past the 45-day window must not be used for any operations, and are placed in inactive status.

SBEX performed by a NOAA inspector will replace the annual ASBE for that inspection year/period. Any SBEX performed by a certified marine surveyor will not be credited as an ASBE unless the VOC (or a designee) participates in the inspection and ensures all elements of the ASBE checklist are completed.

e) Completed ASBE, SBEX, and ATE Reporting

The NOAA inspector or hired surveyor signs completed evaluation/examination checklists, reports, records of findings, and recommendations and forwarded to his/her VOC. The VOC signs and retains a copy before forwarding to his/her approving official as defined by the LOSBO. The VOC must submit the signed copy to Vessel Inventory Management database.

f) Exemptions

All OMAO Small Boats aboard NOAA Ships, including rescue boats, perform an ASBE using the ASBE checklist and adhere to the OMAO Supplemental Small Boat Policy. SBEX for OMAO small boats attached to NOAA ships are performed by the Fleet Inspection Team during annual fleet inspection. Deficiencies for these inspections will be documented in the Fleet Inspection report. The ASBE/SBEX form is not required to be completed when the annual inspection is conducted by Fleet Inspection Team members.

.03 Inspection Procedures for Class III and SRVs

The inspection regulations used for NOAA Class III and SRVs are derived from OSHA and 46 CFR Subchapter T. This Subchapter provides the greatest spectrum of applicability and appropriate safety level as determined by the SBSB for NOAA's operations. Subchapter T and Subchapter U, as applicable, provides equipment and construction elements that will increase the survivability of the small boat and its personnel during catastrophic events.

a) Scheduling Inspections

The VOC of a Class III or SRV contacts the SBP Inspection Coordinator to schedule a mutually acceptable date and time for an inspection. A confirmation of the upcoming inspection is provided to the VOC approximately one month before the agreed-upon date.

b) Pre-Inspection and Records

When the Inspection Coordinator arrives on site, a pre-inspection meeting is held to discuss logistics and other inspection-related matters. Small boat documents and records must be ready and made available to the inspector for examination.

c) Inspection

The scope of the inspection is to determine that the small boat has been operated in compliance with the Manual since the last annual inspection, and if the small boat will continue to do so safely until the next annual inspection. The inspection booklet for Class III and SRV is available on the SBP intranet website.

The VOC (or designee) and OIC must attend the entire inspection. The small boat will be made available for the entire day of the scheduled inspection. The OIC will be asked to demonstrate that all navigation and communication equipment functions properly and specific required equipment functions properly on (any installed) emergency power. The OIC will also be asked to perform dockside engine, bilge pump, fire pump (if installed) and generator tests. Due to these requirements, it is expected that the small boat will be in an operational status. If the small boat is in drydock, the inspection will be modified accordingly. Testing "fixed bilge systems" with a central pump and manifold will require adding fresh water to a compartment bilge to demonstrate that the system will take direct suction. If for some reason the small boat is "non-operational" before the inspection, the Inspection Coordinator must be notified immediately to determine if the inspection will take place or be rescheduled.

d) Drills

All small boats must get underway for drills, to demonstrate crew proficiency and evaluate the effectiveness of the training program with the exception of the small boats in drydock. Drill proficiency is evaluated against the emergency procedures in the SBOM. In all cases, the OIC has the final decision as to whether the small boat gets underway taking into consideration the weather, manning, and

operational risk assessment. If it is decided that the small boat is incapable of conducting drills, the reason is documented in the inspection report. In some locations, one set of drills will be performed on one small boat if several small boats are of the same type or nearly identical. The remaining small boats may conduct dockside machinery trials at the inspector's discretion.

e) Deficiencies

Any deficiencies found will be issued as:

- Category 1 deficiency, which represents a significant risk to personnel, property, or the marine environment. These deficiencies are reported to the SBSB by the Inspector (or designee) the day of the finding. On discovering a Category 1 deficiency, the Inspector may issue a No Sail order, depending on the equipment affected by the failure. A listing of common Category I deficiencies is available on the SBP website.

- Category 2 deficiency, which represents noncompliance with this Manual and must be resolved within the time frame established by the inspector.

Deficiencies are issued before the inspector's departure, and acknowledged by signature of the VOC (or designee). In some cases further evaluation, included in the deficiency form, may be required to clarify a deficiency.

f) Category 1 Deficiencies and No Sail Order

The Inspection Coordinator and Engineering Coordinator have the authority to prevent any small boat from operating if the small boat has a Category 1 deficiency.

Reporting Category 1 deficiencies:

The issuing Inspector notifies the accountable LOSBO of all Category 1 deficiencies within 24 hours after completion of the inspection.

Clearing a No-Sail Order:

No-Sail Orders must be cleared by the issuing inspector before the small boat returns to service. This is accomplished by providing all required information directly to the issuing inspector. The No-Sail Order is cleared in writing before the small boat returns to service.

Appealing a No-Sail Order:

If the LOSBO does not concur with a No-Sail Order, the LOSBO may appeal the issue to the SBSB for a final decision. During this appeal the SBSB and SBP will support and enforce the No-Sail Order until the issue is fully resolved, either by correction of the deficiency or through the SBSB's appeal to downgrade the deficiency.

If the LOSBO does not concur with the Inspector's Category 1 designation, a follow up email to the attending inspector is sent as soon as practical, providing

any supporting documentation and reasons for the disagreement. The Inspector and LOSBO will continue to communicate via email, copying all SBSB members.

If the Inspector and LOSBO cannot come to agreement, or if an interpretation of policy is required the issue is resolved by the SBSB. The SBSB reviews and discusses all pertinent information. If additional information is needed, the LOSBO, VOC, Inspector, or Subject Matter Expert may be consulted. The SBSB votes to uphold the Category 1 Deficiency or downgrade it. Their decision is final and will be communicated to all affected parties. The SBSB's decision will be recorded by the SBSB Chair and included in the small boat's Inspection Report.

The Director, OMAO must be notified through OMAO SECD of any instance when the SBSB votes to downgrade a Category 1 deficiency without a unanimous vote.

g) Post-Inspection Exit Briefing

The Inspector will discuss the inspection details with the VOC (or designee) and issue a list of requirements and corrective actions. All deficiencies are issued before the Inspector's departure as practical and acknowledged by signature of the VOC (or designee).

h) Inspection Follow Up and Corrective Actions

- The inspector provides requirements to address deficiencies issued during the inspection and discusses it with the VOC. This is done on-site after the inspection is completed.
- The VOC reviews and comments on the list of requirements and forwards it to their Program Director and VPC.
- The VPC forwards the list of requirements to the LOSBO.
- The VOC, VPC, and LOSBO develop a Corrective Action Plan or response.
- Corrective Action Plans for resolving deficiencies must be communicated back to the issuing inspector for approval and can be done before the inspector's departure.
- If a deficiency requires continued discussion, the LOSBO can elevate to the SBSB.

SECTION 15 HAZARDOUS MATERIALS

.01 Environmental Compliance

All small boats operate in full environmental compliance with Federal, State, and NOAA requirements. All NOAA employees must consider themselves stewards of the environment, and use established policies and best practices to prevent pollution. NAO 216-17 - *NOAA Environmental Compliance Program* provides guidance on responsibilities to ensure regulations are followed to protect the environment and promote environmental stewardship of our natural resources.

a) Minimum Requirements

- The VOC must:
- Maintains a written inventory of hazardous materials inherent to the maintenance and operation of the small boat
- Ensure that hazardous materials are handled, stored, and disposed of per industry standards, state regulations, federal regulations, and the Safety Data Sheet.
- Additional guidance on the handling, storage, and disposal of hazardous substances is available on the SBP website.

b) Materials Brought by Scientific Party

- The VOC assists with environmental compliance requirements, and works with the Chief Scientist(s) to ensure that the chemical hygiene plan is properly executed and that any problems are promptly brought to the attention of the Program's Director.
- The science party provides a chemical hygiene plan to the OIC;
- The science party provides all spill prevention, and spill response equipment listed by the Safety Data Sheet for each hazardous materials brought aboard;
- The Chief Scientist ensures that hazardous materials are handled, stored, and disposed of per industry standards, state regulations, federal regulations, and the Safety Data Sheet;
- Upon completion of the mission, the science party remains responsible for removing all hazardous materials they brought aboard, as well as any hazardous waste generated by carrying out the mission.

c) Oil or Hazardous Substance Release

- Notify the USCG National Response Center of any discharge into the water by calling: 1-800-424-8802. Then notify VOC and LOSBO.
- All small boats must maintain an inventory log of hazardous materials and quantities.

d) Ship Oil Pollution Emergency Plan (SOPEP)

All Class III and SRVs are required to maintain a current SOPEP. A copy of this plan shall be kept both aboard the vessel and ashore. The SOPEP shall be reviewed annually for accuracy and applicability. Vessel operators and senior shore personnel shall be familiar with this plan. A template Shipboard Oil Pollution Emergency Response Plan (SOPEP) is available on the SBP website.

.02 Pollution Prevention Control

Regulations issued under the Federal Water Pollution Control Act require all small boats with propulsion machinery to have a capacity to retain oily mixtures on board, and be equipped with a fixed or portable means to discharge these oily mixtures to a reception facility. On Class A, Class I, and Class II small boats a bucket, oil absorbent pads, heavy-duty plastic bag, bailer, or portable pump are some of the suitable means that meet the requirement for retention on board until transferring the oily mixture to a reception facility.

No person may intentionally drain oil or oily waste from any source into the bilge of any small boat. You must immediately notify the U.S. Coast Guard if your small boat discharges oil or hazardous substances in the water. Call the Coast Guard National Response Center at 1-800-424-8802.

- Management of oily water can be effectively handled using:
  - Oil water separator;
  - Oil absorbent material;
  - Discharged to an onshore facility
- SBOs must develop refueling procedures to prevent accidental spills during refueling or maintenance of the small boat.
- Motorized small boats, when practical, should keep a supply of oil absorbent materials onboard to respond to a spill of petroleum products.
- All hazardous waste generated is managed per federal and state regulations. The transportation of hazardous waste must be in accordance with the Department of Transportation regulations.

.03 Marine Sanitation Devices (MSD)

All small boats with installed toilet facilities must have an operable MSD on board. Small boats 65 feet and under may use a Type I, II, or III MSD. Small boats more than 65 feet must install a Type II or III MSD. All installed MSDs must be USCG approved. USCG-approved devices are so labeled except for some holding tanks, which are approved by definition under the regulations.

When operating a small boat on a body of water where the discharge of treated or untreated sewage is prohibited by state or federal regulations, the operator must secure the device in a manner that prevents any discharge.

Some acceptable methods are:

- Padlocking overboard discharge valves in the closed position
- Using non-releasable wire tie to hold overboard discharge valves in the closed position
- Closing overboard discharge valves and removing the handle
- Locking the door, with padlock or key lock, to the space enclosing the toilets (for Type I and Type II only)

.04 Vessel General Permits

A Vessel General Permit is required to be maintained on all NOAA small boats 79 feet or greater in length that discharge in waters of the United States to be in compliance with the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.) The Vessel General Permit applies to discharges incidental to the normal operation of all small boats. The Clean Water Act allows states to provide different, more stringent requirements for discharges into their state's waters and must be taken into consideration when a Vessel General Permit is required.

The Vessel General Permit contains effluent limits for different types of discharges including deck runoff, bilge water, and gray water. Contact the SBP for further guidance and Vessel General Permit template.

.05 Lithium Batteries

Lithium batteries present additional risks and require special attention during storage, charging, and handling.

All lithium battery use on Small Boats VOCs and OICs must:

a) Distinguish among consumer devices (e.g., cell, laptop, cordless tools, radios) and mission devices (e.g., higher voltage science gear, submerged devices, autonomous vehicles, custom built instruments)
    1. Maintain an inventory of standard consumer devices and their locations.
    2. Identify projects that include mission equipment powered by lithium batteries
b) Incorporate lithium battery fire hazards and response into existing fire drills and training
c) Explain this battery device policy and local procedures during vessel orientations

Requirements for consumer devices:

a) No unattended charging of consumer devices in berthing spaces
b) Use only chargers that are compatible with the device as defined by the manufacturer
c) Devices must be attended during charging on any surface that is potentially flammable
d) Require regular inspection (e.g., monthly, each use) of battery-powered devices
e) Remove from service, and the vessel, battery cases or devices that are physically damaged, swollen, cracked, or show evidence of overheating
f) Do not store or charge devices in proximity to flammable materials

Requirements for Mission devices:

a) Require device specific procedures and responsibilities for proper storage, handling, charging, and monitoring.
    1. Identify any custom/prototype chargers that do not have rate, overcurrent, or heat monitoring features and consider them to be high risk devices.
    b) Identify and maintain areas suitable for high risk recharging and service.
    1. These areas require a posting, monitored charging only, and a means of fire containment. Containment may include the use of charging bags, metal dividers, or cans.
    2. Location should be dry, open air and allow for overboard jettison whenever possible.
    3. Location must not be near flammable surfaces or in areas that would impede egress.
c) A suitable fire extinguisher shall be located within close proximity of any designated charging station - Class B or ABC rating. Provide posting and instruction on fighting a lithium battery fire.
    1. Do not store or charge devices in proximity to flammable material storage.

Additional requirements:

a) VOCs and program leads shall review operations that require the use of lithium batteries and develop supplemental procedures for any specialized operation not covered under this policy.

SECTION 16 MAINTENANCE PLAN

This section establishes responsibility and objectives for the maintenance of NOAA small boats. It provides guidance on key elements of a maintenance plan to be developed by each operating unit; customized to their unique requirements, small boat complexity, and resources.

Maintenance of small boats is a critical component of the SBP and is integral safety and reliability. Proper maintenance assures maximum life-cycle value and helps minimize environmental impact. It must be recognized that compromised small boat material condition or system performance is often a contributing factor to safety incidents and accidents. An effective maintenance program preserves safety margins and improves overall mission quality, capability, and reliability.

A standardized, program wide, maintenance program is beyond the scope of this Manual and is not practical due to the diverse platforms and operational resources; however, the SBP does require each operational unit to develop plans for maintenance of their small boats in accordance with the general guidelines of this section.

.01 Maintenance Plan Elements

Structure and manage maintenance plans for NOAA boats to recognize the inherent performance, safety, and reliability levels of the boat design. This is accomplished by establishing a detailed plan for scheduled preventative measures, inspection and testing frequency, timely repair, and performance documentation.

Place emphasis on comprehensive planning, resourcing, and scheduling these tasks. Proper planning and execution maintains warranties, reduces unscheduled maintenance events, increases asset availability, and allows for an orderly progression of maintenance actions toward sustaining materiel in a safe and operable condition.

Clearly link maintenance plans to strategic and fiscal planning. Proper maintenance can minimize the potential for catastrophic failure and minimize the total cost of ownership throughout the life cycle. Budgets must be developed to assure funding for scheduled preventative actions and contingencies for emergency repairs. Deferred maintenance or operation of compromised equipment must be avoided.

Adopt manufacturer recommendations and industry best practices in maintenance plans. Plans include, or reference, approved materials, procedures and identify qualified service providers.

Installed systems must be maintained and must not be altered without due consideration of potential impacts. Alterations and modifications to these systems must be directed by qualified persons and in accordance with Section 12.02 of this Manual.

Small boats must present a professional and positive public image. Maintenance plans should address the physical appearance through cleaning and painting schedules. Air and water emissions from engines and machine spaces are minimized through proper maintenance of mechanical systems.

The plan minimizes and prevents environmental, safety, and occupational health hazards in conducting maintenance activities. Consider occupational, environmental, and human factors to allow for safe and effective task accomplishment. Include hazardous material handling, containment and safety protocols in maintenance oversight and training efforts.

The plan provides a means of recording or logging modifications, servicing, inspections, and maintenance activities. It should facilitate the collection and analysis performance related data such as engine parameters, oil/fuel/filter usage, and measures of noise, heat, or vibration.

The programs must establish procedures to record inspection findings, mechanical failures, and incidents with a process to develop and track corrective actions.

.02 Responsibilities

The development and execution of the small boat maintenance plan is the combined responsibility of the OIC, VOC, and Program Director associated with each boat.

The Program Director assures that a plan is developed to the general guidelines established in this Section. The Program Director is responsible for allocating resources (i.e., budget, personnel, and time) that supports the objectives and requirements of the established maintenance plan.

The VOC, in cooperation with operators and technical resources, develops the structure, details, and procedures of the maintenance plan. The format should be appropriate for the complexity of their boats and operations. The VOC assures that corrective measures are implemented for all casualties and that preventative tasks are performed as prescribed.

OICs provides documentation of performance measures, deficiencies, and incidents relating to the operation and condition of each boat. In conjunction with the VOC, the OIC assures that deficiencies have been appropriately mitigated or corrected before underway operations.

The Program Director, VOC, and OIC have the responsibility and authority to remove a boat from service, or restrict its operation accordingly, when deferred maintenance or deficiencies adversely affect design performance, reduces safety margins, hull integrity or compromises the reliability of critical systems.

.03 SBP Support for Small Boat Maintenance

The SBP is available to advise or assist any VOC needing assistance with repairs or researching vendor quotes.

SECTION 17 ACCIDENT AND DAMAGE REPORTING

.01 Definitions

To best serve the small boat community, the definitions below have been developed. These higher standards may differ from the NOAA SECO definitions.

a) Accident

A NOAA accident is defined as an unplanned event, or series of events, which results in one or more of the following:

- Occupational illness to NOAA employees, volunteers, student interns, NOAA Corps personnel, or NOAA affiliates.
- Injury to on-duty NOAA employees, volunteers, student interns, or NOAA affiliates.
- On or off duty injury to NOAA Corps personnel.
- On or off-duty injury to NOAA employees, volunteers, student interns, NOAA affiliates, or NOAA Corps personnel while at sea.
- Damage to NOAA property.
- Damage to public or private property, and/or injury or illness to non-NOAA personnel caused by NOAA operations (e.g., NOAA had a causal or contributing role in the accident)
- Damage to the environment, hazardous material spill, impact on ecosystems, protected species

b) Incident

- An unplanned event or series of events, which results in one of the following:
- A NOAA accident.
- The unintentional release of a hazardous substance into the environment.
- The unintentional exposure of a NOAA employee, volunteer, student intern, NOAA affiliate, or the general public to a radioactive substance.
- A near-miss event that could have resulted in a NOAA accident.

c) Near Miss

- An unplanned event or series of events, which:
- Did NOT result in injury, illness, property or environmental damage
- Was not considered during the mission's operational risk assessment (i.e., not incidental to normal operations)
- Could have resulted in an incident/accident if allowed to progress without interruption and/or without last minute intervention

d) Casualty, Damage and Conditions Found

- Material condition of boats or equipment that has been compromised, breached, or rendered inoperable due to events or conditions other than normal wear and expected life cycle.

.02 Reporting Responsibilities

a) Property Damage

- The OIC must follow table 17.1 below to report all incidents to the VOC. The VOC assures that the incident is reported to the listed investigative authority and the LOSBO.

- The LOSBO must review the details of the VOC's report and determine if the loss or damage is incidental to normal operations. Damage and loss not considered to be incidental to normal operations must be reported to NOAA SECO via the NOAA Online Incident Reporting System.

b) Bodily Harm

- The OIC must follow table 17.2 below to report all incidents to the VOC.

- For Bodily Harm, the VOC must ensure that the individual's supervisor is informed and ensures a report is submitted to SECO via NOAA Online Incident Reporting System.

c) Environmental Harm and Hazardous Release (Table 17.3)

- Notify the USCG National Response Center of any discharge into the water by calling: 1-800-424-8802. Then notify VOC and LOSBO.

d) Protected Species

- Regulations and reporting concerning protected species vary according to operating area. OICs must report strikes to VOC/LOSBO. For regulations, see https://www.fisheries.noaa.gov/rules-and-regulations#protected-resources.

- The SBP must comply with all permitting and regulatory requirements of NOAA Trust Resource laws including but not limited to the Endangered Species Act, the Marine Mammal Protection Act, and the National Marine Sanctuaries Act.

.03 Notification Chain and Timelines

Table 17.1 Property Damage

	Near Miss	**Property Damage <$20k**	**Property Damage $20k–$200k**	**Property Damage $200k–$1M**	**Property Damage > $1M and Loss of Asset**
Procedure	Unclassed OIC must notify VOC **as soon as practical**. VOC may elevate to LOSBO.	Class D incident OIC must notify VOC **as soon as practical**. VOC must notify VPC, LOSBO, and Program Director and ensure the incident is reported to SECO online system **within 7 days.**	Class C incident OIC must notify VOC **immediately**. VOC must notify VPC, LOSBO, and Program Director and ensure the incident is reported to SECO online system **within 7 days.**	Class B incident OIC must notify VOC **immediately**. VOC must notify VPC, LOSBO, and Program Director and ensure the incident is reported to SECO online system **within 24 hours.**	Class A incident OIC must notify VOC **immediately**. VOC must notify VPC, LOSBO, and Program Director and ensure the incident is reported to SECO online system **within 8 hours.**
NOAA Reporting Mechanism	SECO NOAA Online Incident Reporting System https://nsdesk.servicenowservices.com/noaasafe				
Investigation Initiation	VOC	Program Director/VOC	Program Director/VOC	Director, OMAO	Director, OMAO with NOAA SECO

Table 17.2 Bodily Harm

	Near Miss	**First Aid Only**	**Injury Beyond First Aid**	**Serious Injury/Fatality**
Definition	See definition above	One time, short term treatment. Given on site by personnel without significant training.	Significant injury or occupational illness diagnosed by licensed health care professionals. Includes lost time.	Inpatient hospitalization > 24 hrs. Amputation or disfigurement. Death.
Procedure	Unclassed OIC must notify VOC **as soon as practical**. VOC may elevate to LOSBO.	Unclassed OIC must notify VOC **as soon as practical.** VOC must ensure the incident is reported to SECO online system **within 7 days.**	Class C or D incident OIC must notify VOC **immediately.** VOC must ensure VPC, LOSBO, and Program Director are notified and ensure the incident is reported to SECO online system **within 24 hours.**	Class A or B incident OIC must notify VOC **immediately**. VOC must ensure VPC, LOSBO, and Program Director are notified and ensure the incident is reported to SECO online system within 8 hours. **Note:** an occupational related fatality shall be reported to the local OSHA office **within 8 hours.**
Federal Reporting Mechanism	Not Applicable	Not Applicable	Not Applicable	Program Director must notify OSHA **within 8 hours.** (1-800-321-6742)
NOAA Reporting Mechanism	SECO NOAA Online Incident Reporting System https://nsdesk.servicenowservices.com/noaasafe			
Investigation Initiation	VOC	Program Director/VOC	Program Director/VOC	Director, OMAO with NOAA SECO

Table 17.3 Environmental Harm and Hazardous Release

	Near Miss (includes spill inside/within the small boat)	**Spill < Federal/State Reportable Quantity**	**Spill > Federal/State Reportable Quantity**
Definition	A spill that had the potential to occur, but did not actually occur.	A spill that occurred, but did not exceed federal or state Reportable Quantities	A spill that occurred, and exceeded the federal or state Reportable Quantities.
NOAA Procedure	Unclassed OIC must report to VOC **within 24 hours.** VOC must notify VPC, LOSBO, and Program Director **within 7 days.**	Class C or D incident OIC must report to VOC **within 24 hours.** VOC notify VPC, LOSBO, and Program Director **within 7 days.**	Class A or B incident OIC must report to VOC **immediately.** VOC must notify VPC, LOSBO, and Program Director **within 8 hours.**
Federal Reporting Mechanism	Not Applicable	Not Applicable	VOC must report to National Response Center (1-800-424-8802)
State Reporting Mechanism	As Applicable	As Applicable	Reportable quantities and the entity to report to vary by state.
NOAA Reporting Mechanism	Email summary	VOC ensures reporting to SECO online system https://nsdesk.servicenowservices.com/noaasafe	
Investigation Initiation	VOC	VOC/Program Director	Director, OMAO

Note: There are more than 800 chemicals that fall under the Comprehensive Environmental Response, Compensation, and Liability Act. Release of these chemicals must be reported to NOAA, the federal government, and the individual state. Reportable quantities of chemicals can be found on the individual Safety Data Sheet, and under 40 CFR 302.4, Table 302.4 – *Designation OF Hazardous Substances*.

.04 Investigation Authority

The Program Director or VOC must initiate an investigation for all Class C and D small boat incidents consistent with NAO 209-1A. Findings and recommendations resulting from this investigation are made available to the Program Director, LOSBO, VPC, VOC and SBPM.

The Director, OMAO initiates an investigation for Class A and B small boat incidents consistent with NAO 209-1A, Section 7.09 – *NOAA Occupational Safety and Health*. For all Class A investigations an investigator from NOAA SECO will be part of the investigation team. Findings and recommendations resulting from this investigation are made available to the Program Director, LOSBO, VPC, VOC, SBPM, AA, Director, OMAO, and NOAA SECO.

All investigation details and reports are considered confidential documents and are not to be widely distributed unless personal information has been redacted.

.05 SBSB Review

The SBSB charter requires Board review of all incident and accident reports. The SBSB must assure that appropriate investigative and corrective actions have been taken. Identifying lessons learned is key to all incident investigations. The investigation team will develop lessons learned and suggested corrective actions. The SBP will distribute these findings throughout the community, either directly, or via the Accident Reporting section of the SBP intranet website. The identity of the small boat, personnel, and program facility associated with the accident will be redacted.

SECTION 18 WEIGHT LIFTING EQUIPMENT CERTIFICATION AND MAINTENANCE

.01 Applicability

a) Capacities and Limits

This section describes the full rated capacities and Working Load Limit (WLL) limits of booms, cranes, davits, A and J frames, and winches on NOAA small boats. It also defines the purpose and extent of tests, inspections, and safety precautions for this equipment. This Manual does not take into consideration the effects of other loading forces (boat acceleration and moment, drag, and snags) that may increase the total weight being supported by an apparatus and associated components. An operational risk assessment must be conducted before using any weight handling apparatuses per Section 5 of this Manual.

b) NOAA, Office of Federal Agency Programs, and OSHA References

All small boats having booms, cranes, davits, frames, and winches used for weight lifting must comply with the requirements of this document, except as indicated within this section and references below.

- NOAA Administrative Order 209-1
- SBSPM Section 6
- 29 CFR 1960 - *Basic Program Elements for Federal Agencies*
- 29 CFR 1919.1 - *Gear Certification – Purpose and Scope*
- 29 CFR 1919 Subpart C - *Duties of Persons Accredited to Certificate Vessels Cargo Gear*
- 29 CFR 1919 Subpart D - *Certification of Vessels Cargo Gear*
- 29 CFR 1919 Subpart E - *Tests and Proof loads*
- ASME B30 - *Standards Committee on Cranes and Related Equipment*

.02 Definitions

Booms and Frames	A structural member used for lifting, transferring, or supporting heavy weights. The lower part of the boom or frame is supported by a bracket or step allowing the boom or frame to pivot while transferring loads to structure. Rigging mounted on ships structure supports booms and frames
Crane and Davit	A machinery arrangement or self-contained structure, with associated reeving suitable for lifting loads through several dimensions of motion.
Winch	A stationary motor-driven or hand-powered machine used for hoisting or hauling, having a drum that wounds a manmade rope, wire rope, or chain attached to the load being moved.

WLL	This is the maximum weight safely handled by an apparatus and all associated components used in conjunction with an apparatus, with the maximum authorized number of parts in the main purchase. An apparatus's WLL may be limited by the maximum rating of a component used in conjunction with an apparatus.
Static Load Test	A load test conducted on newly installed, structurally repaired (e.g., by welding) or structurally overhauled (e.g., replacement of major structural sections) systems where a test weight equivalent to 125% of WLL is applied as a force by external means and held for not less than 5 minutes, to demonstrate structural adequacy of the equipment and foundation. No part of the equipment, fittings, and structure must take a permanent set, nor degradation of any operating or control function occur as a result of the test.

.03 Boom, Crane, Davit, Frame, and Winches Inspections

Unless more specific guidance is provided by the manufacturer, inspections and overhauls are conducted using guidance contained herein from 29 CFR 1919 or 29 CFR 1926.1400 - *Gear Certification*. Pre-mission Inspection is conducted by the boat's crew before each day of operational use.

Annual Inspections may be conducted by experienced unit personnel and does not require an OSHA accredited person as per 29 CFR 1919 - *Gear Certification*.

Quadrennial Inspections (4 years) only apply to weight handling equipment rated for a WLL of greater than 200 pounds, and is completed by an OSHA accredited person for inspecting marine equipment as per 29 CFR 1919.11 or mobile cranes as per 29 CFR 1926.1400 - *Recordkeeping and Accredited Persons*. For a list of marine accredited inspectors, see the list of OSHA Certified Crane Inspection Agencies.

a) Inspection Schedule

Inspection frequency includes Pre-mission Inspection, Annual, and Quadrennial (4 years) basis per 29 CFR 1919- *Gear Certification*. A grace period of 6 months is allowed for Quadrennials as per 29 CFR 1919.18 - *Grace Periods*.

- Pre-mission Inspection
  - General. The intent of this inspection is to conduct a visual inspection of the apparatus, rigging, and other critical equipment parts that could result in loss of life or equipment damage if failure occurs before each mission.
  - A visual inspect of a boom, crane, frame, or winch and all sheaves, swivels, blocks, block hangers, pad eyes, connecting links, shackles,

hooks, wire, ropes and associated pins for corrosion, wear, deformation, cracks and any other condition that may lead to failure.

- Upon completion of the visual inspection, results must be logged or recorded to indicate inspection was conducted. Any deficiencies or limitations to the equipment on board must be reported immediately to the VOC before departure.

- Annual Inspection and Test Requirements

  General. The intent of this inspection is to ascertain the safety of the rigging and other critical equipment parts that could result in loss of life or equipment damage if failure occurs.

  - In general, the inspection must include all wire and manmade rope, fittings, block fittings, hooks, links, shackles and associated pins, swivels, boom and frame pad eyes, hoist control linkages, brake springs and linkages.
  - Any visible permanent set or deformation in the form of bent pins, elongated holes, bent or distorted staples, and pad eyes are clear indications of overload or improper rigging. Any permanent set or deformation must be reported, and the rig should not be used until the cause is found and corrected. The operator should also be aware of recurring cracks in paint, particularly in areas of high stress corrosion. To inspect for surface cracks, remove paint and wire brush clean surfaces.

- The following requirements are generic in nature, and are included in inspections as applicable in 29 CFR 1919 - *Gear Certification*.

  - Cradle or securely position the boom, crane, davit, or frame and remove all wire or manmade rope. Inspect the wire or manmade rope per 29 CFR 1919.24 - *Limitations on the use of wire rope*.
  - Visually inspect all sheaves, swivels, blocks, block hangers, pad eyes, connecting links, shackles, hooks, winches and associated pins for corrosion, wear, deformation, cracks and any other condition that may lead to failure. Inspection of sheaves includes sheave gage wear measurement IAW 29 CFR 1919 Subpart E - *Certification of Vessels: Tests and Proof Loads*.
  - Do not disassemble blocks, topping lift, vang swivels, or equivalent devices unless there is reason to suspect damage, wear, corrosion, or marginal condition when last overhauled. Inspect hoist and rotating gear brake springs and linkage, where appropriate. Carefully check brake springs for permanent set and compression, and replace if necessary.

    Note: (As applicable) Failure of brake springs in service can result in loss of control or release of load. Inspect hydraulic or pneumatic hoses for ballooning, cracking, and corrosion. Inspect electrical wiring and connections for corrosion. Inspect brake solenoids and switches for corrosion and contact wear.

- Inspect and lubricate all moving parts and wire rope per the manufacturer technical manual or Preventive Maintenance System.
- Replenish the gear lube in the self-contained reservoir gearboxes if they have less than five gallons of lube oil. If possible, drains will be opened and the boxes checked for condensation at the bottom of the tanks. Check any magnetic plugs, if equipped, for particles. Draw oil samples of gearboxes with capacities in excess of five gallons for analysis as per good engineering practice.
- Visually inspect all deck and bulkhead pad eyes, links, chocks, cleats, bits, and mounting bolts. Where inspection indicates possible fractures, deformation, or corrosion, a more detailed inspection must be conducted.

- Quadrennial Inspection (only applies to equipment with a WLL of greater than 200 pounds).

  General. The intent is to accomplish the annual lifting inspection above, and inspect all major components whose performance or mechanical condition may have deteriorated.

  - Disassembly may also be recommended and included in the inspection of other components whose performance is not affected by normal wear but whose failure could result in damage, injury, or loss of life. Examples of these are reduction gears, goosenecks, topping fittings, and sheave pins. Disassembly of such items only needs to be carried out to the extent required to conduct the inspection. For example, it is not necessary to totally disassemble a reduction gear equipped with inspection plates that permit measurement of backlash and observable wear patterns. Outside appearance is not necessarily indicative of the mechanical condition of the equipment.

  The following requirements are generic in nature and may be required by an OSHA accredited person as per 29 CFR 1919.11(d) – *Recordkeeping and Related Procedures Concerning Records in custody of Accredited Persons* and CFR 1919.12 - *Recordkeeping and Related Procedures Concerning Records in custody of the Vessel*.

  - The attending accredited person determines the extent of disassembly required. Specific guidance in the manufacturer's technical manual takes precedence. Remove the arm, boom, or frame, disassembling the connection, between the boom or frame and the small boat that allows slewing motion.
  - Disassemble and inspect topping lifts, vangs, swivels, all blocks, hoist brakes, locking pawls, slewing gear, and pinion gear shafts and bearings. Check all pin, bearings, gears, and sheaves for compliance with dimensional tolerances shown on the original equipment drawings.
  - Replace wire rope, as required. Replace wire rope if the total number of visible broken wires exceeds 10 percent of the total number of wires, or if the rope shows excessive wear, corrosion, or defects.

- Inspect brake linings and brake discs, if applicable.
- Inspect backlash and gear pattern in gear boxes that are equipped with inspection plates per manufacturer's instruction manuals.
- Perform a static test (125% of WLL Limit) on all equipment or bulkhead mounted links and pad eyes used in the boom and frame systems for 5 minutes.
- Visually inspect and non-destructively examine cleats and bitts associated with boom and frame systems using dye penetrant or other methods deemed suitable.

.04 Overhauls

Significant overhaul of primary components may require a quadrennial inspection after reinstallation. At minimum, conduct Rated Load Test (100% of WLL Limit) while underway to prove the installation of a wire and manmade rope, fitting, or other repair conducted underway.

.05 New or Altered Structures and Equipment

Before installing any new boom, crane, davit, frame, or winch on board a small boat, the VOC must contact the SBPM for assistance. The replacement of components in kind does not require the VOC to contact the SBP, but the below steps are required to be completed before use.

- Test commercially manufactured apparatuses and components at 125% of the intended use. Include rotation of the test load through a range of motion that the equipment is required to perform in service. The weight handling system must be able to stop, start, and hold the test load at any position within the service area.
- First, test experimental and in-house constructed apparatuses and components at 150% of the designed working load limit. Include rotation of the test load through a range of motion that the equipment is required to perform in service. The weight handling system must be able to stop, start, and hold the test load at any position within the service area.
- Conduct a Rated Load Test (100% of Working Load Limit) while underway to prove the installation of a wire and manmade rope, fitting, or other repair conducted underway.
- Safety

.06 Stability Documentation

- Small boats with booms, cranes, davits, frames, or winches that have a WLL more than 200 lb must have small boat stability documentation, which addresses the stability of the small boat with the weight handling equipment in use.
- Where the stability of the small boat limits the operational capability of the weight handling equipment, prominently display a graphic safety placard at the

equipment operator's station describing the limitation, and graphically show the safe working zone and working load limit while operating at sea.

- When considering a boat's stability characteristics during testing procedures, maintain specified test loads within limits that can be handled safely. If any of the test loads result in an excessive list or the immersion of the deck edge, reduce the load accordingly to stay within those limits.
- Label Plates. Install engraved or stenciled label plates on small boats booms, cranes, davits, and frames to document the WLL, test weights, and date of certification of the load test.
- Safety Precautions. The following safety precautions must be observed when conducting weight handling equipment tests.
    - To prevent excessive damage in the event of equipment failure during tests, place dunnage under test loads and keep each load as close to the deck as possible.
    - Test or stamp wire ropes, slings, straps, chains, rings, shackles, and other loose gear with weight tested limits by the manufacturer as per 29 CFR 1919.31 - Proof Tests-Loose Gear.
    - To prevent loads from moving off center in the event of a casualty, rig tag lines or cables athwartships from the test load. At minimum, the breaking strength of the tag lines must be greater than or equal to the test load.

.07 Documentation of Test Results

- At the completion of a quadrennial inspection by an OSHA certified inspector, the inspector issues documentation as to what was inspected, references inspected to, and final working load limit and any deficiencies noted.
- The results of the inspections and tests prescribed must be logged or recorded to indicate inspection was conducted.
- Stencil the date and type of the most recent inspection on the boom, crane, davit, or frame in the vicinity of the Label Plate, in a position clearly legible by any individual.

SECTION 19 RIGGING AND PROOF TESTING

The handling of weights onboard small boats impacts personnel safety, small boat stability, and equipment operation. Over-the-side lifting and towing operations from a floating platform can magnify the dead weight mass of instrumentation or nets, resulting in significant forces. Managing the selection, use, and condition of associated gear is critical to safe and efficient operation under these conditions.

Principle Elements for Safe Rigging:

1. Identify component ratings
2. Maintain material condition
3. Review system design and identify limitations
4. Communicate potential hazards and take mitigation actions

All elements of small boat rigging used to control, haul, tow, or secure a load must meet the requirements of this section. These components include winches, blocks, wire and synthetic rope, chain, slings, hooks, eye bolts, clips, and shackles.

.01 Identification and Traceability

Use only marked, traceable, or proof tested components.

- Marked - permanently identified with name or trademark of manufacturer, rated load, and size
- Traceable – documentation is on file to reference capacity limitations and manufacturer's recommendations
- Proof Tested – Mark custom or experimentally designed grabs, hooks, clamps, or other lifting devices, and similar materials to indicate the WLL and proof-tested, before use, to 150% of the determined rated load.

Each small boat must maintain a record of rigging components and their rated limitations. This information must be available to personnel engaged in the design and use of load handling systems. An example of how to log rigging components, and their rated limitations is available on the SBP intranet website.

Where practical, load limitations of rigging components should be communicated to users through permanently affixed tags, color coding, or placards.

.02 Inspection

Load handling systems are subject to degradation from exposure, wear, and fatigue from the dynamic forces encountered on a floating platform. Frequent inspection of material condition is required to identify compromised or failing components.

- First inspect rigging components for the load capacity marked by the manufacturer or documentation stating load limitations. Manufacturers must meet US standards.
- Inspect rigging components before each use.
- Rigging systems should be subsequently tested per with Section 18 of this Manual, of this Manual, or be in accordance with recommendations of the rigging manufacturer and the equipment manufacturer.
- Do not load rigging equipment in excess of its recommended WLL
- Remove defective rigging from service.
- Hooks, shackles, rings, pad eyes, and other fittings that show excessive wear or have been bent, twisted, or otherwise damaged are defective.
- Visually inspect wire and synthetic ropes for defects such as abrasions, broken strands, kinks, excessive wear, or crushed cable that compromise rated capacity and are considered defective
- Make all eye splices per the manufacturer's guidance and instructions.
- Fit rope thimbles of proper size in the eye, except that in sling eyes.
- Use only alloyed and capacity rated chain in rigging.
- Hooks and shackles used in rigging should have provisions to be mechanically secured such as spring loaded retainers, locking pins, zip ties, or wire moussing.
- Only load eye bolts in the plane of the eye and do not load at angles of less than 45° to the horizontal.
- Permanently affix identification on purchased slings and lifting straps stating size, grade, rated capacity, and sling manufacturer
- Verify drums, sheaves, and pulleys are smooth and free of surface defects that may damage rigging. Verify associated wire or synthetic rope is a size in accordance with the equipment design.
- Winch drums must have sufficient rope capacity with recommended rope size and reeving to perform the intended hoisting and lowering functions. Rope capacities and terminations must be in accordance with the manufacturer's recommendations.

.03 System Review and Risk Management

Changes in configuration and mission applications require careful review of the system design and limitations. Before each use, small boat personnel must assure that the configuration is in accordance with component WLL and design applications. This review should include:

- Determine the load dead weight of gear and estimate its center of gravity
- Estimate the potential for high catch weights when using nets
- Identify WLL of all system components

- Identify and monitor the system weakest link
- Establish a means of restraining loads
- Provide for personal protection
- Identify of hazard zones
- Consider potential impact on stability and operation of the small boat
- Reference equipment manufacturer recommendations, intended use and best management practices
- Communicate the details of the rigging plan and associated risks to embarked personnel
- Consider mitigating steps and provisions to secure or release a load in an emergency

SECTION 20 OTHER REGULATED OPERATIONS

This section is to provide additional guidance on operations conducted aboard NOAA small boats that may overlap with other governing entities.

.01 Dive Operations

a) When conducting dive operations from a small boat, the boat must be continuously manned by an OIC. The OIC must remain aboard at all times while divers are in the water. This applies both underway and at anchor. If the designated OIC is intending to dive, the OIC's responsibilities must be transferred to another approved OIC.

b) A topside support person (Designated Person-in-Charge – DPIC) must be available on the small boat and ready, willing, and able to render assistance in an emergency. This person must be currently certified in CPR, First Aid, oxygen administration, familiar with the dive activities being conducted, and physically able to assist in the recovery of an injured diver. DPIC is a qualification approved by the Unit Dive Supervisor (UDS) upon the successful completion of unit/program specific requirements.

c) For planning dive operations, the OIC and DPIC must assess environmental conditions including the current's speed and direction, sea state, and weather forecast to decide whether diving can be safely conducted. The OIC must confer with the DPIC and confirm the dive checklists have been completed.

d) During dive operations, the OIC must concur with the DPIC on the commencement of diving operations and can terminate diving due to weather, small boat related operational problems, or any other factors that may jeopardize the safety of the operation.

e) If the OIC and DPIC are the same person, and they are the only person topside during a dive (or snorkel) operation, the requirements of Section 20.01 i below apply.

f) NOAA Dive Program Authority

The NOAA Diving Program (NDP) provides the policies and training for all NOAA divers, including employees, volunteers, and contractors diving in support of NOAA's mission. All dive operations involving NOAA Small Boats must have prior approval from the NDP and be conducted in accordance with the NOAA Diving Manual. In the case of Section 20.01 h below an NDC review of the dive plan shall suffice.

g) OIC Roles and Responsibilities

The OIC has the responsibility for the safety of the vessel and the personnel aboard. Both the OIC and DPIC (or Divemaster if applicable) have the authority to suspend dive operations at any time.

For dives under the purview of the NDP, the OIC shall assist in ensuring the items below are addressed:

- Training – All SBOs are trained and hold a PQS for live boating operations.
- Mission-Based Risk Assessment - The Mission-Based Risk Assessment should consider the enhanced risk due to the simultaneously occurring small boat and dive operations.
- Diver Recall Method - The OIC shall ensure an effective diver recall method is available
- Diver in Distress - Must have a formal defined procedure.
- Egress - Ensure a proper dive ladder is on board the vessel or other means of egress.
- Gear Storage - Special considerations to loading, handling, and storage of SCBA tanks and dive gear.
- AED - Ensure an AED is aboard the vessel.
- Flags - Ensure the required dive flags are aboard the vessel and properly displayed when conducting dive operations.
- GAR - Additional factors must be considered such as potential difficulty of a single person recovering divers to the boat.
- DEAP (Diving Emergency Assistance Plan) - where the nearest hyperbaric chamber is and the different means of getting an injured diver there
- Emergency Oxygen - ensure emergency oxygen is on board

h) Non-NOAA Divers

- When non-NOAA divers are diving from a NOAA small boat in which NOAA has an interest (i.e., scientific diving), they are considered “diving partners”. It is the responsibility of the diving partner to fill out the NF 57-03-10 and have both the VOC and NDCSB review the dive plan for general safety concerns. Dives that are not approved by the NDP, or are without a NDP reviewed NF 57-03-10, are not authorized.

i) Combined OIC/DPIC

- Combined duties of the OIC and DPIC are only allowed on Class A and I small boats when the mission requires limiting the size and personnel capacity of the vessel. In this case there is a sole person on the boat when divers or snorkelers are in the water. Operating in this manner is not justified due to lack of a larger vessel, lack of personnel, cost, or convenience.

- To conduct a dive operation in this manner, the UDS and VOC must conduct a Mission-Based Risk Assessment which must include a memo for the record from the Program Director (or equivalent). This memo should include both the rationale and the assessment of the risk of the operation, resultant mitigations to those risks, and the impact to the program if the operation does not proceed in this manner. This memo will be proved to the LOSBO and LODO for approval. The period and frequency of this approval must be at minimum annually but may be required more frequently as determined by the LOSBO and the LODO.

.02 Uncrewed Aircraft Systems (UAS) Operations

All Uncrewed Aircraft Systems (UAS) or "drone" operations from NOAA small boats must be approved by the NOAA Uncrewed Aircraft Systems Division (UASD). All UAS operations must comply with NAO 216-104A, NOAA Uncrewed Aircraft Operations Policy, NOAA UAS Handbook, and applicable FAA regulations.

Any UAS operations, regardless of ownership of the UAS, conducted from a NOAA platform are considered NOAA UAS operations, and require approval from the Director, Uncrewed Systems Operations Center (UxSOC). NOAA UAS operations must contact and work with the UASD to receive the Director's approval. UASD will work with groups to complete the approvals process. For initial requests, operators must contact UASD a minimum of 30 days before intended operations. Additional time may be required for complex operations. Contact UAS@noaa.gov with all questions or concerns.

APPENDICES

This page intentionally left blank.

Appendix A NAO 209-125: NOAA SMALL BOAT SAFETY PROGRAM

NAO 209-125
Eff: 4/23/08; Iss: 5/12/08

NOAA SMALL BOAT SAFETY PROGRAM

SECTION 1. PURPOSE

.01. The National Oceanic and Atmospheric Administration (NOAA) has a responsibility to provide a safe working environment for its workforce and for partners who are exposed to the risks associated with using small boats owned and/or operated by NOAA. This is consistent with NOAA Administrative Order (NAO) 209-1, NOAA Safety Policy. The purpose of this Order is:

- to make small boat safety the number one priority for all small boating operations;
- to ensure small boats meet NOAA's seaworthiness and operational safety standards;
- to establish a comprehensive NOAA Small Boat Standards and Procedures Manual (hereafter, "the Manual");
- to establish a NOAA Small Boat Safety Board (SBSB);
- to establish a Small Boat Program (SBP);
- to foster and facilitate collaboration within NOAA and with outside partners having a common interest in safe, efficient, and environmentally sound small boat operations; and
- to encourage a corporate culture that values the skilled small boat operator, encourages the distribution of information, seeks a quality approach, shares commitment, and seeks to manage operational risk.

.02 This is a complete revision and update to NAO 217-103, Management of NOAA Small Boats. Significant changes in this Order include: re-titling and renumbering of the Order to place it in the NAO Series' chapter on safety; revising and updating the policies for small boat safety; and introducing and authorizing issuance of the NOAA Small Boat Standards and Procedures Manual and prescribing that its contents will expand upon safety issues covered in this Order and will cover the non-safety matters previously addressed in NAO 217-103.

SECTION 2. SCOPE

This Order applies:

- to all NOAA small boats as defined in Section 6.01 of this Order;
- to all NOAA personnel who operate any small boat in the performance of their official duties; and
- to all individuals who operate NOAA small boats.

SECTION 3. POLICY

.01 The NOAA Small Boat Standards and Procedures Manual (the Manual) will consist of a broad programmatic core Manual having NOAA-wide application and by Supplemental Small Boat Policy (SSBP) and Small Boat Operating Manuals (SBOMs) developed by NOAA Programs (defined herein) to address their peculiar program and/or mission requirements.

a. Issuance of the Manual is in compliance with NAO 200-3, The NOAA Administrative Order Series.

b. The Manual augments and supplements the policies, procedures, and guidelines in this Order and is intended to maximize the efficiency and effectiveness of NOAA's SBP by providing for the timely development and issuance of programmatic materials to the small boat community.

c. The core elements of the Manual apply to all individuals and Programs involved with NOAA's small boats and has the same force, effect, and authority as this Order. These core elements shall be developed and maintained by the SBSB. An electronic edition of these elements will be available for viewing at the link to the Small Boat Program found on the Office of Marine and Aviation Operations (OMAO) webpage at http://www.omao.noaa.gov/

d. The Supplemental Small Boat Policy (SSBP) and Small Boat Operating Manuals (SBOMs) also have the same force, effect, and authority as the core Manual; however, they are developed by NOAA Programs and are applicable only to their specified Program and/or mission.

.02 At a minimum, all small boats and their required inventories shall be inspected annually and, additionally, in accordance with individual requirements developed under the Manual and/or by NOAA Programs under the SSBP and/or SBOM.

.03 All operators of NOAA small boats shall be trained and certified based on small boat size, engineering complexity, nature of operations, and operating area. NOAA-wide training requirements are defined in the core of the Manual; Program- and mission-related requirements are defined in the SSBP and/or the SBOM.

.04 NOAA small boats shall be operated in a safe and environmentally conscious manner.

.05 NOAA small boats shall be maintained in a seaworthy condition and be fit for the mission intended.

.06 Appropriate safety training and lifesaving equipment resources shall be provided to personnel operating or embarked on NOAA small boats.

.07 NOAA small boats shall be used only for official government purposes.

.08 Any incident or near-miss concerning a NOAA small boat must be reported in accordance with NAO 209-1, NOAA Safety Policy, and any additional requirements in the Manual.

.09 NOAA small boats shall conform to the visual identification and registration requirements provided in the Manual.

.10 A waiver is a written authorization that permits temporary deviation from provisions of this Order for strategic or compelling operational requirements. Any Request for Waiver to provisions of this Order shall be presented in writing to the SBSB. The SBSB will provide guidance to the Director, OMAO, who is the approval authority for all waivers to provisions of this Order. See the Manual for additional coverage of Requests for Waiver.

SECTION 4. BACKGROUND

.01 Operating small boats in support of NOAA missions involves unique associated risks. NOAA relies on small boats to achieve mission requirements. There are numerous regulatory standards that address small boat safety, but little guidance or few regulations tailored specifically to the special mission of small boats or research vessels less than 300 gross tons. Current marine standards are derived from international conventions, lessons learned from casualties, and advances in technology. As such, the body of regulatory information continues to grow and change. Toward this end, this Order seeks to establish a NOAA Small Boat Program that is sufficiently fluid to meet varying small boat requirements on a national, regional, and local level.

.02. As steward of the Nation's oceans and atmosphere, it is NOAA's intent to comply with, or exceed, all applicable regulatory and industry standards and to foster a management culture committed to safe and environmentally sound small boat operations based upon the principles of risk management.

SECTION 5. RESPONSIBILITY

.01. The Director, Office of Marine and Aviation Operations (OMAO), shall broadly administer NOAA's Small Boat Program and shall provide support and resources, and shall recommend additional funding sources for its operations. The Director, OMAO, is the final administrative authority for all matters pertaining to the NOAA Small-Boat Safety Program and its policies, procedures, and standards and shall review the contents of the Manual and any subsequent updates before their issuance. Concurrence will be indicated by signature of the Director on the sequentially numbered Transmittal Sheets that will accompany each issuance or update to the Manual. The Director may request prior review and concurrence by the Deputy Under Secretary for Oceans and Atmosphere before authorizing potentially controversial updates.

.02. The Small Boat Safety Board (SBSB).

a. The composition of the SBSB is as follows.

1. Board Members:

- Small Boat Program Manager (SBPM) - SBSB Coordinator;

- National Marine Fisheries Service representative(s);
- National Ocean Service representative(s);
- Oceanic and Atmospheric Research representative(s) (also representing National Weather Service);
- Office of Marine and Aviation Operations (OMAO) representative(s);
- NOAA Safety and Environmental Compliance Office (SECO) representative(s); and
- NOAA Law Enforcement (from various Line Offices) representative(s).

2. Each organization identified in Section 5.02a.1.(b through g) of this Order may designate one additional board member to the SBSB; however, for voting purposes, each of these organizations is entitled to cast a single vote (Oceanic and Atmospheric Research/National Weather Service also is entitled to one vote).

b. The SBSB serves in an advisory capacity to the Director, OMAO, and is the technical authority for matters pertaining to small boats. The SBSB shall:

1. develop, maintain, review, and approve this Order;
2. prepare, clear, issue, maintain, and distribute the NOAA Small Boat Standards and Procedures Manual (the Manual). The SBSB shall review and revise the Manual, as necessary, in order to keep it current with applicable policies and regulations and to maintain the ability to adapt to changes involving technology and/or safety within the marine community. The Manual, and its future updates, will be issued via sequentially numbered Transmittal Sheets;
3. develop, evaluate, and maintain a set of basic qualifications standards for small boat operators and crew;
4. approve basic small boat training requirements and approve all policies, standards, and operating procedures developed under the Manual (including all SSBP and SBOMs);
5. establish criteria and tools for small boat operational risk assessments;
6. identify and promote “best in class” safety practices for boat operations;
7. establish minimum criteria for SSBPs and SBOMs;
8. determine reciprocity or substitution of small boat operator and crew qualifications with similar qualifications of other agencies, organizations, or training programs;
9. serve as a policy and implementation advisor to the Small Boat Program;

10. evaluate data and trends gathered from operational, inspection, and incident reporting statistics and initiate appropriate actions;

11. address other boating-related matters as requested by NOAA management and/or as deemed appropriate by the SBSB;

12. inform NOAA management of significant small boat management issues;

13. maintain a compilation of small boat inventory and compliance records;

14. provide subject matter expertise for issues relating to the small boat community;

15. provide guidance to the Director, OMAO, regarding Requests for Waivers to the provisions of this Order and of the Manual;

16. respond to questions and concerns raised by the small boat community; and

17. review boating incident/accident reports and initiate appropriate actions.

.03 NOAA Programs. NOAA Programs that own, operate, and/or maintain small boats shall comply with this Order and the Manual and are responsible for the following:

- the safe operation, inspection compliance, life-cycle management, and material condition of their small boats;

- developing and maintaining SSBP and SBOMs which are directly related to their unique program and mission requirements in order to augment the Manual;

- conducting and recording Operational Risk Assessments; and

- designating SBSB representatives and providing adequate time and resources for their participation on the SBSB.

SECTION 6. DEFINITIONS

.01. NOAA Small Boat. A small boat, as defined in Section 6.06 of this Order, owned, operated, or maintained by NOAA. The term includes boats leased, loaned, bare boat chartered (also referred to as demise chartered), or operated under any cooperative agreement with other government agencies, universities, or scientific organizations by or from NOAA, but does not include boats time chartered by NOAA.

.02. NOAA Program. As used in this Order, the term refers to and is synonymous with NOAA Line Offices, Staff Offices, and any of their subordinate entities.

.03. NOAA Small Boat Standards and Procedures Manual. A compilation of instructions,

procedures, regulations, and guidelines derived from operational risk assessments and best management practices applicable to NOAA Small Boats.

.04. Operational Risk Management. A process approach to understanding and dealing with the elements of risk associated with operations. Implementing Operational Risk Management involves performing risk assessments and implementing corresponding risk controls. Risk management is a decision making process that enhances operational capability. The process helps the decision maker in identifying hazards, assessing risks, and implementing controls to reduce the risk associated with any operation.

.05. Operational Risk Assessment. A process involving identification of risks associated with a NOAA small boat's operations and consideration of actions to reduce those risks. Supervision, communication, and overall support, operating area, operator experience level, personnel physical and mental fitness, weather, and complexity of mission may be factors in the assessment.

.06. Small Boat (or Vessel). As used in this Order, includes every description of watercraft less than 300 gross tons capable of being used as a means of transportation of persons on water. The SBSB will classify vessels by size, nature of operations, and engineering complexity.

.07. Small Boat Inspections. Documented, formal evaluations of a small boat's material condition, inventory, and compliance for which inspection criteria, frequency, and format are defined in the Manual.

.08. Small Boat Operating Manual (SBOM). A compilation of instructions, procedures, and guidelines specific to each small boat, its mission, and its operating area.

.09. Small Boat Operator (Operator or Coxswain). As used in this Order, any person who operates a NOAA small boat as defined in Section 6.01 of this Order.

.10. Supplemental Small Boat Policy (SSBP). A compilation of instructions, procedures, regulations, and guidelines derived from operational risk management and best management practices conducted by a NOAA Program for specific small boat operations.

SECTION 7. REFERENCES

The following reference sources are listed in descending order of hierarchy.

- NAO 209-125, NOAA Small Boat Program.
- NOAA Small Boat Standards and Procedures Manual.
- Supplemental Small Boat Policy (SSBP)
- Small Boat Operating Manual (SBOM).

SECTION 8. EFFECT ON OTHER ISSUANCES

This Order supersedes and revokes NAO 217-103, Management of NOAA Small Boats, dated January 21, 2003, as amended.

/Signed/

Under Secretary of Commerce for Oceans and Atmosphere

Office of Primary Interest:
Office of Marine and Aviation Operations
Safety and Environmental Compliance Division

Appendix B Small Boat Safety Board Charter

	NOAA Small Boat Safety Program	DOCUMENT 0104-01.3	VERSION 2.1
		EFFECTIVE DATE 01FEB2022	
	AUTHORIZED BY: Nancy Hann, RADM/NOAA RADM Nancy Hann, NOAA Director, Office of Marine and Aviation Operations	REVIEW DATE 11AUG2026	
		RESPONSIBLE POSITION Small Boat Safety Program Manager	

NOAA SMALL BOAT SAFETY BOARD CHARTER

1. PURPOSE

1.1. This policy specifies the terms of reference for the National Oceanic and Atmospheric Administration (NOAA) Small Boat Safety Board (SBSB).

2. SCOPE

2.1. This policy applies to the NOAA Small Boat Safety Board.

3. POLICY

3.1. **General**

The SBSB is the technical authority within NOAA on interpretation and application of NOAA Administrative Order (NAO) 209-125 - *NOAA Small Boat Safety Program*; matters pertaining to small boat safety policies, standards, and procedures; and all other small boat issues raised to the SBSB.

3.2. **Composition and Qualifications**

3.2.1. The SBSB must consist of the following members:

1. The NOAA Small Boat Program Manager (SBPM)

2. NOAA Line Office Small Boat Officers (LOSBOs) from
   - National Marine Fisheries Service (NMFS)
   - National Ocean Service (NOS)
   - Oceanic and Atmospheric Research (OAR), also representing National Weather Service (NWS)
   - Office of Marine and Aviation Operations (OMAO)
   - Office of Law Enforcement (OLE)

3. A NOAA Safety and Environmental Compliance Office (SECO) representative as a non-voting member

3.2.2. Line/Staff Offices may designate one additional LOSBO board member to the SBSB due to the complexity of operations and other factors.

3.2.3. Selection criteria should be based on each candidate's diversity of experience, currency of experience, and scope of professional qualifications in small boat operations, safety, and operator

training.

3.3. Appointment of Board Members

3.3.1. Board members will be appointed by the Assistant Administrator/Director for each Line or Staff Office. The SBSB or the Small Boat Program Manager may provide recommendations to the Line/Staff Offices.

3.3.2. Appointments to the SBSB will be valid for three years from the date of the appointment letter. Every three years before the expiration of the appointment letter, the appropriate authority within each Line/Staff Office must either reaffirm his/her member's appointment or appoint a new member to the SBSB.

3.4. Selection of Chairperson and Vice-Chairperson

3.4.1. Any appointed member per section 3.2.1.1 and 3.2.1.2 of the SBSB is eligible to be nominated as chairperson of the SBSB with Line/Staff Office concurrence. The voting members of the SBSB will hold nominations and elections annually. The Small Boat Program Manager will forward the SBSB's recommendations for the duly elected Chairperson and Vice-Chairperson to the Director, OMAO.

3.4.2. The elected Chairperson and Vice-Chairperson will be confirmed through an appointment letter from the Director, OMAO.

3.4.3. The Chairperson and Vice-Chairperson will serve a one-year term and may be re-elected. In the case that the current SBSB Chairperson is unable to continue his/her duties, either the Vice-Chairperson or the Small Boat Program Manager will serve as the acting chairperson in the interim. The board may recommend the Director, OMAO approve of a newly elected chairperson.

3.5. Decision Making Process

3.5.1. There shall be one vote per the following:

- NMFS
- NOS
- OAR/NWS
- OMAO
- OLE
- Small Boat Program Office

3.5.2. A quorum of two-thirds of the voting members must be present, in person or electronically, to conduct official board business.

3.5.3. The Chairperson must strive for consensus on all SBSB issues and decisions. Every attempt will be made to query each member of the SBSB on all decisions.

3.5.4. Major objections to majority votes must be made part of the official meeting minutes.

3.5.5. Any member of the SBSB may request, through the Chairperson, that an item be raised to the Director, OMAO.

3.6. Meetings

Meetings of the SBSB will be held monthly. In-person meetings of the SBSB must be held at least twice a year and additional meetings are required. The Chairperson will coordinate the agenda and arrangements for the meetings and determine appropriate attendees.

3.6.1. To ensure flexibility and timely response to critical matters, the Chairperson will call a meeting of the SBSB.

3.6.2. The chairperson will ensure all SBSB meetings have official minutes and actions recorded. Meeting records will be maintained by the Small Boat Program Manager and made available to NOAA management and the NOAA small boat community.

3.6.3. The chairperson will provide the Director, OMAO with minutes from all meetings..

4. GUIDANCE

NOAA Administrative Order 209-125 – NOAA Small Boat Safety Program

5. RESPONSIBILITIES

5.1. **The NOAA Small Boat Safety Board (SBSB) will:**

5.1.1. Review and recommend changes NAO 209-125 – *NOAA Small Boat Safety Program*, and submit recommended changes for approval.

5.1.2. Develop, maintain, and review the NOAA Small Boat Safety Board Charter.

5.1.3. Develop, maintain, and review the NOAA Small Boat Standards and Procedures Manual, and make change recommendations to the Director, OMAO.

5.1.4. Promulgate basic small boat training requirements, policies, standards, and operating procedures developed under the Manual by completing the following:

- Twice a year Vessel Operations Coordinator (VOC) calls
- Every other year a Small Boat Summit

5.1.5. Establish criteria for small boat operational risk assessments.

5.1.6. Identify, publish, and encourage "best in class" safety practices for boat operations.

5.1.7. Determine reciprocity or substitution of small boat operator and crew qualifications with similar qualifications provided by other agencies or training programs.

5.1.8. Provide policy implementation guidance to the Small Boat Program.

5.1.9. Establish Small Boat Program metrics and maintain data collection systems. Evaluate data, determine trends, and initiate appropriate actions.

5.1.10. Address other boating-related matters as requested by NOAA management or the small boat community.

5.1.11. Identify NOAA-wide small boat management issues and inform appropriate management.

5.1.12. Maintain an inventory of small boats.

5.1.13. Develop systems for maintaining required records and documentation per the Manual.

5.1.14. Provide subject matter expertise for issues relating to the small boat community.

5.1.15. Review special circumstances, evaluate requests for waivers to the provisions of NAO 209- 125 and the Manual, and provide guidance to the Director, OMAO as the final approval authority for waivers.

5.1.16. Implement SBSB succession planning by growing talent and developing areas of expertise within the small boat community.

5.1.17. Develop a future vision and strategic plan for the NOAA Small Boat Program.

5.1.18. Develop tactical plans to promote and improve the visibility of small boat platforms within and outside of NOAA.

5.1.19. Review all NOAA small boat incident/accident reports and initiate appropriate actions.

5.1.20. Review pertinent external incident/accident reports and evaluate lessons learned for applicability to NOAA operations.

5.2. **Request for Interpretation, Opinion, or Review**

5.2.1. Requests for SBSB interpretation, opinion, or review shall be routed through the respective line office LOSBO.

5.2.2. When the SBSB receives a request for interpretation or opinion, the board will act as a decision-making body. At least two-thirds of the board members must be in attendance to constitute a quorum. When time is of the essence or in emergency matters and in the absence of a quorum, the matter will be referred directly to the chairperson for a decision.

5.2.3. When the SBSB receives a request for review of operational risk assessments, supplemental vessel policies, vessel operations manuals, or small boat incidents, the board will act as a quality assurance body and provide recommendations.

5.3. **Subject Matter Experts and Working Groups**

5.3.1. The SBSB may consult with appropriate subject matter experts or establish working groups of subject matter experts, to obtain reliable advice on any matter that may exceed the scope of knowledge and expertise of the board members.

5.3.2. The Small Boat Program Office staff, consisting of the Executive Officer, Inspection Coordinator, Engineering Coordinator, and Training Coordinator, and others as assigned, provide valuable support and insight to the SBSB and will participate in SBSB functions to the greatest extent practicable.

---

6. DEFINITIONS

Line Office Small Boat Officer (LOSBO)	Represents both individual programs and the Line Office as a whole on all matters pertaining to small boat operations and ensures Line Office Programs execute safe and effective small boat operations.
Vessel Operations Coordinator (VOC)	Is the Operations Coordinator, Operations Manager, Marine Operations Coordinator, Navigation Response Team Leader, or marine operations point of contact for each Program, Laboratory, or Field Party responsible for

	implementing all the requirements of the Small Boat Standards and Procedures Manual.
Vessel Program Coordinator (VPC)	Will assist their LOSBO with communication and implementation of policies and requirements; report issues up to the LOSBO; provide assistance as needed by the LOSBO.

7. REFERENCES

NOAA Administrative Order 209-125 – NOAA Small Boat Safety Program

NOAA Small Boat Standards and Procedures Manual
https://www.omao.noaa.gov/sites/default/files/documents/2018%200430%20SBS%26PM%204.1.pdf

8. AUTHORITY

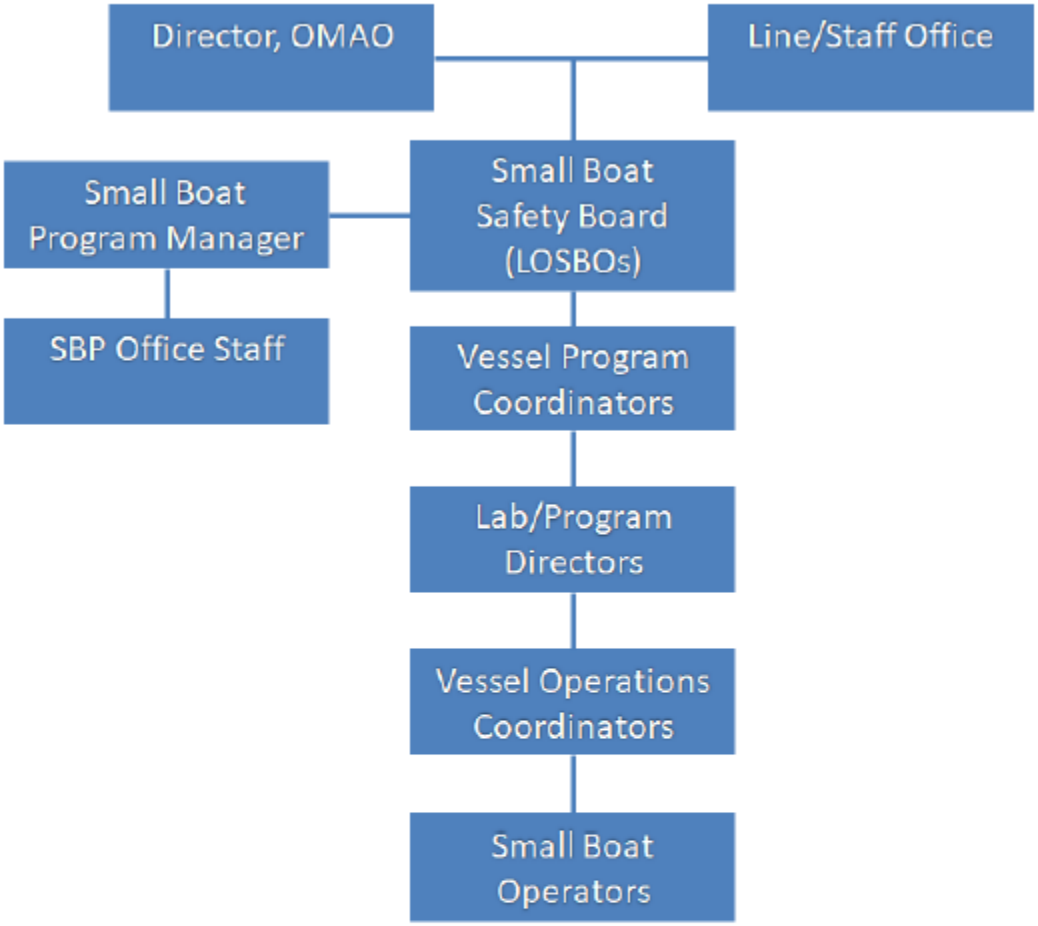
Department of Commerce, Department Organization Order 25-5

9. NOTES

Effect on Other Documents: Supersedes Appendix B from NOAA Small Boat Standards and Procedures Manual, dated April 30, 2018

DOCUMENT HISTORY		
Version	**Description of Change**	**Effective Date**
2.1	Update to section 3.4.1 timing of nominations and elections from "May" to "Annual"	2/1/2022
2.0	Review and update	8/11/2021
1.0	Initial Document	5/20/2015

NOAA Small Boat Program (SBP) Functional Organization Chart



** Vessel Program Coordinator is an optional designation.*