

4.0 MOTORBOATING PERSONAL QUALIFICATION STANDARDS (PQS)

Personal 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.
- _____ Perform as crew for 20 hours underway. Hours underway should be logged and signed off by qualified motorboat crew chief. A copy of your log should be submitted with this completed PQS.

Accomplished:

Applicant Signature _____ **Date** _____

Trainer Signature _____ **Date** _____

PI Signature _____ **Date** _____

Trailing

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:

Applicant Signature_____ **Date**_____

Trainer Signature_____ **Date**_____

PI Signature_____ **Date**_____

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 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:

Applicant Signature _____ **Date** _____

Trainer Signature _____ **Date** _____

PI Signature _____ **Date** _____

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 _____

**Personal 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).

**Personal 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.

**Personal 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.

**Personal 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.

**Personal 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.