National Park Service,
Glacier Bay National Park & Preserve,
Technical Specifications Attachment, Sections 1 – 6.

5/12/2026

Approx 18’ Rigid Hull Inflatable Skiff & Trailer

---

1. General Description of the Equipment and intended use: Approx 18’ Rigid Hull Inflatable Skiff with center console steering with “T-top” awning, twin outboard engine propulsion, integral fuel tank, and electronics package.

The vessel will serve as a general-purpose vessel for use by multiple programs at Glacier Bay National Park. Uses will include vessel- and shore-based research efforts, law enforcement patrols, search and rescue, oil spill response, and marine debris removal.

The vessel will be expected to operate in cold water conditions in bay and coastal marine environments in moderate conditions. Steep inshore chop and tide rips are common features of the operating environment. Vessel will be operated in floating glacial ice occasionally. Landings on rocky beaches and exposed bedrock ledges will occur regularly. The vessel will be operated by general staff with basic Department of Interior-required training in boat operation and marine safety. Use will range from harbor operations to 100 nautical-mile trips between Park headquarters and remote backcountry locations. Operation of the vessel will provide useful training in boat handling, navigation, and use of electronic systems that can be applied to larger vessels in the Park fleet as operator’s training progresses.

The crafts’ design and construction (hull, machinery, and electrical systems) shall comply with USCG regulations and ABYC standards where applicable. Detailed drawings will be submitted for approval prior to construction. Unit shall be delivered as a turnkey, completed, fully functioning vessel. To qualify for consideration, each of the following Characteristics shall be met or bettered:

2. Equipment Salient Characteristics:

2.1 Hull Package:

2.1.1. Monohull rigid hull inflatable boat

2.1.2. Length: 17’6” minimum, 18’6” maximum

2.1.3. Center console steering station with metal T-top awning

2.1.4. Transom Deadrise: 16 - 18 degrees

2.1.5. Capacity: minimum 6 people and 800 pounds gear in addition to standard equipment

2.1.6. The transom shall be set up for twin outboard propulsion, with proper transom height and splash well (if needed) for good seakeeping

2.1.7. Vessel will be powered by twin Mercury outboard motors sized appropriately for the vessel. Minimum cruising speed shall be 20 knots at less than wide open throttle.

2.1.8. Deck shall be constructed of diamond plate aluminum

2.2 Hull Outfitting:

2.2.1. Hull will be constructed to provide adequate buoyancy for passengers, gear, and installed equipment even in the event of loss of all air from the inflatable tubes

2.2.2. Zinc anodes shall be installed on brackets that are welded to the transom.
2.2.3. Hull and deck plating: 3/16 inch 5086-H116 aluminum
2.2.4. Hull shall incorporate fully integral framing system for strength and durability
2.2.5. Hull shall incorporate a fuel tank below the deck, allowing for minimum 125nm range at typical cruising speed
2.2.6. Topsides will incorporate welded aluminum cleats and/or bitts to allow for attaching three dock lines on each side. Stern cleats or bitts may be used for towing harbor oil boom.
2.2.7. 316 Series stainless-steel fastening hardware shall be used throughout the vessel.
2.2.8. The hull shall incorporate an anchor locker with ample room for 20lb Danforth-style anchor, 20' ¼" BBB chain and 300' ½" nylon anchor rode
2.2.9. Topsides will include a padded leaning-post style bench for helmsman and one passenger, and an extruded pipe arch on stern that can be leaned on by passengers while underway. The stern arch will provide protection from falling overboard off stern while underway, while allowing access to engines for daily checks.
2.2.10. Grab rails and handles shall be affixed at convenient locations throughout vessel for use by passengers. A grab rail or handle shall be within reach from any point where a passenger may be standing or seated.
2.2.11. Center console will be sized and located such that a passenger secured to an emergency backboard can be placed on deck either forward of console or on one side of console
2.2.12. Center console will incorporate a seating bench/locker on forward side. Bench will allow seating for two people. The bench seat will also comprise a hinged waterproof lid for a weathertight locker below with room for safety equipment and supplies. Locker will have louvered vents for airflow. Passengers will use Type 4 throwable flotation cushions for padding (no integral seat cushion needed).
2.2.13. A separate locker will be provided for storage of engine chemicals and tools
2.2.14. The T-top awning may be constructed of aluminum tube or plate, with a solid aluminum roof.
2.2.15. The center console will incorporate a forward window which can be hinged up on hydraulic struts to allow photography through opening without glass in the way. (AdvanTec Marine Item # 536830 or similar believed to be sufficient)
2.2.16. RADAR scanner, GPS, and radio antennas to be mounted as high on the vessel as practicable. RADAR scanner will be mounted above T-top roof.
2.2.17. Deck shall be self-bailing via "elephant snout" scupper(s) in transom or one-way check valves
2.2.18. An aluminum double padeye shall be welded on centerline of the bow. Padeye shall be sized to simultaneously accept trailer strap hook and ½" shackle on trailer safety chain
2.2.19. Deck shall be constructed of diamond-plate aluminum, and per description in 2.2.2 above.

2.2.20. Minimum Four (4) D-rings or pockets will be included on foredeck for lashing down deck cargo and/or tarps.

2.2.21. Inflatable tubes will be dark grey in color and air-filled (no foam). Tubes must be a bladder-type system with 1.5 millimeter thickness vulcanized butyl rubber membrane inner tubes and outer protective covers to minimize air leaks. Tubes and attachments to the hull shall be suitable for field repair with off-the-shelf adhesives. Outer covers must be mechanically attached to the hull without the use of glue or nut-and-bolt hardware.

2.2.22. Enclosed voids in the hull will be equipped with a watertight air exchange valve for reduction of condensation due to diurnal and seasonal temperature variation

2.2.23. The gunwale area will be treated with an epoxy barrier for corrosion resistance on all surfaces that will be in permanent contact with the inflatable tubes

2.2.24. Rubber belting will be incorporated into sides and bow for additional chafe protection. Bow rubber belting will cover most of the bow area for extra protection while pushing ahead into barnacle-covered rocks and ledges while transferring passengers to/from shore.

2.2.25. A sealed well in the deck will accommodate a 12-volt bilge pump. Pump is wired to a float switch and has a manual control on the center console

2.2.26. The stern will be constructed without engine guards

2.2.27. Transom shall be constructed with adequate freeboard such that a splash well is not required. Engines will have appropriate shaft length to accommodate this transom height.

2.3 Welding:

2.3.1 All weld seams in the hull shall be welded 100%, both interior & exterior.

2.3.3 All welding shall be performed in accordance with American Welding Society D1.2-2003 procedure qualifications.

2.3.4 All surface areas shall be shiny, mill finish, with no grind marks, splatters, or blemishes.

2.4 Fuel System:

2.4.1 The fuel tank will be configured as described in 2.2.4 above.

2.4.2 An analog, needle-style fuel gauge will be installed on the center console

2.4.3 Each engine will be plumbed to the fuel tank with independent fuel pickups, fuel hose, primer bulbs, and independent water-separating fuel filters with clear bowls.

2.4.4 The tank vent will be placed in a location that offers protection from spray

2.5 Electrical system:

2.5.1. The vessel's electrical systems shall be constructed to meet or better ABYC standards listed in ABYC E-11, 2023 technical amendment

2.5.2. All electrical cable shall be marine grade copper tinned boat cable and labeled for each circuit.

2.5.3. Cables should be routed in wireways wherever possible. Wherever exposed to potential damage, cables shall be protected with rubber.

2.5.4. All electrical switches shall be of a heavy-duty type and properly sealed.

2.5.5. The vessel's 12-volt battery(ies) shall be secured in a waterproof, ventilated box(es) or compartment(s) in a location protected from spray

2.5.6. A 12V self-parking windshield wiper shall be installed on the windshield. Wiper assembly consists of a fully sealed, marine rated wiper motor fitted with a heavy-duty pantographic wiper arm and matching blade.

2.5.7. Wipers to have a control switch with low, high, and variable intermittent speed settings.

2.5.8. One 12-volt receptacle and one combination USB 2.0 and USB 3.0 charging port will be installed on the center console in a protected location

2.5.9. LED navigation lights shall be installed to meet requirements in the International and Inland Navigation Rules Subpart C, August 2024.

2.5.10. The T-top awning will have a sealed LED dome light on the overhead

2.5.11. An electric horn for signaling will be installed

2.5.12. A remote extension speaker for the VHF radio shall be installed on the T-top overhead where it can easily be heard by operator, if the VHF radio itself is not installed on overhead.

2.6 Electronics package:

2.6.1. A Furuno NavNet TZT10X multifunction display shall be installed on the vessel.

2.6.2. A Furuno DRS2DNXT radar scanner will be connected to the multifunction display

2.6.3. A Furuno 525T-PWD transducer will be installed on the transom and connected to the multifunction display

2.6.4. A DSC-capable marine VHF radio with antenna and stainless-steel hinged antenna mount will be installed.

2.6.5. A Furuno FA-70 Class B AIS system will be installed.

2.6.6. A NMEA-2000 backbone will be installed, and used to network all NMEA-2000 compatible devices, including engine displays and VHF radio

2.6.7. A Furuno GP330B GPS antenna will be installed on the radar arch and connected to the vessel's NMEA 2000 network

2.6.8. 12-volt power circuit for a BK Radio KNG-M150 proprietary Federal radio system shall be installed, with Morad VHF-162HD antenna and stainless steel hinged mount. (Radio will be installed by NPS after delivery. Antenna will be installed by builder.)

2.6.9. A Mercury Vessel View engine display will be mounted on the center console in easy view of operator

2.7 Center console and steering

2.7.1. Layout of instrumentation and controls on center console will be submitted to NPS for approval prior to construction.

2.7.2. Steering will be hydraulic, with round steering wheel on center console. A tractor knob will be installed on helm at 9:00 position

2.7.3. Engine controls with an automatic kill-switch with lanyard will be installed at the center console

2.7.4. A small glove box compartment or sheltered shelf will be provided for storage of keys, logbook, weather covers for electronics, etc.

2.8 Paint and graphics:

2.8.1. Anti-fouling bottom paint system with epoxy barrier coat will be applied, non-corrosive, color black.

2.8.2. Lettering displaying identifying information will be applied. Location and size of lettering to be specified by NPS before application

2.8.3. A manufacturer-specified capacity placard will be installed within easy view of passengers. Placard will also state capacity of fuel tank and maximum allowable horsepower.

2.9 Trailer:

2.9.1Vessel shall include one (1) galvanized bunk trailer sized for the dry weight of the vessel plus 25%.

2.9.2 Trailer has 2" ball receiver, safety chains with latching hooks.

2.9.3 Manual strap winch, safety chain with latching hook.

2.9.4 Heavy duty tongue jack.

2.9.5 Trailer wheels shall be galvanized steel

2.9.6 Trailer wheel hubs to be oil filled

3. Warranties:

Extended - Full coverage 3-year engine and control system warranty shall begin from the delivery date of the unit, FOB Gustavus AK.

4. Documentation:

5.1 Builder shall provide one copy each at the time of equipment delivery; Operators manual, Parts manual, and the Shop Repair / Service manuals for all provided equipment. Electronic formats are only acceptable if they are fully equal in scope to these 3 manuals in book format.

5.2 As-built boat drawings shall be included.

5.3 The complete documentation package shall be delivered on or before the delivery date of the new equipment.

5. Pre-construction approvals

5.1 Post award, the vendor will supply detailed shop drawings for government review and approval before construction is begun.

6. Dealer Preparation:

6.1 Final prep before delivery shall include testing and operation of all onboard systems

6.2 Vessel weight shall be documented by builder.

7. Delivery:

Shipping of the prepped vessel shall be to: Glacier Bay National Park, 140 Park Rd, Gustavus AK 99826. The delivery of the completed unit and all attachments shall be made no later than 360 days after award.