

Airboat Operator Course Lesson Plan
Center for Ecology
And Environmental Technology

University of Louisiana at Lafayette

Course Title: Basic Airboat Operator Instruction

Instructor: Roger Holland, CEET Operations Manager

Time Frame: 16 hours (usually a weekend)

Course Goal: At the completion of this training, students will have a basic understanding of transporting, operation, and maintenance of automotive-engine powered airboats.

Objectives: Students will demonstrate:

- A working knowledge of airboat terminology.
- A knowledge of safety precautions and liability concerns with regard to proper airboat operations.
- The launch and recovery of an airboat at a boat ramp.
- Operation of an airboat in deep and shallow water, over marsh, and across low-lying levees.
- A knowledge of preventive maintenance techniques and basic trouble-shooting.
- An acceptable proficiency in the proper operation of an airboat.

Methods of Instruction:

- Lecture
- Power Point Presentation
- Field Instruction

Equipment and Supplies:

- Ear Protection (Headphones, earplugs)
- Eye Protection (Safety glasses, goggles)
- Personal Flotation Device (Life Jacket)
- Field attire (Suitable protection from wind, rain, sun, and insects)
- Airboat and trailer – **Optional**. Students may provide their own airboat to gain familiarity and experience with a vehicle they will use in the field. This is not a requirement. The Center for Ecology will provide an airboat for the course.

References:

- DOI USGS NWRC *Manual of Safe Airboat Operation*
- Florida Game and Fresh Water Fish Commission *Airboat Manual*
- Mark Robichaux's Airboat Connection *Airboat Operator's Information*
- South Florida Water Management District *Manual for Airboat Operations*
- USFWS Everglades National Park *Airboat Manual*

Course: Basic Airboat Operator Instruction

Outline:

I. Introduction

- A. Evaluation of Student Boating Skills
- B. Overview of the Course

II. Airboat Terminology

- A. Hulls
 - 1. Types
 - 2. Bottom coatings
- B. Power Train
 - 1. Engine types
 - 2. Transmissions - Reduction units versus direct-drives
- C. Propellers
 - 1. Material types
 - 2. Blade configurations
 - 3. Length and Pitch
- D. Cage
- E. Steering systems
- F. Miscellaneous - Controls, switches, lights, bilge pump, trim tab

III. Maintenance

- A. Preventive Maintenance Care
 - 1. Periodic Equipment Inspection
 - 2. Maintenance Schedules
- B. Pre-Operation Checks
 - 1. Batteries
 - 2. Engine fluid levels
 - 3. Gear stowage
 - 4. Boat plugs
- C. Post-Operation Care
 - 1. Freshwater wash-down
 - 2. Anti-corrosion measures
 - 3. Post-operation inspection
 - 4. Storage

IV. Safety, Liability and Courtesy

- A. Propeller Danger Awareness
 - 1. Starting
 - 2. Operating
 - 3. Prop Wash
 - 4. Propeller hazards inside the boat
 - 5. Cage etiquette

B. Safety Considerations and Liability

1. Pilot responsibilities
2. Float Plans
3. Communications
4. First Aid Kit
5. Emergency Procedures

C. Courtesy Considerations

1. Prop wash
2. Wake responsibility
3. Noise Hazard

V. Operations

- A. Steering and Throttle Controls
- B. Operational limits
- C. Trailer launch at boat ramp
- D. Transiting deep water
- E. Transiting shallow water
- F. Getting stuck and unstuck
- G. Maneuvering over marsh
- H. Levee crossing
- I. Trailer recovery at boat ramp
- J. Dry launch and recovery
- K. Load Balancing

VI. Special Topics (Discussion only)

- A. Night operation
- B. Ice Operation
- C. Horror Stories - Discussion of submersion, collisions, injuries, fatalities, bad luck

VII. Practical Evaluation