

# RAPTOR DESIGN & ENGINEERING LLC

MANUFACTURER OF



## XTR RESCUE RAPTOR 1860 & 1560



375 New  
Holland  
Drive  
Suite A  
Belleville,  
PA  
17004  
USA

PHONE 717-935-2175  
EMAIL [info@riverraptorjetboats.com](mailto:info@riverraptorjetboats.com)  
WEBSITE [www.riverraptorjetboats.com](http://www.riverraptorjetboats.com)



1. General Specifications

- 1.1. Rigid Hull – Inflatable Boat
  - 1.1.1. Rigid Hull Material: Aluminum
  - 1.1.2. Inflatable Collar Material: Urethane
- 1.2. Hull Shape: Modified V
- 1.3. Propulsion: Inboard Jet



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- 1.4. Internal Layout: Walk-Around Center Console Forward, Open Bow, Boxed Engine Compartment
- 1.5. Overall Length: 1860 = 18'2" or 1560 = 14'11"
- 1.6. Bow Tip To Transom Length: 1860 = 16'3" or 1560 = 13'2"
- 1.7. Bottom Width: 60"
- 1.8. Beam: 83"
- 1.9. Side Height: 27"
- 1.10. Deadrise: 10 Degree
- 1.11. USCG Rated Capacity: 1860 = 7 Persons - 1300 lbs or 1560 = 5 Persons - 850 lbs
- 1.12. Weight (No UHMW): 1860 = 1600 lbs or 1560 = 1300 lbs
- 1.13. Static Draft: 8"
- 1.14. Draft On Plane: 3"
- 1.15. Top Speed 50 mph with 300 hp engine, 43 mph with 170 hp engine
- 1.16. Fuel Consumption: 7 gph @ 30 mph
- 1.17. US Coast Guard Compliant Construction

## 2. Hull Specifications

### 2.1. Aluminum Hull (Boat Bottom & Lower Sides)

- 2.1.1. AL 5052 Sheet Material (Ultimate Tensile Strength 33,000 psi)
- 2.1.2. AL 6061 Extrusions
- 2.1.3. .190" Bottom
- 2.1.4. .125" Sides, Aluminum Collar Cradle, Keder Rail For Collar Attachment
- 2.1.5. .125" Floor Panels
- 2.1.6. Raised Performance Jet Intake System (Dimensions: 13" Wide X 20" Long X 1.75" Deep)
- 2.1.7. Double Mig Welded (Inside & Outside) Hull Seams
- 2.1.8. Custom Build Heavy Duty Infrastructure
- 2.1.9. Engineered, Laser Notched (To Reduce Weight & Provide Access To UHMW Hardware) C Channel & .25" X 2" C Channel Continuously Welded Bottom Stringers, T Extrusion Bottom Stringers
- 2.1.10. Custom Build Floor Support Structure Welded To Stringers
- 2.1.11. Floor Panels Attached To Floor Support Structure Via 3M 540 & Aluminum Rivets
- 2.1.12. Pump Protection Tubing (1 3/4" O.D., 0.125" WALL, AL) Connecting Swim Deck & Transom Reinforced With Cross Brace
- 2.1.13. Self-Baling Deck System – 2 Longitudinal Floor Channels That Direct Water To 2 Transom Mounted Scupper Valves
- 2.1.14. Hull is of rugged, heavy-duty design to minimize damage from impact and abrasion as a result of contacting subsurface objects.

### 2.2. Collar System (Boat Higher Sides)

- 2.2.1. Constructed of 40 oz Urethane Fabric



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- 2.2.2. Available In Red & Grey Color
  - 2.2.3. 14" Diameter
  - 2.2.4. 5 Individual Chambers
  - 2.2.5. 8" Side Rubstrake
  - 2.2.6. 8" Bottom Rubstrake
  - 2.2.7. D Ring Attached Collar Top Life Line
  - 2.2.8. Grab Handles
3. Internal Layout
- 3.1. Center Forward Console Design
  - 3.2. Walk Around Center Console With Polycarbonate Windshield, 4 Grab Handles, Sliding D-Ring Track, 4 D-Ring Pods & 8 Removable D-Rings
  - 3.3. Bow Deck – 53" X 53"
  - 3.4. Sit Down Operator's Station With Low-Back Helm Seat – 1560 Dual Leaner Seat With Storage - 1860
  - 3.5. Rear Deck Engine Compartment Lid (54" X 22" Seating) With Lifting Shocks & Grab Handles
  - 3.6. Swim Deck Extension – 52.5" X 20"
4. Drive System Specifications:
- 4.1. Engine: BRP Rotax 1630
    - 4.1.1. Horsepower: 300 or 170
  - 4.2. Pump: BRP Rotax
    - 4.2.1. 160mm Diameter
    - 4.2.2. Axial Flow
    - 4.2.3. Cast Aluminum Reverse Bucket
    - 4.2.4. Stainless Steel Wear Ring
    - 4.2.5. Integrated Cooling Water Supply For Engine
  - 4.3. Wet Exhaust System
  - 4.4. Fuel Capacity: 1860 – 27 Gallon, 1560 - 19 Gallon (Aluminum Under Floor Fuel Tank To Maximize Fuel Capacity & Watercraft Stability)
5. Electrical Specifications
- 5.1. Rear Starboard Storage Located Electrical Center Containing:
    - 5.1.1. NOCO NLP14 Starting Battery: 500 CCA
    - 5.1.2. Deka Group 31 Lead Acid Deep Cycle Accessory Battery: 100AH (NOCO NLX31 Lithium 120AH Available)
    - 5.1.3. NOCO Genius GENPRO Onboard Battery Charger With NOCO Bulkhead Charging Inlet
    - 5.1.4. Engine Fuse Box
    - 5.1.5. BRP Rotax JPS BUDS Engine Data & Diagnostic System With Diagnostic Plug
    - 5.1.6. Main Electrical Panel Containing:
      - 5.1.6.1. Main Electrical Disconnect



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- 5.1.6.2. Blue Sea Charging Relay
- 5.1.6.3. CZONE Contact 6 Plus Module
- 5.1.6.4. ATO Fuse Box
- 5.1.7. CZONE Digital Switching Power Distribution System
- 5.2. Medallion Helm Mounted 8" Touch Display
  - 5.2.1. Multifunction Touch Display: Clock, Fuel Level, Speed, Engine RPM, Engine Temperature, Fuel Consumption Rate (Instant), Compass, Hour Meter
  - 5.2.2. Indicator Lights: High Engine / Exhaust Temperature, High / Low Battery Voltage, Maintenance Required / Fault Code, Low Fuel, Low Oil Pressure, Check Engine
  - 5.2.3. Cole Hersee Key Switch
- 5.3. Helm Mounted CZONE Switch Panel
  - 5.3.1. Fused Switches:
    - 5.3.1.1. Blower
    - 5.3.1.2. Navigation Lights
    - 5.3.1.3. Manual Bilge
    - 5.3.1.4. Deck Lighting
    - 5.3.1.5. Auxiliary/Lighting/Accessory As Needed
- 5.4. 12V Receptacle
- 5.5. Helm Mounted Kill Switch With Lanyard (Fell Marine MOB Wireless Option Available)
- 5.6. 4" Marine Bilge Blower
- 5.7. Dual 900gph Automatic Bilge Pumps
- 5.8. TH-Marine LED Interior Strip Deck Lighting
- 5.9. Side Helm Recessed LED Front Navigation Lights
- 5.10. Rear Post Anchor Light
- 5.11. Sealed Electrical Connectors At Electrical Harness Junctions & Terminals
- 6. Controls Specifications
  - 6.1. 270 Degree Helm Steering
  - 6.2. Flow-Tec SDR Shifter
    - 6.2.1. Single Lever/Dual Function
    - 6.2.2. Port Side Console Mount
    - 6.2.3. Start In Gear Protection
- 7. Deck Hardware
  - 7.1. Stainless Steel Hardware
- 8. Topside Finish
  - 8.1.1. AquaTraction Cross-Link Polyethylene Marine Flooring – Black – Boat Floors



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- 8.1.2. AquaTraction Cross-Link Polyethylene Marine Flooring – Customer Choice Of Color Scheme – Fore Console Logo, Engine Lid, Transom Top, Swim Deck
- 8.1.3. Customer Service Logo Laser Etched In Engine Compartment Lid
- 8.2. Decals
  - 8.2.1. River Raptor Console Logo
- 9. Additional Options & Accessories Available Upon Request
  - 9.1. ½" UHMW Bottom & Side Coating With Steel Plate Reinforcement Around Intake
  - 9.2. Winch (3500 lb – Bow Mounted)
  - 9.3. 24V Portable Cordless Winch
  - 9.4. Anchor & Anchor Nest
  - 9.5. Fore-Console Or Under Seat Cooler/Seat/Storage Box
  - 9.6. Light Bar Loop – Rear Mounted (Customizable Search & Warning Lighting)
  - 9.7. Light Bar – Bow Mounted Quick-Detach
  - 9.8. Helm T-Top
- 10. 3D Model & 2D Technical Drawings
  - 10.1. A 3D AutoCAD Inventor Model Will Be Made Available Upon Request For Project Approval Prior To Project Construction
  - 10.2. 2D Drawings Will Be Made Available For Project Approval Prior To Project Construction
- 11. Training
  - 11.1. A qualified, manufacturer authorized and trained service representative can offer training at the request of the customer. This training will be at the cost of the customer.
- 12. Commercial Use Warranty
  - 12.1. Scope – Entire Body & Accessories
  - 12.2. Time Period – 1 Year
  - 12.3. Guarantee – Free Of Original Material & Workmanship Defects



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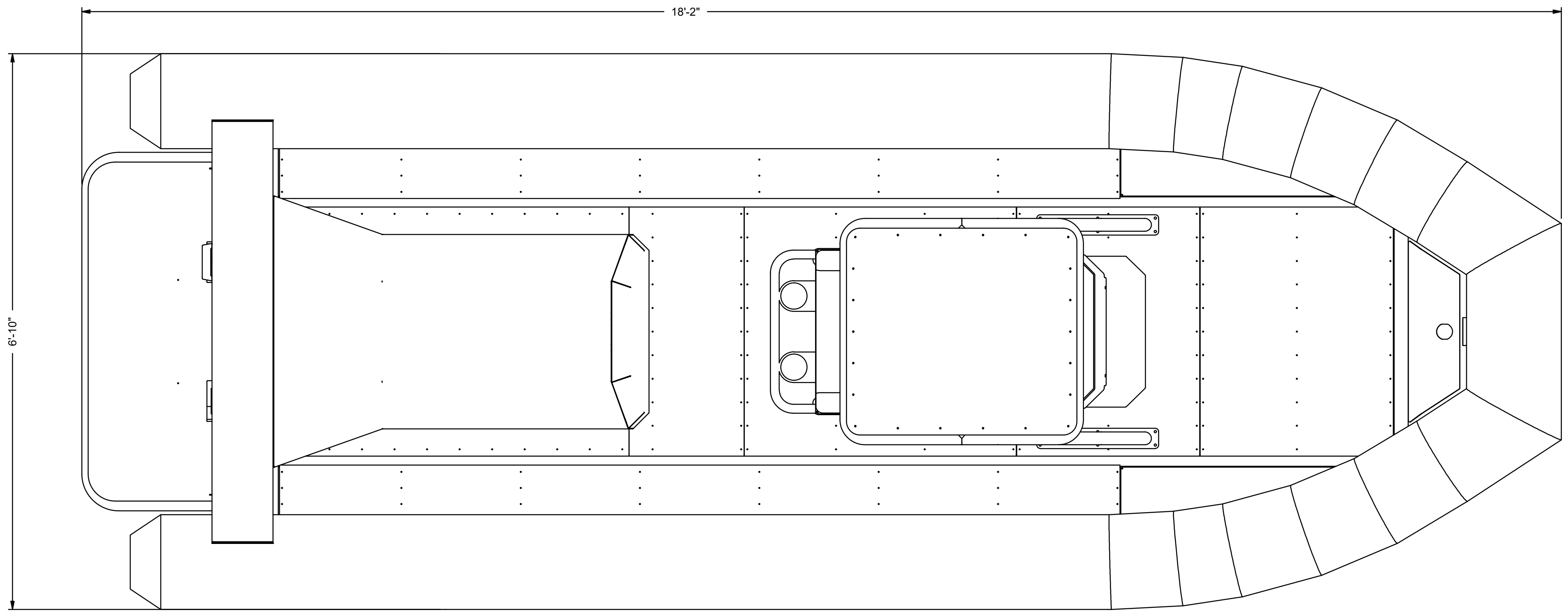


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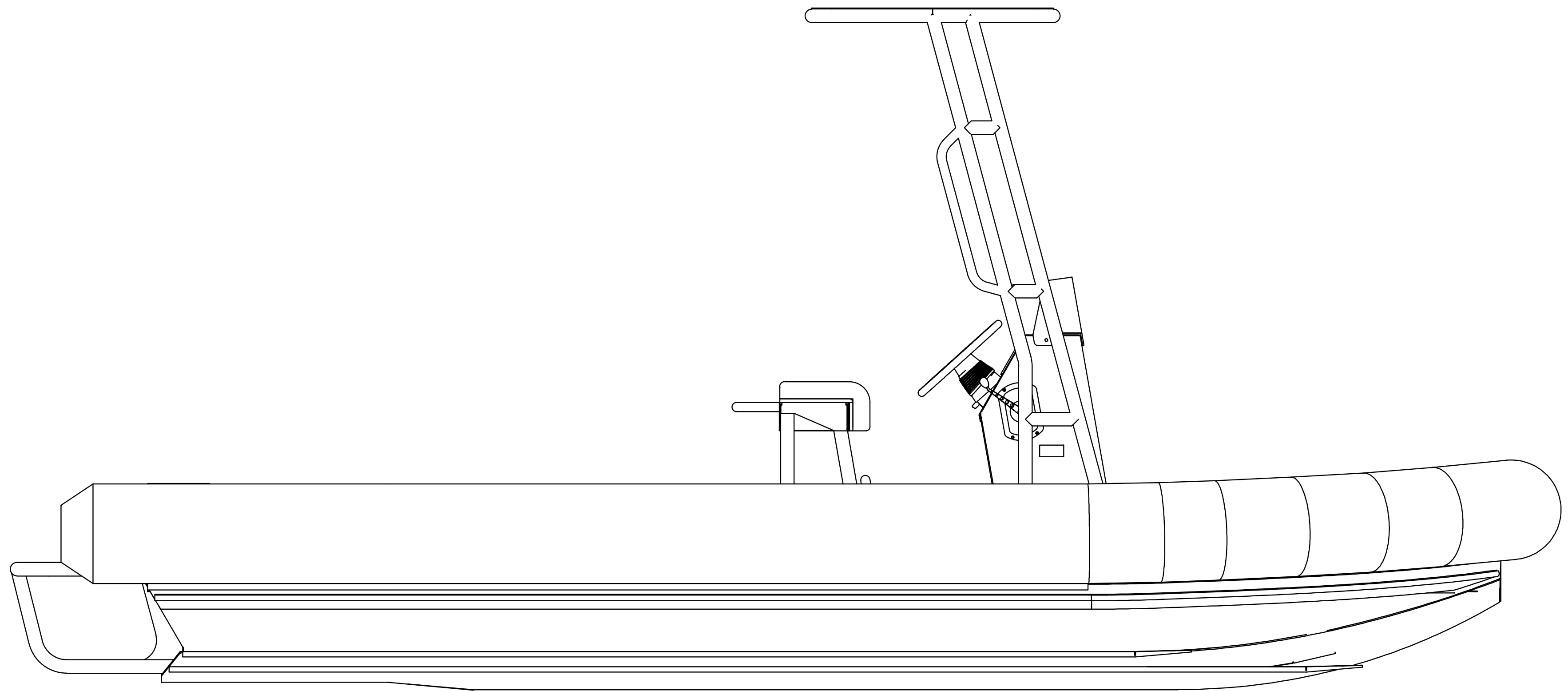
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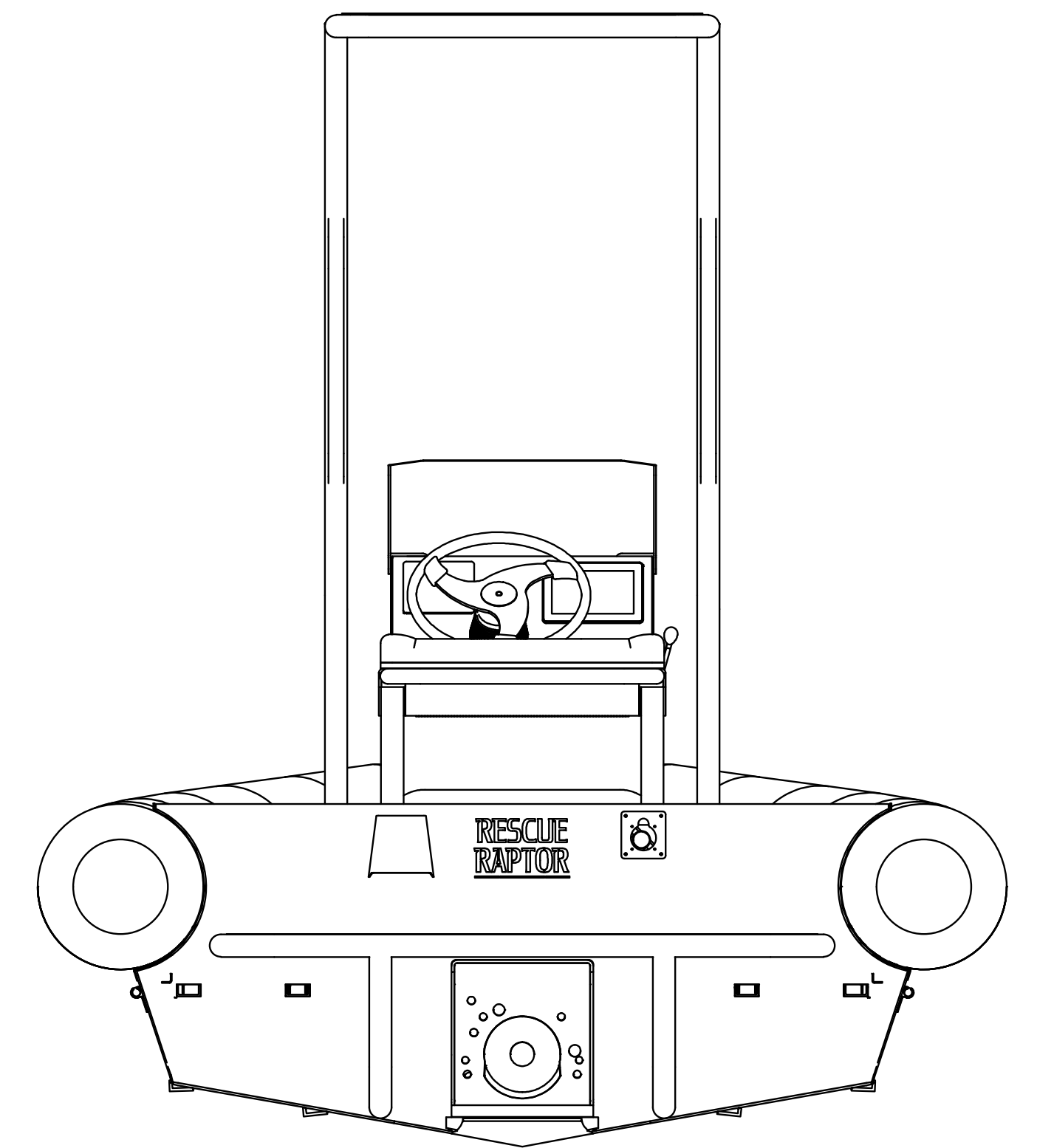
BUILD DETAILS	
ITEMS	VALUE
MODEL	XTR 1860
LENGTH	15'
WIDTH	60"
ENGINE	170/300 HP, ROTAX
BOTTOM THK	0.190
COLLAR MATERIAL	GREY URETHANE
COLLAR PRESSURE	2.5 PSI
FUEL CAPACITY	27 GAL.
BOW STORAGE	STANDARD
STOMP GRATE	STANDARD
BOTTOM UHMW	YES
SIDE UHMW	YES
AQUATRACON COLOR	TBD
BOW COOLER/SEAT	NO
TRAILER	CUSTOM, DUAL



**TOP VIEW**  
SCALE 1:12



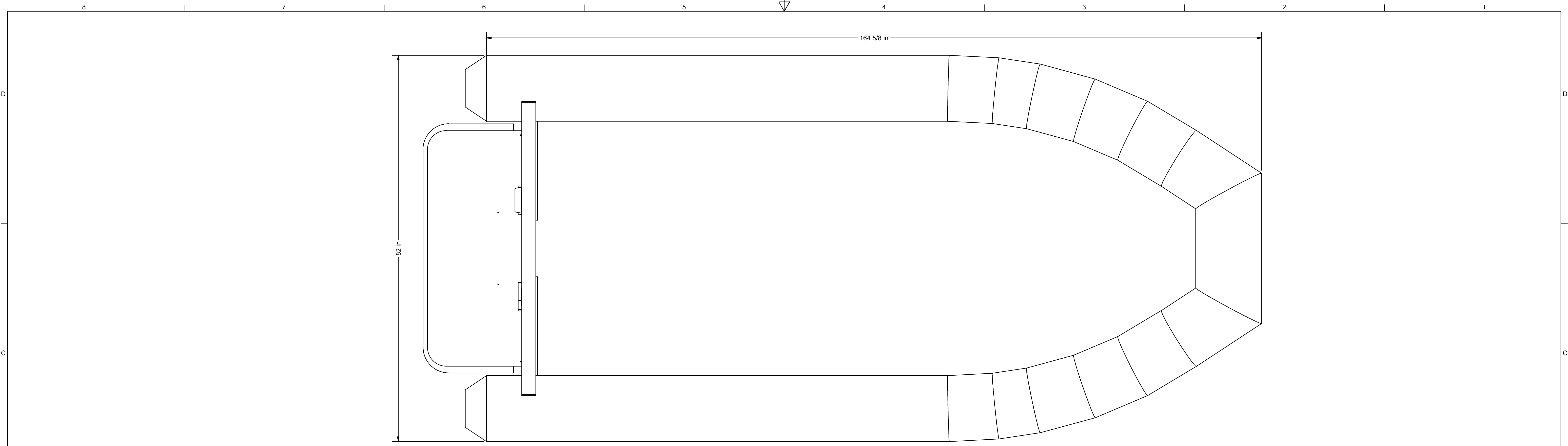
**SIDE VIEW**  
SCALE 1:12



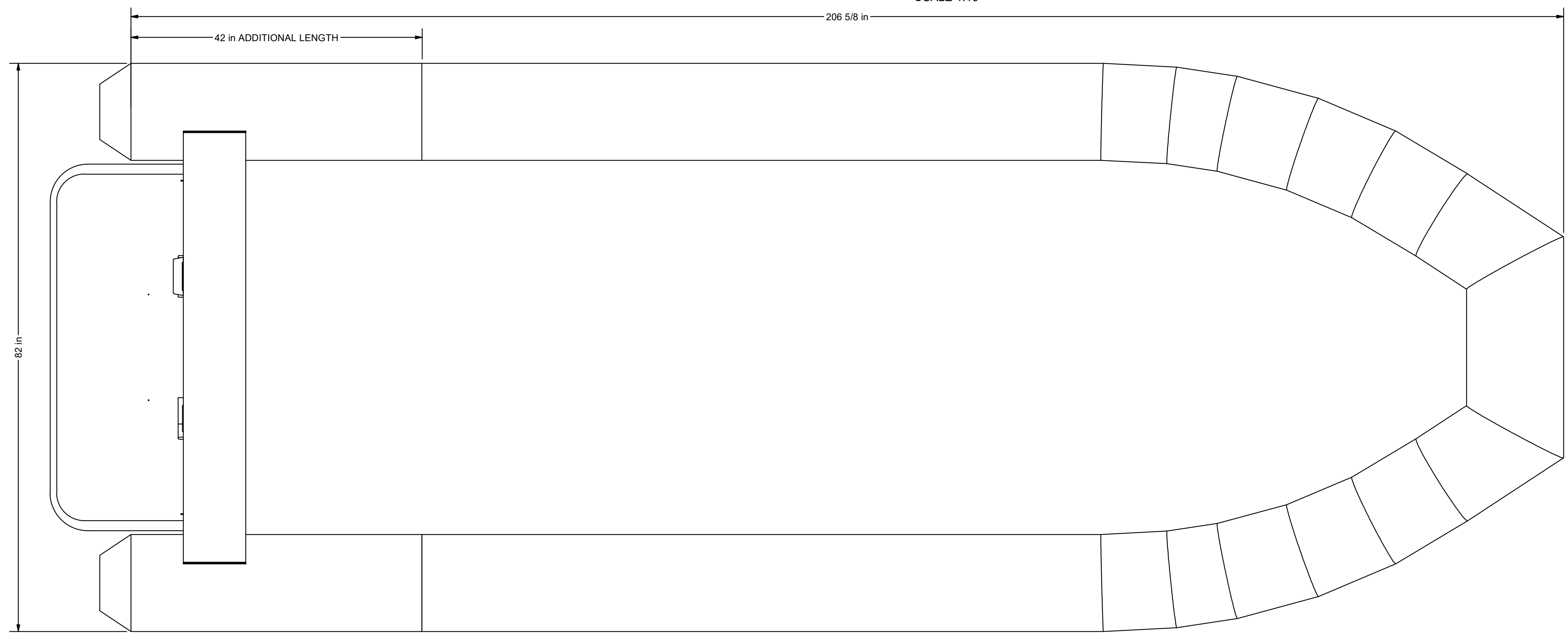
**REAR VIEW**  
SCALE 1:12



1860 XTR FORWARD CONSOLE  
SCALE 1:8



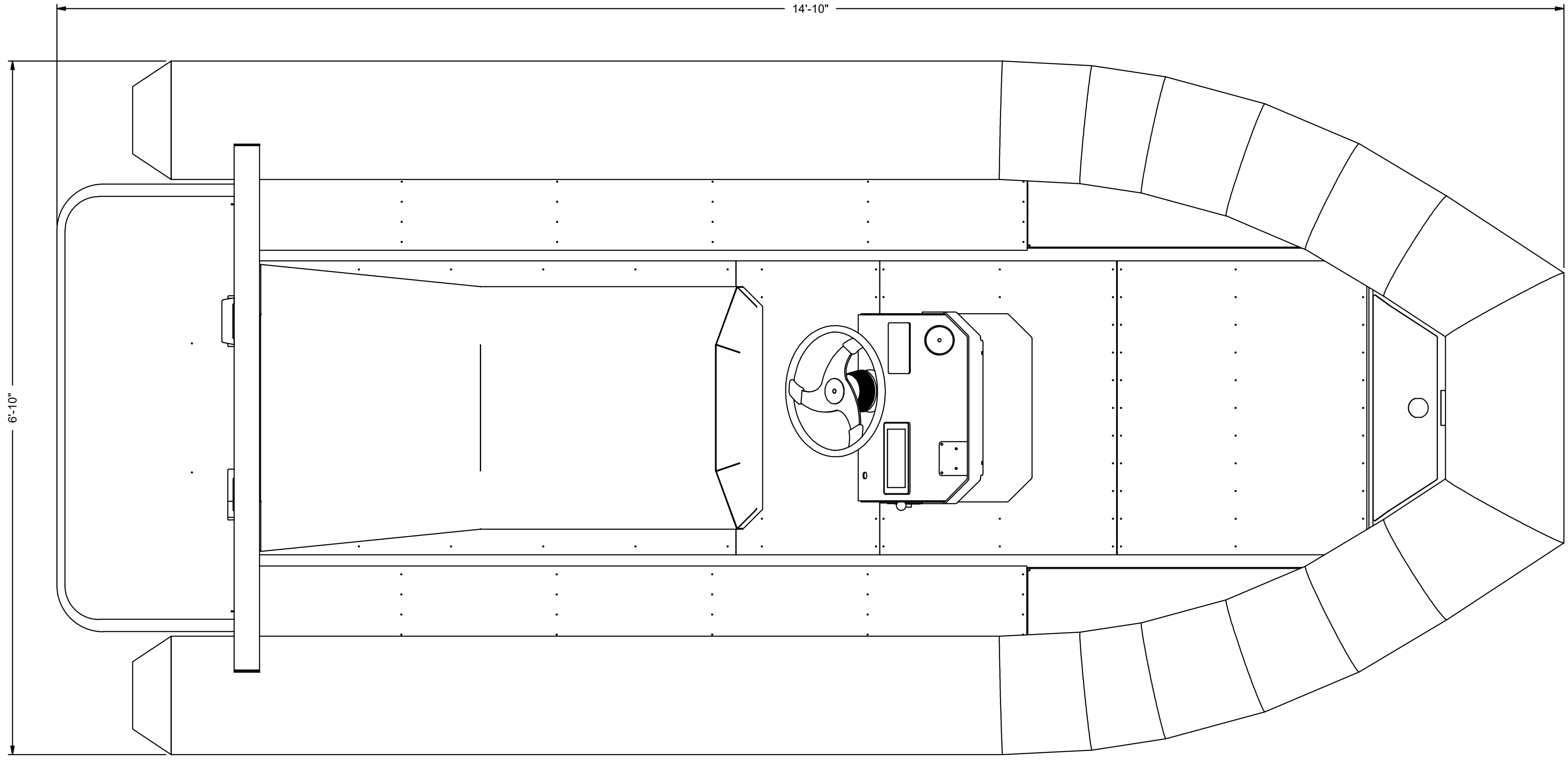
**15' MODEL**  
SCALE 1:10



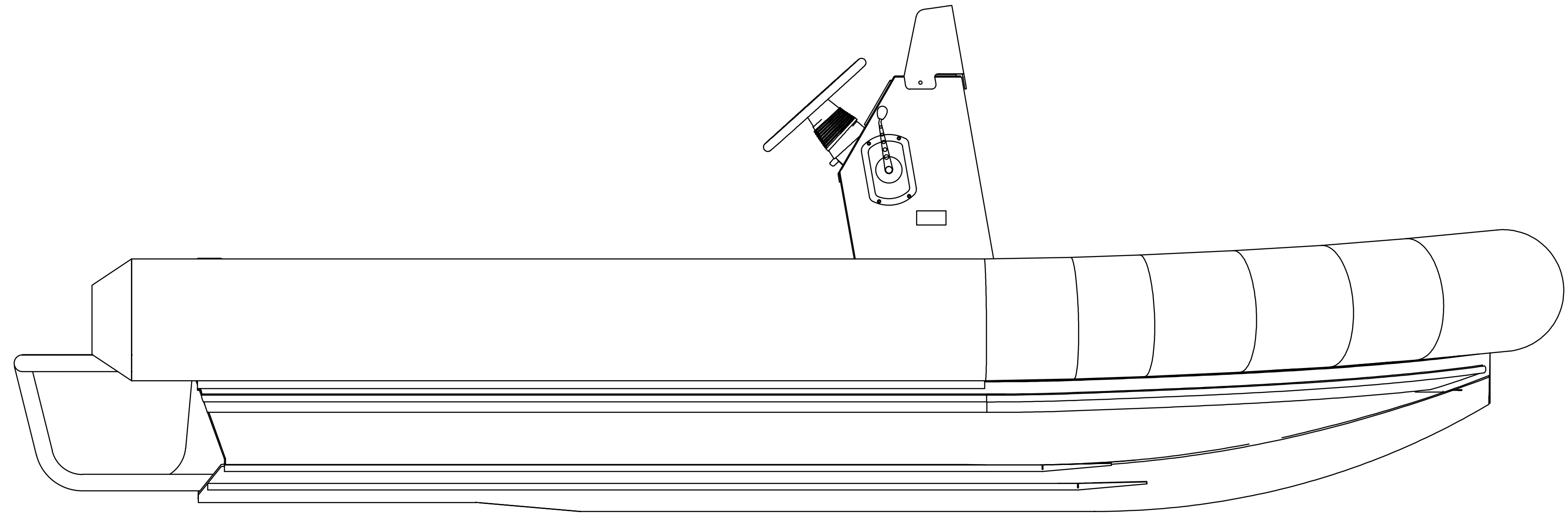
**18' MODEL**  
SCALE 1:10

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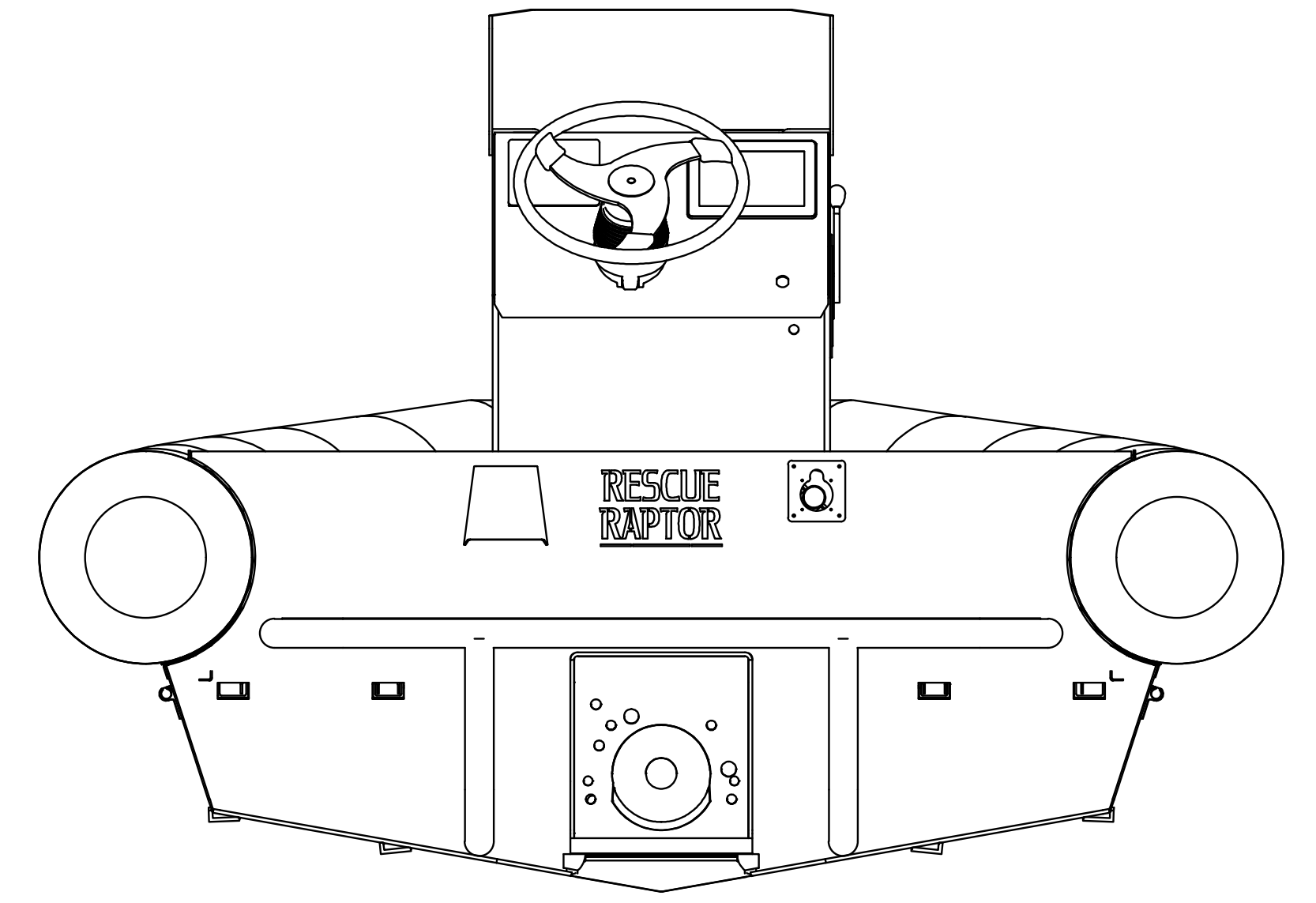
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BOW STORAGE	STANDARD
STOMP GRATE	STANDARD
BOTTOM UHMW	YES
SIDE UHMW	YES
AQUATRACON COLOR	CHARCOAL ON RED
BOW COOLER/SEAT	NO
TRAILER	CUSTOM, DUAL



TOP VIEW  
SCALE 1:10



SIDE VIEW  
SCALE 1:10



REAR VIEW  
SCALE 1:10