

2023 AIRBOAT SPECIFICATIONS

Use:

In shore bayous, rivers and bays, use for transportation of personnel and coastal research.

General Construction and Specifications:

The vessel hull is to be of all welded and crimped construction aluminum plate and extruded aluminum structural members. The motor stand and propeller cage is to be of all stainless steel extruded members. Particulars of all aspects and components of the vessel follow in these specifications. The vessel to be built with accepted marine/airboat construction practices and in accordance with all Federal CFR, USCG, State and Parish regulations. General design and engineering of the vessel should be to standards to accomplish the vessel's intended use for long term operation. The intended use shall include:

1. Comfortably handling 4 passages and an operator.
2. Boat configuration shall be driver and one (1) passenger seats up, one (1) 2-passenger front seat, and two (2) removable lower 1-passenger side seats.
3. The finished airboat must be able to "come to a plane" easily when operating in calm conditions without "purposing", with or without passengers.
4. Minimal to no "torqueing" of the boat while accelerating to planning speed in deep water.

Hull:

The hull is to be all welded aluminum and meet the following guidelines

LOA: 17'0" overall length excluding the grass rake.

BEAM: 7-1/2' overall width at midship

1. Hull plate will be 5086 H1 16 marine-grade aluminum; only 5086 H1 16 marine-grade aluminum will be accepted. Dual certification alloy will not be accepted.
2. Hull will be rounded chine style utilizing eight (8) crimps. Four (4) per side rounded chine style.
3. Bottom of hull shall not be flat. It shall have an overall 1" convex dome when the hull is inverted.
4. Sides of the boat will be 32" at the transom and taper towards the front of the boat to a height of 27" where the rake starts.
5. The following will be constructed from 3/16" 5086 H116 only aluminum plate:
 - a. Bottom
 - b. Transom
 - c. Fantail
 - d. Bulkhead
 - e. Head Block
 - f. Deck

6. The sides will be constructed from 1/8" thick 5086 H1 aluminum.
7. The gunnels will run full length of the hull including the fantail and be aluminum extruded gunnel piece bulbed flat top approximately 2" width.
8. The boat will have seven aluminum T-bar longitudinal runners welded in place on interior, five (5) 2" x 2" x 1/4" and two (2) 2" x 2" x 3/8". The T-bars will be spaced evenly on the hull bottom. ***All T-bar to be pre-rolled to the contour of the bottom before welding to the hull bottom.*** The two (2) 3/8" runners will be positioned at 14-3/16" off centerline both port and starboard so the overall spacing between these runners will be 28-3/8" and to accommodate the bottom brackets of the motor stand.
9. The hull will have one (1) cross brace constructed of 2" x 2" x 3/8" aluminum T-bar horizontal transverse element and 2" x 2" x 1/4" aluminum T-bar vertical elements. Both joined by 3/8" aluminum 5086 H1 16 plate bolted in place shaped and contoured to eliminate a trip hazard. The cross brace T-bars will be fastened in place across the top of the longitudinal by way of 1-1/2" x 2" x 1/4" angle clips and thru-bolted. Cross brace to be positioned in the hull at amidships forward of the motor stand approximately 75" to 77" from the transom. Placement of this cross member should be calculated by the builder to provide maximum structural support under all conditions, and maximum performance of the vessel.

Position of the motor stand in the vessel to be determined by placement of this cross brace at the 75" – 77" position

10. A 108" length of 2" sch. 80 aluminum half pipe will be welded on outsides of boat port and starboard along the third crimp from the bottom up and from transom forward. This will be welded to the vessel in such a way that it shall not interfere with the required height of the polymer. End of the half pipe tapered and half pipe fully welded.
11. A 60" length of 2" sch. 80 aluminum half pipe will be welded on inside of boat port and starboard along the second crimp up from the bottom and from the transom forward. End of the half pipe tapered and fully welded.
12. Inside the nose of the hull a 1/4" flat bar backing will be mounted welded in place and with stainless steel threaded inserts so that a grass rake can be mounted to the bow with bolts that can be fed through the rake to secure it without needing nuts.
13. Provide a 36" x 14" flush-mounted deck hatch with 1" x 2" channel groove draining to aft of deck to keep water out of deck space. Handles and hinges to be flush with the deck. Hatch measurements are negotiable and can be adjusted for structural reasons with approval from CPRA.

14. The foredeck is to be set approximately 2" below the gunwale. The foredeck will be gusseted at each corner to the hull. Width of the gusset forward approximately 12" tapering aft to nothing at approximately 14.5".
15. A 4" – 5" step rail will be welded to the inboard gunwales of the boat running from the front deck gusset and tapered to the propeller guard mounting plate. The inside of the step will be crimped down 2". The 4" – 5" specification shall not include the width of the gunwale's extrusion. This step will be built using 1/8" 5052 marine grade aluminum material. The aft end of the step will taper back to the gunnels approximately 1.5" forward of the propeller guard mounting plate. This taper will be approximately 6" in length.
16. The bottom of the boat shall extend 1-3/4" inches past the transom and the sides shall extend 3/4" past the transom.
17. The hull will have approximately 6" width fantail that has a gradual dip (curvature), half-moon shaped (no hard corners or crimps) the lowest point between the fantail and the bottom of the boat hull shall not be less than 22". This will be rolled and crimped 3/16" aluminum plate same alloy as transom and fully welded to the top of the transom.
18. A 1/4" thick aluminum prop guard mounting plate mounted in the aft corners of the hull near top of transom and below the gunwales will be used to support the aft end prop guard cage assembly. This plate will be approximately 11.5" wide at the transom and taper to approximately 6.5" at the front and will be approximately 14.5" and fully welded in place.
19. Doubler backing plates to be fully welded in place on the hull at the following locations.
 - a. Aft propeller guard mounting plates hull sides and transom.
 - b. Upper attachment of the cross brace at the gunnel.
 - c. Where the foredeck meets the hull side at aft corner and along the hull where the foredeck gusset meets the hull.

Doubler plates to be 3/16" in thickness and fully welded in place.

20. One (1) 1.5" x 1.5" 3/16 aluminum angle exhaust support with U-bolt stainless steel pipe clamps will be bolted on each side of the transom where the exhaust pipe passes through the transom. This angle will be mounted inside of the boat and be supported by two (2) bolts through the transom.
21. Hull will have removable aluminum flooring on top of the runners. This flooring shall be made of 1/8" 5052 marine grade aluminum plate. This flooring will be secured to the runners of the boat using at least nine (9) 1/4" stainless steel panhead screws. These screws will set into at least nine (9) 2" x 1.5" x 3/8" aluminum angles welded to the longitudinal runners that will have stainless steel threaded inserts so that nuts are not necessary. This flooring will be fitted to the sides of the boat and have rubber trim edges

port and starboard. The aft end rear of the flooring will leave at least a 1" gap between the flooring and the center cross brace. At the forward end of the flooring, there will be eight (8) washout holes that are 2.5" wide by 1.5" in depth and positioned between T-bar runners. The flooring will be covered with a non-slip tape.

22. One (1) heavy duty two-hole bow pad eye made of 3/8" 5086 aluminum, 4" long, beveled and double-welded for durability. Positioned on the bow rake below the nose on centerline. Pad eye to be designed for use as an anchor point and winch point for the vessel's trailer. Pad eye placement should not interfere with loading or unloading the vessel on and off of the trailer.
23. Two (2) rear pad eyes for strapping the rear of the hull to the trailer. Rear eye pads will be positioned along the inside of the exposed transom gunwale rails and will be welded to both the gunwale and the fantail. These eye pads will also serve to close the exposed transom gunwale rails.
24. Two (2) 1" or greater inside diameter drain plugs to be installed at the transom, one (1) port side, one (1) starboard side and 1" or greater transom plugs to be supplied.

Grass Rake:

One (1) removable grass rake for attachment to the vessel at the bow to be built and provided, installed on the vessel as per the following specifications.

1. Removable 30" long solid grass rake located at the bow of the hull will be approximately 59" wide at the front.
2. Front plate is to be constructed from 3/16" 5086 aluminum.
3. Sides to be constructed of 1/8" 5086 aluminum plate.
4. One (1) step approximately mid-point of the height of the rake built of 1/8" 5086 aluminum plate with an approximate 10" depth across the top and a 2" crimped down lip aft; bottom of the step to be open. Step to be fully welded at all attachments to the grass rake.
5. The rake will have two (2) 2" ID pipe aluminum spud holes running through the 10" step, one (1) on each side (port and starboard). Two (2) spud poles will also be provided by the vendor. 12" x 1/2" pipe aluminum handles welded on the gunnels of the grass rake port and starboard.

Polymer:

The hull will have a polymer applied to the outside as described below to assist the vessel while being propelled across rough and/or dry terrain.

1. 3/8" thick polymer on the bottom from the transom forward approximately 10' and 1/4" thick polymer on the hull sides from the bottom crimp up. All joints in the polymer will be angular scarf joints with the edge of the leading sheet angle back to avoid snagging the plastic at this joint.
2. Ultra-High Molecular Weight (UHMW) ***BLACK***, polymer to be used and attached with hardened, countersunk, 100° head, aluminum rivets 1/4" x 5/8" on the 1/4" polymer and 1/4" x 3/4" on the 3/8" polymer.
3. The rivets will be placed on an 8" spacing on bottom of boat and a 3" spacing along edges of polymer.
4. Polymer will extend approximately 8" up each side of the boat from the welded side hull seam up. Polymer to extend forward from the transom to the bow nose on the bottom and from the transom to the bow nose on the hull sides, tapering at the bow sides.

Motor Stand:

The motor stand will be designed to support the motor and drive train assembly, also incorporating two (2) upper seats, driver and passenger, and control areas. There will be a storage area provided under the driver's seat. Provisions will be made to mount the fuel tank and sprayer tank within the frame of the stand. The motor stand will also be designed to support the oil cooler. Due to the complex nature of the stand design the vendor can recommend design adjustments to support any safety concerns. All adjustments must be approved by CPRA.

Specifications to be followed as below:

1. The motor stand will be constructed of 1" x 1" x 11 gauge stainless steel square tubing and 1" x 1" x 16 gauge stainless steel square tubing and will be combined with the seat mount to be one (1) piece. The bottom runners of the stand will be constructed from 1-1/2" x 1-1/2" x 3/16" stainless steel angle, to be attached to the hull runners. The width of the bottom runners of the motor stand will be 28-3/8" wide to maximize the usable floor space. Stainless steel 2" or larger gussets will be installed where legs and braces attach to the bottom runners. Three transverse stainless steel 2" x 2" x 1/8" angles welded in place on top of the bottom runners spaced evenly with one 1" x 1" x 1/8" angle between these on center running longitudinal over center hull T-bar. These elements used to support the fuel tank.

2. ***CAD generated drawing of the engine stand with multiple views to be provided by the builder for approval by CPRA and their agents in their returned bid package. Drawing not to be hand drawn. Drawing to include dimensions and all gusset placements on the engine stand.***
3. The stand will bolt to the hull utilizing 3/8" stainless steel bolts with self-locking stainless steel nuts. The motor stand is to be fastened to the two (2) 3/8" T-bar runners with five (5) 3/8" bolts on each runner spaced evenly and two (2) 1-1/2" x 2" x 3/16" stainless angle clips one (1) each forward and aft transverse frame members of the motor stand also thru bolted with 3/8" fasteners.
4. The rear motor mount plates shall be flat horizontal plates. 3" x 4" x 1/4" stainless steel plate with 5/8" hole in the center for the motor mount. Motor mount to set on top and bottom of this plate.
5. The foot rest for the driver will be approximately 29" above the hull of the boat. This foot rest will extend approximately 29" forward from where it attaches to the storage basket. It will have a width equal to or greater than the width of the two (2) upper seats and be adequately supported underneath for driver and companion. Foot rest to be fabricated of 1/8" aluminum plate with non-skid tape finish.
6. A storage basket will be installed below the upper seats. Baskets will be made of 10 gauge, stainless steel wire mesh. The mesh will be 1" x 2". Access from the front.
7. The stand will be constructed with the proper bracing to accommodate two (2) lower level flat panel seats that are easily removable from the boat. These panels will connect to the motor stand mount on each side and forward of the driver seats alongside the foot rest area. The removable seats will be 1' x 2' x 3/16" aluminum plate 5086 H1 16. The seat will hook into the braces of the motor stand and will utilize a 1" support pipe that will be stabilized by a pin. Fiberglass seat shells or standard folding boat seats to be provided and installed on the panels. Fitted covers for all seats shall be provided by the vendor.
8. Motor stand to be fabricated to accommodate two (2) upper seats. Driver seat to port and passenger to starboard. This seat assembly to be approximately 45" at the base above the hull. Both driver and companion seat to be ***fiberglass shells***.
9. Motor stand to be fabricated to hold the oil cooler assembly. Oil cooler to be mounted using rubber expansion type mounts four locations mounted to the frame of the motor stand below the motor and forward of the propeller.
10. No holes are to be drilled through the framing of the motor stand to mount any equipment, access, or other. All mounting tabs for switches, panels, accessories, etc. to be welded in place.

Propeller Guard (Cage)

The propeller guard cage assembly will be constructed as specified below and as a separate attachment to the motor stand and hull. This should be designed with the utmost safety to the passengers in mind.

1. The propeller guard will be a “swept back” design including area inside the hull below the gunnels (not straight down) to maximize floor space.
2. ***CAD generated drawings of the propeller assembly with multiple views to be provided by the builder in their returned bid package for approval by CPRA and their agents. Drawing not to be hand drawn. Drawing to include dimensions, steering components, gusset placements, brackets for oil coolers and radiators, etc. on the propeller guard assembly.***
3. All pipes will be coped and fitted before they are welded. Crimped pipe welds will not be accepted.
4. This unit will be constructed of three (3) vertical main hoops moving from aft forward 1st, 2nd, and 3rd of ½” sch 40 stainless steel pipe. Struts and cross bracing of 7/8” and ¾” stainless steel tubing.
5. The guard will also utilize nineteen (19) horizontal prop guard tubes that will run from the front hoop to the rear hoop. ¾” stainless steel tubing.
6. The propeller guard will bolt onto the boat at the rear prop guard mounting plates and the motor stand forward. The use of studs or “stud-like” devices is not acceptable. Only full stainless steel bolts with the proper stainless steel nylon locking nuts will be accepted.
7. Barrier or guard material is to be constructed of ¾” x 9 gauge flat stainless steel expanded metal from the rear vertical hoop forward approximately 24” and from the gunnel up approximately 5’ and on the cage frame in the hull below the gunnel. The rest of the cage including the top rear portion is to be constructed of 2” x 4” x 10 gauge (.135) stainless steel welded wire.
8. A radiator support frame to be incorporated into the propeller cage. The radiator is to be mounted forward of the propeller and above the engine. The support frame to be fabricated of ½” sch 40 stainless steel pipe welded to the propeller cage frame. All attachment points to the cage frame to be gusseted. The top and bottom radiator mounts will be solid mount with stainless steel bolts and rubber isolation vibration washers.
9. The radiator also to have a rear guard panel. These panels to be constructed of 1” x 3/16” stainless steel flat bar frame and ½” x 16 gauge flat stainless steel expanded metal inner mesh material. Guards to be spaced approximately 1” away from aft face of the radiator and bolted in place and removable without removing the radiator.

10. The cage will have two (2) access doors to the engine. A door will be mounted on each side of the cage. The doors will be mounted on hinges from the top and the opening shall be 33" in length, 22" tall in the rear, and 9" tall in the front. These doors shall be placed in an area that will allow access to the spark plugs, oil dip stick, headers etc. The doors will have 3/4" stainless steel round tubing frame and 2" x 4" x 10 gauge stainless steel welded wire panels and will feature a stainless steel gas ram open assist w/ stainless steel ends and mounting clips. The doors will be held closed by rubber hood-latch-style strap closures with stainless steel mounting clips and hardware, two (2) per door.
11. The rudder support frame to be incorporated into the propeller cage. The rudder support frame bars will also be made of 1/2" diameter sch 40 stainless steel pipe. The rudders are to be mounted to the top and bottom rudder bars by use of 3/8" thick x 2" x 3" stainless steel flat bar brackets welded in place. The lower brackets are to be connected by further utilization of 1/8" thick by 1-1/2" flat bar strut to the fantail thru bolted in place top and bottom approximately 2.5" from the transom.
12. The propeller guard to be designed and fitted to the vessel and motor stand to provide the minimal tip clearance between the tip of the propeller and the propeller guard of 2.75" or what the propeller manufacturer suggests for safe operations. The greater distance of the two will be accepted.
13. Mounting plates for the registration stickers and numbers shall be provided and attached to the cage.

Steering

The steering will be mechanical push-pull type to two (2) rudders aft of propellers; specifications to be followed as below:

1. Steering will be accomplished by means of a marine plastic coated jacket push-pull steering cable with stainless steel hardware ball joints and fittings etc. and located on the left hand side of the driver's seat.
2. The steering arm will be constructed of 1/2" sch 40 stainless steel pipe approximately 40" long from pivot point to end of handle. Cross supports of vertical steering arm will be 3/4" stainless steel tubing. The steering arm shall attach to a horizontal 1" sch 40 stainless steel pipe at the pivot point. This horizontal/pivot arm will be mounted under driver seat basket using two delrin plastic pillow block style bearings.
3. The steering cable shall attach to the steering rod arm approximately 18.5" above the pivot point.
4. The steering cable will be secured and protected from chafe and damage by the exhaust and propeller by use of large tie wraps to the propeller cage and one (1) 2" ID 3/8" stainless steel ring. One (1) ring will be mounted on the prop guard in line with the propeller.

5. The steering arm and cable adjustment will be such that the straight forward steering position will be located in a comfortable position for the driver and such that maximum left and right turning positions will not exceed safe or natural position for the operator.
6. Aft end of steering cable will mount to 2" x 4" x 1/4" stainless steel tab welded and gusseted to lower rudder support from off center to the port side rudder.

Rudders:

Twin airfoil shaped rudders to be provided and installed as per the following specifications.

1. Two (2) aluminum rudders, approximately 28" x 48" envelope style and foam filled. Rudder to be air foil shaped.
2. Both rudders will have a 1/2" sch 40 aluminum pipe running through them welded in place and will be fitted at each end with polymer bushings for 3/8" stainless steel rudder rods. Additionally, these rudders are to have grease zerts located on top and bottom.
3. Rudders are to have .063" thickness skin constructed out of marine grade aluminum.
4. The foot of the rudders is to have 1.5" wide by 1/4" thick flat bar that extends in front of the rudder for attachment of the steering cable and jockey bar. This flat bar will extend well past the pivot point where the rudder rod attaches.
5. A stainless steel adjustable tie (jockey) bar to be installed between the rudders attaching at the forward foot of the rudders.
6. The steering is to be set up and equalized so the vessel will run straight when the steering arm is in a neutral or centered position, centering the rudders. Use of a trim tab on the aft end of the rudder is acceptable to accomplish this.

Engine and Drive Train:

Single engine V-8 gasoline fuel injected with belt driven reduction gear and single propeller.

1. A new GM LSX 7.4 L Pleasurecraft Marine Levitator or approved equivalent fuel injected engine having 525 hp to be furnished and installed to power the boat. The engine will have a new warranty, alternator, mounted fuel filter/water separator, fuel injection for engine horsepower. All parts such as headers, manifold etc. will be of high quality and high performance specifications with required safety equipment and be in excellent running condition. Exhaust system will meet engine manufacturer's requirements.
2. An airboat belt driven reduction unit Century CH4 will be used that will provide a 2.52 to 1 ratio. The reduction drive belt will be a Falcon or approved equivalent belt.

3. Provide and install as previously described an all-aluminum racing radiator that is equivalent to a four (4) core radiator and will adequately cool the engine under extreme conditions.
4. Provide and install an engine oil cooler. The oil cooler is to be a 1' x 2' Hayden brand or equivalent.
5. The engine will be provided with a molded plastic cover protecting top end engine components from rain and adverse weather.
6. The following gauges or approved equivalent are to be provided:
 - a. Livorsi Vantage View Tachometer w/ LCD Information Display
 - b. Livorsi Vantage View Oil Pressure
 - c. Livorsi Vantage View Water Temperature
 - d. Livorsi Vantage View Volt Meter
 - e. Livorsi Vantage View Control Pod
 - i. Vantage View connects to the engine ECU via the CAN bus and provides digital data transfer to the tachometer, providing detailed and accurate engine information
7. The engine to be fitted with 12V DC components starter and alternator.
8. Aluminum instrument panel will be mounted between driver and passenger rear seats and feature the following:
 - a. Tachometer, temperature gauge and oil pressure gauge positioned forward and angled to provide proper visibility.
 - b. Lighted, labeled rocker switches for all lighting and accessories.
 - c. Glove box at rear of panel with internal 12V Dual USB outlet.
 - d. Two (2) 12V outlets on front of panel.
 - e. 6-circuit fuse panel inside front of panel.

Propeller:

1. The propeller is to be a Sensenich 4-blade R Series Propeller that has an 80" diameter composite propeller with a left-hand rotation or approved equivalent.
2. The distance from the center of the propeller to the hull of the boat shall be approximately 57.5" to 59.5". If design or safety requires a difference in distance, CPRA shall be notified.

Exhaust:

Conventional dry exhaust with engine headers, flex and hard pipe installed with thru transom outlet. Built as specified below:

1. The engine exhaust is to be a stainless steel header to a 3” collector head with small tack weld applied as barbs to end of the collector where the flex pipe attaches.
2. A 3” stainless steel flex pipe approximately 15” long to be provided to attach the header to the exhaust pipe.
3. One (1) 3” 409 alloy stainless steel exhaust pipe extending thru the transom at the support plate previously described in the hull section.
4. Exhaust pipe bends will be made using the appropriate 3” muffler bender to prevent kinks in the exhaust.

Electrical and Electrical Components and Accessories:

1. The electrical system is to have a 12 VDC ships service and engine start.
2. All electrical components such as switches, wires connectors etc. will be marine grade. Circuit protection to be provided for each circuit and be marine grade fuses and fuse holders protected from the weather and moisture.
3. All wiring to be marine grade securely mounted and protected from chafe damage.
4. Provide and install two (2) rubber-armored impact resistant 12 VDC LED white spotlights and will be mounted inside the cage facing forward.
5. Provide and install 12 VDC Rule 2000 or greater GPH bilge pump or approved equivalent at the transom with outlet under gunnel. Three-way switch operation (manual, off and automatic) shall be controlled from the engine control box.
6. Provide and install two (2) 12 volt Optima Red Top® Battery; Model 34/78 or approved equivalent; cold crank amps 800; crank amps 1000; reserve capacity 110; ampere hour 50; top terminal, or approved equivalent. Batteries to be installed as per local and federal requirements properly secured and protected. Batteries to be installed in the frame of the motor stand under the drivers’ seat area side by side and secured and covered as required.
7. One (1) double battery switch, Blue Sea 6007 or equal, to be provided and mounted horizontally aft of the instrument panel for ease of reach from the driver’s position. NOTE: The battery switch is to disable ALL electrical circuits when turned off.
8. Twelve (12) VDC LED style navigation lights mounted as per Coast Guard regulation.

9. Provide and install three (3) 12 volt plastic cigarette lighter style outlets located on the control box. Position to be determined by CPRA.
10. Placement of the switches for the running lights, trim tab and sprayer will be determined by the customer.
11. Switches will be labeled and easy to read from the driver's position.

Tankage:

A single aluminum fuel tank mounted in the motor stand frame.

1. A fifty (50) gallon aluminum fuel tank to be provided by builder and will mount inside the motor stand on top of the 2" x 2" x 1/8" angles. The angles will be coated with a layer of silicone (from the tube) across the full width of the angle. The tank will meet all required certifications. All fuel lines are to be Type A-1 or B-1 and meet all local and federal requirements. The fuel tank is to be mounted to the outboard longitudinal runners of the motor stand assembly by use of aluminum flat bar over the lip of the tank and fastened with stainless steel thru bolts.
2. A marine grade Racor or approved equivalent fuel/water separator filter to be provided and mounted in an appropriate location to afford easy access for maintenance.

Miscellaneous:

1. All stainless steel metal work will be powder coated. This will consist of sandblasting, priming, and top coated. The color shall be black.
2. All flooring, front deck, side steps, and rake step will have a "***non-slip tape***" applied for secure footing.
3. All seat shells to be one-piece fiberglass molded and all seat shells to be fitted with cushions and covers. The vendor is to provide a list of seat and cover color options to CPRA for determination of seat and cover colors.
4. Provide 12" x 1/2" aluminum pipe welded in place hand rails along the inside of the gunnel adjacent to both side jump seats.
5. Sprayer system - Provide and install an eight (8) gallon (or larger) capacity largemouth polyethylene sprayer tank placed in its own removable mount. Sprayer will be powered by a 60 psi 12 VDC Flojet chemical pump, or approved equivalent (***mounted under the driver seat***), with a 1.6 gallon per minute spray capacity. The sprayer is to utilize two (2) spray heads mounted in the hull at the bow. The spray heads are to be machined stainless steel button head style as to minimize interference w/ trailer and other objects. All other fittings to be brass with chemical resistant tubing.

6. A single 18” wide trim tab assembly to be provided and installed on centerline at the transom. Trim tab to use 12 VDC electric powered ram. Trim tab assembly is to be set up on a spring loaded cantilever mechanism to prevent damage to the ram if the unit strikes an object while under way. The unit will incorporate four (4) galvanized springs.
7. One (1) “survey pole” mounting hole to be added to the side front deck gunnel area (exact position to be set at time of build).
8. T-Top shade – A removable T-Top/shade providing shade to the driver and front passengers.
 - a. The shade is to be designed and mounted with minimal visual obstruction of the driver.
 - b. Shade is to be set up for easy removal and onboard storage to cage (rolled back) with all mounting hardware and straps provided.
 - c. The vendor is to provide a list of cover options to CPRA for determination before build.
9. Safety Gear - vendor is to provide all Coast Guard required safety gear and approved fire extinguisher relative to the size and operation of the airboat.
10. Fire Extinguisher mount – vendor is to provide a quick access mount for the fire extinguisher (plastic mounts are not acceptable). The mount for the fire extinguisher is to be in an easy to access location on the cage. Other mounting locations maybe considered and approved by CPRA.

Boat Trailer:

Provide one (1) aluminum frame, dual torsion axles, airboat trailer with Guide On side bunks port and starboard and angled loading bunk at aft end, drive on style trailer. The Trailer will be outfitted with:

- a. Winch stand with manual boat winch and winch strap (no cables).
- b. Foldaway manual tongue jack with wheels.
- c. All trailer tire rims to be galvanized.
- d. Spare tire with galvanized rim.
- e. Spare tire mount to be provided and mounted.
- f. Two (2) rear transom straps to be provided and installed to the rear mounting points.
- g. All trailer lighting is to be LED style and meet DOT requirements.
- h. Trailer wiring plug to vehicle shall be a standard 4 pin flat trailer wiring plug.
- i. Trailer Hubs shall be Vault Hybrid Lubrication System or equivalent on all wheels.

General Build and Acceptance Notes:

1. All bolts and nuts will be stainless steel construction except the motor mount bolts and exhaust band clamp bolts
2. All metal work will be either marine grade aluminum or stainless steel. See detailed specifications for locations.
3. All plate cutting to be made by computer aided CNC router machine.
4. Propeller cage and engine stand to be built on pre-existing jigs, including while being welded to completion.
5. Gunwale rails and all open pipe ends will be capped and closed.
6. All edges will be finished and dressed. No sharp edges will be accepted.
7. All pipe joints will be coped and fitted before they are welded. Crimped pipe welds will not be accepted.
8. All pipe bends will be machine bent; no freehand bending of any pipe will be accepted.
9. This will be a “*turnkey*” operation.
10. Vendor will be recognized as authorized dealer for all repairs/servicing associated with this airboat
11. Vendor will provide a warranty against defects in workmanship accessories etc.
12. It is the responsibility of the vendor to pick up and return the airboat for warranty work. This will be done at the vendors’ expense.
13. The customer will at his own discretion send inspectors during all phases of construction to ensure specifications are being met. The customer will not be limited to the number of inspections. An inspection will be made once the hull is complete and before any components or polymer are attached, at this time the engine should be at the vendor location for approval. An inspection will be made after the polymer is attached and all rivets set. An inspection will be made once the propeller guard, motor/seat stand, and grass rake are complete or are near completion but before powder coating. The final inspection and test run will be made once the boat is complete and before the workmanship is accepted. Safety and performance over shallow and deep water shall be considered and tested prior to acceptance. Any adjustments or modification shall be completed prior to approval. Upon approval, necessary documents will be approved and signed for the purchase of the airboat.