

Bodega Marine Laboratory

Small Boat Manual

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SMALL BOAT MANUAL

SECTION 1.00

1.10 PURPOSE

The purposes of this manual are to facilitate safe boating under the auspices of the University of California, Davis, Bodega Marine Laboratory (BML). To ensure that all boating done under BML auspices is conducted in a safe and efficient manner. And to familiarize participants with the basic procedures that affect their own safety and the safety of their fellow user.

Any person designed as a BML small boat operator is required to observe the provisions of this guide. Authorized operators will be given a copy for reference.

1.20 CONTENTS

The Small Boat Manual contains policy and procedures for all boating operations. The BML Small Boat Manual includes:

1. Policy that pertains to all BML boating operations.
2. Requirements for obtaining operator certification.
3. Administrative procedures for conducting the BML boating program.
4. Equipment and maintenance procedures.

1.30 APPLICABILITY

The provisions of this manual apply whenever BML personnel are using a small boat under BML auspices, whether or not the marine laboratory owns the boat.

Specific examples of boat operations under BML auspices include but are not limited to: persons engaged in research; employees acting within the scope of their employment; students engaged in any research operation including those receiving or providing boat operation instruction or involved in boat checkouts; and boat operations conducted in educational and recreational programs sponsored by UCD/BML.

Small boats used under BML auspices fall into four categories:

1. Boats at Bodega Marine Laboratory
2. Boats owned by individual BML programs.
3. Privately owned boats used for BML research.
4. Boats chartered by BML personnel.

In order to be approved for use by BML personnel, a small boat must be numbered in accordance with the regulations of the State of California or in accordance with applicable Federal Law or with a federally approved numbering system of another State.

SECTION 2.00 RESPONSIBILITY

2.10 DIRECTOR, BODEGA MARINE LABORATORY

The Director of the Bodega Marine Lab (BML) has the ultimate authority for the small boat program and its related activities. The Director is responsible for administration of the program and for approving changes to this manual.

2.20 PRINCIPAL INVESTIGATORS

Principal Investigators and/or primary operators are personally responsible for assuring that all boat operations that are part of a program under their direction are conducted in accordance with this manual. Principal Investigators who operate boats that are either owned by individual BML programs or privately owned, US registered boats, used for BML research are required to meet the same safety standards as BML boats and to have on board the safety equipment as outlined in Appendix I.

Principal Investigators must determine that all individuals assigned to boat operations related to their projects are properly authorized as described in section 3.20 of this manual.

2.30 BOATING SAFETY OFFICER

Working with the Vessel Operations Manager, the Boating Safety Officer is responsible to the Associate Director, BML for the conduct of the Small Boat Program. Operational authority for the BML Small Boat Program, including certification of operators, approval of a boat request form/float plan, maintenance of boats, and ensuring compliance with this manual by all operators of BML boats rests with the Boating Safety Officer.

With the approval of the Associate Director, BML, the Boating Safety Officer may permit portions of this program to be carried out by a qualified delegate, although the Boating Safety Officer may not delegate responsibility for the safe conduct of the Small Boat Program.

The Boating Safety Officer shall suspend boating operations that are considered unsafe. He/she will ensure that all boats are in full compliance with U.S. Coast Guard requirements, with respect to equipment and safety procedures.

The Boating Safety Officer is responsible for explaining procedures to be used by BML personnel who wish to charter a non-institutional boat. The procedures are to be consistent with UC Davis Purchasing Department and USCG guidelines. Prior to signing a charter agreement for operations in US waters, the boat must be inspected for compliance with USCG standards. Boats operated by BML personnel that are not owned by BML will be inspected not less than yearly with respect to safety equipment. The Boating Safety Officer may carry out these safety inspections.

2.40 BOAT OPERATOR

Only persons who have been certified as BML boat operators may operate small boats under BML auspices, whether or not the boat is owned by BML. Exceptions may be granted for vessels run by non-

covering charter vessels. In foreign waters, the responsible BML person shall insure the vessel has safety and navigational equipment on board. This may entail the person chartering the vessel to bring his or her own safety equipment. The designated boat operator is responsible for all aspects of boating operations, regardless of any senior personnel present in the boat. These responsibilities include, but are not limited to:

- 1) Safe transport of the vessel to and from the launch site, if applicable.
- 2) The safe navigation of the vessel to and from the site(s) of operation.
- 3) The safe operation of all equipment, either in the collection of data, or the handling of the vessel
- 4) Insuring that all required operational and safety equipment is on board before getting underway. And that it is properly cleaned and stowed upon return. .

Failure to comply with provisions of the Boating Safety Manual may be cause for the revocation or restriction of the operator's authorization. However, any operator may deviate from the requirements of this manual to the extent necessary to prevent or minimize a situation that is likely to cause death, serious physical harm, or major environmental damage. A written report of such actions must be submitted within 24-hours to the Boating Safety Officer explaining the circumstances and justifications.

SECTION 3.00 ADMINISTRATIVE PROCEDURES

3.10 GENERAL

The regulations in this manual must be observed wherever small boat operations are carried out under the auspices of BML. All operators must follow the provisions of the manual and all equipment used must conform to U.S. Coast Guard requirements.

3.11 Operating Areas

The regulations herein shall be observed at all locations where boating operations are conducted under the auspices of the BML Small Boat Program. Areas of operation belong to one of two classifications:

1. Inland Waters: Shoreward of the demarcation line that separates International Navigation Rules from U.S. Inland Navigation Rules, for example within the waters of Bodega Harbor. The demarcation line is known as the COLREGS (Convention on the International Regulations for Preventing Collisions at Sea, 1972) Demarcation Line. It is shown on nautical charts.
2. Coastal Waters: Seaward of the COLREGS Demarcation Line, but normally considered within sight of land.

The type of service for each boat within the Small Boat Program will be clearly identified. Boats will be used only in their designated areas or in areas that provide greater protection

3.20 AUTHORIZATION OF BOAT OPERATORS

See also the "Marine Operations Guidelines". Available from Boating Safety Officer, Vessel Operations Manager or on BML's website <<http://www.bml.ucdavis.edu/facility/MAROPS.PDF>>.

To become an authorized boat operator, one must demonstrate proficiency in safe boat operations, knowledge of the "rules of the road" and familiarity with the operation of safety equipment. To satisfy these requirements all operators must demonstrate to the Boating Safety Officer or his/her designee proficiency in the above requirements by means of a practical or oral exam, documentation of an approved safe boating course/at sea experience. The US Department of Interior, the California Department of Boating & Waterways, the U.S. Coast Guard Auxiliary, and the U.S. Power Squadron offer courses that are acceptable for this purpose. The operator will be given a briefing on the proper care and operation of equipment and safety procedures that are unique to that boat. In-water operational checkout(s) administered by the Boating Safety Officer or his/her designee will be the final step in granting operator authorization.

The Boating Safety Officer has the authority to give limited authorizations to BML personnel that restrict operators to use of certain boats and/or in certain waters.

3.21 Trailing

To become qualified to tow a boat and trailer, the operator or designated driver must demonstrate to the Boating Safety Officer or his/her designee the proper procedures for towing the boat and trailer over the road, as well as launching and retrieving the boat from the trailer to the water. See also "Guidelines, Operation & Maintenance of University-Owned Trailers". Available from the Boating Officer, EH&S, or DSO.

3.22 Re-Authorization

If a boat operator's authorization is revoked, they may be re-qualified after the operator complies with such conditions as the Boating Safety Officer may impose. The operator shall be given the opportunity to present their case to the Director, BML before conditions for re-authorization are stipulated.

3.30 BOATS AND EQUIPMENT

All boats and equipment used by authorized BML operators in US waters, regardless of ownership, will conform to U.S. Coast Guard requirements and to the standards set forth in this manual.

3.31 Stability

All motorboats used by BML personnel should have an installed data plate that designates the number of people and weight capacity according to the manufacturer's specifications. It is the responsibility of the operator to stay within these limits and to have all weight evenly distributed so that the boat will trim properly. If the manufacturer's specifications have been altered, or if a platform was designed and constructed for specific research, the trim and stability modifications may be comprised. It is the responsibility of the Principal Investigator to verify the stability of any modification to the Boating Safety Officer.

3.32 Equipment

The operator shall be familiar with the operation of the equipment and shall inspect all emergency equipment prior to departure. The operator and/or crewmember shall notify the Vessel Operations Manager of any malfunctioning equipment used during their operation.

It is the responsibility of the operator and/or Principal Investigator(s) to replace or renew any equipment lost or damaged as a result of negligence or misuse by the operator. In the event of a disagreement as to responsibility for lost or damaged equipment, the Associate Director, BML will review the case and assign responsibility for replacing it. Required equipment for BML boats is listed in Appendix I.

3.40 BML BOAT RESERVATIONS/FLOAT PLAN

The reservation of any BML boat is on a first come, first served basis. Filing the boat request form on the Marine Operations website calendar http://www.bml.ucdavis.edu:8085/small_boats/ assures reservation. All boat operators conducting small boat operations with a boat from the BML facility should file a boat request form/float plan with the Vessel Operations Manager <smcafee@ucdavis.edu> at least twenty-four (24) hours prior to departure. Float plans are available from the Receptionist, Vessel Operations Manager and Boating Safety Officer. See Appendix II and "BML Marine Operations Guidelines" <http://www.bml.ucdavis.edu/facility/guidelines.html>

Operators of boats other than those from the BML facility must leave a float plan with the BML Receptionist, or the Boating Safety Officer, or the Vessel Operations Manager. The minimum requirements for a float plan are:

1. The boat being used;
 2. The planned date, time and place of departure;
 3. The planned date, time and place of return;
- 5
4. The site(s) of operation;
 5. The names and affiliation of people on board.
 6. Communication schedule, i.e., cellular telephone number and/or VHF working frequency.

3.50 COMMUNICATIONS

Scheduled radio communications with agreed upon frequency should be maintained with the BML Receptionist, Vessel Operations Manager, Boating Safety Officer or other responsible person. To initiate any change in an approved schedule, the Vessel Operations Manager, or assigned alternate, shall be notified and changes confirmed. If the boat operator, or his/her designee is unable to notify the Vessel Operations Manager or assigned alternate, the filed plan must be adhered to. Failure to follow procedures may be cause for suspension or revocation of authorization to operate small boats.

The Vessel Operations Manager or the agreed upon alternate shall be notified by phone or in person upon completion of work.

Special arrangements will be made in advance for multi-day trips or for vessels returning during non-office hours.

Notice of return is required within two hours after the scheduled time of return. If shore-based or radio contact is not made, procedures for U.S. Coast Guard action may be initiated. Vessel operators shall take into account the limited VHF radio and cell phone coverage in coastal waters.

3.60 WEATHER

Use of any boat is always contingent upon weather conditions. Responsibility for monitoring weather conditions prior to departure and during operations resides with the operator. When small craft advisories are issued by the National Weather Service for the waters of a planned operation, the crew of a vessel that is scheduled for operations within that area shall consider postponing the cruise until more favorable conditions prevail. Special permission to operate may be requested from the Boating Safety Officer or the Vessel Operations Manager.

3.70 SCUBA DIVING

Any persons scuba diving from a BML boat are required to observe the provisions of the University of California, Davis Diving Safety Manual. <http://www.bml.ucdavis.edu/facility/dsmanual.pdf>

Diving by students, staff, and faculty of the university or with UCD/BML equipment as a necessary part of their research/occupation, and by other authorized divers under the supervision of the UC Davis Scientific Dive Program as a necessary part of research, and any diving on UCD property constitutes diving under UCD/BML auspices.

The UCD Diving Control Board (DCB) must approve all dive plans. The designated lead diver will be in charge of all diving operations. A BML certified boat operator remaining on board is required for dives deeper than 30 meters (99') in local waters.

3.80 SAFETY CHECKS

3.81 Prior to Departure

1. Perform a functional inspection of the boat and equipment, including communications.
2. Assess all environmental conditions – weather change, ocean conditions.
3. Give a briefing to all on board including, at a minimum, emergency procedures, location of PFDs, fire extinguishers, man overboard, and methods of seeking assistance

3.82 After Returning

1. Upon return the operator will log in the return time with the BML receptionist or other responsible person as agreed upon before departure.
2. Notify the Vessel Operations Manager of any problems with the boat or equipment that occurred during the cruise within 24-hours. E-mail is an acceptable means.
3. The operator or his/her designee will ensure that the boat, boat trailer (if used), engine and all other equipment are thoroughly rinsed with fresh water and stowed after each use.
4. For motorboats, the operator or his/her designee will ensure adequate fuel and oil remain for subsequent operations.

3.90 RECORD KEEPING

3.91 Routine Records

The Vessel Operations Manager or designee shall keep a file of usage for all boats, including a log of scheduled and unscheduled maintenance for each boat, boat trailer and outboard engine.

3.92 Accident Reporting

All accidents must be reported to Boating Safety Officer and to the University's Director of Risk Management within 24 hours of the incident. The Boating Safety Officer will circulate this report to the Director of BML and Director, EH&S.

The Boating Officer shall investigate and document the accident and related personal injury and/or property damage and prepare a report for the Vice Chancellor-Administration.

APPENDIX I

Safety Equipment

Refer to ABCs of California Boating Law by CA Dept of Boating & Waterways

<http://dbw.ca.gov/pubs/ABC/index.htm>

Motorboats operating in coastal waters shall carry at least the following equipment:

1. One VHF radio. Cell phone &/or CB radio also recommended
2. Class I, II, or III PFD for each person on board, plus one 'throwable' with at least 50' of line.
3. Anchor and anchor line
4. Oars, or paddles
5. Signal flares - smoke flare(s) and ≥ 3 pyrotechnic
6. Emergency repair kit and tools
7. Fire extinguisher on all motorboats with open spaces under decking
8. Fog horn, or other signaling device
9. First aid kit and, if diving, an oxygen unit

Suggested equipment:

1. A cellular telephone or CB radio
2. Drinking water
3. Spare fuel
4. Sea anchor
5. Dock lines
6. Bailer
7. Boat hook

APPENDIX II

BML Float Plan

All vessels operating under the auspices of UC Davis must be in compliance with California and USCG regulations. Refer to [ABCs of the California Boating Law](#). Copies are available from the UC Davis Scientific Diving Program or CA Dept. of Boating & Waterways.

Date: _____

Estimated time of return: _____

Vessel:

Outboard powered,

_____ <i>Cape Horn</i> ,	20' runabout,	white w/center console	CF 9188 XS
_____ <i>Henricia</i> ,	16' Inflatable,	orange	CF 5694 XS
_____	17' Klamath skiff	aluminum	CF 3540 XS
_____	14' Klamath skiff	aluminum	CF 3159 XS
_____ <i>Loo</i>	14' Inflatable	black	CF 3093 XS
_____ <i>Pez Martillo</i>	24' "Panga" skiff	white	CF 1611 XS
_____ Other,	Jonboat, etc.	Describe _____	

Number of people on board: _____

Names: _____

Area of operations. (be specific): _____

Launch/recovery site: _____ Lab truck used? Y, N _____

VHF radio frequencies monitored: 16 & _____ Cell phone #: _____

VHF call sign: WTV 3405

If overdue, contact: _____

<u>Local information & emergency numbers</u>			
Emergency	911		
USCG Bodega Bay	875-3596		Monitors VHF 16
Sonoma Co. Parks	875-3540	Doran Park	
	875-3535	Spud Pt.	Monitors VHF 16 & 68
	847-3245	Stillwater Cove	
CA State Parks	875-3483	Sonoma Coast Beaches	
	847-3286	Fort Ross	
	847-3221	Salt Point	