

## Airboat Operator Course Lesson Plan

Ecology Center, University of Louisiana at Lafayette

Course Title: Basic Airboat Operator Instruction

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 acquire:

- Knowledge of airboat terminology
- Knowledge of safety precautions and liability concerns
- Launch and recovery of airboat at boat ramp
- Operation of airboat in deep and shallow water, over marsh, and across low-lying levees
- Knowledge of preventive maintenance techniques and basic trouble-shooting
- Field experience in the proper operation of an airboat

Methods of Instruction:

- Lecture
- Power Point presentation
- Field activities

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 –

Students have the option to provide their own airboat to gain familiarity and experience with a vehicle they will use in the field. This is not a requirement. The Ecology Center 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
    - i. Types
    - ii. Bottom coatings
  - b. Power Train
    - i. Engine types
    - ii. Transmissions - Reduction units versus direct-drives
  - c. Propellers
    - i. Material types
    - ii. Blade configurations
    - iii. Length and Pitch
  - d. Cage
  - e. Steering systems
  - f. Miscellaneous - Controls, switches, lights, bilge pump, trim tab
- III. Maintenance
  - a. Preventive Maintenance Care
    - i. Periodic Equipment Inspection
    - ii. Maintenance Schedules
  - b. Pre-Operation Checks
    - i. Batteries
    - ii. Engine fluid levels
    - iii. Gear stowage
    - iv. Boat plugs
  - c. Post-Operation Care
    - i. Freshwater wash-down
    - ii. Anti-corrosion measures
    - iii. Post-operation inspection
    - iv. Storage
- IV. Safety, Liability and Courtesy
  - a. Propeller Danger Awareness
    - i. Starting
    - ii. Operating
    - iii. Prop Wash
    - iv. Propeller hazards inside the boat

- v. Cage etiquette
    - b. Safety Considerations and Liability
      - i. Pilot responsibilities
      - ii. Float Plans
      - iii. Communications
      - iv. First Aid Kit
      - v. Emergency Procedures
    - c. Courtesy Considerations
      - i. Prop wash
      - ii. Wake responsibility
      - iii. 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