

# **DEEPFLIGHT SUPER FALCON** TECHNICAL SPECIFICATIONS

#### GENERAL SPECIFICATIONS

Occupants: 1 pilot, 1 passenger

Maximum Operating Depth: 100m (330ft)

Dimensions LxWxH: 5.9m x 2.7m x 1.6m

(19.3ft x 8.8ft x 5.2ft)

Weight: 1800 kg (3,968 lbs)

Maximum Cruising Speed: 5 knots

Endurance / Autonomy: up to 8 hours

**Payload:** 250 kg (551 lbs)

Type: Hydrobatic

Certification: Lloyd's Register

## **SAFETY**

**Buoyancy:** Fixed positive buoyancy, auto return to the surface

**Emergency Flotation:** Emergency inflatable lift system

Egress: Internal or external egress Stability: Dynamic self-righting

Depth Protection: Programmable depth protection

system

Fault Detection Identification and Recovery System

(FDIR): Record and monitor critical mission data such as depth, controls, life support, power, and overall system health, and provide audible and visual alarms

#### LIFE SUPPORT SYSTEMS

Oxygen System: 2 independent oxygen systems Carbon Dioxide Removal: Replaceable soda lime cartridges

Emergency Life Support Duration: 72 hrs

**Monitoring:** 2 independent life support monitors

#### PROPULSION AND BATTERY

Propulsion Type: Electric, brushless DC direct-drive

Power Capacity: 10 kWH

Battery Type: Lithium Iron Phosphate (LiFePO4)

Battery Management: Voltage protection,

auto-balancing

Charging: Dual 120-240 VAC chargers

**Charge Time:** 4 hours

**Emergency Battery:** 72 hours for critical systems

#### PRESSURE HULL AND INTERIOR

Hull Type: Proof tested high strength composite Viewports: Polished cast-acrylic hemispherical

viewports

**Seating:** Custom adjustable with integrated harness

Air Conditioning: Adjustable flow air-conditioning

system

## NAVIGATION AND COMMUNICATION

Communication System: Integrated underwater, surface, and internal communications with hand-held backup VHF

**Tracking:** USBL integrated tracking system with backup pinger locator beacon

**Navigation:** Magnetic compass, altimeter, depth gauge

#### **SERVICES**

**Training:** On-site piloting, integration, and maintenance training

Maintenance: Optional extended warranty and maintenance package

**Troubleshooting:** 24 / 7 service and support

### **AUXILIARY**

**Lighting:** 4 external LED lights Max Lumens: 7,000 - 9,300

**Other:** Rigid protective guards for acrylic domes, canvas cover, spare parts and tool kit, checklists and manuals

