

Small Boat Management Program and Operators Manual

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This document is maintained by the Director of the Department of Marine Research Services in consultation with MBL's licensed boatcaptainsand MBL Safety Office.

launched or sold. Small boats registered in the US or operated in US territorial waters owned

operations are allowed under the following conditions

- ” The Operator is an MBL staff member
- ” The small boat is within inshore waters
- ” Water temperatures are over 55 degrees (12.7 C)
 - | USCG-licensed boat captains may operate solo in water temperatures over 50

- A PFD (*Personal Flotation Device*) is critically important safety equipment and it is essential to wear one that fits properly. There must be one USCG approved PFD for each person aboard the vessel. Research personnel who need to work extensively from small boats purchase and maintain their own PFDs. PFDs should not be placed in plastic bags, locked, or closed compartments or have other gear on top of them. All throwable devices must be immediately available for use under state and federal laws.

MBL Policy on PFD Use

1. When operating small boats from the Woods Hole MBL campus all persons must wear an appropriately sized and fitted approved PFD at all times while the vessel is underway (not anchored, aground, or tied to a dock.)
2. When operating away from the MBL campus exclusively in protected waters such as marshes, ponds and protected embayment's

Length < 26'	Mouth-, hand, or poweroperated whistle or horn, or some other means to make an efficient sound signal audible for at least one-half mile required
Length > 26'	Whistle or horn, and a bell audible for at least-half mile required

- Coast Guard approved *Visual Distress Signal* (VDS) are required on all vessels operating on coastal waters and connected waterways, and the Great Lakes. VDSs are classified as day signals (visible in bright sunlight), night signals (visible at night), or both day and night signals. VDSs are either pyrotechnic (smoke and flames) or non-pyrotechnic (noncombustible).

The following combinations of signals are examples of VDSs that could be carried on

Operator and the Cognizant Person to reduce the chance of false alarms.

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 boat.
- ”

Personnel safety requires that the boat operator ~~wil~~ 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. If the small boat is anchored during a dive, the anchor line must be secured to a bow cleat and the remainder of the line coiled and secured to a float such that the boat can be immediately detached from the anchor if necessary to support diver operations. The anchor can be subsequently retrieved.

A boat operator may participate directly in a dive if the vessel is secured to a dock or a pier.

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

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 ~~low~~ communication tools (i.e., know the range limits).
2. Must be 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~~ at
4. Should establish a communications plan with the Cognizant Person. This plan should include scheduled ~~check~~s.

VHF Radio Telephone Guidelines

Avoid excessive calling and ~~make~~ calls brief. 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 - the bridge-to-bridge ~~channel~~ used to communicate with other vessels to discuss meeting and passing maneuvers. Also used to contact bridges (Eel Pond bridge). Should not be used as a hailing frequency to contact vessels for other purposes.
- " 19, 68, 71 – suggested working frequencies.
- " 22a - Is used to transmit safety information by the local USCG Sector.
- " 9- Boater Calling. Commercial and ~~Non~~commercial. Also used for 'radio check' before getting underway.

Accident/Incident Reporting

All accidents must be reported. An accident is an unplanned event or series of events, which results in one of the following:

- ” Injury to Personnel, or occupational illness requires completed Injury Report form to be submitted to MBL Human Resources
- ” The relevant Department or Lab Director is responsible for reporting accidents or injuries to the Director of Facilities.
- ” Damage or loss of MBL, private or public property, not incidental to normal operations, including findings that have the potential to cause damage should be reported to the Director of Marine Research Services
- ” Damage to the environments, hazardous material spill, impact on ecosystem, protected species should be reported to the Environmental Health and Safety Manager and Director of Facilities
- ” Near Miss: An event or circumstance that, if allowed to progress without interruption and/or without last minute intervention, would have resulted in an incident. Events or conditions that approach and compromise safety margins be reported to the Environmental Health and Safety Manager.

Visual Identification

MBL small boats are institutional assets and must maintain a positive image and should follow a uniform identification scheme through the placement of the MBL logo. MRG and applicable Lab Directors will coordinate with MBL Facilities officers to ensure MBL vessels are properly branded. Branding promotes public awareness of the MBL and is displayed in the following manner:

- ” Small boats without a cabin, deck house or steering console should place the seal approximately midway along the port and starboard hull.
- ” Small boats with a cabin, deck house or steering console should place the seal on the port and starboard side of these structures at a location that is least obstructed from a clear broadside view.
- ” The MBL logo must be displayed in addition to the seal. Options include the transom, console, deck house or cabin.

Appendix 1 –List of Small Boats at MBL

MRC

Vessel Name	Size	Registration Number	Description
RV Gemma	50 ft Trawler	Certificate of Documentation Official Number 1303655	Green hull with white deckhouse with buff mast boom and gallows

Appendix 2 – Boat Operators Required Scope of Knowledge

Navigation Rules

- Right of way
- Responsibilities between vessels
- Conduct in Restricted Visibility
- Lights and Shapes
- Sound and Light Signals

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

Appendix 3 –

Appendix 4 – Small Boat Logbook

Date	Vessel	Departure Time	Return (RT)	Return (Actual)
Operator			Cognizant Person	
Crew				
Purpose				
Work Area & Notes				

Date	Vessel	Departure Time	Return (RT)	Return (Act)
Operator			Cognizant Person	
Crew				
Purpose				
Work Area & Notes				

Date	Vessel	Departure Time	Return (RT)	Return (Act)
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Small Boat Crew Information

Appendix 5 –Emergency Checklist



Appendix 6 - Trailering

Only drivers experienced in towing boats are allowed to trailer boats. The maximum width that a trailer and boat may be is 8.5 feet. Anything larger requires a special permit. All of Ecosystem's boats are less than 8.5 beam width. The trailer must be properly loaded and balanced in order to be safely towed. Overloading is dangerous and may result in damage to the boat, trailer and/or tow vehicle. Be aware that loading sampling gear in the trailered boat may cause it to become unstable. The hull design and weight of the boat are considerations when a trailer is selected. Each MBL boat has a designated trailer as well as the correctly sized corresponding hitches. When in doubt, ask an experienced staff member.

Before trailering check that the tow hitch ball and coupler are the same size and that the bolts are tight.

Appendix 7 - Equipment Check for Small Boats

First make sure boat has all the required safety equipment and that the boat plug/s are securely in place. Make sure cooling water intake is below the surface of the water before starting the engine. There should be a PFD for each person in the boat (Type I, II, III or V). Check that the fuel tanks are secured properly. Next make sure that the sound device works and the marine VHF radio/cell phone is charged and in good working order. Make sure the lights are in working order and that the visual distress signals are aboard and that the pyrotechnic devices are not expired. Lastly, check that there is a first aid kit aboard, an anchor and line and a paddle on the boat.

For 16 Feet or Less Vessels

Additionally, you will need:

- x A B-1 type fire extinguisher
- x Three approved night signals on board

For 16-26 Feet Vessels

Additionally, you will need:

- x A B-1 type fire extinguisher
- x Three day and three night signals on board
- x A type IV PFD (throwable flotation device)

For 26-40 Feet Vessels

Additionally, you will need:

- x Two B-1 or one B2 type fire extinguisher
- x A type IV PFD (throwable flotation device)
- x Three day and three night signals

For 40-65 Feet Vessels

Additionally, you will need:

- x Three B1 or one B1 and one B2 USCG approved fire extinguishers
- x A type IV PFD (throwable flotation device)
- x A sound device and bell and whistle that can be heard at least ½ nautical mile
- x Three day and three night signals
- x The ISDOT ISCG International Inland Navigational Rules

Appendix 9 – Definitions

- ” Operator – the person driving the boat.
- ” MBL 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.
- ” Boat User- anyone using a boat; the user does not need to be the operator or the custodian of the boat.
- ” 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
- ” VHF Radio – “very high frequency” range between 156.0 and 174 MHz inclusive also known as the VHF maritime mobile band.
- ” Cognizant Person– an adult, 18 years or older, who is willing and able to take responsibility for the boat.