



UC SANTA CRUZ

Boating Safety Manual

January 2026



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RECORD OF CHANGES
Edition 2.0- 01/2026

Section	Detail
1	● Expand scope to include all UCSC scientific boating, A/R boating, and vessel charters. ● Added References section. ● Added Scope section. ● Applicability and Contents sections were deleted but content from these sections was added to “Purpose” and “Scope”. ● Added basic definitions section.
2	● Boating Safety Committee charge updated to currently approved version. ● Addition of roles: A/R Boating Program Director, Scientific Boating Program Manager, Operator in Charge, A/R Boat operator, Scientific Boat Operator in Training, A/R Boat Operator in Training, Shoreside Point of Contact, Crew, Additional Personnel.
3	● Title changed to “Scientific boat operator training”. ● Addition of specific training/certification criteria for Motorized/Non-motorized operator, jet boats, and air boats. ● UCSC MOTC standards outlined. ● Special operating conditions training requirements added. ● Maintaining authorization will be evaluated on a two-year cycle.
4	● Title changed to “Administration”. ● Float plans moved to operational procedures. ● Chartered Vessels section added. ● Chartering UCSC vessels section added. ● Vessel Acquisition section added. ● Annual Vessel/trailer inspections added.
5	● Stability section reworded. ● Operating areas added/redefined (Inland, Coastal, Offshore). ● Weather: Reduced visibility, lightning, international boating.



	● Minimum equipment section updated by operating area. ● Reduced visibility section added. ● Sections added for jet boats, air boats. ● Section added for Solo Operators. ● Section added for liveboating, boat diving, and anchored diving. ● Section added for lithium-ion battery charging.
Appendix	● All appendices updated to reflect most current documents. ● Appendices for Acronyms, definitions, SBO checkout, Paddle craft checkout, shore contact instructions, boating project plan, trailering safety checklist, boat briefing, UCOP vessel charter guidance, GAR, UCSC charter guidelines added.



SECTION 1.0 OVERVIEW

1.1 Purpose and Scope

The purpose of this manual is to provide guidance, policy, and administrative structure to UCSC boating operations. The overarching goal is to maximize safety, minimize the risk of accidental injury or property damage, and ensure compliance with relevant laws and regulations, while considering the operational needs of UCSC boating programs.

The manual includes:

1. Policies for UCSC *owned and/or operated* boat operations including:
 - Scientific/Educational boating
 - Athletics/Recreational (A/R) boating
2. Requirements and training for obtaining a UCSC Scientific Boat Operator (SBO) authorization
3. Administrative procedures for managing the UCSC Boating Safety Program
4. Equipment and maintenance standards
5. Guidelines for UCSC directed vessel charters
6. Resources for boaters and boating program managers

1.2 References

[Occupational Safety and Health Administration \(OSHA\) General Industry Standards, 29 CFR 1910;](#)
[46 USC 2109, Chapter 23 – General Operation of Vessels](#)
[33 CFR, Navigation and Navigable Waters, Subchapter S, Boating Safety.](#)
[46 CFR Subchapter A, C, I, T, U, V, W- Inspected/Uninspected Vessels](#)
[U.S. Coast Guard, Navigational Rules, International-Inland. D.](#)
[California Department of Boating and Waterways- ABC's of CA boating](#)
[California Harbors and Navigation Code](#)
[California Vehicle Code](#)
[California Department of Motor Vehicles- Vessel/Trailer Registration](#)
[Scientific Boating Safety Association Guidelines](#)
[UCSC Field Research Safety Policy](#)
[UCSC Field Research Safety Procedures](#)
[UCSC Diving Safety Manual](#)

1.3 Scope

The provisions of this manual apply to all:

- UCSC owned and operated vessels
- UCSC owned, non-UCSC operated vessels
- Non-UCSC owned, UCSC operated vessels*

**In case of joint operations, the more conservative institutional minimum standards shall apply.*

Boating Safety Committee Guidance on UCSC directed vessel charters (See “basic definitions” below) can be found in Appendix 1. For questions regarding any boating not covered in this manual, please reach out to the UCSC Boating Safety Officer at boatingsafety@ucsc.edu, and refer to UCOP vessel charter guidelines in Appendix 2.

1.4 Basic Definitions



A complete list of definitions of terms used in this Manual is found in Appendix 4. Basic definitions include:

Affiliate: A person who is connected to UCSC as an employee, volunteer, student, or other party connected through an agreement.

A/R Boating: Any boating done using UCSC A/R equipment and/or operators, for the sole purpose of athletics or recreation.

Scientific boating: Any boating that facilitates UCSC academic research and/or education.

UCSC Directed vessel charters: Vessel charters are directed by the University when an item of monetary value is exchanged for exclusive use of a vessel with a provided captain/crew directed by UCSC affiliates. Vessel charters that are not purchased exclusively for UCSC use and/or are not directed by UCSC affiliates are not covered in this manual.

Vessel Classification – Designated general categories of vessels, based on length/propulsion:

Non-motorized watercraft – Any vessel without a motor and propelled by oars, sails, or other non-mechanical means, including Paddle Craft.

Class A – Motorized vessels less than 16 feet in length including jet-skis and personal watercraft

Class I – Motorized vessels between 16 feet and less than 26 feet in length

Class II – Motorized vessels between 26 feet and less than 40 feet in length

Class III – Motorized vessels between 40 feet and 65 feet in length

Vessel Type – Designated vessel types:

Motorboat - A small boat (<40 ft) powered by an internal combustion or electric motor.

- **Airboat** – Any vessel powered by an aircraft type propeller and generally shallow-draft.
- **Jet boat** – Any shallow-draft vessel propelled by a water jet rather than a propeller.
- **Personal Watercraft (PWC)**– Commonly referred to as jet skis. Usually jet propelled.

Ship- Class III or larger inspected passenger vessel or oceanographic research vessel that small boats may be launched from. Often Motorized.

Non-motorized watercraft – Any vessel without a motor and propelled by oars, sails, or other non-mechanical means

- **Paddle Craft** – a vessel powered only by its occupants, using a single- or double-bladed paddle.
- **Sailboat**- A vessel whose primary means of propulsion is by sail(s).



SECTION 2.0 ROLES AND RESPONSIBILITIES

2.1 Boating Safety Committee (BSC)

By delegation of the Chancellor, the Boating Safety Committee (BSC) has ultimate responsibility for the safety of all boating activities under the auspices of the University of California Santa Cruz (UCSC). The committee will meet on a quarterly basis, or more frequently as needed. Meetings shall require attendance of a simple majority of voting members. The committee may meet in executive session in the absence of any other member during personnel discussion.

The BSC will:

- Establish standards, protocols, and procedures to ensure UCSC boating operations are conducted as safely as possible.
- Make recommendations to the Directors of Environmental Health & Safety (EH&S), the Institute of Marine Sciences (IMS), Department of Athletics and Recreation (A&R), the Department of Ecology and Evolutionary Biology (EEB), and other campus entities concerning the management and safe operation of boating programs.
- Establish and/or approve training protocols or standards through which applicants receive authorization to operate vessels.
- Recommend the issue, re-issue, or revocation of vessel operator authorizations.
- Review and approve projects utilizing motorized or non-motorized watercraft for research or education using UCSC property, equipment, or personnel.
- Ensure boating programs adhere to all relevant federal, state, and UCSC boating safety regulations.
- Suspend boating operations that are deemed unsafe or non-compliant.
- Provide input on contracts for vessels chartered with UCSC funds, or otherwise chartered by UCSC, as needed.
- Serve as a board of review for boating incidents or issues of safety concern.

The BSC may delegate operational oversight for portions of the program to the BSO or designee; however, the BSC may not abdicate responsibility for the safe conduct of the boating program.

2.2 Boating Safety Officer (BSO)

The Boating Safety Officer (BSO) serves as a member of the Boating Safety Committee. This person should have broad experience in boating, advanced understanding of boating operations and safety, a USCG captains license, and an MOTC instructor certification.

Duties and Responsibilities:

- The BSO is responsible to the Boating Safety Committee for the conduct of the Scientific Boating Program.
- The BSO is responsible for review of scientific boating project plans, ensuring scientific vessels are being inspected and maintained, authorization of scientific boat operators, and ensuring compliance with this manual.
- With the approval of the Boating Safety Committee, the BSO may permit portions of this program to be carried out by a qualified designee, although the BSO may not abrogate responsibility for the safe conduct of the boating program.
- The BSO shall suspend any boating operations and/or operators that are considered unsafe.



- The BSO shall review that all scientific vessels are in full compliance with U.S. Coast Guard, Department of Motor Vehicle, and Department of Boating and Waterways requirements, with respect to equipment and safety procedures as applicable.
- The BSO shall work with boating program managers, the A/R boating program director, and the Office of Risk Services to adequately insure scientific vessels.

2.3 Athletics/Recreational Boating Program Director

The Athletics/Recreational (A/R) Boating Program Director serves as a member of the Boating Safety Committee and should have broad experience in boating. Duties and responsibilities include:

- The A/R Boating Program Director is responsible to the BSC for the conduct of the A/R Boating Program, development of courses, authorization of A/R operators, and ensuring vessels are routinely inspected and maintained.
- The A/R Boating Program director shall review that all A/R boats and trailers are in full compliance with U.S. Coast Guard, Department of Motor Vehicle (CA DMV), and Department of Transportation (DOT) requirements, or other applicable local/state/federal policies and procedures.
- Work with the Office of Risk Services and BSO to adequately insure A/R vessels.

2.4 Principal Investigator

A Principal Investigator (PI) is an individual who has primary responsibility for the design, proposal, execution, and management of a research, training, or public service project, and who will be involved in the project in a significant manner.

- Principal Investigators are responsible to the Boating Safety Committee for ensuring that all scientific boat operations under their direction are conducted in accordance with this manual.
- Ensure that all proposed boating plans have been reviewed by the Boating Safety Officer, or designee, before PI approves any boating research activities.
- Ensure that new vessel and trailer purchases are routed through CruzBuy. Input should be solicited from the BSO for new or donated vessels/trailers regarding any safety features that may be necessary for the proposed operations prior to purchase/donation of the vessel.
- May be responsible for paying the insurance deductible for any damages incurred to vessels used for their projects.
- Ensure that all individuals assigned to scientific boat operations related to their projects are properly authorized as described in section 3.2 of this manual.
- Work with the BSO to ensure that joint operations led by other institutions meet or exceed relevant minimum safety standards, as determined by all institutions involved.

2.5 Scientific Boating Program Manager

A Scientific Boating Program Manager (Manager) may be assigned by the BSC, or designee, to a specific program or project or cover portions of a single operational area/project or multiple operational areas/projects. Manager responsibilities include:

- Ensure that UCSC owned vessel operations within their respective programs are conducted in a safe manner and are in compliance with this manual, established UCSC policies and procedures, and local laws.
- Ensure that all vessels within their respective programs are properly equipped and



maintained. Managers are required to ensure maintenance schedules and inspections for vessels in their programs are followed and should liaise closely with the BSO to ensure maintenance/inspections are documented appropriately.

- Maintain records according to Section 4.1
- Ensure that vessels are appropriately insured by working with the BSO and the Office of Risk Services to update the insurance schedule.
- Ensure availability of safety and survival equipment for vessels and operators within their respective programs required by this Manual and all applicable laws and regulations.
- Ensure that float plans are filed by the Operator In Charge (OIC) prior to any operation and submit yearly vessel usage reports to the BSO when requested.
- Notify the BSO when they receive notification of any safety concern, accident, or near miss.
- May delegate portions of their program to qualified designees but may not abrogate responsibility for the program.
- A list of scientific boating program managers is in Table 1 below. Email contacts are embedded in the hyperlink of each manager name.

Table 1: Scientific Boating Program Managers

Manager Name	Program/Operational Area
Luis Hernandez	Institute of Marine Science (IMS)
Patrick Robinson	UC Año Nuevo Reserve, CA
Mark Readdie	UC Big Creek Reserve, CA
Don Croll	Croll Lab, El Pardito, Mexico
Ari Friedlander	Friedlander Lab
Mark Carr	Carr Lab
Kristy Kroeker	Kroeker Lab, Sitka, Alaska

2.6 Scientific Boat Operator (SBO)

Only authorized personnel may operate and/or trailer UCSC owned vessels. Operators may apply for authorization as a Scientific Boat Operator (SBO) using the procedures outlined in section 3.1. *Non UCSC personnel may only operate UCSC vessels if they are onboarded and approved as UCSC SBO's.* Operators who are not UCSC employees or formal volunteers must sign an approved UCSC [liability waiver](#) form (Appendix 5) to be filed with the project supervisor. Volunteers will need to complete the Office of Risk Services [volunteer waiver and election of workers compensation form](#) (Appendix 6), as applicable.

Failure to comply with this Manual's provisions may be cause for the revocation or restriction of an SBO's authorization. However, any operator may deviate from these requirements to the extent necessary to prevent or minimize a situation that is likely to cause injury, death, damage to the vessel, or significant environmental damage. Any such deviations shall be reported to the BSO or designee, boating program manager, and project PI within 24 hours.

2.6.1 Operator In Charge

One Operator In Charge (OIC) must be assigned for each day of operation, for each motorized vessel underway, or for each group of paddlecraft operators. The OIC is the primary operator onboard, or the paddlecraft group leader, and is ultimately responsible for the vessel and crew during operations, regardless of position or job classification.



OIC responsibilities include, but are not limited to:

- Designating an appropriate shore contact, and providing that contact with the “Float Plan” and “Shore Contact Instructions” (Appendix 10 & 11)
- Safe transport of the vessel to and from the launch site.
- The safe navigation of the vessel to and from the site(s) of operation.
- The safe operation of the vessel and equipment at all times.
- Ensuring that all required operational and safety equipment is on board before getting underway.
- Ensuring that all passengers and divers have clearance to be working on the project requiring the vessel.
- Verifying and adhering to the load ratings of the tow vehicle, vessel trailer and vessel.
- Reporting all incidents, citations, and safety concerns/issues to the BSO and project PI.
- Completion of a daily log for all UCSC owned boat use (Appendix 12)
- Direct supervision of vessel Operators -In -Training

2.7 Athletic/Recreational Boat Operator

Only persons who have been authorized by the A/R Boating program director or designee may operate A/R boats. Operators may apply for athletic/recreational authorization/training programs through the [Department of Athletics/Recreation](#) (A/R). Temporary exemptions from typical A/R operator training requirements may be granted in writing by the A/R Boating Program Director with documentation of the need, rationale, and the operator’s experience and training supporting the exemption.

The A/R operator is responsible for:

- Safe transport of the vessel to launch site (if applicable)
- The safe navigation of the vessel
- The safe operation of the vessel and equipment at all times.
- Ensuring that all required operational and safety equipment is on board before getting underway.
- Verifying and adhering to the load ratings and adhering with any vessel/program specific safety procedures.
- Reporting all accidents, citations, and safety concerns/issues to the A/R Boating Program Director.
- *If damage to UCSC property occurs and is determined by the BSC to be due to negligent operation, the operator may be responsible for payment of damages up to the insurance deductible.*

Failure to comply with policies may be cause for the revocation or restriction of an operator's authorization. However, any operator may deviate from these requirements to the extent necessary to prevent or minimize a situation that is likely to cause injury, death, damage to the vessel, or significant environmental damage. Any such deviations shall be reported to the A/R Boating Program Director within 24 hours.

2.8 Scientific Boat Operator-in-Training

To assist in the training and development of new SBO’s and to allow Authorized SBO’s temporary relief from duties, personnel may operate a UCSC vessel when under the direct and immediate oversight of a qualified OIC. In such cases, the OIC shall be available to immediately take over



command of the vessel should the need arise. The Operator in training shall have completed an MOTC, or equivalent course (Section 3.2). Training should be logged using the [UCSC vessel training form](#).

2.9 Athletic/Recreational Operator-in-Training

Athletic/Recreational Operators in training must adhere to A/R training policies and must be under the direct supervision of a qualified instructor.

2.10 Shoreside Point of Contact

For every scientific vessel operation, a shoreside point of contact (Shore Contact) shall be designated. The shore contact must be available to respond in the event of an emergency and shall not be on the water with the field team. The Shore Contact is responsible for receiving pre-departure personnel lists, maintaining scheduled contact with the OIC, and confirming departure time and safe return to port (See Section 5.1).

At minimum the shore contact should be provided with the following information prior to field team departure (see Shore Contact Instructions in Appendix 10):

- Description of watercraft
- List of occupants and designated OIC
- Point of departure/return
- Destination
- Estimated time of departure
- Estimated time of return
- Means of contact, and contact schedule
- Purpose of the trip
- Action to take if overdue

2.11 Vessel Crew

Vessel Crew (Crew) are persons other than the OIC necessary for the safe operation of the vessel, or scientific operation. Crew who are not UCSC employees or formal volunteers must sign an approved UCSC [liability waiver](#) form to be filed with the project supervisor (Appendix 5).

Volunteers will need to complete the Office of Risk Services [volunteer waiver and election of workers compensation form](#) (Appendix 6), as applicable .

2.12 Additional Personnel Onboard

Additional Personnel onboard are personnel who are not required to be engaged in the safe operation of the vessel. Additional Personnel who are not UCSC employees or formal volunteers shall sign an approved UCSC [liability waiver](#) form to be filed with the project supervisor (Appendix 5). Volunteers will need to complete the Office of Risk Services [volunteer waiver and election of workers compensation form](#) (Appendix 6), as applicable.



SECTION 3.0 SCIENTIFIC BOAT OPERATOR TRAINING

3.1 Scientific Boat Operator Authorization

Personnel needing a UCSC scientific boating operator authorization should email the boating safety program at boatingsafety@ucsc.edu. Applicants who are applying to operate motorboats who do not have MOTC/MOCC, should first apply for the MOTC using the online [MOTC Application Form](#). Applicants should also apply for a web-boater account by navigating to <https://webdiver.ehs.ucsb.edu/UCSC>, and clicking on the “submit boating application” button. The BSO may give limited authorizations to UCSC personnel that restrict SBOs to the use of certain boats and/or in certain waters and may defer to another institution's training program for the authorization of SBOs (Appendix 22). Upon approval, SBOs are qualified to operate designated UCSC vessel configurations in environments and conditions commensurate with experience.

The following training and licenses are required as a minimum for UCSC SBOs of various vessel classes and types:

3.1.1 Non-Motorized Watercraft

Minimum requirements to operate non-motorized watercraft are below:

1. Complete an [American Canoe Association \(ACA\)](#), or equivalent approved course appropriate for the environment being operated in.
2. Current 1st Aid/CPR certification
3. Demonstrate proficiency to the BSO or designee in the safe operation of the proposed type of watercraft in conditions similar to proposed operations (Appendix 8).
4. Demonstrate proficiency to the BSO or designee in the operation of any specialty equipment and procedures specific to the boat or task to be undertaken.
5. For operation on Swift Waters, additional training may be required as determined by the BSO or designee

Operators of non-motorized watercraft chartered by the University that includes contracted trip guides are exempt from the above training requirements. It is strongly recommended that trip leaders take additional safety training. USCG standards must be adhered to. For questions reach out to the BSO at boatingsafety@ucsc.edu

3.1.2 Motorized Class A, 1, and 2 vessels

Minimum requirements for UCSC affiliates to operate a motorboat up to 40 ft in length for scientific purposes are listed below:

1. Complete a National Association of State Boating Law Administrators (NASBLA) [approved course](#) for state of boat operations
2. Complete a Motorized Operator Training/Certification Course MOCC/MOTC, or equivalent approved course.
3. Be current in CPR/First Aid.



4. Demonstrate proficiency to the BSO or designee in the safe operation of the proposed type of boat in local conditions (Appendix 7). Typically, a checkout will not be considered before 12 days of sea time are documented on a similar vessel under the supervision of a qualified OIC. Vessel training should be documented in the [UCSC vessel training form](#).
5. Demonstrate proficiency to the BSO or designee in the operation of any specialty equipment and procedures specific to the boat or task to be undertaken.
6. For operation on Swift Waters, completion of the MOCC [River Module](#) or equivalent training may be required.

3.1.3 Motorized Class 3 Vessels

In addition to the minimum requirements from section 3.1.2, SBO must possess a current USCG Merchant Mariner's Credential with minimum rating of [Operator of Uninspected Passenger Vessels \(OUPV\)](#) and must have experience in the conditions under which vessels will be operated.

3.1.4 Jet Boat Operator

In addition to the requirements from section 3.1.2, SBO must have successfully completed a checkout and demonstrated proficiency operating the specific boat they are proposing to use.

3.1.5 Airboat Operator

In addition to the requirements for Class A, I, or II vessels as applicable, SBO's shall have successfully completed Airboat Awareness and Operations Training equivalent to the Department of Interior (DOI) Motorboat Operator Certification Course (MOCC) [Airboat Operation Module](#). Other personnel onboard shall receive additional briefings on safety and operational procedures specific to airboats.

3.1.6 Vessels not Defined

Operation of vessels not defined in this document is not authorized without prior approval by the BSC. Additional training for special purpose vessels and associated equipment may be required.

3.2 Minimum Motorized SBO Training Requirements

UCSC Motorized Operator Training Course (MOTC) standards align with those of the DOI MOCC with Open Water Module. Equivalent training may be approved by the BSC or designee.. Successful completion of training does not itself grant authorization to operate a motorized UCSC vessel/trailer. A vessel specific checkout is required, and specialty training modules may be required depending on operating area or vessel type.

UCSC motorized operator training should include:

3.2.1 Training duration

- 40 hours

3.2.2 Academic Requirements

- UCSC policies and state/federal laws and regulations
- Vessel orientation, terminology
- Required and recommended equipment
- Rules of the road
- Operating area specific rules and regulations



- Survival and Rescue
- Aids to navigation
- Marlinspike
- Weather
- Vessel inspection and safety equipment
- Operating Systems/Maintenance
- Trailing
- Anchoring and beaching
- Rendering assistance and towing
- Fire suppression
- Navigation

3.2.3 Skills Requirements

Dry Land

- Lines and knots (appropriate for vessel and operations)
- Trailer backing (where applicable)
- Vessel and safety equipment inspection
- Float plans and checklists
- VHF use

Pool or Confined Water

- In-water use of exposure suits, work suits and PFDs (as appropriate)
- Deployment of throwable rescue gear such as PFDs, Rescue bags, etc.
- Removing a person from the water - conscious and unconscious
- Survival techniques
- Life rafts
- Capsized vessel righting

Slow speed maneuvering

- Launch and recovery
- Vessel handling characteristics
- Crew responsibilities
- Docking - port and starboard sides using various approaches
- Turning around in a confined area ("star" or "circle")
- Touch and go
- Object recovery, personnel recovery
- Line and/or Throwable PFD toss
- Anchoring and beaching
- Towing
- Communications

At speed maneuvering

- Object avoidance
- Man overboard (MOB) drills
- Offshore navigation
- Vessel handling

3.2.4 Examinations

- Sixty-five question (50 MOTC, 15 OWM) DOI-approved (or equivalent) final exam. Passing score is 70%. All trainees should demonstrate 100% comprehension of the material covered on the exam after grading.



3.3 **Trailer**

Tow vehicle operators shall *have a valid drivers license* and demonstrate to the BSO or designee:

- Proper procedures for trailer and vehicle hookup/inspection
- Towing the vessel and trailer over the road
- Maneuvering a loaded trailer in confined spaces
- Launching and retrieving vessel from the trailer to the water (as applicable)

Typically, trailer operators will have gone through an MOTC and can conduct a trailer checkout with the BSO/designee at the same time as their vessel checkout. A stand-alone trailer training/checkout can be organized as needed with the BSO for trailer operators that have not taken an MOTC or do not need SBO authorization.

3.4 **Specialized Launch/Retrieval training**

In some circumstances, the minimum required launch/retrieval training for an SBO may not meet special operational circumstances required for launching/retrieving the vessel. The following additional training may be required if operationally necessary.

3.3.1 ***Hoisting***

The SBO shall receive vessel and site-specific hoist training and must demonstrate competency to the BSO or designee prior to using any boat hoist to launch/retrieve a vessel.

3.3.2 ***Beach Launch/Retrieval***

The SBO shall receive site specific beach launch/retrieval training and must demonstrate competency to the BSO or a designee prior to authorization to launch/retrieve from a beach.

3.5 **Special Operating Conditions**

3.4.1 ***Surf Zone Operations***

If the proposed operations require transit through an active surf zone, the SBO shall receive site specific surf zone training and must demonstrate competency to the BSO or a designee prior to authorization to travel through an active surf zone.

3.4.2 ***Night Operations***

If the proposed operations occur between the hours of sunset and sunrise, the SBO shall receive night boating training and will demonstrate proficiency to the BSO or a designee prior to authorization of night boating operations.

3.4.3 ***Swift Water***

The BSO shall be consulted on additional training needed for motorized/nonmotorized operations on inland waters with sustained currents exceeding 1 kt. Training requirements will vary by operating area, proposed mission, and platform used.

3.4.4 ***Equipment Deployment***

The BSO shall determine if additional training, equipment, or supervision is needed for equipment deployments from motorized/nonmotorized vessels. Equipment deployment



hazards, mitigations, and methodology shall be outlined in detail in the boating project plan.

3.6 Maintaining SBO Authorization

Operators who have not been actively boating for a period of **two years** may have their vessel use authorizations re-evaluated at this time. SBOs are required to maintain current certifications, licenses, and other requirements listed in Section 3.1 to remain actively authorized. Operators will be notified by the BSO of any changes to their boater status and will be given an opportunity to provide documentation to renew their SBO authorization.

3.7 Revocation of Authorization

An SBO authorization may be revoked by the BSO, or designee, for any action deemed unlawful, unsafe or non-compliant with this Manual. SBO revocations shall be reviewed by the BSC.

3.8 Appeal and Re-Authorization

A revocation may be appealed by providing a written explanation to the BSO of the need and rationale for maintaining the Operator's authorization. If approved, the SBO may re-qualify after complying with such conditions as the BSC imposes. The SBO shall be given the opportunity to present their case to the BSC before conditions for re-authorization are determined.



SECTION 4.0 ADMINISTRATION

4.1 Records

Records described below shall be maintained by the boating program manager responsible for the vessel, or by the A/R Boating Program Director in cases pertaining to A/R vessels/operators. Records may be requested by the BSC or designee.

Records may include, but are not limited to:

- Relevant training, certifications, and vessel checkout records for each operator, and operator in training-shall be kept until five years after operator has left the University.
- Accident reports- shall be kept indefinitely.
- Vessel logs-should be kept for the lifetime of the vessel, as applicable.
- Vessel inspection, maintenance, and repair records for each vessel-should be kept for the lifetime of the vessel.
- Trailer inspection, maintenance, and repair records if applicable-should be kept for the lifetime of the trailer.

4.2 Scientific Boating Project Proposals

All UCSC owned and/or operated scientific vessel use requires submitting a Boating Project Plan to the BSO through [Web-Boater](#), or the form in Appendix 9. This should be submitted to the BSO at least one month prior to the proposed operation. Vessel use requests should be submitted to the appropriate boating program manager (See Section 2.5) at least 24 hours prior to the intended day(s) of use.

Field Safety Plans

Field safety plans are required for scientific work conducted in remote or potentially hazardous locations. For boating projects, a boating project plan may be used in lieu of a field safety plan. Field safety plans and policies can be viewed on the [UCSC Environmental Health and Safety website](#). Field safety plans that involve watercraft as a means of transportation should consult with the BSO for assistance by emailing boatingsafety@ucsc.edu. Questions should be directed to boatingsafety@ucsc.edu and/or fieldsafety@ucsc.edu.

4.3 Bareboat Charters

Bareboat charters are defined by UCSC as the use of a vessel that is not owned by UCSC in exchange for an item of monetary value, without a provided captain or crew, where UCSC is responsible for the safe operation of the vessel. Bareboat charters should be routed through Cruz Buy as applicable and must meet relevant minimum safety and equipment standards for the area of operation which will be evaluated by the BSO. In cases where UCSC affiliates utilize a motorized bareboat charter for scientific/educational use, the same minimum operator requirements outlined in section 3.1 must be met, as well as any additional requirements put in place by the charterer, or the BSC. A scientific boating project proposal must also be submitted per section 4.2. Scientific paddlecraft charters will adhere to USCG regulations and will be evaluated by the BSO in Cruz Buy, or through a boating project plan, and/or field safety plan.



A/R bareboat charter operators will meet requirements put in place by the A/R boating program director.

4.4 Chartering UCSC Owned Vessels

UCSC vessels engaged in carrying external passengers for hire in exchange for any item of monetary value must be operated by a U.S. Coast Guard (USCG) licensed Captain. Vessels carrying more than 6 passengers for hire must carry and maintain a valid USCG Certificate of Inspection (COI).

4.5 Vessel/Trailer Acquisition

All new UCSC vessel/trailer acquisitions must be routed through [CruzBuy](#) to be compliant with all local and UC insurance requirements. Additionally, the BSO should be consulted prior to purchase/donation of vessels/trailers to ensure safety features and equipment are appropriately budgeted for.

4.6 Annual Vessel/Trailer Inspections

All UCSC vessels used for scientific boating must be inspected by a qualified person designated by the BSO, using the vessel/trailer inspection forms in Appendix 18, 19, and 20 at least annually. If a vessel fails an inspection, it shall be removed from service until it passes inspection. Annual inspections are to be performed in addition to pre-departure inspections conducted by the OIC.

All UCSC vessels used for A/R boating must be inspected by a qualified person designated by the A/R boating program director, at least annually. If a vessel fails an inspection, it shall be removed from service until it passes inspection.

All trailer inspections should be conducted by UCSC Fleet Services and any inspections not conducted by UCSC Fleet Services should be sent to them for their records.

4.7 Incident Reporting

All injuries, accidents, and near misses shall be reported to the BSO, the project PI, or any member of the BSC as soon as feasible and always within 24 hours. A Boating Accident Report (Appendix 16) shall be filed with the BSO within three business days. Any accident resulting in a fatality, injury requiring medical treatment beyond first aid, disappearance under circumstances that indicate death or injury, damage to other vessels and other property in excess of \$500, or total loss of the vessel shall also be reported to the [Division of Boating and Waterways](#). Any accident resulting in fatality or injury shall also be reported to the UCSC [Office of Risk Services](#).

A reportable incident is when:

- Someone is injured and requires more than basic first aid for the injury.
- A vessel/trailer breaks-down while in use in any manner that is not easily remedied, suffers more than minor hull damage, or is involved in an accident or near-accident or other unsafe event whether on land or in the water.
- A citation or boarding of the vessel is conducted.
- Damage to the environment, hazardous material spill, or impact on ecosystems or protected species.
- Damage to public or private property caused by UCSC operations.



SECTION 5.0 OPERATIONAL PROCEDURES

5.1 Float Plans and Communication

Float Plans are required for all UCSC owned and/or operated scientific boating operations and are strongly recommended for all boating operations. All vessels leaving from the Long Marine Lab (LML) boat yard must file a paper float plan (Appendix 11), which shall be placed on a clipboard in the kiosk by the boatyard. All other vessels must file a [digital float plan](#) or establish a predetermined check-in schedule and float plan with a shore contact (Appendix 10).

Float plans must include the following, at minimum:

- Description of watercraft
- List of occupants and designated OIC
- Point of departure/return
- Destination
- Estimated time of departure
- Estimated time of return
- Means of contact, and contact schedule
- Purpose of the trip
- Action to take if overdue

Standing Float Plans may be filed covering multiple vessels and for multiple events provided the Shore Contact is informed in advance of which vessels and personnel will be involved and the dates of specific operations. For trips to remote areas and/or over multiple days, a communication schedule shall be established prior to departure.

It is the Shore Contact's responsibility to ensure the vessel and all personnel onboard have returned pursuant to the plan. It is the OIC's responsibility to communicate with the shore contact immediately upon return. Notice of return is required within 10 minutes after the scheduled time of return. Emergency procedures are to be initiated by the Shore Contact per the Shore Contact instructions (Appendix 10), if notice of return is not received.

To initiate any change in an approved schedule, the Shore Contact must be notified and changes confirmed. If the SBO, or their designee is unable to notify the Shore Contact, the filed plan must be adhered to. Failure to follow these procedures may be cause for suspension or revocation of SBO authorization.

5.2 Pre-Departure Safety Checks

Prior to departure the vessel Operator shall:

- Ensure the Float Plan and other communication plans are in place.
- Perform a safety inspection of the vessel trailer (if applicable).
- Perform a vessel and equipment inspection (Appendix 12)
- Assess current and forecasted weather conditions
- Ensure all personnel onboard have received a boat/mission briefing (Appendix 14)

After Returning the operator shall:



- Log in the return time with the Shore Contact as agreed upon before departure.
- Note any problems with the boat or equipment that occurred and inform the Program Manager within 24-hours.
- Ensure that the boat, boat trailer, engine(s) and all other equipment are thoroughly rinsed with fresh water and stowed after each use.

5.3 Stability

No UCSC affiliates may operate or embark on an unseaworthy or unsafe vessel, or any vessel loaded in a manner that will jeopardize the safety of the Operator, Crew, Additional Personnel, or vessel. Vessel loading must be adjusted for local and variable sea conditions. In no case may the vessel load exceed the maximum capacity of persons and/or gear on the vessel's USCG Capacity Plate, if affixed. It is the responsibility of the Program Manager to notify the BSO of any modifications made to the vessel that may alter trim/stability.

5.4 Lithium-Ion Battery Charging

Portable Lithium-Ion batteries can pose a serious fire hazard, particularly when being charged. If lithium-ion batteries must be charged on a vessel, an appropriate fireproof case should be used while the batteries are charging. Batteries shall be inspected before and after charging and never left unattended while charging. Batteries showing signs of deterioration shall not be charged. Charging of Lithium-Ion batteries shall be included in the boating project plan.

5.5 Operating Areas

Operating areas are designated based on environmental effects on mission safety and the relative distance from the nearest harbor, support ship*, or exempt area (section 5.6.1). Operating areas influence operator training requirements and safety equipment carried.

Table 2. Operating Area Designations

Designation	Description
Coastal Waters	Waters up to 12 nautical miles from a harbor, support ship*, or exempt area (section 5.6.1).
Inland Waters	Shoreward of the COLREGS demarcation line that separates International Navigation Rules from U.S. Inland Navigation Rules. For example, within Santa Cruz Harbor.
Offshore Waters	Waters 12 nautical miles or more from nearest land, exempt area, or support ship*.
Swift Waters	Any Inland Waters where prevailing currents exceed 1 knot including man-made structures such as dam spillways and levees.

* Support ship is a class 3 or larger vessel specifically designated as an emergency response asset and readily available to assist in an emergency.

5.6 Weather

UCSC Operators are responsible for assessing the effect of local weather on the safety and efficacy of vessel operations. Current conditions must be continually assessed, and long-range forecasts evaluated well beforehand as applicable. It is the right and responsibility of every person aboard to notify the OIC if they feel unsafe.



General Guidelines

- 1) NOAA National Weather Service (NWS) [5-Day Marine Forecasts](#) are to be considered the basic weather planning guideline for UCSC scientific boating operations. Additionally, [NWS river forecasting tools](#) should be utilized for inland/swift water operations as applicable.
- 2) All UCSC SBOs operating in US waters are required to consult NWS 5-Day Marine Forecasts for the planned area of operation immediately prior to departure and are required to indicate that they have done so on their float plan.
- 3) For international boating operations, the BSO should be consulted on appropriate weather forecasting resources. Additional weather forecasting tools can be found on the UCSC [Boating Safety Website](#).
- 4) In general, UCSC boaters should not conduct small boat (<40 ft LOA) operations when forecasts for the time and area of operation include any of the following:
 - Sustained winds that range greater than 25 knots
 - Swell height greater than 12 feet
 - Wind waves greater than 4 feet
 - LightningIf any of the above conditions are observed while on the water, the operator should terminate operations and return to the nearest safe harbor.
- 5) SBOs should consult with the BSO if they are unsure of a specific vessels load/handling capabilities in different weather conditions.
- 6) SBOs may choose to conduct operations when conditions exceed those above only:
 - In designated exempt areas (see below)
 - Where for practical reasons involving remote, extended, or frequent trips, the BSO, upon finding a qualified SBO, grants that SBO authority to operate as they deem safe.
- 7) SBOs may not operate at night unless specifically approved to do so by the BSO.

5.6.1 Exempt Areas

The following local areas are considered exempt from the above forecast related guidelines due to their relatively protected locations, and shall be subject only to the on-site judgment of the operator as to the safety of operations:

- i. Monterey Bay, Monterey: Del Monte Beach to Lover's Point and out to one mile from Monterey Harbor
- ii. Monterey Bay, Santa Cruz: Capitola to Lighthouse Point and out to one mile from Santa Cruz Harbor– Except when the harbor entrance in Santa Cruz has substantial breakers.
- iii. Carmel Bay when launching from Stillwater Cove: Pescadero Point to Carmel Point.
- iv. Ano Nuevo Channel – when transiting to and from shore and Ano Nuevo Island
- v. All inland waterways. Special attention should be paid to rain forecasts and effects on river flow and debris that may impact boating operations.

5.7 Decision To Proceed

At no time shall a UCSC owned and/or operated vessel operation proceed when the OIC determines conditions are unsafe. If, at any time, any person onboard feels that conditions are unsafe, they shall report the condition to the OIC. The OIC shall cease operations and return to



nearest port or safe water until the condition has been remedied to everyone's satisfaction. The BSO shall be consulted in instances when safety of the vessel may have been compromised.

Operators are encouraged to utilize a formalized risk assessment model such as the Generalized Assessment of Risk (GAR) model to assess overall mission risk prior to embarking. The BSO should be contacted for higher risk missions. Factors to consider should include:

- Supervision
- Planning
- Team Selection
- Team Fitness
- Communication
- Contingency Resources
- Environment
- Mission Complexity

A full risk assessment template is available in Appendix 21.

5.8 PFD Policy

It is recommended that all personnel wear a [USCG approved PFD](#) in open areas of watercraft. An operator, PI, BSO, Athletic/Recreational Program Director, or Program Manager can require occupants to wear a PFD at any time. When not required to be worn, PFDs on all vessels shall always be readily accessible, and approved per USCG regulations. All PFDs must be used in compliance with their labeling. Inflatable PFDs may only be used in operating conditions that won't cause them to prematurely inflate and must be maintained to manufacturer specification.

5.9 Equipment Requirements for UCSC Owned and/or Operated Vessels

UCSC operators must be familiar with the operation of all vessel equipment and inspect all emergency equipment prior to departure. The operator will notify the Program Manager, or A/R Boating Director of any missing, damaged, or malfunctioning equipment within 24 hours. It is the responsibility of the Principal Investigator(s), or operator to replace or renew any equipment lost or damaged because of negligence or misuse. In the event of a disagreement as to responsibility for lost or damaged equipment, the Boating Safety Committee will review the case and assign responsibility for replacing it.

All vessels and equipment, regardless of ownership, shall conform to USCG, state, and local carriage requirements when operated by UCSC affiliates. The nature of specific operations may require vessels and boating equipment to meet higher standards than these guidelines as determined by the BSO.

5.10 Minimum UCSC Owned Equipment and Numbering Requirements

All UCSC owned vessels will, at a minimum, be equipped with the safety equipment required by the USCG (Table 4) for the vessel size and operating conditions. Additional equipment may be required depending on the hazards associated with the operating area and/or operations, as defined below (Table 3). All required safety equipment must be operational and in good working condition. Vessels will meet USCG, federal, state, and local vessel numbering requirements. Required safety and other equipment is specified by operating area in Table 3, and by vessel class in Table 4.

**Table 3:** Equipment required for all UCSC vessels by operating area

Additional equipment may be required based on vessel type/class/operation per USCG regulations. USCG requirements by vessel class can be viewed in table 3.

Required Safety Equipment	Inland	Coastal	Offshore	Fog/Night
<i>Wearable PFDs for each person on board</i>	X	X	X	X
<i>Throwable PFD (per USCG requirements)</i>	X	X	X	X
<i>Kill Switch (motorized vessels only) *</i>	X	X	X	X
<i>Navigation Lights per USCG regulations</i>	X	X	X	X
<i>Sound signaling device (whistle, horn, etc.)</i>	X	X	X	X
<i>Lines as needed for docking/operation</i>	X	X	X	X
<i>Bailer/bilge pump (not required if self-bailing)</i>	X	X	X	X
<i>Fire extinguisher appropriate for vessel size/type</i>	X	X	X	X
<i>Oxygen Kit (if diving)</i>	X	X	X	X
<i>First aid kit**</i>	X	X	X	X
<i>Marine VHF Radio (or other approved device)</i>	X	X	X	X
<i>Damage control/Repair kit**</i>	X	X	X	X
<i>Anchor and line appropriate for vessel size. Not required for paddlecraft/sailing vessels unless otherwise specified</i>	X	X	X	X
<i>Visual Distress Signals per USCG regulations</i>		X	X	X
<i>GPS</i>			X	X
<i>EPIRB or InReach/other approved device</i>			X	
<i>Sea Anchor</i>			X	
<i>Life Raft</i>			X	

* Must be worn at all times unless the operator deems it is safer not too due to the nature of the operation (swift water, etc.).

**When multiple UCSC vessels are operating in close proximity to each other, this equipment requirement may be met by carriage on one vessel.

**Table 4.** Summary of Minimum USCG Required Equipment by Vessel Class

Other USCG, and UCSC requirements may also apply. Vessels over 65 ft LOA shall adhere to USCG requirements for passenger vessels ([CFR 46, Chapter I, subchapter T, part 180](#)).

USCG REQUIREMENTS BY VESSEL CLASS	Non-Motor ized	CLASS A (<16 ft)	Class 1 (16 to <26 ft)	Class 2 (26 to <40 ft)	Class 3 (40 to <65 ft)
Fire Extinguisher	NA	(1) Type B-1. Vessel's incapable of trapping fuel fumes are exempt		(2) Type B-1 or (1) Type B-2	At least (3) B-1, or (1) B-1 plus (1) B-2
PFD	(1) wearable for each person	(1) wearable for each person plus (1) throwable		1 wearable for each person plus (1) mounted life ring with attached line	
Engine Kill Switch	NA	(1) for vessels without enclosed cabin		NA	
Sound Signal	Means of producing an efficient sound signal				USCG approved whistle/bell
Navigation Lights	(1) flashlight when operating at night/reduced visibility	Refer to USCG Navigation Rules . Only required at night or in reduced visibility.			
Visual Distress Signals	Refer to USCG navigation rules				
Certificate of Number	NA	Numbering ≥3 in high and adjacent valid registration sticker on forward half of vessel.			
Ventilation	NA	Gasoline-fueled with engine and/or fuel tank in accessible compartment- at least (2) ventilation ducts with cowls and rated power blower			
Backfire flame arrestor	NA	Required on all gas motors, except outboard motors			
Oil Pollution Placard	NA			Minimum 5x8 inches posted in machinery space or at bilge control station	
Garbage Placard	NA			Minimum 4x9 inches posted in conspicuous location	
Navigation Rules	NA			Copy of current edition for all vessels >39 ft	
Marine Sanitation Device	NA	NA	If installed, must be USCG approved		



5.10.1 Cold Weather

Cold stress experienced by the boat operator and crew may lead to reduced physical and mental capacity including poor judgment. It is the responsibility of the UCSC SBO to plan for cold water operations and implement mitigation strategies. The SBO must inform their crew members of forecasted cold weather conditions and ensure that all crew are dressed appropriately.

Cold weather conditions are defined when one of the following conditions is met, based on real-time or predicted values from the [NOAA NDBC](#), or equivalent:

1. The sum of air and water temperatures is less than 100°F/38°C
2. Water temperatures are below 45°F/7.2°C
3. Air temperatures are below 40°F/4.4°C

If any of these conditions are met, appropriate exposure protection for each person on board UCSC owned and/or operated vessels shall be readily accessible. If the exposure protection is not designed to be worn, personnel shall demonstrate the ability to don the exposure protection in under one minute to the OIC. For questions regarding the suitability of exposure protection for the conditions operated in, contact the BSO at boatingsafety@ucsc.edu. Re-warming materials should also be considered.

It is strongly recommended that re-warming supplies such as thermal blankets, hot water, and heating pads be carried when operating in cold conditions.

5.10.2 Offshore Waters

In addition to other requirements in this Manual, UCSC owned and/or operated vessels operating offshore (See section 5.5) shall be equipped with:

- At least **two** independent communication devices that do not rely on the same power source and get consistent service throughout the area of operation.

OR

- One Emergency Position Indicating Radio Beacon (EPIRB) or InReach

AND

- Life raft(s) capable of carrying all persons onboard.
- GPS

If it is too deep to anchor in the area of operations, a sea anchor is strongly recommended.

5.10.3 Reduced Visibility

In addition to other requirements of this Manual, any UCSC owned vessels operated at night or in reduced visibility (e.g., fog) shall be equipped with a GPS and lights (as applicable to vessel size and USCG navigation rules). A radar system is strongly recommended. For the purposes of this manual, visibility is to be considered reduced in the event of fog with visibility less than ¼ mile. Visibility can be considered restricted when the NWS or equivalent agency issues a dense fog advisory, or anytime between sunset and sunrise.

If visibility suddenly becomes restricted while on the water, it is important to make operational changes to account for the conditions. These changes may include:

- Decreasing vessel speed and preparing to stop
- Establishing multiple lookouts
- Illuminating running lights



- Making required sound signals
- Monitoring GPS, radar, and transducer
- Seeking the nearest safe anchorage to wait for conditions to improve if unequipped/unprepared to operate in reduced visibility.

5.10.4 Jet Boats

In addition to other requirements of this Manual, UCSC owned and/or operated jet boats should also be equipped with the following safety equipment:

- Hearing protection for Operators, Crew, and other personnel onboard except during low-speed operations when activities require unobstructed hearing.

5.10.5 Airboats

In addition to other requirements of this Manual, UCSC owned and/or operated airboats should also be equipped with:

- Hearing protection for Operators, Crew, and other personnel onboard except during low-speed operations when activities require unobstructed hearing.
- Eye protection for Operators, Crew, and other personnel onboard.

5.11 Solo Operators

Solo-Boating is approved on a case-by-case basis by the UCSC Boating Safety Committee or designee. Solo operations on Class A, I, and II motorized and non-motorized vessels should have close support, either from ashore or from a nearby platform. Close support is where rescuers are immediately notified by a dedicated person other than the operator in the event of an emergency and are readily able to respond.

Specific exemptions may be considered by the BSC when a request is submitted in writing to the BSO.

UCSC A/R paddlecraft must adhere to the boating clubs designated operating areas.

5.12 Scientific Boat Diving Operations

Any person(s) SCUBA diving from a UCSC boat, or under UCSC auspices are required to observe the provisions of the UCSC Diving Safety Manual. Diving by students, staff, researchers and faculty of the university or with UCSC equipment as a necessary part of their occupation, and by other authorized divers under the supervision of the UCSC dive program as a necessary part of research, constitutes diving under UCSC auspices.

All dive plans must be reviewed by the UCSC Diving Safety Officer (DSO). The designated lead diver will oversee all diving operations.

5.12.1 Live Boating

Operators must be endorsed by the BSO or designee for live-boating operations and shall demonstrate good close quarters maneuvering skills, an understanding of standard diver tending practices, and excellent situational awareness/communication skills. Previous diving experience is strongly recommended. Consultation with the Lead Diver is required



before operations begin. Specific guidance on live boat diving operations may be requested from the UCSC DSO (divingsafety@ucsc.edu).

5.12.2 Anchored diving operations

A UCSC owned and/or operated vessel may be left unattended on anchor to support dive operations only if:

- 1) Specific hazards and mitigations are addressed in the boating project plan and approved by the BSO.
- 2) The SBO determines anchor condition, bottom type, and environmental conditions are appropriate for anchored diving.
- 3) The anchor and rode are checked by the SBO before operations commence, and placement is checked upon descent at each site.

In all cases, environmental conditions, area of anchorage, anchor placement, and anchor/rode type and condition should be carefully considered.



APPENDIX 1. UCSC DIRECTED VESSEL CHARTERS

Vessel charters are directed by the University when an item of monetary value is exchanged for exclusive use of a vessel with a provided captain/crew and is directed by UCSC affiliates. Non-UCSC owners/operators must comply with all relevant USCG, federal, state, and local regulations covering chartered vessels for hire, and comply with UCSC contract requirements. All scientific vessel charters should be routed through [Cruz Buy](#) to ensure appropriate liability insurance and contracting language is in place. CruzBuy requisitions should be started as soon as possible to allow for processing time, which can be lengthy. A [charter assessment questionnaire](#) should be submitted with the charter request through Cruz Buy. All A/R outside group usage shall be approved by the A/R boating director.

Vessel charters that are not purchased exclusively for UCSC use and are not directed by UCSC affiliates are not covered in this manual. For questions or concerns related to any charter operation, reach out to the BSO at boatingsafety@ucsc.edu, and refer to UCOP guidelines in Appendix 2.

1.1 International Charters

In special international circumstances where it may be difficult to determine equivalencies of relevant federal/state/local regulations, the BSO or qualified designee may assess the safety of an international UCSC directed charter operation and make a recommendation to the BSC for final approval/rejection of the charter proposal.

At minimum, all international UCSC directed vessel charters should:

- Carry equipment required by the USCG for a similarly sized vessel
- Be appropriate for the conditions operated in
- Be captained by an operator qualified to operate the vessel per the country's regulations
- Not exceed the maximum capacity of the vessel.



APPENDIX 2. UCOP GUIDELINES FOR VESSEL CHARTERS



MARSH

The Regents of the University of California Guidelines for Vessel Charters

This document is provided to outline the risk management guidelines when the University charts non-owned vessels.

A charter is a contract for the commercial leasing of a vessel or space on a vessel.

When chartering a vessel, several steps should be taken to ensure adequate insurance coverage for the University of California as a charterer.

As outlined in Business and Finance Bulletin BUS-63, an attempt should be made to name UC as an additional insured under the vessel owner's Protection & Indemnity and Hull & Machinery policies.

- Protection & Indemnity (P&I) Coverage – request that the vessel owner name UC as an additional insured with a waiver of subrogation. Please note that if the P&I coverage is placed through a mutual P&I club, the vessel owner is prohibited from naming a charterer as an additional insured. If the P&I coverage is placed in the commercial insurance market, then it is feasible for the owner to comply with this request.

Note: it is important for UC to request an insurance certificate for P&I coverage to understand the limits available in case the vessel owner/employees are liable for injury to the university's employees/passengers on the vessel, and to make sure the limits satisfy UC's internal guidelines (see table below).

- Hull & Machinery (H&M) Coverage – in addition to being named as additional insured, request a waiver of subrogation on the vessel's H&M policy to protect UC against needing to pay for damage caused by the university's employees to the vessel itself.

Please carefully review certificates of insurance or copies of the insurance policies provided for exclusions/ limitations to ensure that coverage is appropriate for the specific charter in question.

Note the following guidelines for P&I limit the vessel owner needs to carry in order for the vessel to be chartered by UC:

Chartered Watercraft	P&I Limit	Notes
Commercial:		
▪ 1-10 Passengers	\$5,000,000	P&I should include Collision Liability, unless provided under the H&M policy
▪ 10+ Passengers	\$10,000,000	
▪ 23+ Passengers	\$15,000,000	
Private:		
▪ Not Exceeding 30'	\$500,000	P&I should include Collision Liability, unless provided under the H&M policy
▪ Exceeding 30'	\$1,000,000	



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NOTE: in addition to the policies in place arranged by the vessel owners, the University of California purchases Charterer's Liability coverage, which provides protection against liabilities arising out of UC acting in the capacity of a vessel charterer. However, this policy provides coverage **only for chartered vessels under 500 Gross Registered Tons, chartered by UC on a time or voyage basis, and operating on the Pacific coastal and inland waters of the U.S., Canada, or Mexico.** Should the vessel charter not fit these parameters, or should the type of activity involved in chartering a vessel present high risk or severe exposures, consult with your local Risk Management office for specific coverage requirements as may be applicable. Depending on the charter particulars, additional coverage may need to be purchased at extra premium.

Charters in which the crew is not provided by the charterer (called bareboat or demise charter) require advance approval for coverage under the University's ocean marine policy. A specific request must be submitted to Marsh Risk & Insurance Services prior to charter, allowing sufficient time to make necessary coverage arrangements (30-day lead time).

All vessel charters must be reported to Marsh Risk & Insurance Services via the quarterly Marine Exposure Report to ensure coverage for the charter. Campus departments must report any charters to their local Risk Management offices who is responsible for submitting the quarterly reports to Marsh.

A copy of the charter agreement and the charterer's certificate of insurance must be maintained at the campus. In the event of a loss, it will be necessary to provide this information.

Sample vessel charter agreements are attached to this document for your reference.

For further information, contact your local Risk Management office.



MARSH

The Regents of the University of California Best Practices for Vessel Charters

The University recommends the following best practices for charters of non-owned vessels.

- Vessel Requirements
 - U.S. Coast Guard Inspection (as required for the vessel)
 - Less than twenty-five (25) years of age
 - Steel or fiberglass construction
 - Diesel engines
 - Survey within the past two (2) years
 - Compliance with any survey recommendations
 - Capability to handle the intended charter
- Captain and Crew Experience
 - A professionally licensed Captain with a least ten (10) years experience
 - Review resumes of Captain and First Mate for experience for the intended charter
- Charter Agreement between UC and Vessel Owner
 - Review responsibilities of Vessel Owner and Charterer (UC)
 - Maintain copy of signed Charter Agreement
- For Bareboat Charterers Only:
 - On-Hire survey must be performed BEFORE vessel charter commences to determine condition of the vessel:
 - Surveyor must be a member of NAMS (National Association of Marine Surveyors) or equivalent
 - Recommendations must be complied with before accepting the vessel
 - Off-Hire survey must be performed BEFORE vessel charter concludes to determine condition of the vessel:
 - Surveyor must be a member of NAMS (National Association of Marine Surveyors) or equivalent



APPENDIX 3. ACRONYMS

A/R	Athletics and Recreation
BSC	Boating Safety Committee
BSO	Boating Safety Officer
CFR	Code of Federal Regulations
CPR	Cardiopulmonary Resuscitation
DBW	Division of Boating and Waterways
DSO	Diving Safety Officer
EPIRB	Emergency Position Indicating Radio Beacon
GPS	Global Positioning System
MOB	Man Overboard
MOCC	Motorboat Operator Certification Course
MOTC	Motorboat Operator Training Course
MSD	Marine Sanitation Device
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
OIC	Operator In Charge
PFD	Personal Flotation Device
SBO	Scientific Boat Operator
UCSC	University of California Santa Cruz
USCG	United States Coast Guard
VHF	Very High Frequency



APPENDIX 4. DEFINITIONS

Accident (Incident) – An unplanned event or series of events, which results in one of the following:

- Someone is injured and requires more than just basic first aid for the injury.
- A vessel/trailer breaks-down while in use in any manner that is not easily remedied, suffers more than superficial hull damage, or is involved in an accident or near-accident or other unsafe event whether on land or in the water.
- A citation or boarding of the vessel being operated.
- Damage to the environment, hazardous material spill, or impact on ecosystems or protected species.
- Damage to public or private property caused by UCSC operations.

Additional Personnel Onboard – Personnel present on a vessel who are not required to be engaged in the safe operation of the vessel.

Affiliate: A person who is connected to UCSC as an employee, volunteer, student, or other party connected through an agreement.

A/R Boating: Any boating done using UCSC A/R equipment and/or operators, for the sole purpose of athletics or recreation.

Auspices. UCSC auspices include any boating operation in which UCSC is connected because of:

- Ownership of vessel(s)/equipment used
- Locations selected
- Relationship with the associated individual(s).
- Affiliated course or research project

Checkout – A documented skills, aptitude, and equipment evaluation. Content and objectivity are guided by established minimum performance standards. The evaluation is conducted by the BSO or a designee.

Classification or Vessel Class – Designated general categories of vessels, based on length/propulsion:

Class A – Motorized vessels less than 16 feet in length

Class I – Motorized vessels between 16 feet and less than 26 feet in length

Class II – Motorized vessels between 26 feet and less than 40 feet in length

Class III – Motorized vessels between 40 feet and 65 feet in length

Coastal Waters – Waters up to 12 nautical miles from a harbor, support ship, or exemption zone.

Crew – Personnel other than the OIC necessary for the safe operation of the vessel.

Inland Waters – Shoreward of the COLREGS demarcation line that separates International Navigation Rules from U.S. Inland Navigation Rules.

Inspections – Documented, formal evaluations of a vessel's material condition, machinery, equipment, and compliance for which inspection criteria, frequency, and format are defined in this Manual.

Jet Boat – Any shallow-draft vessel propelled by a water jet as opposed to a propeller.

Kill Switch – A device designed to shut off an engine if the Operator, who is attached to the switch via a lanyard or Bluetooth device, is thrown away from the controls.

Length or Vessel Length – The documented length of the vessel included in official registration or documentation information. This will always be the Length Overall (LOA), as measured from stern to bow.

Live Boating – Maintaining a mobile vessel in support of dive operations. The vessel is not at anchor, and the motor(s) may be running and in gear when required for maneuvering around divers on the surface.

Motorboat – Any watercraft/vessel propelled by an electric or internal combustion motor/engine.

Near Miss – An event or circumstance that approaches an accident in which no property was damaged, and no personal injury was sustained, but where given a slight shift in time or position, damage or injury easily could have occurred. Events or circumstances that approach and compromise safety margins.

Non-motorized watercraft – Any vessel without a motor and propelled by oars, sails, or other non-mechanical means



Operator In Charge (OIC) – The individual assigned to direct the operation of any vessel for a specific operation. The OIC is the primary operator onboard and ultimately responsible for the vessel and crew during operations, regardless of position or job classification.

Offshore – Waters 12 nautical miles or more from the nearest harbor, support ship, or exempt area.

Operator in Training – Any person who controls the operation of a vessel or vessel trailer under UCSC auspices while under the direct and immediate oversight of a UCSC Authorized Operator.

Paddle Craft – A vessel powered only by its occupants, using a single- or double-bladed paddle. Examples include canoes, kayaks, and paddleboards.

Personal Flotation Device (PFD) – A USCG-approved device designed to keep the user afloat in the event of accidental immersion.

Planned Return– The time that the OIC notes on the float plan and communicates to the Shore Contact to indicate time that all personnel will be off the water or back at a home base.

Scientific boating: Any boating that facilitates UCSC academic research and/or education

Ship: Class 3 or larger inspected passenger vessel or oceanographic research vessel that small boats may be launched from.

Shore Contact – The Shore Contact is responsible for monitoring vessel operations, including vessel departure and arrival times as indicated on the Float Plan. The Shore Contact must be available by phone or radio throughout the duration of vessel operations. The Shore Contact must be able to act if a vessel is overdue and may not be on the water with the field team.

Solo Operator – An Operator of a vessel with no other persons onboard. For single seater paddlecraft this is defined as no other persons on the water able to render immediate assistance.

Support Ship– Class 3 or larger vessel that is specifically designated as an emergency response asset for small boats under its jurisdiction, and readily able to respond in an emergency.

Type or Vessel Type – Designations specifying the design, propulsion, or specific features within special vessel classifications.

Designated vessel types:

Motorboat – A small boat (<40 ft) powered by an internal combustion or electric motor.

- **Airboat** – Any vessel powered by an aircraft type propeller and generally shallow-draft
- **Jet boat** – Any shallow-draft vessel propelled by a water jet rather than a propeller
- **Personal Watercraft (PWC)**– Commonly referred to as jet skis. Usually jet propelled.

Ship– Class 3 or larger inspected passenger vessel or oceanographic research vessel that small boats may be launched from. Often motorized.

Non-motorized watercraft – Any vessel without a motor and propelled by oars, sails, or other non-mechanical means

- **Paddle Craft** – a vessel powered only by its occupants, using a single- or double-bladed paddle
- **Sailboat**– A vessel whose primary means of propulsion is by sail(s).

UCSC Directed vessel charters: Vessel charters are directed by the University when an item of monetary value is exchanged for exclusive use of a vessel with a provided captain/crew directed by UCSC affiliates. Vessel charters that are not purchased exclusively for UCSC use and/or are not directed by UCSC affiliates are not covered in this manual.

Underway – A vessel is not at anchor, or made fast to the shore, or aground.

Vessel (Watercraft) – Any floating device capable of being used as a means of transportation of persons on water. Vessels are classified by size, presence or absence of a motor (see Classification), and special characteristics (see Type).



APPENDIX 5. WAIVER AND RELEASE OF LIABILITY

UNIVERSITY OF CALIFORNIA, Santa Cruz

Waiver of Liability, Assumption of Risk, and Indemnity Agreement

Waiver: In return for being permitted to participate in the following activity or program ("The Activity"), including any associated use of the premises, facilities, staff, equipment, transportation, and services of the University, I, for myself, heirs, personal representatives, and assigns, **do hereby release, waive, discharge, and promise not to sue** The Regents of the University of California, its directors, officers, employees, and agents ("The University"), from liability **from any and all claims, including the negligence of The University**, resulting in personal injury (including death), accidents or illnesses, and property loss, in connection with my participation in the Activity and any use of University premises and facilities.

Description of Activity or Program:

Date(s):

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

Indemnification and Hold Harmless: I also agree to indemnify and hold The University harmless from any and all claims, actions, suits, procedures, costs, expenses, damages and liabilities, including attorney's fees, arising out of my involvement in The Activity, and to reimburse it for any such expenses incurred.

Severability: I further agree that this Waiver of Liability, Assumption of Risk, and Indemnity Agreement is intended to be as broad and inclusive as permitted by law, and that if any portion is held invalid the remaining portions will continue to have full legal force and effect.

Governing Law and Jurisdiction: This Agreement shall be governed by the laws of the State of California, and any disputes arising out of or in connection with this Agreement shall be under the exclusive jurisdiction of the Courts of the State of California.

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 confirm that I am signing the agreement freely and voluntarily, and **intend my signature to be a complete and unconditional release of all liability** to the greatest extent allowed by law.

Participant Name (print)

Date of Birth

Participant Signature

Date

I, the parent/legal guardian of the Participant, hereby agree to the above on behalf of the Participant.

Parent/Guardian Name (print)

Signature

Date



APPENDIX 6. VOLUNTEER WAIVER AND ELECTION OF WORKERS' COMPENSATION COVERAGE

FILLABLE FORM

UNIVERSITY OF CALIFORNIA, SANTA CRUZ - UCSC VOLUNTEER WAIVER AND ELECTION OF WORKERS' COMPENSATION COVERAGE

(To be used by persons providing volunteer services not related to employment duties, or their UCSC education requirements, and without compensation, for the benefit of the university.)

Email copy to the Workers' Compensation Office in Risk Services at incident@ucsc.eduName of Volunteer: Home Phone: Home Address: UCSC Sponsored Program/Event in which volunteer's services will be provided: Volunteer Appointment Begins on: Ends on:
(Month/day/year) (Month/day/year) (Cannot be indefinite)

The purpose of the [UC COVID-19 Vaccination Program Policy](#) is to facilitate protection of the health and safety of the University community, including its patients as well as its students, trainees, personnel and all other who work, live and/or learn in any of the University's locations or otherwise participate in person in University programs. It is intended to reduce the incidence of COVID-19 infection, disease, disability, and death.

A covered individual includes anyone designated as personnel, students, or trainees under this Policy who physically access a University Facility or Program in connection with their employment, appointment, or education/training. "Personnel" also includes, for purposes of this policy, "official volunteers", as defined in the Regulations Governing Conduct of Non-Affiliates in the Buildings and on the Grounds of the University of California¹.

Do you attest that you are in compliance with the UC COVID-19 Vaccination Program Policy? Yes ☒ No ☐Should you have any questions please contact Risk Services at 831-459-1787 or cadelgad@ucsc.edu.UCSC Department for which Volunteer Services will be provided: Name of Volunteer's Supervisor: Supervisor's Phone:

¹ Official volunteers as defined in the [Regulations Governing Conduct of Non-Affiliates in the Buildings and on the Grounds of the University of California](#).

ELECTION OF REMEDY

As a condition of my participation in UCSC volunteer service and in consideration for my use of UCSC facilities and equipment, I, the above named volunteer, hereby understand and agree that in the event I am injured or contract an illness or disease either during my UCSC volunteer service, or subsequent thereto as a result of such service, that I am hereby electing to be covered under the University of California's Self Insured Workers' Compensation Program as a volunteer for the University of California, Santa Cruz Campus, and that the benefits provided by the Labor Code of the State of California shall be my **SOLE AND EXCLUSIVE REMEDY FOR ANY AND ALL SUCH INJURIES, ILLNESSES OR DISEASES**. This election of remedy shall be binding on myself, my heirs, administrators, executors and assigns.

WAIVER, RELEASE & INDEMNITY

In consideration of my use of UCSC facilities and of equipment and of my coverage under the University's Self Insured Worker's Compensation Program, I, the above named Volunteer, hereby for myself, my heirs, executors, administrators, and assigns voluntarily release, forever discharge, waive, and relinquish any and all actions, claims, or causes of action for bodily injury, personal injury, property damage, or wrongful death occurring or arising out of the course and scope of my volunteer service against the Regents of the University of California, its officers, agents, volunteers, and/or employees (herein after referred to as the University), whether the same shall arise by contract, the negligence of any said persons, or otherwise. **IT IS MY INTENTION BY THIS INSTRUMENT TO EXEMPT AND RELIEVE THE UNIVERSITY FROM ANY AND ALL LIABILITY TO ME, MY HEIRS, ADMINISTRATORS, EXECUTORS, AND ASSIGNS FOR BODILY INJURY, PROPERTY DAMAGE, AND WRONGFUL DEATH CAUSED BY NEGLIGENCE.**

I, the above named Volunteer, for myself, my heirs, administrators, executors, and assigns do hereby agree, in the event any claim for bodily injury, property damage, or wrongful death arising out of my volunteer services shall be prosecuted against the University, to defend, indemnify and hold harmless University from and against any and all such claims or causes of action by whomever or wherever made or presented, except for such claims as may arise from or be caused by the willful misconduct of the University.

I, the above named Volunteer, hereby expressly waive all rights under Section 1542 of the *Civil Code of California* which states that a "general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

REPORTING OF INJURIES/ILLNESSES AND MEDICAL TREATMENT

I hereby agree to report all injuries or illnesses contracted in the scope of my UCSC volunteer service to the UCSC department in which I am providing volunteer service and to the Office of Risk Services (831) 459-2850, FAX (831) 459-3268, incident@ucsc.edu, 100 Enterprise Way E100,

1/29/2024

FILLABLE FORM

Scotts Valley, CA 95066 immediately. Volunteers injured on the campus are authorized to be treated at the Designated Medical Treatment Providers at <http://risk.ucsc.edu/all-forms/wc-authorization-medical-form.pdf> or Dominican Hospital Emergency Room.

I, the above named volunteer, have read and understand the above "election of remedy," the "waiver, release and indemnity," and the "waiver of Civil Code Section 1542 rights", and agree to all of them.

Signature of Volunteer: Date: Signature of University Supervisor/PI: Date:

Original: Volunteer's Department - Retain for 5 years following termination of volunteer services
One Copy to Volunteer & One Copy to the Workers' Compensation Office in Risk Services via email, incident@ucsc.edu

**APPENDIX 7. MOTORIZED OPERATOR CHECK OUT FORM**

BOATING CHECKOUT TASK BOOK				
Skills are to be evaluated by Boating Safety Officer, Diving Safety Officer, or Marine Operations Manager				
VESSEL:		Operator:		
Skill	Subject	Task /Performance Requirement	Instructor Initials	Date
1	UCSC diving/boating policies and procedures	Demonstrates knowledge of "no go" conditions, required safety equipment, and float plan requirements		
2	Meteorology/weather	Can interpret marine weather forecasts, and understand impacts on operations.		
3	Contingency Planning	Designates appropriate shore contact, files float plan, understands and briefs emergency response resources.		
4	Trip Planning	Demonstrates knowledge of rule of thirds, fuel planning, fueling procedures, gauges, and burn rates.		
5	Crew briefing	Demonstrates proper safety briefing, weather assessment, and able to perform mission specific briefing. Clear and concise.		
6	Boat design and systems	Has understanding of design, steering, fuel, electrical, propulsion, and vessel-specific systems.		
7	Safety and emergency equipment	Can locate and demonstrate use of onboard emergency equipment		
8	Fire and damage control	Takes necessary procedures to prevent fire occurrences, especially during refueling procedures. demonstrates use of fire extinguisher.		
9	Vessel start up and shut down	Demonstrates proper start-up, crew briefing and shut down		
10	Radar Operation	Demonstrates understanding of radar system, when and how to use, MFD interface, rangefinding, etc		
11	Docking	Demonstrates proper procedure for; untying, pulling away, approaching and securing vessel to dock in a variety of approaches.		
12	Rules of the Road	Demonstrates knowledge of rules of the road.		
13	Aids to Navigation	Demonstrates understanding of navigational buoys, lights, horns, locations in area of operations.		
14	Marlinspike, knots, etc.	Able to tie bowline, anchor bend, cleat hitch, clove hitch, and gasket hitch without assistance.		
15	Anchoring	Demonstrates ability to drop and set anchor as well as retrieve.		
16	Crew overboard	Demonstrates ability to perform MOB recovery procedures.		
17	Radio use	Demonstrates proper use of VHF radio,		



18	Navigation	Able to navigate to a waypoint and stay within 5 feet of the point. Demonstrates understanding of compass, Dead reckoning, and ability to locate position without the aid of electronics.		
19	Electronics; use of GPS chart plotter system	Able to navigate using waypoints, routes, etc. Demonstrates ability to use onboard chart plotter.		
20	Electronics; use of depth sounder	Demonstrates proper use of depth sounder, while underway, anchoring, and for specific needs of research.		
21	Rescue Operations	Demonstrates safe and proper boat handling during simulated SAR drills including MOB recovery.		
22	Engine troubleshooting	Can differentiate engine trouble from various sources, i.e. fuel problems, intake, air, etc.		
23	Trailer techniques	Demonstrates ability to trailer a boat, maneuver around obstacles, and place and retrieve boat at loading ramp. Ensures boat and trailer are road ready prior to embarking. Hubs checked at appropriate intervals.		
24	Preventive maintenance	Understands and demonstrates importance of proper record keeping (boat log), corrosion prevention, marine growth, engine upkeep, cleaning and caring of boat and equipment.		
25	Dive operations	Knowledge of dive emergency evacuation plan, demonstrated ability to get an unconscious person on the boat using multiple methods. Proper use of flag/light signals. Safe live-boating techniques.		
26	Boat handling; heavy seas Open Ocean	Ability to operate in varied sea and weather conditions, swell, wind chop. Quartering into seas, operating in a following sea.		
27	Leadership	Directs crew appropriately. Professional conduct and solicits crew input. Delegates tasks and has a big picture understanding of the operation and effects on safety.		
28	Deck Management	Keeps deck organized with a priority on accessibility of safety equipment. Load considerations and effects on vessel stability are appropriately handled.		
29	Time management	Briefings, vessel setup, trailering, and operations are conducted at an appropriate speed that is safe but also optimizes operational efficiency		
30	Live Boating	Demonstrate situational awareness, close quarters maneuvering, and communication skills for live-boating divers. Demonstration of skills during diving field operations.		
31	Surf Zone	Demonstrate operating vessel through a surf zone safely		
32	Night Operation	Demonstrates ability to navigate and operate boat at night.		

**APPENDIX 8. PADDLE CRAFT TRAINING RECORD FORM**

Boater Name: _____ Date: _____

Training Location(s): _____ Paddlecraft Type: _____

Scoring Scale:

This training is administered with a Satisfactory/Needs Improvement assessment. Any knowledge or Skills requiring additional training or review will be re-visited with the trainee. This is a conceptual framework for course administrator to assess participants understanding of the course material.

Knowledge Assessment

Standards and policies: _____ Pass Date: _____

Float Planning/shore contact instructions: _____ Pass Date: _____

Knowledge of local marine hazards _____ Pass Date: _____

Safe transport of watercraft _____ Pass Date: _____

Water Skills

Knots (bowline, truckers hitch): _____ Pass Date: _____

Paddling technique/Bracing: _____ Pass Date: _____

Towing: _____ Pass Date: _____

Site assessment: _____ Pass Date: _____

Beach launching assessment/skills (if needed): _____ Pass Date: _____

Self-rescue: _____ Pass Date: _____

Buddy rescue: _____ Pass Date: _____

Entry/exit facilitation: _____ Pass Date: _____

Cleanup/Breakdown _____ Pass Date: _____

Comments: _____

_____**Paddlecraft Authorization**

I _____, certify that this individual has successfully demonstrated knowledge of the above areas, and capably performed the above water skills. With this training, current CPR/First Aid certification, [ACA training course documentation](#), and approved boating project plan, they are approved to pilot paddlecraft for approved UC Santa Cruz scientific research, in conditions and vessels similar to those in which this course was conducted.

**APPENDIX 9. SCIENTIFIC BOATING PROJECT PLAN**

Project Title:	Principal Investigator
Operation start/end date:	Created by:

Diving Project? Yes. ☐ No. ☐

Boating Safety Officer Cell: 831-889-8836

Project Description:

Project Personnel:	Cell	Affiliation	Emergency Contact Cell
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			

Shore contact receives float plan prior to departure. If shore contact can't reach vessel one hour past ETA then the predetermined emergency agency and BSO should be contacted

Shore Contact(s)	Cell	Launch type(s)	
1)		Ramp ☐	Hoist ☐
2)		Dock/Mooring ☐	Beach ☐
3)		☐ Other:	

Project site(s) and launch location(s). Attach map.

--

Vessel(s) used

Operator(s)

1)	1)
2)	2)
3)	3)
4)	4)
5)	5)

Does weight of crew and equipment exceed max capacity of any vessel? Yes ☐ No ☐

Tow Vehicle(s) License Plate Number

Tow Vehicle Operator(s)

1)	1)
2)	2)
3)	3)

Does weight of towed vessel exceed weight rating of vehicle or hitch? Yes ☐ No ☐



Safety equipment on board			Additional Equipment
Life Jackets ☐	Fire Extinguisher ☐	Throwable PFD(s) ☐	
#	#	#	
Type:	Type	VDS/Flares ☐	
Immersion Suit. ☐	Anchor ☐	Sea Anchor ☐	
#	GPS ☐	Potable Water ☐	
First Aid Kit ☐	Dive Flag ☐	Oxygen kit ☐	
AED ☐	Manual Bilge Pump ☐	Air Pump ☐	
Whistle/horn ☐	Dive ladder ☐	Signal light ☐	
Communications Equipment			Additional Coms
EPIRB ☐	Handheld VHF ☐	Fixed Mount VHF ☐	
Satellite phone ☐	InReach ☐		
#:	inreach.com		

Emergency Communications Plan/ Contingency Resources**Nearest Medical Facility: (name, number, transportation method, transportation time)****Anticipated Hazards****Mitigations**

1)	
2)	
3)	
4)	
5)	
6)	

Other Considerations/Comments:



APPENDIX 10. SHORE CONTACT INSTRUCTIONS TEMPLATE

These instructions are to be provided to the designated shore contact prior to departure of the field team

Before the field team leaves:

Step 1: Get cell phone number for the Operator In Charge.

Step 2: Know their plans for the day and what time they expect to be off the water. Request a copy of their float plan.

Step 3: Arrange a specific time that the Operator In charge will call you.

If the field team contacts you for assistance:

Step 1: Get this information from them:

What is their exact location (Coordinates Preferred)

How many people are there on board?

Are there any injuries? If there are injuries, how many people are injured and how are they being treated?

What type of assistance is needed?

Step 2: If it is an emergency, dial 911 and say:

"Hello, my name is _____. I am the shore contact for a _____ (number of people) research team traveling via _____ (Description of Boat) located at _____ (lat/long coordinates, or approximate location using common landmarks). They have informed me that they require emergency assistance related to _____ (State nature of emergency)."

If applicable, state number of people injured, nature of injuries, and current treatment.

Don't hang up until the operator says it is ok to do so.

Step 3: Call these people to inform them of the situation.

Ian Moffitt (work cell) 831-889-8836, 323-304-0242 (personal cell)

Dave Benet (C) 831-459-5567

Luis Hernandez (C) 831-334-9114

Step 4: If no one is available, call additional people using the phone list on the next page.

If the field team has not contacted you by the designated time:

Step 1: Call the field leader and others on the field team (leaving voicemail and text messages)

Step 2: Wait 10 minutes and try again (just to be sure they were not in a cell phone dead zone)

Step 3: Call these people to inform them of the situation

Ian Moffitt (work cell) 831-889-8836, 323-304-0242 (personal cell)

Dave Benet (C) 831-459-5567

Luis Hernandez (C) 831-334-9114

Step 4: If no one is available, call additional people using the telephone contact list below.



Emergency Contact List:

UCSC Boating Safety Program Staff:

Dave Benet (UCSC Diving): (C) 831-459-5567

Ian Moffitt (UCSC Boating): (Work cell) 831-889-8836 / (personal cell) 323-304-0242

UCSC Boating Program Managers:

Luis Hernandez: (C) 831-334-9114

Kristy Kroeker: (C) 831-566-8253

Ari Friedlander (C) 919-672-0103

Don Croll (C) 831-535-3219

Mark Carr (C) 831-246-3524

IMS Facilities Staff:

Randolph Skrovan: (W) 831-459-4735 / (C) 831-818-2071

Luis Hernandez (Marine Operations): (C) 831-334-9114

Vessel Safety Support:

Morro Bay Harbor Master: 805-772-6254

Santa Cruz Harbor Master: 831-475-6161 Harbor Office / 831-471-1131 Harbor Patrol Non-Emergency

Monterey Harbor Master: 831-646-3950 Day / 831-594-7760 Evening

Carmel (Stillwater) Harbor Master: 831-625-8520

Point Lobos Ranger Station: 831-624-4909

USCG station Monterey: 831-647-7300

USCG station San Francisco: 415-399-3300 (emergency only)

USCG station Bodega Bay: 707-875-3596

Point Arena Harbor Master: 707-882-2583

Towboat US: 800-391-4869

DAN:

Emergency: 919-684-9111

Medical: 919-684-2948

**UCSC Scientific Vessel Descriptions:**

Name	Type	Description	CF Number
San Lorenzo	26' Radon inboard/outdrive	Fiberglass hull-black&white, cabin	Federal Boat
Soquel Point	22' Radon twin 135 Honda outboards	Fiberglass hull-black&white, cabin	CF9082XS
Sebastes	22' Anderson single 225 Honda outboard	Fiberglass hull-black&white, center console	CF3704XS
Terrace Point	17' Boston Whaler single 90 Honda outboard	Fiberglass hull-light grey, center console	CF3122XS
Dal Ferro	12' Achilles single 20 Honda outboard	Inflatable hull-red, open deck	CF9576XS
Minigon	12' Achilles single 20 Honda outboard	Inflatable hull-red, open deck	CF9686XS
Umi Chan	12' Achilles single 20 Honda outboard	Inflatable hull-red, open deck	CF3078VX
Mirounga	10' Achilles single 9.9 Honda Outboard	Inflatable hull, open deck	
Big Creek Inflatable	12' Achilles single 20 Honda outboard	Inflatable hull-red, open deck	CF9883X
Jean Agnes	14' Achilles single 70 Honda outboard	Inflatable hull-red, open deck	AK-1161-AU
Cachalote	24' fiberglass center console Panga single 140 Suzuki	White and blue fiberglass Panga with installed bench seating	0304458214 4
Linda K	28' SOLAS Rigid Hull Inflatable	Rigid Hull Inflatable with center console. Black Pontoons, Aluminum deck.	Unregistered



APPENDIX 11. IMS FLOAT PLAN

UCSC Boat Activity Log

Date: _____	Weather Check _____
Operator in Charge: _____	_____
Crew: _____	_____
_____	_____
_____	_____
_____	_____
Time out: _____	Planned Return: _____
Vessel/Engine: _____	_____
Location/Destination: _____	_____
Harbor/Launch: _____	_____
Project/Purpose: _____	_____
Field Contact(s) names and cell phones: _____	_____
_____	_____
Shore Contact: _____	_____
Account To Be Charged: _____	_____

**APPENDIX 12. SAMPLE DAILY LOG****DAILY LOG****Date:** _____**Hours:** _____**Engine Hours/Fuel Log****Operator(s):** _____

_____**Crew:** _____

_____**Start** _____ / _____**Finish** _____ / _____**Location:** _____
_____**Project:** _____
_____**Checklist****Before Leaving the Lab**

☐	log starting hours
☐	engines start / warm up
☐	water pressure check
☐	oil & fuel level check
☐	engines on travel brackets
☐	PFDs / fire extinguisher
☐	signal devices / tool kit
☐	First Aid / O2 kit (if diving)
☐	radio & instruments check
☐	trailer & nav lights check
☐	hitch & safety chain hookup
☐	bow safety chain/winch check
☐	tire tread, pressure and grease
☐	fenders/ dock lines/ ladder

Launching and Start up

☐	both power switches on
☐	engines off main brackets
☐	check fuel bulbs
☐	start up engines
☐	radio antenna up
☐	instruments on

Return to Lab or Slip

☐	fuel topped up
☐	rinse and scrub deck
☐	engines down & rinse
☐	brake rinse
☐	trailer rinse
☐	replace instrument cover
☐	return to boat yard
☐	chock wheels
☐	jack up / on pedestal
☐	power switches off
☐	secure cabin door

Servicing/work done (eg. Fueling, lube, repairs)**Damage or Problems****Comments and General Log**

Motor Rinsing Options: 1) Connect strbd side motor flush valve
directly to hose. Rinse for 10 mins with motor off. 2) Use
rinse "ear muffs" over motor cooling intakes and rinse 10 min
with motor idling. MONITOR CLOSELY.



APPENDIX 13. TRAILERING SAFETY CHECKLIST

Pre-Trailer Steps/Inspection:

- Confirm capacities are appropriate/legal
- Vehicle towing capacity
- Vehicle GCWR limit - Total weight of vehicle, trailer, and cargo
- Hitch, ball and receiver size and weight capacities
- Trailer height and width road limits
- Inspect condition of coupler, straps, brake lines, lights, U-bolts, bunks, etc.
- Verify trailer and vehicle tire pressure and lug nut torque
- Hitch receiver properly set with pin and retainer

Coupling Steps/Inspection:

- Coupler seated properly on ball, latched and locked
- Stow trailer jack
- Cross and connect safety chains to vehicle. Twist chains as needed to shorten length to prevent dragging. Ensure length is sufficient for turning radius. Ensure chain retainers
- (e.g., gates, rubber straps, etc.) are secure.
- Attach emergency brake cable (if applicable). Ensure sufficient length.
- Match terminals and attach wiring harness. Ensure sufficient length.
- Check lights operation (turn, brake, running)
- Check tension on bow winch, set lock position and attach safety chain
- Secure bow vertically (lash down to trailer frame) for long hauls or rough terrain
- Secure transom tie downs
- Engine raised and locked. Use engine/transom supports.
- Steering is hard over and/or secure in place
- Lower antennas, masts, etc.
- Secure loose items
- Remove wheel chocks and any locks on wheels

De-coupling Steps:

- Ensure secure parking location with minimal slope
- Place wheel chocks
- Release coupler latch and lock
- Raise trailer tongue using trailer jack
- Continue raising while confirming the coupler is releasing from ball
- Raise tongue until coupler is clear of hitch
- Remove/stow safety chains, emergency brake cable and wiring harness.
- Move vehicle away
- Rinse (use salt removing/neutralizing product) and secure (lock) trailer/boat
- Cover for UV protection as possible



APPENDIX 14. BOAT BRIEFING CHECKLIST

General Information:

Introduction of Operator/Crew, vessel name
Paperwork: waivers if applicable
Destination & timeline (departure, ETA site, depart site, ETA return)
Loading/stowing gear
Expected weather/ocean conditions
Hazards

Roles of Persons Onboard:

Designated Operator, Crew, Lookout
Requirements/actions specific to the vessel (off limit areas, etc.)
Tasks specific to the overall mission.

Safety and Regulations:

Location & operation of VHF radio and primary working channel
Location & donning of PFDs and/or survival suits
Location & deployment of throw ring and life raft (if equipped)
Location & use of fire extinguishers
Location of first aid
Location of oxygen kit (if diving)

Emergency Procedures:

Emergency resources in the area
Man overboard (MOB)
Diving emergency procedures (if applicable)
Fire
Abandoning the vessel
Emergency radio communication
Use VHF Channel 16 in US mode
Clearly and calmly state:
MAYDAY, MAYDAY, MAYDAY!
Vessel name, ID number & description
Nature of distress
Location (speak slowly and repeat position)
Number of people on board



APPENDIX 15. ON SITE BOATING EMERGENCY MANAGEMENT

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 point 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 Boating Safety Officer or the designated Assistant.
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 the designated mother-ship or land-based point of contact. A communication schedule shall be established to monitor the situation until safe moorage is obtained.

1. Apply measures to minimize or correct the situation and contact land base or mother ship.
 - Location
 - Nature of problem
 - Type of assistance needed
 - Number of persons on board
 - 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.
 - Same as #1 above.
 - Request notification of the land base that is holding your float plan.
2. Notify the Boating Safety Officer or the designated Assistant.
3. 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 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.
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 Boating Safety Officer or the designated Assistant as soon as possible.

**APPENDIX 16. BOATING ACCIDENT REPORT FORMS**

All boating accidents involving vessel or equipment failure or any other circumstances that significantly increased the risk of injury or damage, required action to avoid injury or damage, or required towing or other support shall be reported. All boating accidents resulting in injury or property damage shall also be reported.

Any accident resulting in a fatality, injury requiring medical treatment beyond first aid, disappearance under circumstances that indicate death or injury, damage to other vessels and other property in excess of \$500 or complete loss of the vessel shall also be reported to the Division of Boating and Waterways (see below).

Date of report: _____ **Did an injury result?** Yes _____ No _____

If yes, check the appropriate space(s):

_____ Minor Injury _____ Referred to Physician

_____ Serious injury (See DBW Accident Report)

_____ Fatality (See DBW Accident Report)

_____ Other (Describe): _____

Workers' Compensation Claim: Yes _____ No _____

Property Damage? Yes _____ No _____

Date of Accident: _____ **Location:** _____ **Time:** _____

Program/Project: _____ **Designated Operator:** _____

Reporting Person: _____

Other Crew and Personnel Onboard:

Circumstances and Narrative (use additional sheets if necessary):

Extent of Injuries or Illnesses, Treatment Provided, Property Damage and Outcome:

Recommendations to Avoid Repetition of Accident:

Signature _____ Date _____ / _____ / _____

Boating Safety Officer Recommendation:

Boating Safety Officer _____ Date: _____



The California Division of Boating and Waterways [accident report form](#) (below) shall be used for all UCSC boating accidents resulting in a fatality, injury requiring medical treatment beyond first aid, disappearance under circumstances that indicate death or injury, damage to other vessels and other property in excess of \$500, or complete loss of the vessel.

CALIFORNIA BOATING ACCIDENT REPORT

CALIFORNIA STATE PARKS DIVISION OF BOATING AND WATERWAYS

The operator of every recreational vessel is required by Section 656 of the Harbors and Navigation Code to file a written report whenever a boating accident occurs which results in death, disappearance, injury that requires medical attention beyond first aid, total property damage in excess of \$500, or complete loss of a vessel. Reports must be submitted within 48 hours in case of death occurring within 24 hours of an accident, disappearance, or injury beyond first aid. All other reports must be submitted within 10 days of the accident. Reports are to be submitted to California State Parks Division of Boating and Waterways, Accident Unit at P.O. Box 942896, Sacramento, California 94296-0001, (916) 327-1826. Failure to submit this report as required is a misdemeanor and is punishable by a fine not to exceed \$1000 or imprisonment not to exceed six months or both.							
DATE OF ACCIDENT (M/D/Y)	TIME OF ACCIDENT ☐ AM ☐ PM	COUNTY	STATE	BODY OF WATER	NEAREST CITY OR TOWN		
LOCATION ON WATER			LATITUDE/LONGITUDE ACCIDENT OCCURRED: N W				
# INJURED	# DEAD	TOTAL \$\$	LAW ENFORCEMENT ON ACCIDENT SCENE? ☐ YES ☐ NO		AGENCY NAME		
TEMPERATURE WATER AIR		WATER CONDITIONS ☐ CALM (Waves less than 6") ☐ CHOPPY (Waves 6"-2') ☐ ROUGH (Waves 2'-6") ☐ VERY ROUGH (Waves >6")		WIND CONDITIONS ☐ NONE ☐ LIGHT (0-6 MPH) ☐ MODERATE (7-14 MPH) ☐ STRONG (15-25 MPH) ☐ STORM (OVER 25 MPH)		FORECAST AVAILABLE? ☐ YES ☐ NO USED? ☐ YES ☐ NO	
WEATHER (CHECK ALL THAT APPLY) ☐ CLEAR ☐ CLOUDY ☐ FOG ☐ RAIN ☐ SNOW ☐ HAZY				WEATHER FORECAST BEFORE VOYAGE AVAILABLE ☐ YES ☐ NO USED ☐ YES ☐ NO DURING VOYAGE ☐ YES ☐ NO ☐ YES ☐ NO AFTER VOYAGE ☐ YES ☐ NO ☐ YES ☐ NO VISIBILITY ☐ GOOD ☐ FAIR ☐ POOR STRONG CURRENT ☐ YES ☐ NO			
TYPE OF ACCIDENT (CHECK ALL THAT APPLY) ☐ CAPSIZING ☐ COLLISION WITH VESSEL ☐ COLLISION WITH FIXED OBJECT ☐ COLLISION WITH FLOATING OBJECT ☐ FALL OVERBOARD ☐ FALL IN BOAT ☐ GROUNDING ☐ FIRE/EXPLOSION (fuel) ☐ FIRE/EXPLOSION (other than fuel) ☐ FLOODING/SWAMPING ☐ SINKING ☐ STRUCK BY BOAT/PROPELLER ☐ SKIER MISHAP ☐ OTHER: _____		CAUSE OF ACCIDENT (CHECK ALL THAT APPLY) #1 #2 (See back of sheet for vessel number) ☐ IMPROPER LOOKOUT/INATTENTION ☐ OPERATOR INEXPERIENCE ☐ EXCESSIVE SPEED ☐ MACHINERY FAILURE ☐ IMPROPER LOADING ☐ OVERLOADING ☐ EQUIPMENT FAILURE (DESCRIBE): ☐ HAZARDOUS WEATHER/WATER ☐ RESTRICTED VISION ☐ IGNITION OF SPILLED FUEL/VAPOR ☐ IMPROPER ANCHORING ☐ OFF-THROTTLE STEERING INABILITY ☐ FAILURE TO VENT ☐ OTHER: _____		ACTIVITY AT TIME OF ACCIDENT #1 #2 (See back of sheet for vessel number) ☐ WATER SKIING ☐ WAKE BOARDING ☐ TUBING ☐ FISHING ☐ RACING ☐ WHITEWATER ACTIVITY ☐ FUELING ☐ HUNTING ☐ OTHER: _____ DID DRUGS OR ALCOHOL CONTRIBUTE TO THE ACCIDENT? ALCOHOL ☐ YES ☐ NO ☐ UNKNOWN DRUGS ☐ YES ☐ NO ☐ UNKNOWN IF YOU MARKED "YES," PLEASE PROVIDE DETAILS IN NARRATIVE.			
DESCRIBE WHAT HAPPENED AND WHAT YOU COULD HAVE DONE TO PREVENT THIS ACCIDENT (Use sketch if helpful. Explain the cause of death or injury, medical treatment, etc. If needed, continue description on additional paper.)							
OTHER PROPERTY (Damage to items other than vessels)							
DESCRIPTION OF DAMAGE				ESTIMATED DAMAGE \$\$ ☐ NONE			
OWNER'S NAME	ADDRESS	STATE	ZIP	PHONE ()	NOTIFIED ☐ YES ☐ NO		
VICTIM OR WITNESS INFORMATION							
VICTIM/WITNESS NAME/ADDRESS/PHONE	VICTIM/WITNESS STATUS	RIDING IN VESSEL #	DATE OF BIRTH/AGE	INJURY DESCRIPTION	CAUSE OF DEATH	COULD VICTIM SWIM?	LIFE JACKET WORN?
	☐ INJURED ☐ DEAD ☐ WITNESS ONLY				☐ DROWNING ☐ TRAUMA ☐ OTHER	☐ YES ☐ NO	☐ YES ☐ NO
	☐ INJURED ☐ DEAD ☐ WITNESS ONLY				☐ DROWNING ☐ TRAUMA ☐ OTHER	☐ YES ☐ NO	☐ YES ☐ NO
	☐ INJURED ☐ DEAD ☐ WITNESS ONLY				☐ DROWNING ☐ TRAUMA ☐ OTHER	☐ YES ☐ NO	☐ YES ☐ NO
	☐ INJURED ☐ DEAD ☐ WITNESS ONLY				☐ DROWNING ☐ TRAUMA ☐ OTHER	☐ YES ☐ NO	☐ YES ☐ NO

DBW FORM BAR-1 11/17

THIS CONFIDENTIAL REPORT IS USED IN RESEARCH FOR THE PREVENTION OF ACCIDENTS AND A COPY IS FORWARDED TO THE UNITED STATES COAST GUARD

**CALIFORNIA BOATING ACCIDENT REPORT**

CALIFORNIA STATE PARKS DIVISION OF BOATING AND WATERWAYS

INFORMATION: OPERATOR #1

OPERATOR NAME, ADDRESS, PHONE #	IS OWNER DIFFERENT THAN OPERATOR? ☐ YES ☐ NO	OPERATOR EXPERIENCE ☐ UNDER 10 HOURS ☐ 10 TO 100 HOURS ☐ OVER 100 HOURS	OPERATOR EDUCATION ☐ AMERICAN RED CROSS ☐ USCG AUXILIARY ☐ US POWER SQUADRON ☐ STATE COURSE ☐ INFORMAL ☐ NONE ☐ OTHER: _____
	OWNER NAME AND ADDRESS		
AGE	MARINA/RAMP LAUNCHED FROM:		

INFORMATION: VESSEL #1

(YOUR VESSEL)

THIS VESSEL ONLY	# INJURED	# DEAD	ESTIMATED DAMAGE	RENTED BOAT ☐ YES ☐ NO	# OF PERSONS ON BOARD	# OF PERSONS TOWED		
BOAT NUMBER (CF OR DOC #)		MFR. HULL ID #		BOAT NAME	DEPTH (TRANS. TO KEEL)	BEAM WIDTH	LENGTH	
BOAT MANUFACTURER		BOAT MODEL		YEAR BUILT	SPEED AT TIME OF ACCIDENT ____ MPH	# OF ENGINES	HORSE POWER	
ACTIVITY ☐ RECREATIONAL ☐ COMMERCIAL ☐ OTHER	FIRE EXTINGUISHER ON BOARD ☐ YES ☐ NO	TYPE OF FIRE EXTINGUISHER # ONBOARD	FIRE EXTINGUISHER USED ☐ YES ☐ NO	LIFE JACKETS ON BOARD ☐ YES ☐ NO	LIFE JACKETS ACCESSIBLE ☐ YES ☐ NO	LIFE JACKETS WORN ☐ YES ☐ NO		
TYPE OF BOAT ☐ OPEN MOTORBOAT ☐ CABIN MOTORBOAT ☐ PERSONAL WATERCRAFT ☐ HOUSEBOAT ☐ PONTOON ☐ INFLATABLE ☐ SAILBOAT (aux. engine) ☐ SAILBOAT (sail only) ☐ CANOE/KAYAK ☐ RAFT ☐ ROWBOAT ☐ AIRBOAT ☐ OTHER (specify) _____		HULL MATERIAL ☐ WOOD ☐ ALUMINUM ☐ FIBERGLASS ☐ PLASTIC ☐ RUBBER/VINYL/CANVAS ☐ STEEL ☐ OTHER (specify) _____		PROPULSION (select all that apply) ☐ PROPELLER ☐ SAIL ☐ MANUAL ☐ WATER JET ☐ AIR THRUST ☐ OTHER (describe) _____ ENGINE TYPE (select one) ☐ OUTBOARD ☐ STERNDRIVE (I/O) ☐ INBOARD ☐ POD DRIVE ☐ NONE ☐ OTHER: _____ TOTAL HORSEPOWER: _____ HP		OPERATION AT TIME OF ACCIDENT ☐ CRUISING ☐ CHANGING DIRECTION ☐ CHANGING SPEED ☐ TOWING SKIER/TUBER ☐ TOWING SKIER - SKIER DOWN ☐ TOWING ANOTHER VESSEL ☐ BEING TOWED BY ANOTHER VESSEL ☐ DRIFTING ☐ AT ANCHOR ☐ TIED TO DOCK ☐ LAUNCHING ☐ DOCKING/LEAVING DOCK ☐ SAILING ☐ OTHER (specify) _____		TYPE OF FUEL ☐ GAS ☐ DIESEL ☐ ELECTRIC ☐ OTHER: _____

INFORMATION: OPERATOR #2

OPERATOR NAME, ADDRESS, PHONE #	IS OWNER DIFFERENT THAN OPERATOR? ☐ YES ☐ NO	OPERATOR EXPERIENCE ☐ UNDER 10 HOURS ☐ 10 TO 100 HOURS ☐ OVER 100 HOURS	OPERATOR EDUCATION ☐ AMERICAN RED CROSS ☐ USCG AUXILIARY ☐ US POWER SQUADRON ☐ STATE COURSE ☐ INFORMAL ☐ NONE ☐ OTHER: _____
	OWNER NAME AND ADDRESS		
AGE	MARINA/RAMP LAUNCHED FROM:		

INFORMATION: VESSEL #2

(OTHER VESSEL INVOLVED)

THIS VESSEL ONLY	# INJURED	# DEAD	ESTIMATED DAMAGE	RENTED BOAT ☐ YES ☐ NO	# OF PERSONS ON BOARD	# OF PERSONS TOWED		
BOAT NUMBER (CF OR DOC #)		MFR. HULL ID #		BOAT NAME	DEPTH (TRANS. TO KEEL)	BEAM WIDTH	LENGTH	
BOAT MANUFACTURER		BOAT MODEL		YEAR BUILT	SPEED AT TIME OF ACCIDENT ____ MPH	# OF ENGINES	HORSE POWER	
ACTIVITY ☐ RECREATIONAL ☐ COMMERCIAL ☐ OTHER	FIRE EXTINGUISHER ON BOARD ☐ YES ☐ NO	TYPE OF FIRE EXTINGUISHER # ONBOARD	FIRE EXTINGUISHER USED ☐ YES ☐ NO	LIFE JACKETS ON BOARD ☐ YES ☐ NO	LIFE JACKETS ACCESSIBLE ☐ YES ☐ NO	LIFE JACKETS WORN ☐ YES ☐ NO		
TYPE OF BOAT ☐ OPEN MOTORBOAT ☐ CABIN MOTORBOAT ☐ PERSONAL WATERCRAFT ☐ HOUSEBOAT ☐ PONTOON ☐ INFLATABLE ☐ SAILBOAT (aux. engine) ☐ SAILBOAT (sail only) ☐ CANOE/KAYAK ☐ RAFT ☐ ROWBOAT ☐ AIRBOAT ☐ OTHER (specify) _____		HULL MATERIAL ☐ WOOD ☐ ALUMINUM ☐ FIBERGLASS ☐ PLASTIC ☐ RUBBER/VINYL/CANVAS ☐ STEEL ☐ OTHER (specify) _____		PROPULSION (select all that apply) ☐ PROPELLER ☐ SAIL ☐ MANUAL ☐ WATER JET ☐ AIR THRUST ☐ OTHER (describe) _____ ENGINE TYPE (select one) ☐ OUTBOARD ☐ STERNDRIVE (I/O) ☐ INBOARD ☐ POD DRIVE ☐ NONE ☐ OTHER: _____ TOTAL HORSEPOWER: _____ HP		OPERATION AT TIME OF ACCIDENT ☐ CRUISING ☐ CHANGING DIRECTION ☐ CHANGING SPEED ☐ TOWING SKIER/TUBER ☐ TOWING SKIER - SKIER DOWN ☐ TOWING ANOTHER VESSEL ☐ BEING TOWED BY ANOTHER VESSEL ☐ DRIFTING ☐ AT ANCHOR ☐ TIED TO DOCK ☐ LAUNCHING ☐ DOCKING/LEAVING DOCK ☐ SAILING ☐ OTHER (specify) _____		TYPE OF FUEL ☐ GAS ☐ DIESEL ☐ ELECTRIC ☐ OTHER: _____

PERSON COMPLETING THE REPORT

NAME	ADDRESS	PHONE ()	QUALIFICATION OF PERSON COMPLETING REPORT ☐ OPERATOR ☐ OWNER ☐ OTHER (specify) _____
SIGNATURE	DATE		

DBW FORM BAR-1 11/17

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APPENDIX 17. USCG SEA SERVICE LOG

DEPARTMENT OF HOMELAND SECURITY U.S. Coast Guard						OMB No. 1625-0040 Exp. Date: 03/31/2021			
SMALL VESSEL SEA SERVICE FORM (OPTIONAL CG-719S) For Service on Vessels of Less Than 200 Gross Register Tons Only									
Section I: Applicant Information <i>(Note: Complete One Form Per Vessel)</i>									
Name Last		First		Middle		Reference Number (if applicable)		Social Security Number	
Vessel Name				Official number(s) listed on the registration, certificate, or document					
Vessel Gross Tons		Length Feet		Inches		Width (if known) Feet		Inches	
Propulsion (Motor/Steam/Gas Turbine/Sail/Aux Sail)				Served As (Master/Mate/Operator/Deckhand/Engine etc.)					
Name of Body or Bodies of Water Upon Which Vessel was Underway (Geographic Locations)									
Section II: Record of Underway Service									
In the block under the appropriate month, write in the number of days you served for that year <i>(you can show more than one year)</i>									
January		February		March		April			
Year	Days	Year	Days	Year	Days	Year	Days		
May		June		July		August			
Year	Days	Year	Days	Year	Days	Year	Days		
September		October		November		December			
Year	Days	Year	Days	Year	Days	Year	Days		
Total number of days served on this vessel:				Number of days served on Great Lakes:					
Average hours underway (per day)?				Number of days served on waters shoreward of the boundary line as defined in 46 CFR Part 7:					
Average distance offshore:				Number of days served on waters seaward of the boundary line as defined in 46 CFR Part 7:					

**SMALL VESSEL SEA SERVICE FORM (OPTIONAL CG-719S)****Section III: Signature and Verification - Applicant Read Before Signing!**

- Owners of vessels may attest to their own experience and provide proof of ownership per 46 CFR 10.232.
- Those who do not own their own vessel must obtain letters or other evidence from licensed personnel or the owners of the vessels listed per 46 CFR 10.232.

I certify that I have served on the above vessel as stated. I am making this statement in order that I, the applicant, may obtain a credential to operate a vessel under the provisions of Title 46 CFR, as applicable. I understand that if I make any false or fraudulent statement in this certification of service, I may be subject to a fine or imprisonment of up to five (5) years or both (18 U.S.C. 1001).

Signature of Applicant

Date (MM/DD/YYYY)

X

Owner, Operator or Master Read Before Signing! I certify that the above individual has served on the above vessel as stated. I am making this statement in order that the applicant may obtain a credential to operate a vessel under the provisions of Title 46 CFR, as applicable. I understand that if I make any false or fraudulent statement in this certification of service, I may be subject to a fine or imprisonment of up to five (5) years or both (18 U.S.C. 1001).

Signature and Title of Person Attesting to Experience

Date (MM/DD/YYYY)

X

Owner's, Operator's, or Master's Name

Owner's, Operator's, or Master's address and phone number

Last

First

Middle

Street Address

Email Address (Optional)

City

State

Zip Code

Phone

PRIVACY NOTICE

Authority: 14 U.S.C. 632; 46 U.S.C. 2103, 7101, 7302, 7502, 46 C.F.R. 10.301

Purpose: The information is collected by the Coast Guard to determine whether an applicant meets the regulatory standards for issuance of a U.S. Merchant Mariner Credential (MMC). The Coast Guard evaluates an applicant's qualifications to determine compliance with the national and international requirements for issuance of the MMC, any endorsement within the MMC, and medical certificate.

Routine Uses: The information is used by authorized Coast Guard personnel who have a need for the record to determine whether an applicant is a safe and suitable person and qualifies for the MMC, any endorsement within the MMC, and medical certificate. In addition, the Coast Guard uses this information to maintain and update records of merchant mariner documentation transactions. The information will not be shared outside of DHS except in accordance with the provisions of DHS/USCG-030 Merchant Seamen's Records System of Records, 74 FR 30308 (June 25, 2009).

Disclosure: Furnishing this information (including your SSN) is voluntary; however, failure to furnish the requested information may result in the non-issuance of the MMC, any endorsement within the MMC, and medical certificate.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The United States Coast Guard estimates that the average burden for this report is 15 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Chief, Office of Merchant Mariner Credentialing, 2703 Martin Luther King, Jr. Ave, S.E., STOP 7509, Washington, D.C., 20593-7509 or Office of Management and Budget, Paperwork Reduction Project (1625-0040), Washington, DC 20503.



APPENDIX 18. ANNUAL VESSEL INSPECTION LOG

UCSC Annual Vessel Inspection Log

Vessel: _____ Engine Hours: _____

Date: _____	Notes/Work Completed	Finished
☐	inspect hull for damage	
☐	inspect transom, deck, gunwales, cabin or console	
☐	inspect all hatches and thru-hull plugs	
☐	inspect batteries / clean contacts/ check charge	
☐	confirm engine service records	
☐	power on / lower engine	
☐	inspect trim / tilt mechanism and travel bracket	
☐	inspect lower unit / anodes / intakes / props	
☐	run engine / check water pressure	
☐	inspect binnacle and throttle linkage	
☐	test throttle control and gear selector	
☐	check oil level/ condition	
☐	check steering fluid / inspect helm	
☐	inspect steering linkage / test steering function	
☐	confirm instrument gauges function	
☐	operate electronics (GPS, sounder, radar etc)	
☐	test bilge pump and float switch function	
☐	run spare motor / check spare fuel	
☐	check navigation, anchor, and deck lights	
☐	complete radio check	
☐	check PFD's (type / quantity / condition)	
☐	fire extinguisher (quantity / condition / mount)	
☐	check visual distress signals (3 day/night)	
☐	test sound signal function	
☐	inspect first aid kit and replace missing items	
☐	inspect anchor and anchor rode	
☐	inspect oars, dock lines and fenders	
☐	check tool kit/ lube and test tools	
☐	check condition of extra safety equipment	
☐	check vessel placarding /blowers (Class 3 only)	
☐	check vessel CF numbers and registration	
☐	check boat binders:	
☐	- vessel daily log	
☐	- vessel / trailer documentation	
☐	- emergency contacts	
☐	- checkout procedure/equip checklist	
☐	- crew safety orietation guidelines	
☐	- VHF radio usage guidelines	
☐	- UCSC emergency response flow chart	
☐	- UCSC diving injury protocol	
☐	- CA boating accident report forms	
☐	- UCSC liability loss report forms	
☐	- volunteer waivers (diving & non-diving)	
☐	- vessel / trailer work order forms	

Inspected By: _____ Signature: _____

BSO Signature: _____



APPENDIX 19. ANNUAL TRAILER INSPECTION LOG

UCSC Annual Trailer Inspection Log

Vessel: _____ UCSC vehicle number: _____

Date: _____

	Notes/Work Completed	Finished
☐	inspect trailer frame for corrosion	
☐	inspect side rails, fenders and hardware	
☐	inspect vessel bunks and mounting brackets	
☐	inspect axles / leaf springs/ u-bolts	
☐	remove and inspect wheels	
☐	inspect hubs, grease seals and spindles	
☐	check bearings, b-buddies and grease status	
☐	measure brake pad / shoe wear	
☐	inspect tires and check pressure	
☐	replace wheels and re-torque nuts	
☐	remove and inspect spare tire / mount	
☐	inspect brake actuator and master cylinder	
☐	check brake fluid and inspect brake lines	
☐	test brake function on each wheel	
☐	test reverse solenoid bypass	
☐	inspect trailer wiring	
☐	check connector and clean contacts	
☐	test light function	
☐	lube and test hitch mechanism	
☐	inspect safety and brake chains	
☐	lube and operate jack stand to limits	
☐	lube and operate bow winch	
☐	check winch strap and lock mechanism	
☐	check license plate and registration	
☐	check vehicle stencil condition	

Inspected By: _____ Signature: _____

BSO Signature: _____



APPENDIX 20. ANNUAL KAYAK INSPECTION FORM

Date of Inspection: _____

Inspected by: _____

Kayak Information:

Brand/Model: _____

Serial Number: _____

Color: _____

Type of Kayak: (e.g., sit-on-top, sit-inside) _____

Exterior Inspection

Hull Condition:

- ☐ No cracks or holes
- ☐ Minor scratches or scuffs (acceptable)
- ☐ Significant damage (cracks, deep gouges, or punctures)

Comments: _____

Keel (Bottom) Condition:

- ☐ Keel is intact, no visible damage
- ☐ Slight wear or damage
- ☐ Major damage to keel

Comments: _____

Deck (Top) Condition:

- ☐ No cracks or significant damage
- ☐ Minor damage (cosmetic)
- ☐ Major damage or visible separation

Comments: _____

Bulkheads & Hatches:

- ☐ Secure and sealed properly
- ☐ Hatch lids functional, no cracks
- ☐ Hatch or bulkhead damage

Comments: _____

Hardware & Components

Seats & Footrests:

- ☐ Fully intact and adjustable
- ☐ Minor wear, but functional
- ☐ Broken or damaged

Comments: _____

Rudder/Skeg (if applicable):

- ☐ Functions properly
- ☐ Sticks or doesn't deploy properly
- ☐ Bent or broken

Comments: _____

Handles:

- ☐ All handles securely attached
- ☐ Minor wear or loose screws
- ☐ Broken or missing handles

Comments: _____

Drain Plugs:

- ☐ Secure and leak-free
- ☐ Slight wear, no leakage
- ☐ Missing or damaged



Comments: _____

Paddle:

- ☐ No cracks or damage
- ☐ Minor chips or scratches
- ☐ Broken or bent blade

Comments: _____

Overall Condition:

- ☐ Excellent (No issues found)
- ☐ Good (Minor cosmetic issues, fully functional)
- ☐ Fair (Functional but requires minor repairs)
- ☐ Poor (Needs significant repairs or replacement)

Additional Comments or Recommendations:

Inspection Completed By: _____

Signature: _____



APPENDIX 21: GENERALIZED ASSESSMENT OF RISK (GAR)

Operational Risk Management Analysis Using the **GAR Model (GREEN-AMBER-RED)**

Operational Risk Management (ORM) is based on a team discussion to understand the operation, evaluate the risks and how they will be managed. A GAR should be customized for each project, implemented before & during each operation, & routinely reviewed and refined to maximize effectiveness.

Assign a risk code of 0 (For No Risk) through 10 (For Maximum Risk) to each of the eight elements below.

	Rating
SUPERVISION – Leadership and Supervisors are actively engaged, involved and accessible for all teams and personnel. There is a clear chain of command	
PLANNING – There is adequate information and proper planning time. JHAs are current and have been reviewed and signed by all levels. All required equipment, training and PPE had been provided.	
CONTINGENCY RESOURCES – Local emergency services can be contacted, available and respond in a reasonable amount of time. Has an emergency Evacuation Plan been prepared and is crewed briefed?	
COMMUNICATION – There is established Two-Way Radio (VHF or Emergency Dispatch) communication throughout the area of operation. EPIRB/PLB, GPS-linked, Satellite Phone, Position/Location Resources (e.g., AIS, Chart Plotters, Mobile Apps)	
TEAM SELECTION – Level of individual training, qualifications, experience, familiarity with area of operations and equipment. Cohesiveness and atmosphere that values input and self-critique.	
TEAM FITNESS – This includes physical and mental fitness. Team members are rested, engaged and overall moral is good. The team is mindful and has a high degree of situational awareness. Illness, Medications, Stress, Alcohol, Fatigue & Food, Emotion, Rehydration (IMSAFER)	
ENVIRONMENT – Weather Forecast & Advisories, Wind, Seas, Tides, Depths, Currents, River Discharge, Debris/Ice, Surf, Rocks, Reefs, Traffic, Uncharted Water, Remoteness, Security (personnel and/or equipment)	
TASK COMPLEXITY – Severity, probability, and exposure of mishap. The potential for incident that would tax the current team level. (New Location or Operation, Route Complexity, Vessel Maneuverability, Time Constraints, Task Load, Number of People &/or Organizations Involved)	

***NOTE: Any category rated > 5 should receive specific mitigation.**

Total Risk Score _____

The mission risk can be visualized using the colors of a traffic light. If the total risk value falls in the GREEN ZONE (1-35), risk is rated as low, avoid becoming complacent. If the total risk value falls in the AMBER ZONE (36-60), risk is moderate, and you should consider adopting procedures to minimize the risk. If the total value falls in the RED ZONE (61-80), STOP, apply measures to reduce the risk prior to starting the event or evolution.

GAR Evaluation Scale
Color Coding the Level Of Risk

1	35	36	60	61	80
GREEN (Low Risk)		AMBER (Caution)		RED (High Risk)	

The ability to assign numerical values or "color codes" to hazards using the GAR Model is not the most important part of risk assessment. What is critical to this step is team discussions leading to an understanding of the risks and how they will be managed.

**APPENDIX 22: UCSC VERIFICATION OF BOATER TRAINING**

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

Boating Safety Program
Environmental Health & Safety Dept
115 McAllister Way
Santa Cruz, CA 95060**UC SANTA CRUZ VERIFICATION OF VESSEL OPERATOR TRAINING AND EXPERIENCE**

DATE OF REQUEST	BSO RECIPIENT	PHONE	EMAIL
HOST ORGANIZATION	HOST INVESTIGATOR	PHONE	EMAIL

The UC Santa Cruz vessel Operator listed below has completed all the requirements and has demonstrated the necessary competencies to achieve Operator In Charge status in the UCSC Boating Safety Program.

UCSC VESSEL OPERATOR	POSITION	PHONE	EMAIL
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CERTIFICATIONS AND QUALIFICATIONS

TRAINING	DATE	BOATING ACTIVITY	CERTS. / QUALS.	EXP. DATE
MOCC or equivalent		Days in last 24 mos.	CPR	
UCSC Vessel Operator auth		Last date underway	O ₂ Admin.	
Last check-out		Operating areas:	First Aid	

ADDITIONAL TRAINING AND EXPERIENCE

☐ Towing	☐ Hoist Launch	☐ Restricted Vis.	☐ Navigation	☐ Class A (< 16 ft)	☐ Class III (40<65 ft)
☐ Trailer Launch	☐ VHF	☐ Anchoring	☐ Inst. Deployment	☐ Class I (16<26 ft)	☐ Other: _____
☐ Beach Launch	☐ Electronics	☐ Trawling	☐ Scuba tending	☐ Class II (26<40 ft)	☐ Other: _____

ADDITIONAL INFORMATION

GENERAL COMMENTS: Traci is a competent operator and has excellent operational leadership skills. She exhibits sound judgement and would be a valuable asset for your team.		
EMERGENCY CONTACT	RELATIONSHIP	BEST PHONE
ADDRESS		ALTERNATE PHONE

VERIFICATION

The above individual is currently an Authorized Motor Vessel Operator with the University of CA Santa Cruz. If you have any questions about this Operator or the information provided, please contact me.

BOATING SAFETY OFFICER SIGNATURE	PRINTED NAME	DATE
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