

## 6.0 AIRBOAT PERSONAL QUALIFICATION STANDARD (PQS)

### Personal 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. Trailering

\_\_\_\_\_ 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)

\_\_\_\_\_ 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.
- \_\_\_\_\_ Perform as crew for 20 hours underway. Hours underway should be logged and signed off by qualified airboat 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. 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 \_\_\_\_\_