

AIRBOAT PERSONNEL QUALIFICATION STANDARD (PQS)
Personnel Qualification Standard (PQS)
All Airboats at FIU

Airboat Crew Chief Candidate: _____

This PQS is designed to be completed under the guidance of a mentor. Any mentor signing off on a task needs to be a qualified airboat crew chief. The purpose of the PQS is to allow crew members to gain experience and knowledge working under a qualified airboat 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 airboat crew chief/trainer should notify a Qualified Examiner to make arrangements for the “dockside” exam and underway check ride. All airboat operators are considered airboat crew chiefs unless they are under training, being supervised by a certified airboat crew chief. They must fulfill general boating requirements outlined in section 3.3.1 of this manual.

AIRBOAT PRACTICAL CHECKLIST

1. Pre-flight safety inspection
2. Trailing
_____ Appropriate hook-ups (safety chains, trailer lights)
_____ Launching/loading
 - _____ Drain plugs, safety chains, boat strap, trailer lights
 - _____ Backing trailer (positioning, proper trailer depth)
 - _____ Use of winch and bow line
3. Personal protective equipment (life jacket, ear- and eye-protection)
4. Airboat operation
_____ Starting/stopping engine (adequate engine warm-up and cool-down)
_____ Knowledge of engine cut off switch
_____ Shallow-water operation
 - _____ Gradual turns
 - _____ Sharp turns
 - _____ 180-degree turns
 - _____ Zig-zag operations
 - _____ Operating speed
_____ Deep-water operation
 - _____ Turns
 - _____ Operating speed
 - _____ Stopping (monitoring wake)
_____ Other skills (ability to follow trail, caution for wildlife)
_____ Knowledge of and response to hazards
 - _____ Getting stuck
 - _____ Swamped boat
 - _____ Lightning
 - _____ Heat-related health issues

Operations during fog, heavy rain, nighttime (low visibility conditions)

5. Preventative maintenance and repairs

- _____ Post-operation clean-up
- _____ Trailer maintenance (tire condition, wheel bearings, trailer lights)
- _____ Airboat maintenance
 - Refueling
 - Checking/adding oil
 - Cleaning sediment trap and bilge pump
 - Checking fan belts
 - Secure bolts/screws (engine mount, grass rake)
 - Condition of spark plugs, wiring, and battery terminals
- _____ Emergency repairs and trouble-shooting mechanical problems

ADDITIONAL REMARKS _____

Accomplished:

Applicant Signature _____ **Date** _____

Trainer Signature _____ **Date** _____

PI Signature _____ **Date** _____

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 Airboat 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 operating an airboat. Hours underway must be logged and signed off by qualified airboat crew chief. A copy of the 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 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. Mirror, whistle, etc..
Note, all airboats have non pyrogenic visual distress signals due to the risk of fire in sawgrass.
- _____ 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, as appropriate.
- _____ Demonstrate ability to use GPS to find your stations and return to launching point.

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 airboats and as crew chief acknowledge that I am authorized to operate these airboats 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 airboats with either myself or my designated crew chief trainer and authorize them to operate FIU airboats 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 _____