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 ___________
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:

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 ______________