

SAS AVIATOR SPECIFICATIONS

PRESSURE -DEPTH

Cockpit Pressure test depth (instrumentated) Feet Sea Water (fsw)	1600
Factory manned test depth (full test). fsw	1250
<i>Note: above is the effective ABS depth rating</i>	
SAS (Sub Aviators Systems) Operational Max owner operational depth fsw(M)	1,000fsw (330)
<i>Note: basic hull safety factor for ABS=1.25 for SAS=</i>	1.6

DIMENSIONS Feet (Meters)

Width with main wings deployed	12.2 (3.75)
Width with main wings Folded	5.3 (1.65)
Max Height off Deck sub on dolly	6 (1.85) 6 (1.85)
Min. water depth. Surfaced3 (1)	
Length	22 feet

WEIGHTS lbs (Kg)

Dry Transport weight (excluding Batt)	3800 (1725)
Modular (interchangeable) battery packs, lbs	700 (320)
Launch Weight	4900 (2225)

PERFORMANCE

Higher performance Thrusters and battery modules are available. Unless otherwise stated performance is based on standard thrusters and utility lead acid battery pack. These craft are designed to upgrade to battery technology (possibly to use fuel cells) as it becomes practical.

Max Decent rate	320ft/min
Max Ascent rate	600ft/min
Speed knots	5.2kts
Max Speed with optional Thrusters- Silver Zinc (military)Batt (est.)	7.9kts
Typical tow speed with 70 Hp RIB est.	7 kts
Max range - Lead acid traction Batt Nm Nautical Miles (est.)	20nm
Minimum Stall speed with recommended positive buoyancy, Knots. est.	0.6kts

Useable speed/range/endurance envelope with std Thrust & batt. to recommended 60% discharge point.

Number of short one hour (training) dives per day	4
Duration of hard / fast high energy mission to 40% energy reserve	3 hrs
Duration of typical long range search mission to 40% energy reserves	5 hrs

Note: performance with Silver Zinc or future Batts corespondingly improved

Pitch / Roll - typical relaxed piloting range +/- degs.	30
Pitch / Roll - typical high performance dive profile +/- degs.	60
Pitch/ Roll for "hyrdobatic" maneuvers degs.(excluding batt issues)	No Limits

CONTROLS DUAL COCKPITS *Note: flight control match std military aircraft layout.*

Joystick, mechanically interlinked with full feel (position and force) for pitch & roll.
Rudder Bar: mechanically interlinked for heading.
Thrust lever, Left side mechanically interlinked with auto thrust lock out on start up. (*Note: flight controls match classic military aircraft*).
Electronic linked: Emergency, reverse thrust, cut out and differential thrust.
Electronically linked dual, power up and thrust enable switching
Dual-redundant activation of emergency air bags for surface exit.
Dual-redundant activation of emergency drop weight (redundant because of fixed positive buoyancy).
bags for surface exit.

INSTRUMENTS-NAVIGATION-COMMUNICATIONS

Std Nav Inst fitted to dual cockpits: Pitch/Roll attitude indicator, Compass repeater, Depth, Altitude, Thrust.
Std Communications all dual redundant: Cockpit intercom(s), Surface VHF(s), Sub Sea voice UQC(s) commercial+military Hz.
Full suite life support and power instrumentation.

