REQUEST FOR PROPOSAL – NO. SHF-22-001
Humboldt County Sheriff's Patrol Boat and Trailer

SAMPLE CONTRACT- ATTACHMENT A—DESCRIPTION OF GOODS AND SERVICES

CONTRACTOR OBLIGATIONS:

All work done, when and where governed, must comply with current the U.S. Coast Guard (USCG), National Marine Manufacturers Association (NMMA) and American Boat and Yacht Council (ABYC) regulations.

The boat and trailer design must be a design of a recognized manufacturer of heavy aluminum watercraft that has been in business continuously for a minimum of 24 consecutive months.

Warranties shall include:

Engine and pump/IO = full manufacturer's warranty

Hull = minimum 10 years on materials and workmanship

Equipment = manufacturer's warranty or California law

The manufacturer of the vessel shall use materials and equipment that are new, shall be marine grade and shall meet appropriate Federal and industry standards for material and installation. The manufacturer shall give a minimum 10-year warranty on materials and workmanship.

The vessel and trailer must be manufactured and delivered to the County of Humboldt Sheriff's Office on or before June 30, 2024. Failure to meet this deadline will result in a penalty of $500.00 per day for each day beyond the deadline date.

Sheriff's Patrol Vessel Requirements

The vessel shall meet U.S. Coast Guard, State of California and Department of Boating and Waterways standards and regulations at the time of manufacture. The manufacture of the vessel shall conform to all safety orders of the California Division of Industrial Safety and current OSHA requirements. All Materials and equipment shall be new, shall be marine grade and shall meet Federal and industry standards for material and installation.

The vessel will be used for general law enforcement and search & rescue. The vessel will be primarily used in the waters of Humboldt Bay and the Pacific Ocean The vessel configuration, balance, and construction must be strong and lightweight. The vessel shall have a cruising speed of 40 to 45 MPH. The vessel will be used all year, both day and night, and in all weather and be able to operate in shallow waters.

General Information

The vessel shall have a total center length of at least 28 feet. The vessel shall have a beam of at least 10 feet. The vessel shall be a rigid-hulled inflatable style vessel. The vessel shall have a Step-Chine Hull. The hull of the vessel shall be constructed of marine grade aluminum. The bottom plate shall of a thickness of at least .25 inches. The side plate thickness shall be at least .19 inches. The vessel shall have a welded aluminum bow eye and tie downs. The vessel shall have a minimum of eight welded aluminum cleats with backing plates. The cleats shall be at least 10 inches. All inside hull standing and walking surfaces should be decked and covered with a non-skid type material. The vessel shall have an enclosed walk around style cabin. The cabin shall at minimum have three doors with one located on the aft side, one located on the port side, and one located on the starboard side. All doors and windows shall be capable of being locked. The cabin shall have sufficient space for at least four persons. The cabin of the vessel shall be placed on the centerline of as to balance the vessel with a full fuel tank and two personnel onboard. The deck of the boat shall be "Self-Bailing" in style with at least two Scupper Valves. The vessel shall be equipped with a bilge pump rated at a minimum of 2000 G.P.H. All materials and equipment shall be new and shall meet appropriate federal and industry standards. The vessel shall be powered by two outboard motors with a desirable horsepower rating of 300 HP each.

Material: New Marine Grade Aluminum

LOA: 27 - 32 feet	Beam: 120 to 132 inches
Chine Beam: 94 - 99 inches	
Construction: Welded	Fuel Capacity: 180 gallons minimum

Minimum Thickness Bottom: .250 inches
Minimum Side Thickness: .190 inches
Power: minimum 600 hp, with full manufacturer's warranty

The vessel shall be manufactured to meet or exceed both ABYC, NMMA, and USCG Standards.

It is intended that the manufacturer, when selecting components, materials and design practices for the specified boat and trailer, will use those which are best available in the industry for type operation and conditions to which the boat and trailer will be subjected.

All components, materials and design practices will be selected to give maximum requirements of the specifications.

CONTRACTOR will deliver the completed boat and trailer to a location designated by the awarding agency.

CONTRACTOR will allow outside vendors to access and perform work aboard the vessel, while at CONTRACTOR'S facility as agreed upon by CONTRACTOR and purchaser for installation of any electronics or other equipment not provided and/or installed by CONTRACTOR.

The motors and trailer must be able to be serviced or repaired by a certified vendor/ mechanic within Humboldt County.

Hull

Self-Bailing Decks: Fully self-bailing deck with two oversize scupper ponds located at the aft deck corners. Drains to have mechanical flapper style non-return valves to prevent water ingress. All standing and walking surfaces to be covered in non-skid material.

Delta Pad: Minimum of 24-inch width.

Cleats: Eight Heavy duty 10-inch cast aluminum cleats with welded backing plates.

Beaching plate: minimum of 16 inches wide and 9 feet long .250-inch thickness.

Freeing Ports: Minimum of one per side with clam shell shield to prevent water intrusion on hard turns or heavy seas.

Inspection Hatches: The vessel shall have sufficient inspection ports / hatches in compliance with A.B.Y.C. requirements.

Sacrificial Anodes: The vessel shall have at minimum two sacrificial anodes for cathodic protection.

Bow Eye: Heavy duty aluminum bow eye.

Lifting Eyes: Four heavy duty welded lifting eyes.

Tie Downs: Two cast aluminum, heavy duty transom tie downs. One to be located on the port side and one to be located on the starboard side of the lower transom.

Tie Down Pockets: Four welded aluminum tie-down pockets in deck. Two forward deck and two aft deck.

Engine Mounting: Twin Engine "Offshore" style bracket for mounting of outboard engines

Crash Guard: Outboard Motor protection / Crash guard to be minimum of 2 inches in diameter.

Aft Mast: To be hinged to fold for highway transport. Radar antenna, Radio Antenna, and FLIR at top of mast for full 360-degree visibility with FLIR camera.

Tow Bit: 3-inch tow bit with cross pin and welded cap to be located on stern.

Rope Reel: located on stern forward of tow bit. Rope reel should have removable handle and be sized appropriately to hold at least 250 feet of tow rope.

Welded Bow Safety Rails: 1.25-inch diameter. Approximately 72 inches in length.

Welded Stern Rails: 1.25-inch diameter. Approximately 48 inches in length.

Sponson system: The vessel shall be collared with an inflatable or partially inflatable / foam sponson system. The sponson shall be made of heavy-duty material and shall be covered with a rub strake material on the tube sides. Additional heavy duty fendering shall be installed at the bow.

Bilge Pumps: A minimum of two bilge pumps rated at a minimum of 2000 GPH each with auto float switches shall be included in the vessel.

Washdown Pump: A washdown pump including a coil hose and trigger nozzle shall be installed on the vessel.

Engines & Controls:

Engines: Twin outboard Engine installation and rigging package. Engines shall be a minimum of 300 horsepower each, making total engine horsepower 600 horsepower. One engine to have standard rotation and one to be counter rotating. Engines to be equipped with stainless steel three blade propellers. One propeller to be standard rotating and one to be counter rotating. Engines to be controlled by electronic start. Main engine harness and all necessary engine installation wiring to be included.

Engine Control: Dual binnacle shift and throttle control. Twin engine key switch with emergency stop lanyard. Twin engine start/stop panel.

Steering System: Twin ram power assist hydraulic steering system with stainless 13.5” steering wheel. Hydraulic pump and all required hoses and wiring to be included.

Trim Tabs: 12” x 9” 12-volt trim tabs with trim indicator on dash / helm area.

Engine Display: Multi-function engine display to monitor engine RPM, trim, engine hours, battery voltage, fuel tank level, fuel burn rates and water pressure.

Fuel Tank: Fuel tank to have a minimum of 180-gallon capacity. Tank to be constructed of 5052 aluminums with appropriate interior baffles, neoprene rubber and seaboard isolation mounting beds and brackets to prevent tank movement while underway. Tank to have two 3/8” pickup fittings, two 5/8” vent fittings, a 1.5” fill pipe. Fuel tank to be equipped with electric fuel level sending unit and gages mounted on helm if not integrated with engine display monitor. Deck plates should be installed to access tank fittings as needed. The tank shall be accessible for removal by being accessed via a deck plate over the entire fuel tank. Fuel tank installation and components are to comply with ABYC and EPA standards in effect at the time of manufacture. Tank to be pressure tested and certified.

Fuel Filter / Water Separators: One installed per engine and each to have low point drains.

Cabin Specifications

Walk around Cabin: Approximately 9 feet in length with shortened cuddy trunk for additional storage and access to electrical wiring. Walk around cabin to have padded matting to assist in shock mitigation on all standing surfaces. Cabin to have one locking hinged door centered on the aft side with a window. Cabin to have a locking sliding door with a window on the port side and the starboard side. Vessel to be balanced appropriately for weight of cabin aft. Grab handles vertical port and star aft, on port dash, and vertical port and star on forward face of console. Cabin walls, ceiling and floor to have insulation. The windshield of the cabin shall have an electric multi speed wiper system with a washer fluid reservoir.

Interior Cabin Roof Rails: To be mounted on the ceiling of the cabin and run along outboard sides of the cabin aisleway.

Passenger grab rail: .750-inch Welded aluminum grab rail on passenger side of dash

Exterior Cabin roof handrails: 1-inch welded aluminum grab rail to run along cabin roof gutters. Rails to run fore and aft along length of cabin.

Radio Rack: Overhead radio rack mounting panel for overhead electronics installations. Rack to be designed so that it does not block the operator's line of sight.

Additional Storage: Sufficient storage compartments to store additional equipment and carriage items shall be included in the cabin design. One locking storage compartment capable of being used as a gun locker shall be included in design.

Charting table: A charting table with a desktop surface for writing and use of a computer shall be included in design. This should also have drawers/cabinets underneath it for additional storage. Electrical power shall be wired to this location. This table should be located at the aft of the cabin on the starboard side.

Seating: The cabin shall have seating for at minimum four persons. The operator seat shall be a shock mitigating seat with folding arm rests. The navigator's seat located on port side of cabin shall be a shock mitigating seat with folding armrest. The bench of both the operator and the navigator's seat shall fold down to allow for operation of the vessel in a standing position and easy ingress/egress through sliding side doors. Directly behind the operator and navigator seats shall be two additional shock mitigating seats (It is desired that the manufacturer also includes in their quote an option to have these aft seats be non-shock mitigating to show the price difference). These seats are to be installed on top of a small riser to allow for additional storage underneath. In the aft port side of the cabin behind the rear passenger seat, an optional bench seat with storage can be installed. If no bench seat is built at this location, a storage cabinet shall be built here. All seating shall be upholstered with a strong wear resistant material.

Cabin Ventilation: A minimum of two fans shall be installed in the cabin for ventilation. Two passive vents to be in cabin roof (one forward one aft).

Cabin dome lighting: At minimum, four Red/White overhead cabin dome lights shall be installed. These lights shall be LED.

Carbon Monoxide Detection: A carbon monoxide detector shall be installed in the interior of the cabin.

Electrical Rigging

The electrical system of the vessel shall include at minimum four batteries and shall be of quality and sufficient to run all electronics. Wire from battery to fuse block to be 4 gauge insulated red and black wire. A 12-volt accessory panel with labeled breakers and lighted rocker switches shall be installed. A minimum of six spare breakers shall be included. There shall be a master battery disconnect switch located inside the cabin. A minimum of four 12-volt power outlets shall be installed throughout the cabin. **Marine batteries must be used.**

All electrical wiring and coaxial cables shall be run through conduit where exposed, and through grommets where passing through bulkheads. All terminal ends shall be sealed with silicone gel after installation.

Lighting

Navigational Lighting: USCG "International Rules" approved navigation lighting shall be installed. All lights shall be LED.

Flood/Deck Lights: A minimum of four LED flood lights shall be installed with one being placed on each corner of the cabin facing downward to illuminate the deck of the vessel.

Search Light: A remote controlled roof mounted LED spotlight will be installed on forward of cabin roof.

Emergency Lighting: LED emergency light bar with strobing blue light.

Scene Lights: Minimum of three LED Flood lights. One facing aft, one facing port side, and one facing starboard side. All lights to be independently switched.

Electronics & Navigation Installations

Compass: A magnetic compass shall be installed on the dash where it will not interfere with electronics or line of sight of the operator.

Electronic Navigation: A minimum of two marine chart plotter screens such as the Garmin GPSMAP 8612 or "approved equal" shall be installed at the helm. These display screens shall also be capable of integration with sonar, radar and FLIR. They

shall be installed in a location as to not obstruct the operator's line of sight. An external GPS antenna shall be installed on the cabin roof. A radar system such as the Garmin GMR 18 or "approved equal" shall be installed on the cabin roof.

VHF Radio: A VHF Radio with exterior fiberglass antenna shall be installed. The antenna shall be 8 foot in length and installed on a folding base.

Siren & Speaker: One weather resistant siren amplifier with a 100-watt output rating such as the Whelen WPA112 or "approved equal". One weather resistant 100 watt rated siren speaker such as the Whelen SA315P or "approved equal". One weather resistant siren control such as the Whelen WPA3FM or "approved equal."

Ropes and Rigging

Tow Rope: 250 feet of 1 ¼" tow rope to be installed on rope reel.

Dock Lines: Four pre-spliced 5/8" by 35' dock lines.

Life ring: USCG approved orange ring buoy with stainless steel mounting/hanging bracket.

Boat hook: One telescoping boat hook with stainless steel mounting brackets.

Trailer

Trailer must meet Federal and Society of Automotive Engineers (SAE)requirements.

Triple axel aluminum I-beam style trailer with a minimum13,500 pound carrying capacity. Trailer to have surge disc brakes. Trailer to include LED lighting compliant with California Vehicle Code requirements and heavy-duty winch. Tires to be on galvanized rims.

Paint Options

Install agency specific graphics package to include at minimum; Agency name and logo in reflective vinyl on sides of cabin, agency name on sponsons both port and starboard side.

Exterior cabin paint to be white

Interior cabin paint to be gray.

Interior hull paint to be gray.

ADDITIONAL RESPONSIBILITIES OF CONTRACTOR:

All work done, when and where governed, must comply with current USCG, NMMA and ABYC regulations.

Engines and trailer must be able to be serviced by a certified repair shop within Humboldt County. CONTRCTOR is to provide names of local certified repair and maintenance providers.

The boat and trailer design must be a design of a recognized manufacturer of heavy aluminum watercraft that has been in business continuously for a minimum of 24 consecutive months.

Manufacturer nor Dealer cannot be subject to U.S. Department of Homeland Security Article XX-that restrict federal financial assistance awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities.

Warranties will include:
Engine and pump = full manufacturers warranty
Hull = minimum 10 years on materials and workmanship
Equipment = manufacturer's warranty or California law

The vessel, motor, trailer and listed equipment will all be considered as one unit.

CONTRACTOR is to specify the grade of aluminum used throughout, the type of electrical wire used, brand and type of batteries, fuel filter, blue light and GPS/Depth sounder model used.