

**- Hyper-Sub Platform Technologies Inc -
 Fast Boat Dry Cabin Submarine (FBS)**



FBS is the world's first successfully tested, dual modality, dual use marine vessel operating both as a long-range speedboat and dry cabin submarine. It is highly scalable and modular in design employing various cabin configurations and payload packages for a wide variety of leisure or security activities and can be upgraded with future capabilities as technology and needs develop. As a speedboat, FBS can be quickly launched from any dock, boat ramp and beach or river estuary, can travel hundreds of miles on the surface and arrive quickly at a dive site; then unlike any other vessel before, it can dive for extended periods and long distances as a submarine, to a depth of 500ft (150m) simply by engaging a few control switches. All while keeping passengers dry, warm and safe from decompression sickness.

STANDARD SYSTEM FEATURES & DIMENSIONS – (alternative system dimensions can be discussed)

- Length Overall: 45' 2" (14m.)
- Beam: (With side tank modules installed): 16' 6" (5 meters)
- Height (arch deployed): 9' 6" (3m.)
- Draft: 2' 6" (0.8m)
- Dry Weight: 30,000 lbs. (13,608 kg)
- Cabin: Acrylic, 1 atmosphere, 500' (152m) depth rated. Pilot plus five (4) passengers
- Lock In/Out Chamber variant: up to six (6) Combat Swimmers (with minimal vital equipment)
- Variable Cargo Capacity: 3,000 lbs. (1,360 kg)

SURFACE VESSEL PERFORMANCE CHARACTERISTICS

- Fuel Capacity: 525 gallons (1,987 liters) Diesel
- Engines: 2 x 480-hp Yanmar 6LY3-ETP diesel with V-drives
- Propellers: 24x31 4-blade, no-cup Michigan Wheel
- Cruise Speed: 30 mph /48 kph / 26 kts @ 3,000 RPM – min payload & sea conditions
- Fuel Consumption: 34 gal per hr. 127 liters per hr. (min. payload & sea conditions)

- Planing speed: achieved in 8 seconds. (min. payload & sea conditions)
- Wide Open Throttle (WOT): 35 mph/ 57 kph / 31 kts (min. payload & sea conditions)

SUBMERGED PERFORMANCE CHARACTERISTICS

- Submerged Propulsion: 2 x 60 hp 12" thrusters - electric over hydraulic
- Station Keeping / Hover Capability: 2 x 10 hp vertical thrusters
- Normal Life-Support Duration: twelve (12) hours / Emergency Life-Support Duration: forty-eight (48) hours
- Maximum Dive Depth (Acrylic Cabin): 500 feet (152m.)
- Submerged range: 140nm / 260 Km @ 1.4Kts / 2.6 Kph
- Max Submerged Speed: 5.5 kts / 10 Kph (range is greatly reduced without in-water re-charge of batteries)

STANDARD SUBMERGED SYSTEMS

- Batteries: 22.8 kWh AGM – options available up to 544 kWh
- Standard Dive Air Storage: 4,000 std. cu. ft. @ 4500 psi (SCBA air rated)
- Electrical system: 96 VDC and 12 VDC (other break-out voltages available)
- Accessories: SCBA air umbilical for prolonged diver support / SCUBA tank recharge station
- AC inverter for battery recharge- snorkels available for submerged re-charge

NAVIGATION, COMMUNICATION & INSTRUMENTATION (Suggested Options only)

- 1 x Surface Navigation Radar & all navigation lighting
- 1 x long-range 3-D subsea navigation sonar & echosounder with chart plotter
- Auto Nav and waypoint following package can be fitted
- 1 x HD Zoom IP - High-Definition camera & 4 x Fully dimmable lighting arrays
- 1x imaging sonar for obstacle avoidance plus Photonics mast periscope option

ONBOARD SAFETY FEATURES & EQUIPMENT (Suggested Options only)

- Three independent methods of surfacing: Normal operating system surfacing, Emergency drop tray surfacing and Controlled Dead Systems Submerged
- Passive safety characteristics such as Hyper-ballast compartmentalization (eight (8) separate compartments) retaining over 15,000 lbs. (6,805 kg) of total reserve submerged lift for rapid emergency ascent
- Atmospheric monitoring system Various (H^2 , O^2 & CO^2) & CO_2 scrubber
- Emergency life-support: forty-eight (48) hours per crew /passenger
- 4 x Emergency Strobe lights & Dual frequency underwater telephone
- Fire extinguishing systems: Engine compartment / Halon auto dump

NOTE: All specifications may be subject to change and the FBS system is configurable for multiple mission profiles– please contact to discuss your specific requirements.

