



**Woods Hole Oceanographic Institution**

**Small Boat Management Program and  
Operators Manual**

Revised March 2020

## Table of Contents

<u>1.0</u>	<u>Introduction .....</u>	<u>3</u>
<u>2.0</u>	<u>Small Boats at WHOI .....</u>	<u>3</u>
<u>3.0</u>	<u>Operator Certification Process .....</u>	<u>4</u>
<u>4.0</u>	<u>Important Information for Operators and Users of Small Boats Registered in the U.S. or Operated in U.S. Territorial Waters .....</u>	<u>5</u>
<u>5.0</u>	<u>Float Plan .....</u>	<u>5</u>
<u>6.0</u>	<u>Diving from a Small Boat .....</u>	<u>6</u>
<u>7.0</u>	<u>Boat-to-Shore Communications.....</u>	<u>7</u>
<u>8.0</u>	<u>VHF Radio Telephone Guidelines .....</u>	<u>7</u>
<u>9.0</u>	<u>Breaking Down .....</u>	<u>8</u>
<u>10.0</u>	<u>Appendix 1 .....</u>	<u>9</u>
<u>11.0</u>	<u>Appendix 2 .....</u>	<u>10</u>
<u>12.0</u>	<u>Definitions .....</u>	<u>11</u>

## 1.0 Introduction

WHOI researchers, students and others working for or on behalf of WHOI (“WHOI Personnel”) at times self-operate or charter small boats<sup>1</sup> for coastal or other research projects. Operation of a small boat means being in control of the propulsion and navigation of the vessel. A chartered vessel may be operated by a person who is hired along with the vessel or, in the case of a bareboat charter, by the person chartering the vessel. Any WHOI Personnel operating a small boat owned by WHOI, registered in the US or operated in US territorial waters in the course of their work at WHOI (“Operator”) must be certified to do so. This guide is intended to introduce small boat operators and charterers to the WHOI small boat operating procedures. Operators are expected to be familiar with the information presented here and to operate all boats owned by WHOI, registered in the US or operated in US territorial waters using these guidelines.

All boats, whether maintained by WHOI or chartered must be in good working condition and if registered in the US or operated in US territorial waters, meet all federal and state safety and licensing requirements. Operators are required to complete a certification process prior to operating small boats.

## 2.0 Small Boats at WHOI

For a small boat to be used on any WHOI project, grant or contract or for any other reason on behalf of or in the name of WHOI, it must either be owned by WHOI or if chartered and registered in the US or operated in US territorial waters, from an organization with sufficient licenses, certifications, and insurance (see <http://www.whoi.edu/page.do?pid=13116> for the Vessel Charter Policy). All WHOI owned small boats must have liability insurance coverage 12 months of the year. WHOI owned small boats without insurance cover must either be covered by insurance, stored, or sold. Small boats registered in the US or operated in US territorial waters owned by private individuals (not charter companies) cannot be utilized.

WHOI Marine Operations provides oversight for small boat operations and has the following principal responsibilities:

- Oversee implementation of the small boat policy
- Maintain an internal web site listing of WHOI-owned small boats and approved charter vessels
- Ensure small boat charters are properly reviewed and approved
- Facilitate training opportunities
- Ensure operator training records are maintained
- Maintain float plan records
- Assist with sourcing small boats
- Administer vessel/trailer titles, registration, and insurance; maintain records for each
- Ensure small boats and trailers are scheduled for accounting and insurance purposes
- Assist with logistics such as shipping arrangements

The point of contact within Marine Operations is the designated small boat coordinator.

---

<sup>1</sup> A “Small Boat” for this policy is any personnel-carrying watercraft under 35 feet equipped with propulsion machinery. Any other small craft must still otherwise comply with USCG, federal, and state laws, regulations, and practices.

Management responsibility for small boats acquired by a WHOI laboratory or grant rests with the PI or his/her designate. This responsibility includes operation, maintenance, repair, upgrades, scheduling and terms of use by other users. PIs have the right to decline shared use if they deem the proposed application to be unsafe or inappropriate for their boat.

Insurance for small boats shall be paid by Institution overhead as long as:

- The boat(s) is operated in accordance with this and other applicable Institution policies
- The boat(s) is available for shared use

### **3.0 Operator Certification Process**

The certification held by the operator of any vessel, whether WHOI owned or bareboat chartered, must be appropriate to the vessel chartered and/or operated. In any cases where federal licensing standards through the United States Coast Guard apply, they must be adhered to.

To become a small boat Operator, an appropriate boat operator course, approved by WHOI Marine Operations, must be completed. It is the responsibility of the Operator to maintain this certification and get their course approved by WHOI Marine Operations ahead of time. A higher operator certification can exempt one from this process but they must have their certification on file.

A current First Aid & CPR course must also be maintained in addition to boat operator qualifications. All certification documents, cards and/or certificates must be maintained by the Operator, and copies of those presented at the time of bareboat charter (where the person chartering the vessel will be the operator) or of initial boat operation to the small boat coordinator of WHOI Marine Operations.

To promote safety and proper use and care of equipment we expect all boat Operators to be knowledgeable in the areas summarized in Appendix 1.

Small boats often work in remote locations and significant time may pass before an injured person can be returned to port. All certified boat Operators must complete and stay up to date with the WHOI "First Aid" training class, including basic first aid, and CPR. This training is tracked by the WHOI Training Management System.

Approved boating safety courses are:

[WHOI Small Boat Operator Training Course](#)

[New England Maritime](#)

[USCG Auxillary](#)

[Boatwise, LLC \(State Wide\)](#)

[Mass State Courses](#)

\*\*other courses may be acceptable subject to approval by Marine Operations

#### **4.0 Important Information for Operators and Users of Small Boats Registered in the U.S. or Operated in U.S. Territorial Waters**

At least two people must be onboard vessels while underway.

A cognizant person and a float plan (see below) are required for every trip.

Once underway, the Operator is responsible for the safety of the boat occupants and is legally responsible for ensuring that the vessel meets all federal and state or local requirements.

Small boats may not be operated on behalf of WHOI during Small Craft Advisory conditions in any season or location no matter who the Operator is. A small craft advisory is issued when winds have reached, or are expected to reach within 12 hours, speeds of 21 to 33 knots expected to produce wave conditions hazardous to small craft or when sea or lake ice exists that could be hazardous to small boats.

Immediately prior to (i.e., the same day) it is the Operator's responsibility to: a) check the local weather forecast (e.g., see the example websites below), b) consider sea conditions at the planned worksite based on that forecast, and c) make a prudent decision whether or not to leave the dock. A small boat absolutely should not leave the dock when the local "small craft warning" is posted. It is the operator's responsibility to give priority to safety issues, even if it means that essential work will be postponed.

Three useful URLs provide current local weather conditions and forecasts:

MVCO <http://mvcodata.whoi.edu/cgi-bin/mvco/mvco.cgi?Units=Metric>

NWS Forecast <http://seaboard.ndbc.noaa.gov/data/Forecasts/FZUS51.KBOX.html>

Weather Underground [http://www.wunderground.com/US/MA/Woods\\_Hole.html](http://www.wunderground.com/US/MA/Woods_Hole.html)

Please bookmark these websites and make a habit of using them regularly. Similar information is available on the web for any locale where you may be operating.

#### **5.0 Float Plan**

In order to ensure the safety of boat operators and occupants it is imperative that a responsible "Cognizant Person", an adult 18 years of age or older who is willing and able to take on the responsibilities outlined below, be identified in the Float Plan, see Appendix 2. A Float Plan must be completed by the Operator and submitted to the Cognizant Person before departure. The Operator is responsible for identifying a local Cognizant Person and for providing a Float Plan and local emergency contact information to that person. Note that the WHOI front desk is prepared to serve as the "Cognizant Person" and daytime staff / nighttime security are trained in the responsibilities outlined below.

Float Plans shall be submitted to the Marine Operations Small Boat Coordinator in a timely manner, but no more than 10 days after each small boat use for archiving and utilization data

purposes.

If the Operator expects delays in returning he/she must make every effort to notify the Cognizant Person by cell phone or VHF radio.

### Cognizant Person Responsibilities

The responsible cognizant person will:

- Know the location of the worksite and intended travel routes.
- Know the expected time of return.
- Remain available to receive notification until the boat and occupants have returned safely.
- Have a copy of the float plan for detailed information of the equipment and occupants at departure.
- Know emergency procedures and be prepared to take appropriate action if the boat does not return at the specified time.

### Appropriate Action by Cognizant Person

WHOI places strong emphasis on adherence to Cognizant Person responsibilities. If the boat and occupants have not returned within 1 hour of the ETR (Estimated Time of Return) and there has been no word from them about the delay, the Cognizant Person should contact the local U.S. Coast Guard sector, see float plan for details.

Coast Guard Station Woods Hole: (508) 457-3277 or hailed via VHF Channel 16

## **6.0 Diving from a Small Boat**

WHOI maintains a strict diver training and certification program. All scientific diving must be done under the auspices of this program following the procedures outlined in the Institution's Diving Safety Manual (DSM). The WHOI Dive Safety Program is described at URL: <http://www.who.edu/main/cruise-planning/diving-program> and copies of the Manual are available at that website and in hard copy and PDF from the Dive Safety Office. A copy of the latest version of the WHOI DSM must be available on board during diving operations, and a WHOI-approved dive plan must be filed with the Diving Safety Office prior to any diving activity. An appropriate "diver down" flag must be flown at all times divers are in the water. Operators who take out divers must be certified in Diver First Aid and oxygen administration. When diving is included in the small boat cruise, a diver emergency oxygen kit or local equivalent must be aboard (available from the WHOI dive locker).

Personnel safety requires that the boat operator will not participate directly in any dive operations. The boat operator must be fully available to maneuver the boat as required by

divers in the water. The boat operator has the ultimate responsibility for the boat and crew safety.

The boat operator has the authority to modify or cancel dive operations based on his/her interpretation of weather and sea conditions.

### **7.0 Boat-to-Shore Communications**

The boat operator is responsible for maintaining communications with his/her cognizant person and with the US Coast Guard or other emergency services. The Operator:

- 1) Does not work beyond the range of on-board communication tools (i.e., know the range limits).
- 2) Must be very familiar with both cell phone and VHF operation, emergency contacts, and protocols.
- 3) Must monitor the VHF radio at all times while under way and on station.

### **8.0 VHF Radio Telephone Guidelines**

Avoid excessive calling. Make calls as brief as possible. Give name of called vessel first, then "This is (name of your vessel)," your call sign, and the word "over". (NOTE: transmission protocol: "over" implies a response is expected; "out" states end of transmission.) If the station does not answer, delay your repeat for 2 minutes, then repeat the call.

Channels:

- **16** - Is both a hailing frequency and a distress frequency. All vessels are required to monitor this channel. The USCG also monitors 16. If you attempt to hail another vessel via Channel 13, and get no response, you may then attempt to hail the same vessel on Channel 16. Switch to a working frequency as soon as possible when establishing contact with any vessel or shore station on Ch. 16.
- **13** - Calling frequency for commercial and pleasure craft in and around US waters. Use channel 13 to establish contact then switch to an open working frequency.
- **13** - Hailing frequency. This channel is customarily monitored by professionally operated vessels in US waters.
- **22a** - Is used to transmit safety information by the local USCG Sector.

## 9.0 Breaking Down

In the unfortunate situation of an engine failure here are some steps to take before calling for help:

- Without power the boat will begin to drift. You will want to throw out the anchor but may want to drift out of the way of traffic first
- Check the kill switch, it may have been knocked out of place
- Check the fuel tank, the breather may be closed or the tank empty
- Check the battery terminals, clean them if appropriate

USCG will only respond to an emergency. Tows must be arranged with a commercial provider or helpful friend.



## 10.0 Appendix 1

### Elementary Seamanship

- Boat types and terminology
- Evaluation of equipment prior to departure
- Evaluation of weather conditions
- Load distribution
- Boating courtesy
- Wind, waves and current
- Anchoring
- Refueling
- Emergency situations
- First aid

### Federal, State and Local Laws

- Registration
- Required equipment
- Accident reporting
- Diving operations
- Life preservers
- Responsibility for wake

### Charts and Aids to Navigation

- Determining your position
- Determining water depth
- Chart scales
- Aids marking sides of channels
- Daymarks

### Basic Navigation

- The mariner's compass
- Plotting a course
- Steering a course

### Marlinspike Seamanship

- Cleat hitch
- Round turn and two half hitches
- Bowline
- Coiling a line

### Boat-to-Shore Communications

- cell phone
- VHF
- range limits

### First Aid

- first aid, CPR

## 11.0 Appendix 2

### SMALL BOAT FLOAT PLAN

(Leave a copy with the Cognizant Person and take a copy with you)

Boat Name: \_\_\_\_\_

Boat Operator: \_\_\_\_\_

Trip Participants & Their Roles:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cognizant Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Departure Time and Date: \_\_\_\_\_

Estimated Time of Return (ETR) and Date: \_\_\_\_\_

Local USCG sector contact info: \_\_\_\_\_

Nature of work:

Area of work:

Travel Routes:

Scuba Diving Plans: Yes\* \_\_\_ No \_\_\_ Depth \_\_\_ No. Dives \_\_\_

\*plan **MUST** be authorized by WHOI Dive Safety Officer

Equipment Checklist:

___ Fuel level at departure	___ Cell Phone (No. _____)
___ Oil level	___ Radio, GPS
___ PFD's**	___ Navigation Aids (charts, compass)
___ Fire Extinguisher	___ Paddles, Bailer, Anchor
___ First Aid Kit	___ Navigation lights functional
___ Test engine & steering before leaving dock	

Operator Signature: \_\_\_\_\_

Operator's signature acknowledges that operator and all participants understand their roles for the cruise

\*\*State and Federal required safety gear, USCG recommends and WHOI requires that all persons wear PFD at all times.

**When the water temperature is below 50F, use of thermal buoyant worksuits are encouraged**

## 12.0 Definitions

- 1) Operator – the person driving the boat.
- 2) WHOI boat custodian (PI who is responsible for the boat) - they may not be an operator on a particular trip, but the custodian is responsible for paying the insurance and the maintenance costs. A Science Department can be a boat custodian.
- 3) Boat user- anyone using a boat; the user does not need to be the operator or the custodian of the boat.
- 4) Chartered boat- a boat hired from a company in the business of chartering. The company should be licensed and insured to charter boats, and be local to operations
- 5) VHF Radio – “very high frequency” range between 156.0 and 174 MHz inclusive also known as the VHF maritime mobile band.
- 6) Cognizant Person – an adult, 18 years or older, who is willing and able to take on the responsibilities outlined in this Manual.
- 7) Personal Flotation Device (PFD) – also known as a life jacket. Required attire for each person on board all small boats.
- 8) Bareboat Charter – a boat hired without a hired Operator. All bareboat charters must be reported to Marine Operations.
- 9) WHOI Project – Internally (e.g. Independent Study award) or externally (Federal, State, nongovernment source) funded award or contract.
- 10) WHOI Personnel - WHOI researchers, students and others working for or on behalf of WHOI.
- 11) Small boat- any personnel-carrying watercraft under 35 feet equipped with propulsion machinery. Any other small craft must still otherwise comply with USCG, federal, and state laws, regulations, and practices.
- 12) Float plan – Appendix 2 of this policy. Particulars and departure checklist regarding small boat cruise. A copy is left with a Cognizant Person during every WHOI small boat cruise on a boat registered in the US or operated in US territorial waters.