The Metal Shark 55' Defiant is a welded aluminum monohull pilothouse patrol vessel specially designed for use as a law enforcement, port security, and fire rescue response boat. Like all Metal Sharks, it may be fully customized to meet virtually any mission requirement. The vessel shown on these pages has been specially configured for use as a multipurpose port security vessel with fire fighting and Chemical, Biological, Radiological, Nuclear and high-yield Explosive (CBRNE) response capability. Regardless of configuration and equipment, the 55' Defiant serves as an extremely stable, dependable, and highly capable platform that is well suited for both inland and offshore use.
Hull Design: The 55’ Defiant features a proven Metal Shark hull design that has been engineered and built to precise tolerances. To achieve its superior hull life rating of 30+ years, the hull is composed entirely of heavy, welded plates of premium-grade 5086 aluminum alloy. Thanks to its wide beam and pronounced reverse chines, the 55’ Defiant is extremely stable. Twin diesel water jets, straight shaft inboards, and pod propulsion systems are available.
Deck Layout: At the heart of the 55' Defiant’s crew-friendly design is its spacious, clutter-free deck arrangement that allows for easy, surefooted passage from bow to stern. Wide, non-skid walkways feature low-level LED lighting for night missions, and careful consideration has been given to the placement of all rails and grab handles. A durable heavy duty trapezoidal rubber rub rail (shown), or available urethane-sheathed foam collar provides impact resistance during alongside maneuvers; while port and starboard dive recesses and the full-width swim platform facilitate access to and from the water or other vessels.
Pilothouse: The most immediately apparent advancement in Metal Shark’s Defiant pilothouse design is the use of pillarless glass to substantially enhance visibility. The result is a near elimination of the dangerous blind spots that are an unfortunate drawback of conventional pilothouse vessels. Further, the 55’ Defiant’s quickly opening side and aft pilothouse doors offer added flexibility and greatly facilitate communication when docking or maneuvering alongside another vessel.
Helm: The 55' Defiant boasts a wide-open helm layout that puts all controls at the operator's fingertips, with ample space for mounting multiple navigation components. The 55' Defiant may be equipped with joystick controls for dockside maneuvering, as shown here.
Pilothouse Layout: The 55 Defiant’s roomy pilothouse may be configured with multiple seating options, including shock mitigating seats. Shown here is a large bench seat which converts to two stretcher bunks for water ambulance use in emergency response situations.
Crew Accommodations: The 55’ Defiant’s fully customizable below-decks crew accommodations are accessed via a set of stairs in the pilothouse. The standard layout features an enclosed head on the starboard side, which includes a vacuum toilet, wash basin, and hot shower. A full galley with sink, microwave, and refrigerator has been located to port. Forward of the head and galley is a crew seating area with table and settee that can double as sleeping berths. Aft of the head is a spacious mid-cabin area that can be configured with twin bunks or utilized as multi-use space.
Custom Capability: Like all Metal Sharks, the 55’ Defiant may be full customized to suit a wide array of mission requirements. The vessel is shown here with a full electronics package including forward-looking infrared (FLIR) camera and radar; and also a fire pump package with multiple RF-controlled monitors. Metal Shark is well versed in the proper outfitting of vessels with electronics, fire fighting equipment, positive-pressure CBRNE (chemical, biological, radiological, nuclear, and high-yield explosive) filtration systems, or any other mission-specific hardware.
Custom Capability: 55 Defiant shown here in multipurpose port security / fire rescue configuration. Multiple RF-controlled monitors provide maximum control in tactical firefighting situations, dual heavy-duty rubrails provide impact protection, and a massive forward pusher knee adds utility.
Propulsion: The 55 Defiant may be fitted with a wide range of propulsion systems, including diesel waterjets, straight shaft inboard diesels, and pod propulsion systems. The vessel shown here is equipped with twin Cat C-18 engines mated to Hamilton waterjets.
SPECIFICATIONS:

Length Overall: 55’ (16.7 meters)
Beam: 17’ (5.2 meters)
Draft: 4’ (1.2 meters)
Fuel Capacity: 600 Gallons (2,271 litres)
Max Speed: 30+ knots (sea state 1, full load)
Cruising Speed: 15-20 knots (full load)
Range: 360+ nm at cruising speed
Crew Capacity: 6+ persons
Total Capacity: 20 persons
Electrical System: 12V or 24V; 120V or 240V
Enclosure Noise: Pilothouse: <84 dBA, Machinery Room: <115 dBA
Propulsion: CAT, Cummins, Volvo and MTU options

KEY FEATURES (Typical Vessel Setup):

Air Conditioning System
Batteries: Optima Blue Top (4)
Berths: Two
Bilge Pumps: (3) 3700 GPH
Bow Bit & (8) 10” Cleats
Chart Table: Large, w/ Integrated Storage
Collar: Solid Foam Wraparound (Heavy Duty Trapezoidal Rubber Rail is Available as an Option)
Construction: Welded 5086 Aluminum Alloy
Dash: Large, for Electronics and Controls
Decks: Self-Bailing w/ Scuppers
Dive Reliefs: Port & Starboard
Electronics Mounting Pod: Overhead
Fans: Overhead Circulation
Fire Extinguishers: (4)
Fuel/Water Separators: Racor (2)
Defrosting System: Cabin
Galley: With Sink, Stove, and Microwave
Grab Rail Package
Head Compartment: With Sink, Head & Shower
Ladder, Removable
Life Ring w/ Mount
Lifting Eyes, Four-Way

KEY FEATURES, CONTINUED:

Lighting: Accommodations Area
Lighting: Courtesy LED Work Lights
Lighting: Low-Level Walkway Illumination
Lighting, Navigation
Lockers: Bow/Anchor & Stern
Non-Skid Decks & Gunnels
Pilothouse: Fully enclosed, 360-degree visibility, overhead spotter windows
Rescue Points: Stern, Port, and Starboard
Radar Arch: Folding
Seating: 4 shock mitigating, option for additional seating for 4-6 persons
Settee w/ Table (converts to berth)
Shore Power w/ Charger & Cord
Steering Helm, Tilt Hydraulic
Tow Post / Gun Mount: Forward
Windows & Doors: Diamond SeaGlaze
Wipers: Self-Parking
Zinc Anodes, Hull

COLLAR & HULL FENDERING SYSTEM:

Heavy-Duty Sheath-Wrapped Foam Collar
Bolt Rope Style Attachment System
Black rub strake
Anti-fouling paint preparation behind collar
Custom color choices & UV coating protection
Integrated dive relief cutouts
(Heavy Duty Trapezoidal Rubber Rub Rail also available)

POWER & PROPULSION NOTES:

Available power includes twin CAT, Cummins, Volvo and MTU options.
Propulsion can be in the form of conventional shaft drive, waterjet or Pod propulsion. While waterjet propulsion offers speed and maneuverability advantages; the conventional straight shaft configuration offers lower acquisitions costs, maintenance costs, and is serviceable anywhere in the world with the most basic of tools and training. Depending on propulsion, cruising speed averages 30 knots with top speeds of 40+ knots. A 600-gallon fuel tank provides a range of over 360 miles; even greater range is possible.
55 Defiant General Arrangement
Deck Plan

55 Defiant General Arrangement
Centerline Longitudinal Section

55 Defiant General Arrangement