

**UNIVERSITY OF CALIFORNIA
SANTA BARBARA**

**SMALL BOAT OPERATIONS
MANUAL FOR ACADEMIC USE**

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6.10 Department of Ecology, Evolution and Marine Biology – Marine Lab	
*see document titled “EEMB Small Boat Regulations”	

**UNIVERSITY OF CALIFORNIA, SANTA BARBARA
SMALL BOAT OPERATIONS MANUAL**

**SECTION 1.00
OVERVIEW**

1.10 PURPOSE

The purpose of these boating standards is to ensure that all scientific boating is conducted in a manner that maximizes safety and is in compliance with UCSB policy 5455 (Small Boat Operations). This manual also sets forth standards for training and certification that will allow a working reciprocity between organizational members.

1.20 CONTENTS

The Small Boating Operations Manual establishes minimum guidelines for the operation of non-University-National Oceanographic Laboratory System (UNOLS) University of California, Santa Barbara (UCSB) scientific boating operations. Sections 1-5 describe these minimum guidelines and Section 6 should be completed by each Launch Master to describe the guidelines for the day-to-day operation of their boating program.

This manual includes:

1. Policies that pertain to all vessels operating for academic use under the auspices of the UCSB.
2. Guidelines for obtaining and maintaining boat operator authorization.
3. Administrative procedures.
4. Equipment standards.
5. Safety Standards

1.30 APPLICABILITY

For the purpose of this manual, "small boat" is any boat 40 feet or less in length and the provisions of this manual apply whenever UCSB personnel are using a boat under UCSB auspices for academic use, regardless of ownership of the boat.

Specific examples of boat operations under UCSB auspices include: persons engaged in research, earning academic credit, 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.

Boats used under UCSB auspices include:

1. Boats owned, supported, or administered by the UCSB, regardless of ownership.
2. Privately owned boats used by the UCSB for scientific or educational purposes.
3. Any other vessels used by the UCSB for scientific or educational purposes.
4. In case of joint operations, the lead institution will ensure that all applicable safety standards are being met.

**SECTION 2.00
RESPONSIBILITY**

2.10 SMALL BOAT OPERATIONS COMMITTEE (SBOC) MEMBERSHIP

A Small Boats Operations Committee, appointed by the Chancellor, will consist of a committee chair, PI's, Launch Masters and boat users that represents the UCSB scientific boating programs.

2.20 SMALL BOAT OPERATIONS COMMITTEE RESPONSIBILITY

1. Has autonomous and absolute authority over the boating program's operation.
2. Shall review and revise the small boat operations manual.

3. Shall assure compliance with the small boat operations manual.
4. Shall take disciplinary action for unsafe practices, and act as a board of appeal.
5. Shall recommend the issue, reissue, or the revocation of boating authorizations.
6. Shall establish and/or approve training programs through which the applicant can satisfy the requirements of the organizational member's boating safety manual.
7. Shall suspend boating operations that are considered to be unsafe or unwise.
8. Shall periodically review the Launch Masters and committee chair performance.
9. Shall sit as a board of investigation to inquire into the nature and cause of boating accidents or violations of the organizational member's boating safety manual.
10. May grant exceptions to this manual.

2.30 LAUNCH MASTER RESPONSIBILITIES

The Launch Master for each UCSB boating operation should have broad experience in boating and is responsible of the day-to-day operations of the particular boating program.

Duties and Responsibilities

1. Evaluate prospective boat operation as specified by the SBOC.
2. Have the authority to schedule and cancel boating trips.
3. Have the authority to suspend one's boating privileges, until review by the SBOC.
4. Oversee the inspection and maintenance of safety equipment
5. Maintain all itinerary forms on file for one month unless an incident occurs. In the case of an incident the form will be kept on file for 5 years.
6. Have the authority to authorize boat use beyond the geographical constraints.
7. All boats, vehicles and boat trailers (private or University owned) used under the auspices of UCSB must be approved by the Launch Master.
8. Shall suspend boating operations considered to be unsafe or unwise.
9. Report all accidents, incidents, boardings, citations, safety concerns, and issues to the SBOC.

2.40 DEPARTMENT, PRINCIPAL INVESTIGATORS AND ADMINISTRATIVE OFFICERS

Responsibilities of the departments, principal investigators and administrative officers operating small boats are the following:

1. Develop and maintain procedures for the safe operation of all small boats under their jurisdiction.
2. Establish procedures to assure proper qualification of small boat operators as described in section 3.10 of this manual.
3. Ensure compliance with all departmental procedures and procedures in this manual for small boat operators.
4. Provide secure storage for all small boats sufficient to prevent their unauthorized use.
5. Forward all accident reports to the Small Boats Operations Committee.

2.50 BOAT OPERATOR

1. Only authorized UCSB boat operators may operate small boats under UCSB auspices, whether or not the boat is owned by the UCSB. Exceptions may be granted by the Small Boat Operation Committee for vessels run by non-UCSB owner/operators.
2. In US waters non-UCSB owner/operators must comply with USCG, state, and local regulations covering chartered vessels. In foreign waters, the responsible UCSB person shall ensure the vessel meets the equipment requirements of this manual.
3. 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:
 - a. Safety of the vessel and all persons on board.
 - b. Operation of the vessel in compliance with federal, state, and local regulations and this manual.
 - c. Safe transport of the vessel to and from the launch site, if applicable
 - d. The safe operation of all equipment.
 - e. Ensuring that all required operational and safety equipment is on board and that crew and passengers know the location and how to operate safety/survival equipment.
 - f. Report all accidents, incidents, boardings, citations, safety concerns, and issues to the Launch master.
4. Failure to comply with provisions of the Small Boat Operations 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, damage to the vessel, or major environmental damage.
5. The operator or person in charge of a vessel is obligated by law to provide emergency assistance that can be safely provided to any individual in danger at sea regardless of affiliation. The operator or person in charge is subject to a fine and/or imprisonment for failure to do so.

SECTION 3.00 ADMINISTRATIVE PROCEDURES AND TRAINING REQUIREMENTS

3.10 AUTHORIZATION OF BOAT OPERATORS

An authorized boat operator should complete the following:

1. Boating safety course from the California Boating and Safety Dept., Coast Guard Auxiliary, Power Squadron or approved equivalent: <http://ehs.ucsb.edu/units/diving/dsp/html/sbc.htm>.
2. Provide documentation of, and/or acquire, practical experience in operating a boat.
3. Demonstrate to the Launch Master proficiency in the safe operation of the proposed type of boat:
 - a. Prepare the boat for use
 - b. Safely drive and back a vehicle, which is trailering a boat if trailering is required
 - c. Launch and retrieve the boat, operate the boat effectively in local conditions (in close quarters, choppy seas, kelp and other conditions determined by the Launch Master).
 - d. Proficient use of the support equipment: compass, radio, electronic navigational, emergency gear and other support equipment.
 - e. Anchoring the boat

- f. Perform other minor safety-related maintenance on the type of vessel that is to be used.
 - g. Demonstrate how to tow another boat. (If required)
 - h. Demonstrate proficiency in the operation of any specialty equipment and procedures specific to the boat.
 - i. Other items determined by the Launch Master.
4. Have current training in CPR, First Aid along with Oxygen Administration when diving is conducted.
 5. Conduct a minimum number of trips determined by the Launch Master and Small Boat Operations Committee where he/she is the primary operator under direct supervision of an approved boat operator.

3.20 MAINTAINING AUTHORIZATION

The UCSB Small Boat Operations Committee shall set standards for maintaining authorization. At a minimum, operators shall be re-authorized by the Launch Master every 5 years.

3.30 REVOCATION OF AUTHORIZATION

A boat operators' authorization may be revoked by the Launch Master or SBOC for any action deemed unsafe or unlawful or for not meeting the procedural requirements of the UCSB outlined in this manual.

3.40 RE-AUTHORIZATION

If a boat operator's authorization is revoked, they may be re-qualified after the operator complies with such conditions as the SBOC may impose. The operator shall be given the opportunity to present his/her case to the SBOC before conditions for re-authorization are stipulated.

3.50 WAIVER OF REQUIREMENTS

The SBOC may grant a waiver for specific requirements for a UCSB boating operation.

SECTION 4 ADMINISTRATIVE PROCEDURES AND RECORD KEEPING

4.10 FLOAT PLAN

All boat operators conducting boat operations under the auspices of the UCSB shall file a float plan with a responsible party (shore contact person) prior to departure. The float plan shall include the passenger manifest, destination and time of return, shore contact, equipment check and the latest weather forecast for the area(s) to be visited.

4.20 MAINTENANCE OF RECORDS

1. A file of usage for all boats, including a log of scheduled and unscheduled maintenance for each boat and boat trailer shall be maintained.
2. Records shall be maintained for a period deemed appropriate by the Launch Master.

4.30 ACCIDENT AND INCIDENT REPORTING

1. All accidents must be reported to the Launch Master within 24 hours of the incident.
2. Any accident causing loss of the vessel, damage over \$2,000, requiring medical treatment beyond first aid, or loss of life must be reported to the U.S. Coast Guard.

3. The SBOC shall investigate and document the accident as described in 2 above and related personal injury and/or property damage and prepare a report.
4. Accident reports shall be held for 5 years.

SECTION 5.00 OPERATIONAL PROCEDURES

- All boats and equipment used by UCSB authorized operators in US waters, regardless of ownership, will, at a minimum, conform to U.S. Coast Guard, state, and local requirements and to the standards set forth in this manual.
- All boats operated outside of U.S. Coast Guard jurisdiction shall at a minimum comply with U.S. Coast Guard regulations in addition to any applicable local requirements and to the standards set forth in this manual. Info: <http://www.uscgboating.org/index.aspx> & <http://www.dbw.ca.gov/>

5.10 EQUIPMENT

1. The operator shall be proficient with the operation of the equipment and shall inspect all emergency equipment prior to departure.
2. The operator and/or crewmember shall notify the Launch Master of any malfunctioning equipment.
3. The nature of specific operations may require vessels and boating equipment to meet higher standards as determined by the Launch Master and/or the SBOC.
4. Lifejackets - The type and number of lifejackets on board shall meet US Coast Guard Standards required for the type of boat being used and be easily accessible. Non-swimmers must wear a life jacket on board and all personnel must wear a lifejackets when conditions necessitate.

5.20 STABILITY

The operator shall observe the posted maximum boat load limits set by the Launch Master and no person may operate a vessel loaded in a way that would jeopardize the safety of the operator or crew.

5.30 COMMUNICATIONS

The Launch Master shall set communication guidelines. At a minimum, the vessel is required to have one effective means of communication for assistance (VHF radio, cell phone, satellite phone, etc).

5.40 WEATHER

The Launch Master shall establish weather guidelines for the boating operations.

5.50 SPECIAL OPERATIONS

The Launch Master shall establish guidelines for special operations such as; foreign waters, SCUBA diving, trawls, live boating, night operations, equipment deployment, etc.

5.60 SAFETY CHECKS

Prior to departure the boat operator shall:

1. Perform a functional inspection of the boat, trailer and equipment, including communications.

2. Assess all environmental conditions – weather, water conditions, etc.
3. Complete a float plan (Section 4.10) and provide the shore contact w/ the necessary information.
4. Have crew complete any necessary forms: work comp., waivers.
5. Give a briefing to all new crew on board including, at a minimum, emergency procedures, location of PFDs, fire extinguishers, man overboard procedures, and methods of seeking assistance with a VHF radio, satellite device or other predetermined communication equipment.

After Returning:

1. Upon return the operator will contact the shore contact as agreed on before departure.
2. Notify the Launch Master of any problems with the boat or equipment that occurred during the cruise.

Shore Contact Duties:

1. Record vessel float plan before departure.
2. Attempt to contact vessel after ETA if nothing heard. Contact US Coast Guard or other emergency agency if nothing is heard from the vessel after one hour past their ETA determined by the Launch Master.

**SECTION 6.00
ADDITIONAL PROCEDURES
FOR SPECIFIC UCSB BOATING PROGRAMS**

Below are additional procedures to Section 1-5 determined for the various UCSB Boating programs. Forms, waivers and the boating programs manuals of each specific UCSB scientific boating program are available online: <http://ehs.ucsb.edu/units/diving/dsp/html/sbc.htm>

- 6.10 Department of Ecology, Evolution and Marine Biology – Marine Lab**
*see document titled “EEMB Small Boat Regulations”

UCSB SMALL BOAT OPERATIONS MANUAL
Department of
Ecology, Evolution and Marine Biology

The following are additional policies and procedures to the ones outlined in sections 1-5 of the UCSB Small Boating Operation Manual. The information, including all forms, waivers, and appendices can be found online.

I. GOVERNANCE

A. Launch Master Responsibilities:

The Marine Collector/Naturalist will serve as Launch Master and be in control of day-to-day operations originating from the Marine Laboratory.

B. Remote Location Responsibilities:

Boat operations, under the auspices of the EEMB Department originating away from the UCSB Marine Laboratory, shall be the responsibility of a UC employee approved by the Launch Master. This employee shall be on site at the remote location and abide by the regulations set forth in this document.

II. OPERATOR QUALIFICATIONS FOR POWER VESSELS

- A. The Operator will have the minimum qualifications for coastal use (i.e., within 10 miles of the coast) outlined in section 3.10 as well as the qualifications set forth by the Launch Master outlined in Appendix 1.
- B. The operator of any trips into the open waters (beyond 10 miles of the coast) of the Santa Barbara Channel should have additional qualifications as outlined in Appendix 1.
- C. To maintain active status, operators will have captained a boat within the previous 12 month period, attend a yearly refresher seminar given by the Launch Master and provide proof of current CPR certification and a valid CA driver's license.

III. OPERATOR RESPONSIBILITIES FOR POWER VESSELS

The operator is responsible for the equipment and the safety of the persons on board and shall comply with all rules and regulations set forth by the US Coast Guard and this manual.

- A. Before the trip, the operator will complete the UCSB online float plan or equivalent hardcopy (See Appendix 16). Included in this form are a passenger manifest, destination and time of return, equipment check, and the latest NOAA NWS weather forecast for the area to be visited. This itinerary will be communicated to and easily accessed by the responsible shore contact for the cruise.
- B. The operator will observe the following geographical constraints during boat use.
 - 1. Coastal Marine use (within 10 miles of the coast).
 - a. All powerboats are limited to launching from Santa Barbara, Goleta, Ventura or Channel Islands harbor. Operators shall be restricted to waters south of Pt. Conception and north of Point Mugu.
 - b. The Launch Master may grant permission for use of boats beyond geographical limits. Those wishing to go beyond these limits require a written

request to and permission from the Launch Master. Operators shall demonstrate the need for such use and knowledge of the coastline and problems that may be encountered in that area. Approval may be granted only after completing the Geographical Constraints Waiver (See Appendix 19).

2. Offshore Marine use (beyond 10 miles from the mainland coast).
 - a. Island approved operators will have access to the coastal zones outlined above as well as the front and back sides of Anacapa and Santa Cruz islands and the front (North) side of Santa Rosa and San Miguel islands.
 - b. The Launch Master may grant permission for use of boats beyond geographical limits. Those wishing to go beyond these limits require a written request to and permission from the Launch Master. Operators shall demonstrate the need for such use and knowledge of the coastline and problems that may be encountered in that area. Approval may be granted only after completing the Geographical Constraints Waiver (Appendix 19).
 3. Requests to temporarily relocate a boat from the university boatyard must be approved by the Launch Master one month in advance. Relocations might not be approved between May 1 - Oct. 31. (See Appendix 3)
 4. Fresh water use: There are no geographical limits to fresh water use as long as safety is not compromised. All departmental boating regulations as well as CA Dept. of Boating/Waterways and CDFW regulations must be followed.
- C. The Operator will comply with the following rules regarding weather.
1. Sources of information.
 - a. National Weather Service
 - b. U.S. Coast Guard or Harbormaster.
 2. When winds greater than 15 knots and/or a "chance" of thunderstorms are predicted for the area of operation, extra caution in the form of frequent re-evaluation of trip conditions shall be exercised. Trips (other than those in protected bays) shall be canceled due to weather if:
 - a. winds greater than 20 knots and wind chop greater than 3' are predicted for the area to be visited.
Or
 - b. small craft advisories are posted for the area to be visited.
Or
 - c. thunderstorms are predicted for the area of operation.
- * Primary source of information will be NWS or Coast Guard broadcasts.*
3. The operator will return to port if thunderstorms or frequent whitecaps and wind chops greater than 3' are encountered during a passage. If such conditions develop while on station or if conditions rapidly deteriorate, work will cease and the operator will return to port. If the return trip is unsafe, the operator should seek the closest safe anchorage.
 4. In the event of fog with visibility less than ¼ mile, trips scheduled on any boat with inoperable radar will be cancelled or delayed until the visibility increases to ¼ mile or greater. If such conditions develop while on station, running lights will be displayed per coast guard regulations and the operator will seek the closest safe anchorage until able to make safe passage back to port.

- D. A minimum of two people will be on board for all trips. The operator shall observe the posted maximum boat load limits set by the Launch Master. (See Appendix 6).
- E. The operator will adhere to the following communications procedures for all operations.
 - 1. Before departing, the operator will check to see that all electronic communication equipment (VHF radio/personal cell phone) is fully operational. The trip will be aborted if there is no functional device on board. Offshore trips (including the islands) will be canceled if there is no functional VHF radio on board.
 - 2. If the boat is going to be more than 2 hours past the original ETA, the operator must notify the shore contact person and advise them of a new ETA. After 2 hours from the original ETA, the designated shore contact person must attempt to contact the vessel. If the designated shore contact does not hear from the vessel within 2 hours of the original ETA, the Launch Master will be notified. If unable to contact the Launch Master the Coast Guard should be notified. The responsibilities of the shore contact person are listed in section 5.6-3 of this manual. (See Appendix 2)
 - 3. If the trip is delayed during transit or plans are changed, notification will be given to the shore contact person immediately.
- F. It is the boat operator's responsibility to notify a shore-contact person of launch plans, return time and any changes.
- G. **All boat personnel are advised to wear PFDs at all times. PFDs must be worn by all personnel when:**
 - 1. Conditions necessitate as determined by the operator.
 - 2. Operating a boat within 50 meters of the surf zone.
 - 3. Transferring from one vessel to another.
 - 4. Non-swimmers must wear a PFD at all times.
- H. The Operator will comply with the following boating restrictions.
 - 1. Boats cannot be used for the purpose of taxiing people to and from field sites requiring pickup on an alternate day.
 - 2. Recreational activities (e.g., surfing, water skiing, etc.) from departmental boats are prohibited at all times. Violators will be suspended from all boating activities until a review by the UCSB Small Boat Operations Committee.
 - 3. Use of private boats for UCSB research requires filing a signed Release and Indemnity Agreement (See Appendix 20).
 - 4. Use of private vehicles to tow an EEMB departmental boat requires prior written permission by the Marine Mechanician (See Appendix 17) – any such vehicle must meet the standards outlined in Appendix 6.
- I. In the event of an accident it is the operator's responsibility to notify the Launch Master and BSO as soon as possible, complete the Boating Accident Form (See Appendix 12) and submit it within 24 hours.

J. In order to be a certified operator s/he must complete the following forms.

1. (Appendix 21) – Memorandum of Understanding and Agreement
2. (Appendix 22) - Elective/Voluntary Activity Waiver (when it applies)
3. (Appendix 20) - Release & Indemnity Agreement (when it applies)

IV. SAFETY GEAR, SPARE PARTS AND TOOLS

- A. All power vessels owned and operated by the EEMB department will carry mandatory safety equipment required by the USCG as well as additional safety equipment required by the Launch Master.(See Appendix 5)
- B. In addition, each EEMB power vessel shall carry a tool kit containing tools and spare parts as outlined in Appendix 5.

V. MAINTENANCE

- A. The Marine Laboratory Marine Mechanician will perform and log maintenance of the following on all boats (See Appendix 18):
 1. Main engine:
 - a. Start
 - b. Gear shift and throttle operation
 - c. Steering
 - d. Overheating signal circuit
 - e. Lower unit oil
 - f. Propeller and keel
 - g. Battery charge, connections, and electrolyte level
 - h. Clock and tachometer
 2. Inspect hulls for damage
 3. Running lights
 4. Radio operation, antenna mount, electrical connections
 5. Trailer lights, tires, brakes, springs, rollers, and safety chains
 6. Anchors, anchor chains, lines, and connections.
 7. Life jackets and life ring.
 8. Sea anchor and line.
 9. Fire extinguisher.
 10. Inspect the safety and tool kits.

VI. OPERATOR QUALIFICATIONS FOR NON-POWER VESSELS INCLUDING BUT NOT LIMITED TO KAYAKS, ROW BOATS, ETC.

- A. The operator will have the minimal qualifications for coastal use (i.e., within 1/4 mile of the coast) as outlined in Section 3.10 of this document.

VII. OPERATOR RESPONSIBILITIES FOR NON-POWER VESSELS INCLUDING BUT NOT LIMITED TO KAYAKS, ROW BOATS, ETC.

The operator is responsible for the equipment and the safety of the persons on board and shall comply with all applicable rules and regulations.

- A. Before the trip, the operator will complete a float plan (Appendix 16). Included in this plan are a passenger manifest, destination and time of return, equipment check, and the latest NOAA NWS or Coast Guard weather forecast for the area to be visited.
- B. Life jackets are to be worn at all times.
- C. The operator will observe the following geographical constraints for non-power boat use.
 - 1. Non-power boats shall not be used more than 1/4 mile from the nearest shoreline (both marine and freshwater) without prior approval of the Launch Master.
 - 2. The Launch Master may grant permission for use of boats beyond geographical limits. Operators shall demonstrate the need for such use and knowledge of the coastline and problems which may be encountered in that area.
- D. The non-powered vessel will carry all the USCG required safety equipment. (See Appendix 5)
- E. In the event of an accident it is the operator's responsibility to notify the Launch Master and BSO as soon as possible and complete the Boating Accident Form, (See Appendix 12) and submit it within 24 hours.
- F. Recreational Activities (e.g., surfing, fishing) from departmental boats are prohibited at all times. Violators will be subject to penalty by the Launch Master.
- G. In order to become a certified operator (defined in Section IV), s/he must complete the following forms.
 - 1. (Appendix 21) – Memorandum of Understanding and Agreement
 - 2. (Appendix 22) – Elective/Voluntary Activity Waiver (when it applies)
 - 3. (Appendix 20) – Release & Indemnity Agreement (when it applies)

VIII. SAFETY GEAR, SPARE PARTS AND TOOLS

- A. All non-power vessels owned and operated by the EEMB department of the UCSB will carry mandatory safety equipment required by the USCG as well as additional safety equipment required by the Launch Master.(See Appendix 5)

IX. APPENDICES

Appendix 1: Certification Requirements

Appendix 2: Boating Policy Terms

Appendix 3: Scheduling Policies and Procedures

Appendix 4: Pre-Departure Briefing Guide

Appendix 5: Safety Equipment Guide

Appendix 6: Boat Load Limits and Vehicle Standards

Appendix 7: Fueling Procedures

Appendix 8: Launching Procedures

Appendix 9: Operating Procedures Power Vessels

Appendix 10: Boating Operations for Live Boating

Appendix 11: Kayaking Procedures

Appendix 12: Accident Reporting Form

Appendix 13: Emergency Management Procedures

Appendix 14: Fuel Pump Emergency Procedures

Appendix 15: Boat Project Approval Form

Appendix 16: Float Plan Form

Appendix 17: Boat, Trailer, Vehicle Inspection Form

Appendix 18: Maintenance Checklist

Appendix 19: Geographical Constraints Form

Appendix 20: Release & Indemnity Agreement Form

Appendix 21: Memorandum of Understanding and Agreement Form

Appendix 22: Volunteer Waiver Form

*Appendices in **BOLD** are not directly referenced in this manual but have been provided as additional guides and procedures.

Boating Certification Requirements

To Become Certified to Operate Departmental Boats:

UCSB affiliates may be approved to operate departmental boats after submitting the following to the Launch Master:

- 1) An email from the PI of the grant requesting that you become a UCSB EEMB small boat operator.
- 2) Confirmation from the campus diving or boating officer that you are current with the following certifications:
 - a. CPR
 - b. First Aid
 - c. Oxygen administration
- 3) PI name & Phone #
- 5) Project Title
- 6) EEMB four digit recharge # for the grant to be charged.
- 7) Your Name
 - a. Email
 - b. Lab phone #
 - c. Personal phone #
- 8) A photocopy of your USCG approved small boat safety class certification, CA DBW Boating License and your CA DMV driver's license.
- 9) Documentation showing that you have completed a minimum of 12 trips in an EEMB power vessel where you have been the primary operator (18 trips for "Island" checkout).

Once all the above have been completed you must demonstrate to the Launch Master that you are proficient in the necessary skills on a boat checkout.

Maintaining Certification

- 1) Operators must have captained a boat within the previous 12 months.
- 2) Boat operators must attend a yearly refresher seminar given by the EEMB Launch Master.
- 3) Operators must provide proof of current CPR certification and a current CA driver's license.

Boat Check Out Will Include the Following:

Name _____ **Date** _____ **Boat** _____

- ___ Demonstrate use of electronic boat reservation calendar.
- ___ Location and use of Fish 5 radio
- ___ Prepare boat for use (run engine, check gear).
 - ___ Sling preparation and inspection
 - ___ Knowledge of oxygen kit location.
 - ___ Knowledge of life jacket use.
 - ___ Knowledge of dive flag use.
 - ___ Knowledge of safety kits / vessel assist.
 - ___ Knowledge of current line.
 - ___ Knowledge of fire extinguisher.
 - ___ Knowledge of life ring.
 - ___ Knowledge of anchor.
- ___ Fueling procedure
- ___ Prepare trailer and vehicle for use.
- ___ Drive & back vehicle with trailer.
- ___ Launch & retrieve boat at hoist. (if applicable)
- ___ Launch & retrieve boat at launch ramp. (if applicable)
- ___ Demonstrated knowledge of navigation gear/fuses.
- ___ Demonstrate use of radio & cell phone.
- ___ Demonstrate basic boat operating procedures:
 - ___ Trim engine
 - ___ Trim tabs and bring boat up onto a plane
 - ___ Turning
 - ___ Object Avoidance
 - ___ Man Over Board
 - ___ Picking up diver
 - ___ Anchoring
 - ___ Use of boat in kelp
 - ___ Backing up
 - ___ Towing
 - ___ Docking
- ___ Island Checkout:
 - ___ Ability to navigate to and from Island(s)
 - ___ Familiarity with the Island coastlines
 - ___ Can find safe anchorage
 - ___ Knowledge of UCSB field station
 - ___ Knowledge of which weather conditions warrant a canceled/aborted trip
 - ___ Ability to secure/handle boat in rough seas
- ___ Review Basic Engine Parts and Prop Change
- ___ Demonstrate Knots (bowline, cleat hitch, sheet bend, square knot).
- ___ Demonstrate boat cleanup and shutdown procedure.
- ___ Review UCSB boating regulations, emergency procedures, and accident reporting

Definition of Boating Policy Terms & Conditions

Prior to launching the "Float Plan" is to be completed online or equivalent hardcopy (see Appendix 16) at the UCSB Marine Lab. The following is a clarification of some of the responsibilities assumed by completing the form.

Specific Destinations and Times: It is important to state the various destinations and approximate times you expect to be there, when possible.

Estimated Time of Return: As stated in the SBO manual: "If you are going to be more than a 2 hours late you MUST notify your shore contact." If you can't reach them contact Fish 5 or the Launch Master.

Name & Phone # of Shore Contact: The shore contact is to be notified that they are the contact person and they are to be informed of their responsibilities before departure.

Shore contact responsibilities are as follows:

- 1). They are to have immediate access to all the information listed on the Float Plan.
- 2). They are to know the boat CF number, description of the boat; the phone number of the US Coast Guard for the area that the boat is operating in; and the phone number of the Launch Master (805-893-2873).
- 3). The shore contact is to be familiar with the procedure to be implemented in the event that a boat is overdue. If the boat is overdue by more than 2 hours the shore contact is to initiate contact in the following manner:
 - A). Via the VHF radio.
 - B). Via cell phone (if possible)
 - C). Check the boat yard. (The UCSB CSO's can help).
 - D). If no contact is made with the vessel within an additional 1 hour the shore contact is to report the vessel overdue to the Launch Master. If unable to contact the Launch Master the Coast Guard should be notified.

Operator: This person is responsible for the boat and crew and must be a UCSB EEMB Department approved boat operator. They are also responsible for the following:

- 1). That the Float Plan has been completed.
- 2). The shore contact has been notified and is aware of their responsibilities.
- 3). The shore contact is notified upon return.
- 4). That the Marine Mechanician is notified of any boat or trailer problems and that they are listed on the white board outside the shop door.
- 5). That a UCSB "Release & Indemnity Agreement Form" has been completed when necessary.
- 6). That a UCSB "Volunteer Waiver Form" has been completed when necessary.
- 7). That the boat has been cleaned and secured for the next user.

Any persons using the departmental boats outside the geographical boundaries as stated in the Small Boat Operations Manual must consult with the Launch Master and receive permission to do so. The request is to be made at least five working days prior to the intended date of use.

By signing below I acknowledge that I have read and agree to statements made in this document and the document "UCSB Small Boating Safety Manual." I understand that failure to comply with any of the statements will possibly result in loss of boating privileges.

Name: _____

Date: _____

Boat Scheduling Policies and Procedures

- UCSB research groups and courses have the highest priority. Non-UCSB groups can schedule boats on a “space available” basis (\leq 1 week in advance May – Oct).
- Boats cannot be taken outside of the geographical limits set forth by the Small Boat Operations Manual without prior written approval by the Launch Master.
 - Requests to relocate a boat to another region must be approved by the Launch Master \geq month in advance. Relocations might not be authorized between May 1 – Oct 31.
- Each boat will be down 1 weekday each month for maintenance at the Marine Mechanician’s discretion.
- Taking a boat reserved by another group without mutual consent will be penalized by the Launch Master.
- Scheduling of boat operations originating at UCSB is web-based.
 - Boats to be reserved or canceled via internet.
 - Users cannot alter reservations of others.
- Cancellations must be made **the day before** the scheduled date of use except for bad weather or other immediate, unforeseen events (E.G. Crew Illness).
 - Cancellations must be made using web-based scheduler, which will send an email notification to other potential boat users.
 - The group will be charged the boat day use fee if it fails to use the notification system properly.
- Limits on boat use from MAY 1 – OCTOBER 31 by UCSB research groups (\equiv All individuals conducting work under same UCSB award account & fund number).

- A UCSB research group can reserve boats in advance a maximum total of 45 boat days, of which a maximum of 15 boat days can be in any single month.
- Each UCSB research group has from January 1 to April 30 for early scheduling of boats for the May – October period.
- Boat reservations can be made by UCSB user groups 1 week in advance for unscheduled or released boat days during the May- October period.

Pre-Departure Briefing

General Information:

- Introduction of operator/crew + vessel name & CF #
- Mission & Objectives
- Destination & timeline (departure, eta site, depart site, eta return)
- Loading/stowing gear
- Using the radio, GPS & engine
- Expected weather/ocean conditions
- Any possible hazards
- Paperwork: waivers and work comp. forms if applicable

Roles of persons onboard:

- Lookout
- Trim & balance of vessel, moving about the vessel
- Requirements/actions specific to the vessel (off limit areas, etc)
- Tasks specific to the overall mission.

Boating laws and regulations:

- Location of pfd's & proper donning
- Location & deployment of throw ring, & life raft if available
- Location of fire extinguishers
- Location of first aid & oxygen
- Discharge of materials

What to do in case of emergencies:

- Chain of command
- MOB
- Fire
- Engine breakdown
- Abandoning the vessel
- Resources in the area
- Phone, radio communication

Answer any questions

Safety Equipment Guide

I. MANDATORY SAFETY EQUIPMENT FOR POWER VESSELS

In accordance with US Coast Guard regulations, every power vessel owned and operated by the EEMB department of the UCSB will be equipped with the following mandatory safety items:

- a. Life Jackets
 1. Boats less than 16ft: A U.S. Coast Guard-approved Type I, II, or III life jacket for each person on board.
 2. Boats 16ft or longer: The same requirements as above and 1 easy-to-reach Type IV device designed for throwing.
- b. Fire Extinguisher: (# and type of extinguisher determined by the boat size and type)
- c. A Sound Producing Device: air horn, whistle.
- d. A Visual Distress Signaling Device i.e. flares, mirror
- e. Running lights

II. ADDITIONAL SAFETY EQUIPMENT FOR POWER VESSELS

In addition, depending on the vessel size, location and activity, the vessels operated by the EEMB department may be required to be equipped with the following safety items.

- a. Oxygen Kit w/safety information card (when using SCUBA)
- b. Dive Flag (when using SCUBA)
- c. Safety Kit
- d. Current Line
- e. Life Ring and line
- f. Anchor
- g. Marine VHF Radio and AIS
- h. GPS
- i. Radar
- j. Compass
- k. Cell phone (if applicable)
- l. Sea anchor
- m. First aid kit
- n. Strobe light
- o. Radar reflector
- p. Tool Kit, including:
 1. Slip-joint pliers.
 2. Vice-grip pliers.
 3. 12" Crescent wrench.
 4. Philips Screwdriver.
 5. Regular screwdriver.
 6. Hull drain plug.
 7. Ignition safety lanyard.
 8. WD-40 or LPS 1.
 9. Fuses:
 - 3 ea – ATC 20
 - 2 ea – ATC 10
 - 2 ea – ATC 3
 - 2 ea – ATM 20
 - 3 ea – ATM 10
 10. Spare prop, washer, nut and cotter pin.

III. MANDATORY SAFETY EQUIPMENT FOR NON-POWER VESSELS

In accordance with US Coast Guard regulations, every non-power vessel owned and operated by the EEMB department of the UCSB will be equipped with the following mandatory safety items:

- a. Life Jackets (one for each person onboard)
- b. Sound Producing Device
- c. Visual Distress Signal

IV. ADDITIONAL SAFETY EQUIPMENT FOR NON-POWER VESSELS

In addition, all non-power vessels owned and operated by the EEMB department of the UCSB will be equipped with the following safety items:

- a. Dive Flag (when using SCUBA)
- b. Compass.
- c. Oars or paddles.
- d. First aid kit.
- e. Small sea anchor and line.
- f. Launch Master approved safety kit and tool kit.

SUMMARY OF FEDERAL EQUIPMENT REQUIREMENTS FOR EEMB BOATS

Federal Motorboat Requirements as of 2023.

Vessel Length (in feet)

Equipment	Regulation	<16	16<26	26<40	40<65
Certificate of Number (State Registration)	All undocumented vessels equipped with propulsion machinery must be state registered. Certificate of Number must be on board when the vessel is in use. Note that some states require all vessels to be registered.	X	X	X	X
State Numbering	(a) Plain block letters/numbers, not less than 3 inches in height, must be affixed on each side of the forward half of the vessel, in a contrasting color to the background, and read from left to right. (b) State validation sticker(s) must be affixed within 6 inches of the registration number. Note: check with your local boating agency for specific state requirements.	X	X	X	X
Personal Flotation Devices (PFD)	(a) One Type I, II, III, or V* wearable life jacket for each person on board. Must be U.S. Coast Guard-approved. *If using a Type V, it must be worn at all times and used for the activity specified on the label. (b) In addition, must carry one Type IV throwable device.	X	X	X	X
Visual Distress Signals (VDS)	(a) One electric distress light, or three combination day/night red flares. Note: only required to be carried on board when the vessel is operating between sunset and sunrise. (b) Three combination day/night red flares – hand-held, meteor, or parachute-type or one orange distress flag, or one electric distress light, or three hand-held or floating orange smoke signals and one electric distress light.	X	X	X	X
Fire Extinguishers	If your boat is less than 26' feet in length, uses an outboard engine, fuel is in a portable fuel tank, and there are no areas within the boat where fuel vapors can be trapped, the boat is not required to have a fire extinguisher. (a) One 5-B or One 10-B. Note: fixed system equals one 5-B or one 10-B. (b) Two 5-B, or two 10-B, or one 20-B. Note: fixed system equals one 5-B or one 10-B. (c) Three 5-B, or three 10-B, or one 20-B and one 5-B or one 10-B. Note: fixed system equals one 5-B or one 10-B. *B-I and B-II extinguishers are acceptable if boat model is 1953-2017, and extinguisher is <12 years old.	X	X	X	X
Engine Cut-Off Switch	Required to be worn anytime the motorboat is operating on plane or greater than displacement speed. Vessels whose main helms are inside an enclosed cabin are exempt.	X	X		
Sound Producing Devices	(a) A vessel of less than 39.4 feet (12 meters) must, at a minimum, have some means of making an efficient sound signal – i.e. handheld air horn or athletic whistle. A human voice/sound is not acceptable. (b) A vessel 39.4 feet (12 meters) or greater, must have a sound-signaling appliance capable of producing an efficient sound signal, audible for 1/2 mile, with a 4- to 6-second duration.	X	X	X	X
Navigational Lights	Required to be displayed from sunset to sunrise and in areas of restricted visibility.	X	X	X	X

Boat Load Limits

Fish 1:

- **Maximum load capacity = 2,000 lbs. of gear**(not including people)
 Safety Restrictions:
 - Total # of people allowed on board is 5.
 - Total # of SCUBA tanks is 22. All tanks must be secured in a tank rack.

Fish 2:

- **Maximum load capacity = 2,000 lbs. of gear**(not including people)
 Safety Restrictions:
 - Total # of people allowed on board is 5.
 - Total # of SCUBA tanks is 22. All tanks must be secured in a tank rack.

Fish 3:

- **Maximum load capacity is 2,000 lbs. of gear**(not including people)
 Safety Restrictions:
 - Total # of people allowed on board is 5.
 - Total # of SCUBA tanks is 22. All tanks must be secured in a tank rack.

RV Connell:

- **Maximum load capacity = 759 lbs. of gear**(not including people)
 Safety Restrictions:
 - Total # of people allowed on board is 6.
 - Total # of SCUBA tanks is 30. All tanks must be secured in a tank rack.

All other boats:

- Not to exceed the manufacturers recommended maximum load capacity and must be approved by the Launch Master.

Tanks\People	2 People	3 People	4 People	5 People	6 People
1 Tank	190 lbs	265 lbs	340 lbs	415 lbs	450 lbs
2 Tanks	230	305	380	455	490
3 Tanks	270	345	420	495	540
4 Tanks	310	385	460	535	580
5 Tanks	350	425	500	575	620
6 Tanks	390	465	540	615	660
7 Tanks	430	505	580	655	700
8 Tanks	470	545	620	695	740
9 Tanks	510	585	660	735	780
10 Tanks	550	625	700	775	820
11 Tanks	590	665	740	815	860
12 Tanks	630	705	780	855	900
13 Tanks	670	745	820	895	940
14 Tanks	710	785	860	935	980
15 Tanks	750	825	900	975	1020
16 Tanks	790	865	940 lbs	1015	1060
17 Tanks	830	905	980	1055	1100
18 Tanks	870	945	1020	1095	1140
19 Tanks	910	985	1060	1135	1180

(Does not include weight of people. Based on an average gear weight of 75 lbs./person and a tank weight of 40 lbs when full. Does not include extra sampling gear or miscellaneous equipment.)

**** Those operators who wish to vary the boat load limits must submit a written request for approval to the Launch Master.**

Tow Vehicle Standards

- 1) Gross combined vehicle weight rating (GCVWR) of vehicle not exceeded.
- 2) Gross trailer weight (GTW) for hitch class not exceeded. Class V and/or 10,000 lb rated hitch required to tow EEMB vessels.
- 3) Appropriate hitch ball (2 5/16" and 10,000 lb rating) attached to hitch.
- 4) Gross trailer weight rating (GTWR) of trailer not exceeded.
- 5) California Vehicle Codes for towing met (safety chains, brakes, lights, fenders, etc)
- 6). Approved by vessel's Launchmaster.

Small Boat Fueling Procedure

the same person should perform the entire fueling procedure

- 1) Check to make sure engine and all electronics are off. Close any open hatches or cabin doors
- 2) Use the fuel cap opener on the dipstick to remove the fuel cap slowly to prevent debris or water from falling into tank.
- 3) Check o-ring on fuel cap for defects, excess wear, and dirt. Clean, re-grease or replace if necessary.
- 4) Make sure that the boat is on a level plane, clean dipstick and slowly check current fuel level (dipsticks are boat specific).
- 5) Zero the counter on the fuel pump before fueling. When fueling, fill to whole numbers.
- 6) Fuel tank to desired level paying special attention to not overfill or fill too quickly causing splash back onto boat/into boyard.

*NEVER place dipstick, fuel cap, or other device under nozzle handle while filling.

*ONE person must always be in contact with the nozzle while fueling is in progress.

- 7) After fueling slowly double check fuel level using the dipstick to ensure an accurate fill.
- 8) Record the date, boat name, number of gallons fueled, and recharge number in the electronic fuel log (see QR code on fuel locker), and record remaining gas on whiteboard. Zero the counter.
- 9) Lock the fuel pump and locker after use.

Goleta Pier Launching Procedures

Launching procedure

- Get key to Goleta pier ramp/crane.
- Remove pier gate and secure lock.
- Drive out on pier slowly < 5mph, use caution.
- Position boat under crane boom.
- Unlock key box
- Turn on power to ramp (key is captured during operation).
- Using 2 button control panel, lower ramp to ~1m above water.
- Switch key and turn on power to crane (key is captured during operation)
- Check that power is energized to control buttons on the 6 button control panel
 - * If there is no power check “emergency shut off switch” located at the seaward side of the crane.*
- Unhook trailer from vehicle.
- Unhook boat bow strap and safety chain.
- Inspect and Install lifting sling on boat.
- Lower crane hook and position to attach to sling.
- Attach crane hook to pear link on sling making sure pear link is properly oriented.
- Confirm that antenna is down and all gear is stowed.
- Slowly lift boat from trailer to a height that the boat keel will clear the pier rail and trailer.
- Rotate the crane to the right or left until the boat is over the water clear of the pier rail. Keep the boat low and close to the pier for control.
- Slowly lower the boat until it is ~1m above the water.
- Bring the boat inward so that it rests up against the pier pilings next to the ramp.
- Have the boat operator and all passengers (minus crane operator) board the boat via the ramp.
- Move the boat out about 1m from the pier pilings.
- When the boat operator gives the “ok” lower the boat, lower at fast speed until the boat operator disengages the hook from the ring on the sling. The person manning the hook should maintain control of the hook until it is free of the boat.

Hoist Operator:

- Ensure hoist is level winding and raise the hook until it is high and out of the way.
- Turn off power by removing key and re-lock key box.
- Park vehicle in parking lot at base of pier.
- Lock pier gate.
- Move trailer if more boats are scheduled to launch.

Boat Operator:

- Raise ramp using in dash remote until the yellow line on the ramp aligns with the yellow lines painted on the pier pilings.

Retrieval procedure

- Get key.
- Install lifting sling on boat.
- Lower antennas.
- Check ramp to make sure nobody is present on the ramp and the yellow lines on ramp and pier pilings are still aligned.
- Lower ramp to ~1m above water.
- Drop off crane operator on ramp.
- Unlock key box.
- Turn on power to crane (key is captured during operation).
- Lower hook next to pier and ~1m above the water.
- When boat is in position move hook out to boat and keep in position until hook is attached to sling.
- When the person manning the hook gives the "ok" raise the boat at fast speed until it is clear off the water. (Ensure level wind).
- Bring the boat inward so that it is up against the pier pilings.
- Let the boat operator and passengers disembark via ramp.
- When the boat occupants are clear of the ramp, move the boat out 1m from pier pilings.
- Bring the boat up until the keel & engine just clear the pier rail. Ensure level wind.
- Rotate the crane until the boat is in position over the trailer.
- Lower the boat until it almost touches the trailer bunks.
- Attach the boat bow strap and secure the boat to the bow roller.
- Attach the bow safety chain.
- Lower the boat on to the trailer and remove the hook from the sling.
- Check to make sure the chines are not resting on the trailer runners.
- Raise the hook (ensure even wind) and bring hook inward to crane.
- Switch key and turn on power to ramp (key is captured during operation).
- Position ramp so that the yellow line on the ramp and pier are aligned.
- Turn off power by removing key and re-lock key box.
- Raise engine.
- Release tension on bow strap and re-secure hand tight.
- Replace pier gate and lock when leaving pier.

Santa Barbara Harbor Launching Guide

Launching Procedure

- Back boat onto launch ramp. Stop before boat hits the water.
- Unhook winch strap and safety chain from bow eye.
- Attach a rope to the boat for assistant to maintain control after launch.
- Back the boat into the water until the rear wheels of the vehicle touch the water line. Gently hit the brakes to bump the boat off the trailer.
- Pull the boat into the landing dock and secure to a cleat.
- Park the vehicle and trailer in a designated stall.

Retrieval Procedure

- Back vehicle and trailer onto the launch ramp.
- Have one person man the winch while the boat operator slowly drives the boat onto the trailer. Never position body between boat and trailer.
- Communicate with hand signals while positioning the boat onto the trailer with the bow eye positioned properly below the bow roller.
- Connect the winch strap and pull in the slack making sure to connect the safety chain before giving the boat operator the "ok".
- Once the bow is secured, gently ease off the throttle paying special attention not to jerk the boat backwards.
- Turn off and raise engine before pulling the boat out of the water.
- Before leaving to hit the road release the tension on the winch strap, lower the antenna, and put brace on engine.

Operating Procedures for Power Vessels

START UP PROCEDURE:

- Turn battery switch(s) to “on”.
- Turn on all instruments and check for function
- Complete online boat checkout
- Check fuel level
- Check fuel/water separator for presence of water, drain if necessary
- Lower engines
- Attach water hose and “ earmuffs” to engine intake and turn on water.
- Turn key to start engine(s) at idle
- Turn off engines and secure for transport

CRUISING PROCEDURE:

- 1) Do not exceed 5200 RPM
- 2) Optimal cruising speed is 5000 RPM
- 3) Make sure to check that the engine is “pissing”
- 4) If the boat is excessively loaded with weight or if you are towing an object do not run the boat at full throttle. Back the throttle off until the engine is running comfortable and not lugging. If you can't maintain a plane at 2500-3000 RPM then you will have to slow down. Keep in mind that one of the most long term damaging operations to the engine is full throttle under an excessive load.

SHUT DOWN PROCEDURE:

- Fuel boat until full
- Remove all personal items
- Attach hose to engine flush port and turn on fresh water to partial pressure
- Let the water circulate for about 3 - 5 min. Make sure hose is not kinked or collapsed during flushing procedure.
- Hose down boat top to bottom. Clean and dry all bilges & compartments.
- Hose down trailer especially the brakes.
- Complete online boat check-in
- Cover compass, GPS, and Radar
- Turn battery switch to off

Boating Operations for Live Boating Deployment and Recovery of Divers

Key Points:

- The boat operator is in charge of the safety of the boat and passengers and therefore determines when it is safe to deploy or recover divers.
- Always keep the engine in neutral and the prop away from the divers in the water.
- Avoid drifting down on divers
- The operator must be familiar with the Dive Accident Management Plan specific to the operation: Missing Diver, Injured Diver, Diver Recall.
- Live Boating must be approved as part of the divers dive plan.

Deployment

1. Approach dive site from down weather
2. Decreasing the speed of the boat to steerage speed when approaching the dive site.
3. Once on site, position the bow down weather to avoid drifting on the divers and fouling any equipment in the prop(s).
4. When the divers are ready to enter the water, shift the engine in neutral and turn the prop away from the side the divers will be entering.
 - a. Confirm the boat is in neutral
 - b. Call out "neutral" loudly as the signal for the divers to get into the water
5. Leave the engine in neutral until the divers and equipment are clear of the boat.

During Dive

1. Keep surface marker float, bubbles or divers within clear view, but at a safe distance throughout dive. Any surface markers should be determined and approved during the dive planning process.
2. The operator should keep the sun at their back and the boat down weather of the divers whenever possible.

Recovery

1. Avoid drifting down on divers by approaching the divers from down weather when possible.
2. Reduce speed early during approach and the speed of the boat should be at steerage speed when the divers are about 2 boat lengths away.
3. Shift the boat into neutral when the bow of the boat is within about 20ft of the divers.
 - a. Confirm the boat is in neutral
 - b. Call out "neutral" loudly.
4. Make final steerage adjustments using the wheel.
 - a. Once the divers are along side, turn the wheel so the prop is away from the divers.
 - b. Leave engine in neutral until divers are aboard.

UC Santa Barbara Kayaking Guide

All kayaking operations conducted under the auspices of the EEMB department of the UCSB are required to follow the rules and regulations stated in the UCSB Small Boating Safety Manual. Kayak operators will be required to meet the qualifications set forth in section 3.10 of the manual as well as sections 6-8 of this document.

Pre-Departure:

- 1) Complete the float plan form (Appendix 16) to be filed with your shore contact.
- 2) Make sure to check local conditions and hazards for the chosen launch site.
- 3) Check that you have all necessary safety gear as outlined in Appendix 5.
- 4) PFD's are to be worn at all times while onboard the kayak.

Surf Launching:

- 1) Study the surf and pick a moment to launch that coincides with the end of a large set.
- 2) Enter the kayak from the upwind side.
- 3) Board the kayak and paddle quickly at the oncoming waves.
- 4) If necessary, go into a "tuck position" to pierce oncoming waves or continue to paddle through the wave to maintain momentum.
- 5) Make sure to stay perpendicular to the waves and maintain speed to avoid rolling the kayak.
- 6) Avoid "Rip Tides" which can be identified by a discolored plume of water extending from the beach out beyond the surf line.

Re-Entry:

- 1) Position yourself so your head is near the cockpit area of the kayak and you are facing it. Let your feet float to the surface of the water by floating on your stomach.
- 2) Reach across the boat to the far edge and swim up and onto the kayak, so your bellybutton is across the centerline.
- 3) Next, roll over onto your backside which should end up in the seat. Sit up and swing your feet into the foot wells.

Surf Landing:

- 1) Study the surf and determine if it is dumping, spilling, or surging. If the waves lose energy as they hit the beach they are surging and pose no threat to your landing. If the waves are dumping on the beach you will hear a loud "boom" with each wave. Avoid landing through these waves. If the waves are spilling with a nice, gradual breaking crest you should be able to surf them in.
- 2) Pick a calm moment to paddle in. Try to stay behind a wave following it as closely as possible.
- 3) If a wave catches you, attempt to "surf" it in using your paddle as a rudder to maintain control. Lean towards the wave to raise the down wave side of the kayak and avoid rolling.
- 4) If you loose your angle and find yourself broaching the wave, you can surf the wave sideways by leaning into it fairly hard and bracing on the wave with your paddle. You may be able to avoid obstacles by paddling forward or backward while on/in the wave.
- 5) If you end up rolling make sure to tuck forward to prevent yourself from hitting underwater objects. Upon surfacing, hold onto the kayak for floatation and ride it into shore.
- 6) Exit the kayak on the ocean side. Quickly grab the kayak and drag it up onto shore out of the reach of the oncoming waves.

Return:

- 1) Close the float plan with your shore contact.
- 2) Clean the kayak and all gear with fresh water.

Accident Reporting Form

This form should be submitted to the Launch Master within **24 hrs.** of an accident

Date: _____ Time: _____

Name of person completing this form: _____

Phone #: _____

Signature: _____

Location of accident: _____

Weather conditions: _____

Name of boat: _____ CF#: _____

Point of entry: _____

Name of project: _____

Captain of vessel: _____

Phone #: _____

Names of crew: _____

Names & Phones # of witnesses other than UCSB personnel:

Was anyone injured? _____ Describe: _____

Was there any property damage? _____ Describe: _____

Please briefly describe the events of the incident on the back of this page

BOATING EMERGENCY MANAGEMENT PROCEDURES

Introduction

Most boating incidents take place through the culmination of several factors leading up to a single point when unsafe situations combine and pass a critical threshold resulting in an emergency situation. Identifying these factors and correcting them immediately is the best course of action.

General Procedures (Personnel Injury)

The nature and severity of personnel injury shall be the determining factor for the mode and method of patient transport.

Make contact with victim, if safe, rescue as required.

1. Establish ABC's. (Airway, Breathing, Circulation) Then apply first aid as required.
2. Determine severity and select the mode of transport. (Self transport, USCG, or EMS)
3. As applicable, contact the pre-designated land base, USCG channel 16 VHF, or EMS 911. Or local equivalent
4. Coordinate with EMS for patient transfer site and ETA.
5. Notify the Launch Master.
6. Complete the Accident Forms as required.

General Procedures (Non-urgent Disabled or Damaged Vessel)

For non-emergency related damage or disabling situations it is the responsibility of the operator to suspend the mission and assess all conditions then take appropriate action. The operator must communicate the situation to another vessel or land-based point of contact. A communication schedule shall be established to monitor the situation until safe anchorage is obtained.

1. Apply measures to minimize or correct the situation and relay the following info:
 - Location
 - Nature of problem
 - Type of assistance needed
 - Number of persons onboard
 - Establish a communication schedule based on severity.
2. Arrange USCG assistance if another assistance provider (such as Vessel Assist) is not available. Hail USCG on VHF Channel 16 and follow their directions.
 - Request notification of the land base that is holding your float plan.
3. Notify the Launch Master.
4. Complete the Accident Form if required.

Emergency Procedures (Collision, Fire, Flooding, Grounding, Crew Overboard)

Severe situations that can lead to the loss of life and property are collision, fire, flooding, grounding, capsizing and crew over board. Each of these situations requires the operator to immediately initiate measures to correct the situation. Additionally, the USCG and/or another designated agency shall be notified to facilitate rescue and/or assistance.

1. Initiate control measures to prevent/minimize loss of life and the vessel: put on life-vest and wetsuits if available.
2. Contact USCG Channel 16 VHF
 - MAYDAY, MAYDAY, MAYDAY!
 - Location (Speak slowly and repeat position)
 - Nature of distress
 - Vessel name, ID number & description
 - Number of people on board
3. Request notification of the Launch Master (805)893-2873 as soon as possible.

UCSB Diving & Boating Safety Information

Diving & Boating Safety Phones: (805) 451-5099 / (805) 451-9067

Contacts

UCSB Contacts

Eric Hessell DSO: (805) 451-5099 / (805) 455-6772

Carly Haack BSO: (805) 451-9067

Christoph Pierre: (805) 452-0443 / 893-2873

Mickey O'Connell: (805) 453-6826 / (805) 893-7181

Christian Orsini: (707) 479-3386

Clint Nelson: (805) 717-4794

UCSB Police (24/7): (805) 893-3446

EH&S emergency contact (24/7): (805) 893-3194

UCSB Work Comp. Claim Reporting

for medical treatment: (805) 893-4440

for questions: (805) 893-2029

UC Transportation Emerg. Roadside Service:

m-f: (805) 893-3692 / after-hours: (800) 600-6065

UC Auto, Property & General Liability Incidents:

(805) 893-5837

Other

Santa Barbara Harbor Patrol (805) 564-5530

Vessel Assist: Card # in Safety Kit on boat

(805) 644-2762

National Response Center *For oil and hazardous materials spill* (800) 424-8802

Medical

Emergency 911

Santa Barbara Sheriff (805) 683-2724

Goleta Wound Management: (805) 696-7920

351 S. Patterson Ave, Goleta

Southern Calif. Wound Center: (805) 494-1222

2166 North Moorpark Rd., Thousand Oaks

Occupational Medicine Center: (805) 898-3311

Sansum- 101 S. Patterson Ave, Santa Barbara

Goleta Valley Hospital: (805) 967-3411

351 S. Patterson Ave, Goleta

Cottage Hospital: (805) 682-7111

400 W Pueblo Street. ER (805) 569-7210

Dr. Millington (hyperbaric physician):

(805) 844-8664

UCLA Chamber: m-f: (310) 794-1031

after-hours: (310) 825-6301

Catalina, USC Hyperbaric Chamber

Emergency-only, 24/7: (310) 510-1053

Boat Description

Fish 1 - CF 0007 XD; red hull; black bottom; 22 ft Anderson w/ cabin

Fish 2 - CF 8925 XS; white hull; black bottom; 22 ft Anderson w/ cabin

Fish 3 - CF 8924 XS; blue hull; black bottom; 22 ft Anderson w/ cabin

R/V Connell - CF 3530 XS; grey hull, black bottom; 26 ft Anderson w/ cabin & twin engines

Kelpfish - CF 8972 XS; green hull; 22 ft Radon w/ grey cabin

R/V Resonance - CF 3589 XS; blue hull; 22 ft Anderson w/ blue cabin

Procedures

- 1. Rescue victim and/or position so the proper procedures may be initiated.**
- 2. Establish (A)irway, (B)reathing and (C)irculation as required.**
- 3. Administer 100% oxygen, if appropriate or suspected DCI.**
- 4. Activate the local EMS for transport to the nearest appropriate medical facility.**
- 5. Insurance/ Chamber/ Hospital Info:**
 - If you are a UCSB employee (i.e. on payroll), your work comp insurance is "Sedgwick CMS".
 - If you are not a UCSB employee (i.e. student/intern), then provide your own medical insurance card.
- 6. Contact if further evaluation or possible evacuation is necessary:**
 - U.S. Coast Guard Rescue Coordination Center: (510) 437-3701 or Ch. 16
 - Divers Alert Network: Emergency (919) 684-9111 / Non-Emergency (919) 684-2948
 - Out of state/country Travel Insurance: in united states: (800) 527-0218
 - outside united states: (410) 453-6300
- 7. Contact Diving & Boating Safety Officer and Emergency Contact Person**
 - Diving & Boating Safety Phone: (805) 451-5099 / (805) 451-9067
- 8. Within 24hrs submit an Incident Report Form:**

<https://www.ehs.ucsb.edu/programs-services/workers-compensation>

Diving First Aid

Diving & Boating Safety Phones: (805) 451-5099 / (805) 451-9067

CPR

- **Assess the scene**
- **Check responsiveness: “Are you okay?”**
- **Alert EMS: Call 911**
- **Control any severe bleeding with direct pressure**

A-B-C sequence is recommended for potential drowning scenarios

C-A-B or **Compression-Only CPR** are recommended for non-drowning scenarios

1. AIRWAY:

Head tilt, chin lift

2. BREATHING:

Quickly look in the mouth for airway obstruction. Give 2 normal breaths until the chest rises. Clear airway if necessary.

3. COMPRESSION:

Look, listen, feel (5-10 seconds). If the victim is not breathing, provide 30 compressions, and then 2 breaths.

Continue to repeat until there are signs of movement/ EMS arrives.

4. AED:

Deliver 1 shock as prompted by the AED. Immediately follow with CPR.

CPR: 30 Compressions/ 2 Breaths
(100-120 compressions per minute/
beat of Stayin’ Alive)

DIVING ACCIDENT MANAGEMENT

1. Rescue victim and perform primary assessment
2. Alert local EMS as detailed in dive plan
3. CPR and/or administer First Aid including 100% oxygen
4. Secure victim’s dive computer and scuba equipment
5. Contact Diving & Boating Safety phone
6. Submit accident report

Phone Numbers

UCSB Diving & Boating Safety Phone:

(805) 451-5099/ (805) 451-9067

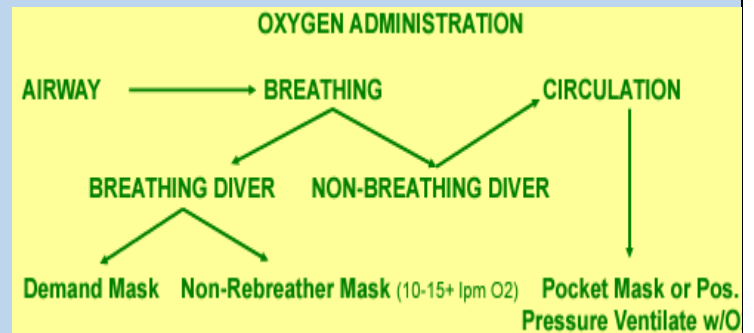
DAN Emergency Hotline: (919) 684-9111

Non-Emergency/ Info-Only: (919) 684-2948

UC Travel Assistance Program (out-of-state/ country)

(800) 527-0218 (inside US)

(410) 453-6300 (outside US)



FIELD NEURO EXAM

Perform if you suspect patient is experiencing DCI symptoms.

1. **Orientation:** name, location, day/month/year, and recent activity?
2. **Eyes:** number of fingers held up, eye movement, peripheral vision, and pupil size
3. **Face:** sensation – check while patient’s eyes are closed, smile, clench jaw, clear and correct speech
4. **Hearing:** hearing equal on both sides, and normal for the diver
5. **Swallow:** watch the Adam’s apple
6. **Shoulders:** shrug resistance
7. **Arms and Hands:** sensation, grip strength, push strength/ resistance
8. **Legs:** balance check, leg strength, and resistance
9. **Additional Things to Note**

Repeat Assessment as Directed By EMS

FUEL PUMP EMERGENCY PROCEDURES

In Case of Spill:

- Shut off pump (use emergency shutoff switch if necessary)
- Put emergency drain cover over boatyard drain
- Use spill kit (in right fuel locker) to isolate fuel and prevent it from entering the drain
- Clean up spill and isolate contaminated materials
- Contact EH&S (805) 893-3194 for disposal

In Case of Fire:

- Shut off pump (use emergency shutoff switch if necessary)
- Use fire extinguisher (right of marine shop) to put out fire.
- Call **Fire Dept.** at **911** and check area for any remaining fire.
- Contact EH&S (805) 893-3194 for disposal

-In the event of any emergency contact Launch Master (805) 893-2873 or Marine Mechanician (805) 893-7181

Request for Scientific Boating Project Approval or Renewal

1. Name of project: _____
2. Name of Principal Investigator or Administrative Officer: _____
3. Department: _____
4. New or an ongoing project? _____
5. Research project description and goals. Use a separate sheet if necessary: _

6. Vessel name & description: _____
7. Vessel owner & Operator(s): _____
8. Names & affiliation of those on board: _____

9. Location of project: _____

10. Start and end dates of operations: _____
11. Special conditions or logistical considerations: _____

12. Emergency procedures (EMS activation, nearest medical aid, etc.): _____

13. Other universities, institutions or groups involved with the project _____

Float Plan Form

All vessels operating under the auspices of the UCSB must, at the minimum, be in compliance with local, state and USCG regulations

Date: _____

Departure time: _____

Estimated Return Time: _____

Name & description of vessel: _____

Number of people on boat: _____

Captain of Vessel: _____

Names of Crew:

Contact Number(s):

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Specific Area of Operation: _____

Type of Activity: _____

Point of Departure: _____

Description of Tow Vehicle (if applicable): _____

Shore Contact: _____

Contact Number: _____

Latest NOAA NWS Weather Forecast: _____

Emergency plan, including activation time: _____

Local information & emergency numbers

Emergency Phone: 911

Emergency Radio: USCG

Monitors VHF 16

Boat, Vehicle, and Trailer Inspection
Private or University owned

Boats:

- Registration:_____
- US Coast Guard Equipment Required
- UCSB Safety Equipment (See Appendix 5)
- Life Jackets
- Weight limit:_____
- Anchor and Rhode
- Insurance:_____
- Max Horse Power Rating:_____
- Other_____

Vehicles:

- GCVWR Rating:_____
- Hitch Rating:_____
- Vehicle Registration:_____
- Insurance:_____
- License:_____

Trailer:

- License:_____
- Insurance:_____
- Registration:_____
- Gross Vehicle Rating:_____
- Lights
- Brakes
- Tire Rating:_____
- Safety Chain

Authorized Approval:_____

Date:_____

Maintenance Check List

Boat _____

Hours _____

Date _____

Monthly Maintenance

- Grease swivel bracket
- Grease tilt tube
- Wash motor
- Oil linkages
- Drain water from fuel filter
- Life preservers
- Tool kit
- Safety kit
- Fire extinguisher
- Spare prop, nut and washer
- Anchor, chain and rope
- Check sling
- Check zincs
- Load test battery
- Check battery terminals
- Test navigation lights
- Trailer lights
- Trailer tire pressure
- Trailer lug nuts
- Trailer wheel bearings
- Trailer coupler and lube
- Safety chains
- Check disc pad thickness
- Lube and check bow winch



University of California, Santa Barbara

Waiver of Liability, Assumption of Risk & Indemnity Agreement

Elective/Voluntary Activities Waiver

EEMB	Boating and Diving Program
Department	Class/Activity

Waiver: In consideration of being permitted to participate in any way in

UCSB related boating and diving activities

hereinafter called "The Activity", I, for myself, my heirs, personal representative or assigns, **do hereby release, waive, discharge, and covenant not to sue** The Regents of the University of California, its officers, employees, and agents from liability **from any and all claims including the negligence of The Regents of the University of California, its officers, employees and agents**, resulting in personal injury, accidents, or illnesses (including death) and property loss arising from, but not limited to, participation in The Activity.

Assumption of Risks: Participation in The Activity carries with it certain inherent risks that cannot be eliminated regardless of the care taken to avoid injuries. The specific risks vary from one activity to another, but the risks range from 1) minor injuries such as scratches, bruises, and sprains 2) major injuries such as eye injury or loss of sight, joint or back injuries, heart attacks, and concussions 3) catastrophic injuries including paralysis and death.

I have read the previous paragraphs and I know, understand, and appreciate these and other risks that are inherent in The Activity. I hereby **assert that my participation is voluntary and that I knowingly assume all such risks.**

Indemnification and Hold Harmless: I also agree to INDEMNIFY AND HOLD The Regents of the University of California HARMLESS from any and all claims, actions, suits, procedures, costs, expenses, damages and liabilities, including attorney's fees brought as a result of my involvement in The Activity and to reimburse them for any such expenses incurred.

Severability: The undersigned further expressly agrees that the foregoing waiver and assumption of risks agreement is intended to be as broad and inclusive as is permitted by the law of the State of California and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect.

Acknowledgment of Understanding: I have read this waiver of liability, assumption of risk, and indemnity agreement, fully understand its terms, and **understand that I am giving up substantial rights, including my right to sue.** I acknowledge that I am signing the agreement freely and voluntarily, and **intend by my signature to be a complete and unconditional release of all liability** to the greatest extent allowed by law.

Signature of Participant	Print Name of Participant	Date	Age (if Minor)
Signature of Parent/Guardian of Participant if Minor	Print Name of Parent/Guardian of Participant if Minor	Date	

Memorandum of Understanding and Agreement:

Use of Boats and Engines Belonging to the
Ecology, Evolution, and Marine Biology Department, UCSB

Name: _____

Telephone (Work): _____

Telephone (Home): _____

E-Mail: _____

I have familiarized myself with, and understand, the rules governing the use operation, transport and maintenance of the boats and related equipment belonging to the Ecology, Evolution, and Marine Biology Department at UCSB.

I understand that this agreement entitles me to operate those boats specifically designated below. Each use requires the approval of the Departmental Launch Master or their designated representative. I further understand that damage to boats, engines, trailers, vehicles, and other equipment (which is excess of normal and reasonable wear and tear), as determined by the Launch Master, Marine Mechanician, or SBOC, or violation of UCSB, Federal, State, or City regulations governing the use and safe management of this equipment; may result in suspension of this operator's privileges by the SBOC. In addition, I understand that I may be liable for expenses resulting from damage or loss of boats and equipment in excess of normal wear and tear and/or in cases of reckless negligence, as determined by the SBOC.

- | | | |
|--|------------------|-------------|
| <input type="checkbox"/> Fish Boats | Signature: _____ | Date: _____ |
| <input type="checkbox"/> R/V Connell | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Kayak | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Coast (12 trips) | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Island (6 additional trips) | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Beach Launch | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Hoist Launch | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Ramp Launch | Signature: _____ | Date: _____ |
| <input type="checkbox"/> CPR | Signature: _____ | Date: _____ |
| <input type="checkbox"/> First Aid | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Oxygen Administration | Signature: _____ | Date: _____ |
| <input type="checkbox"/> Small Boat Class Certs. | Signature: _____ | Date: _____ |

Launch Master Approval: Signature: _____ Date: _____



UCSB Workers' Compensation Coverage Volunteer Information

Workers' Compensation coverage is provided to volunteers as defined below. If a work-related injury or illness occurs, this information will be used to assist in determining appropriate coverage. Completion of this form does not guarantee coverage under the University's Workers' Compensation program. Direct any questions concerning this coverage to the Workers' Compensation Coordinator at 1-805-893-2029.

Department Processing Instructions

1. Complete the Workers' Compensation Volunteer Information Form (modifiable PDF on next page) to document each of your department's volunteers.
2. The supervisor or department representative is responsible for ensuring all sections of the Volunteer Information Form are accurate and complete. Incomplete forms will be returned for further information.
3. Ensure the volunteer meets the criteria for coverage outlined below.
4. Send copy to Workers' Compensation, Mail Code 5132, or fax to 1-805-893-8521, or email to egrozeva@ucsb.edu and retain original in department files.
5. Volunteer may also need to complete a UC Waiver of Liability, depending on nature of duties. For further information go to <https://www.ehs.ucsb.edu/riskmanagement/waiver-liability> or contact Risk Management at 1-805-893-5837.

Definition of "Volunteer" for Workers' Compensation Coverage

For the purpose of workers' compensation coverage, a volunteer is defined as a person rendering services to the University where:

1. The University has control and direct supervisory responsibility over the manner and result of the services rendered; and
2. The volunteer receives no remuneration for such services other than meals, transportation, lodging, or reimbursement for incidental expenses, if appropriate.

The following categories do NOT fall within the volunteer definition:

1. Individuals whose service is provided in pursuit of personal educational goals or to earn educational credit;
2. The individual receives remuneration for services rendered from a non-UC payroll, e.g., visitors or guests on per diem or travel allowance or academic or research visitors receiving support from home institutions;
3. The individual is sponsored by an outside agency and provides service to the University through that sponsoring agency, e.g., Red Cross volunteers or United Way volunteers;
4. The individual is an off-campus volunteer who is sponsored or referred by the University but is not under the direct supervision and control of the University, e.g., Student Internships, Student Teachers, etc.
5. Guests of the University such as: casual visitors; computer users who are employees of an organization which has a formal contractual agreement to use computer facilities; or retired employees who desire occasional access to campus/laboratory/recreational facilities.



UCSB Workers' Compensation Coverage Volunteer Information Form

1. Please complete the following information regarding your volunteer. If you have any questions, please call Workers' Compensation 1-805-893-2029. **Completion of this form does not guarantee coverage under the University's Workers' Compensation program.**
2. Submit completed form to the Workers' Compensation Office. Email to egrozeva@ucsb.edu, fax to 1-805-893-8521 or use campus mail code 5132 and retain original for your department files.

DEPARTMENT INFORMATION	
Department:	Department Phone:
Department Contact:	Department Contact Email:
Supervisor:	
Volunteer Work Location:	
Brief Description of Volunteer Activity:	
Period of Service*: <i>*Not to exceed one year</i>	Begin Date: _____ <i>Required</i>
	End Date: _____ <i>Required</i>
Form Completed By:	Date Completed:

VOLUNTEER INFORMATION	
Name:	Phone:
Address:	
Is Volunteer over 18 years of age? <input type="checkbox"/> Yes <input type="checkbox"/> No If "No", date of birth: _____	
Student Status: <input type="checkbox"/> Not Applicable <input type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate <input type="checkbox"/> Other Institution	
If student, name of school:	Is volunteer work related to course work? <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Department verifies that Volunteer has been informed of the following: Volunteer service will be uncompensated (except for per diem, where applicable), and volunteer understands that they or the University may terminate this relationship at any time without notice. Volunteer agrees to abide by all rules and regulations of the University and understands that they are not an employee of the University. Completion of this form does not guarantee coverage under the University's Workers' Compensation program.	