MOTORBOATING PERSONNEL QUALIFICATION STANDARDS (PQS)

Personnel Qualification Standard (PQS)
Motorized vessels in open or confined fresh and marine waters, including Biscayne Bay and Florida Bay, Keys coastal water inside the reef tract

Crew Chief Candidate: __________________________________

This PQS is designed to be completed under the guidance of a mentor. Any mentor signing off on a task must be a qualified Motorboat Crew Chief. The purpose of the PQS is to allow crew members to gain experience and knowledge working under a qualified Motorboat Crew Chief, while working as crew during normal research operations. This allows for specific “on the job” training with the vessels being used, and the operational area being worked in. Mentors should only sign off on tasks once the trainee is competent in performing the task independently. Once all sections are complete, the Crew Chief/trainer should notify a Qualified Examiner to make arrangements for the “dockside” exam and underway check ride. Qualified Examiners are designated by the BSO with input from SERC and the FOC.

Initial Certifications

Completed

_______ Obtain state of Florida Boating Safety Education Card. A copy should be submitted with this completed PQS.

_______ Current First Aid certification. A copy should be submitted with completed PQS.

_______ Current CPR certification. A copy should be submitted with this completed PQS.

_______ Pass the Motorboat Crew Chief Qualification Examination with a score of 90% or better. The exam should be submitted with this completed PQS.

_______ Log at least twenty (20) hours behind the helm. Hours underway must be logged and signed off by qualified motorboat crew chief. A copy of the log should be submitted with this completed PQS.

Accomplished:

Applicant Signature ____________________________ Date __________

Trainer Signature ____________________________ Date __________

PI Signature ____________________________ Date __________
**Trailering**

Note: The Marine Science BBC Boatyard is an excellent location to practice trailer skills without the complications of traffic.

**Completed**

- [ ] Properly hook truck up trailer. Hitch, chains, and lights.
- [ ] Conduct safety checks of truck, trailer, and boat in preparation for transport.
- [ ] Safely drive truck and trailer in forward gear, including pulling up boat ramp.
- [ ] Safely drive truck and trailer in reverse, including backing down boat ramp.
- [ ] Prep boat for launch, and safely launch boat.
- [ ] Retrieve boat onto trailer, pull out of water and secure for travel.

**Accomplished:**

Applicant Signature ___________________________ Date ____________

Trainer Signature ____________________________ Date ____________

PI Signature _________________________________ Date ____________
## Pre-Trip Preparations

### Completed

- [ ] Demonstrate knowledge of how to reserve FIU vehicle and boat.
- [ ] Prepare a float plan.
- [ ] Ensure boat is equipped with all necessary safety and operational equipment.
- [ ] Verify boat is fully fueled and electrical systems are functional.
- [ ] Ensure crew and passengers have enough food, water, clothing, and sun protection for anticipated field time, as well as reserves in case of trouble that leave boat and crew stuck for extended length of time.

### Accomplished:

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Operational Tasks

Completed

_________ Safely board all gear, crew, and passengers.

_________ Brief all crew and passengers, both safety and mission briefings.

_________ Demonstrate proficiency in safely leaving dock/launching area.

_________ Demonstrate proficiency in safely operating boat underway as part of mission.

_________ Demonstrate proper usage and knowledge of engine cut of switch.

_________ Demonstrate proficiency in safely docking, returning to launching area, and boat retrieval.

_________ Demonstrate knowledge of communications equipment, use and limitations. VHF radio, cell phone, and satellite phone; as applicable to operating area.

_________ Demonstrate knowledge of emergency signaling devices. EPIRB, flares, mirror, whistle, etc.

_________ Tie the following knots and state their use. Cleat hitch, bowline, sheet bend, clove hitch, round turn and two half hitches.

_________ Demonstrate ability to read and navigate with appropriate charts and/or maps for area.

_________ Demonstrate ability to use GPS, and if applicable the depthfinder to find your stations.

_________ Demonstrate ability to use GPS to return to launching point.

If applicable for vessels in open waters:

_________ Demonstrate ability to use tide tables.

_________ Demonstrate knowledge of currents and transiting inlets.

_________ Demonstrate knowledge of the inland and international “Rules of the Road”.

Accomplished:

Applicant Signature ____________________________ Date ______________

Trainer Signature ______________________________ Date ______________

PI Signature ______________________________ Date ______________
**Post Trip Tasks**

**Completed**

- _______ Fuel boat and truck at FIU fuel pumps after return to campus.
- _______ Remove and return all gear that does not remain stored aboard.
- _______ Wash down boat and trailer.
- _______ Close out float plan.

**Accomplished:**

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As noted above, I have successfully completed the PQS for FIU motorized vessels and as crew chief acknowledge that I am authorized to operate vessels in a manner that promotes safety of the vessel, the environment, the research equipment, and most importantly, the personnel aboard the vessel. I do acknowledge if any unsafe operations may occur, my crew chief title may be revoked, and I may be responsible for damage fees.

Signature ___________________________ Date __________

As this candidate’s PI, I acknowledge that they have completed the PQS for FIU motorized vessels with either myself or my designated crew chief trainer and authorize them to operate FIU vessels in a manner that promotes safety of the vessel, the environment, the research equipment, and most importantly, the personnel aboard the vessel. I also acknowledge that if any unsafe operations may occur, their crew chief title may be revoked, and we may be responsible for damage fees.

Signature ___________________________ Date __________
Personnel Qualification Standard (PQS)
Motorized vessels that are Chartered

To qualify as a motorboat crew chief for chartered vessels, an individual must have a U.S Coast Guard Merchant Mariner Credential (OUPV or Greater).

Personnel Qualification Standard (PQS)
Motorized vessels at Aquarius Reef Base

To qualify for ARB Vessels, the candidate must complete the ARB Personnel Qualification System with the Aquarius Operations Director or an appointed designee.

Personnel Qualification Standard (PQS)
Motorized vessels at night

To conduct planned night-time operations the following additional requirements must be met: completion of the Research Vessel Captain or motorboat crew chief Night-time Endorsement section of the ARB Personnel Qualification System and/or completion of portions of the FIU Boating and Safety Manual where applicable.

Personnel Qualification Standard (PQS)
Specific vessels

For specific vessel operations the following additional requirement must be met: completion of the Research Vessel Captain or motorboat crew chief vessel specific section of the ARB Personnel Qualification System and or completion of portions of the FIU Boating and Safety Manual where applicable (i.e. Dewey Dwayne). For specific vessels, the Marine or Freshwater FOC, depending on who owns the vessel, will have the final say if the motorboat crew chief candidate has sufficient experience to operate the vessel.

Personnel Qualification Standard (PQS)
New Motorized vessels brought into FIU fleet

For a vessel new to the FIU fleet, the BSO shall determine which operators have sufficient experience to operate the vessel without completing a relevant PQS section. Qualification in this manner shall be based on experience and skills and shall be documented in writing. FIU/ARB Operations Director will work with the BSO for ARB personnel.