

Specifications

Performance

Standard day, sea level at maximum gross weight

Maximum cruise speed	146 kt	270 km/h
HIGE ceiling	15,989 ft	4,873 m
HOGE ceiling	11,222 ft	3,420 m
AEO service ceiling	11,864 ft	3,616 m
Maximum range cruise (no reserve).	450 nm	834 km
Frigate operating capability		Sea State 5

Weights

Maximum gross weight	21,884 lb	9,926 kg
ASW configuration weight.	17,758 lb	8055 kg
ASuW configuration weight	17,133 lb	7,771 kg
Empty weight	15,200 lb	6,895 kg
Useful load	6,684 lb	3,031 kg

Dimensions

Length with rotors	64.8 ft	19.75 m
Width with rotors	53.7 ft	16.36 m
Overall height	17.16 ft	5.2 m
Folded length	41.1 ft	12.5 m
Folded width.	10.7 ft	3.2 m
Folded height	13.4 ft	4.1 m
Wheelbase-tread	8.9 ft	2.7 m

Accommodation

Cockpit crew		2 pilots
Cabin crew	1 Tactical sensor operator 1 Acoustic sensor operator	
Cabin accommodations.		up to 5 passengers
Cabin length.	10.8 ft	3.2 m
Cabin width	6.1 ft	1.8 m
Cabin height.	4.4 ft	1.3 m
Cabin area.	65 sq. ft	6.0 sq. m
Cabin volume	299 cu. ft	8.5 cu. m

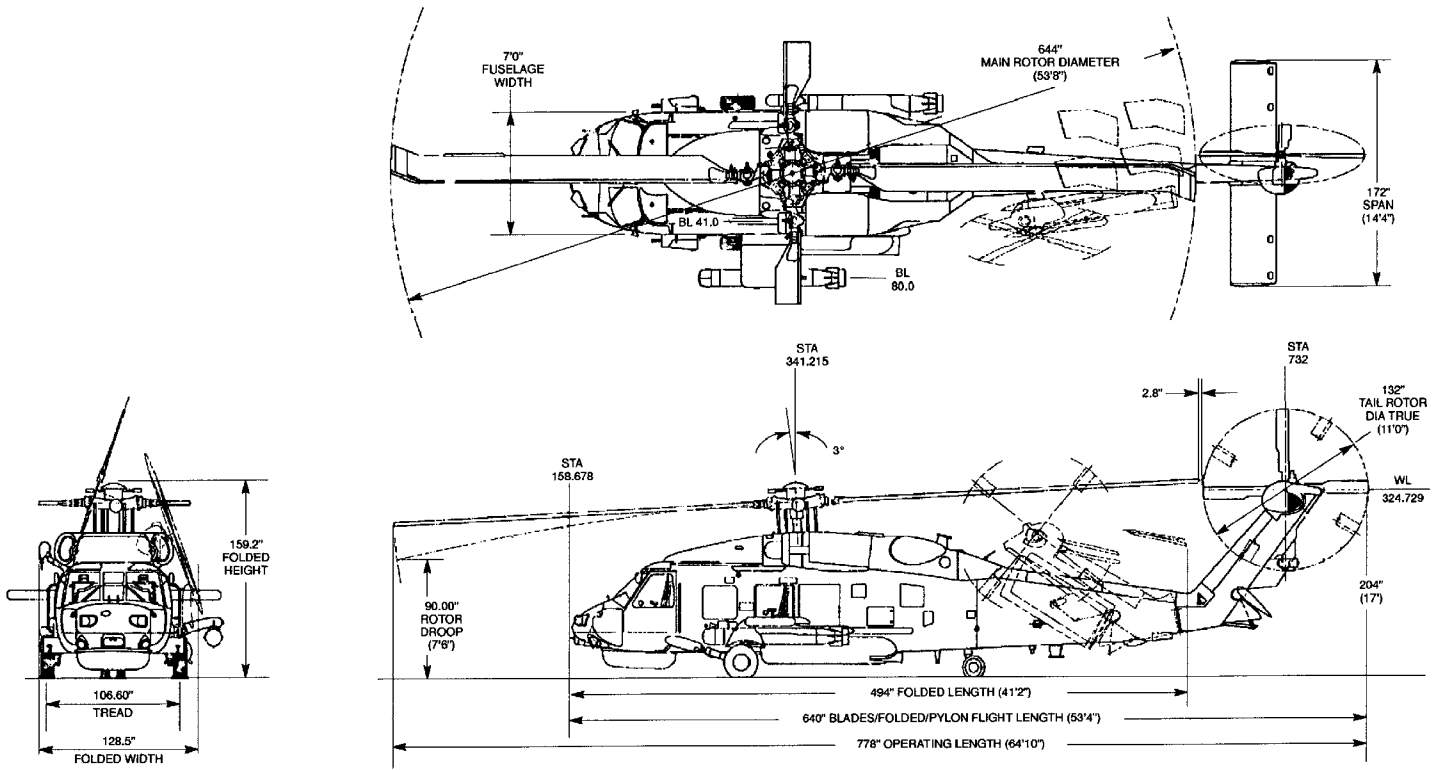
Powerplants

Engines		T700-GE401C
Number of engines		2
Total take-off power	3,780 shp	2,818 kW
Maximum continuous power	3,324 shp	2,479 kW

Fuel Capacity

Normal fuel	588 gal	2,226 l
Auxiliary fuel (two external fuel tanks).	240 gal	908 l

Aircraft Dimensions



Integrated Glass Cockpit



Standard Baseline Configuration

Airframe

- Marineized airframe structure with enhanced environmental protection
- Durable multi-functional cabin floor
- Shatter resistant glass windshields with anti-ice
- Two crashworthy pilot seats
- Dual-tire, swivelling tail wheel, mid-position on transition section
- Two single-action jettisonable cockpit doors with pop-out egress windows
- Single cabin sliding door
- Sealed tub design
- Recovery Assist Secure Traverse (RAST) system structural provisions
- Aircraft Ship Integrated Secure and Traverse (ASIST) system structural provisions
- Foldable tail pylon
- Foldable stabilator
- Interior panels
- Exterior paint, single base color, non-reflective
- NVG compatible cabin
- Built-in aircraft work stations: engine cowlings, hydraulic deck, tail pylon
- External rescue hoist provisions
- Environmental control system

Integrated Cockpit

- Four landscape 10 inch diagonal, Multi-Function Displays (MFD)
 - Primary flight display (three modes)
 - Navigational display
 - Caution/advisory display
 - Engine instrumentation and fuel monitoring display
 - Tactical management display mode
- Digital Automatic Flight Control System (DAFCS) with four axis coupled flight director and SAR modes
- Dual embedded flight management system
- Dual display control panels
- Stand-by instrument
- Digital clock
- Master warning panel
- Dual-heated pitot static system
- Dual air data computers
- NVG compatibility
- Internal Communications System (ICS)

Avionics

- Dual VHF/UHF - MXF-484
- Secure voice provisions - KY-58
- UHF/VHF Direction Finder - DF-301E
- VOR/ILS - ARN-147
- TACAN - ARN-153
- LF/ADF - ARN-149(V)
- INS/GPS - Dual LN-100G EGI
- HF Radio - HF9000D
- Link 11 data transfer
- Link 11 encryption provisions - KG-40A
- Emergency locator transmitter - ELT10-214-2
- Cockpit voice/flight data recorder
- IFF APX-100/APX-119

Standard Baseline Configuration

Rotor and Drive System

- Fully articulated main rotor system with one-piece titanium hub and elastomeric bearings
- Four ballistically tolerant, composite-titanium main rotor blades with erosion protection
- Four-bladed, crossbeam, composite tail rotor blades with erosion protection
- Bifilar vibration suppression
- 3000 psi hydraulic system, transmission-powered, three hydraulic pumps
- Automatic main rotor blade fold
- Dual redundant and isolated flight controls
- Ballistically tolerant main, intermediate, and tail gearboxes
- Ballistically tolerant, interconnecting driveshaft system
- Magnetic chip detectors with fuzz burn-off and built-in test circuit
- Rotor brake
- Blade de-icing system

Powerplant and Fuel System

- Two marinized T700-GE401C engines with Digital Electronic Control Unit (DECU)
- One auxiliary power unit (APU)
- Crashworthy, self-sealing, suction-type fuel system
- Dual self-sealing, crashworthy 1,120 liter (295 gallon) main fuel tanks
- Single pressure and gravity refuel ports
- Hover In-Flight Refueling (HIFR) system
- Fuel dump system
- Fuel quantity and low-level warning

Electrical

- Two 30/45 kVA transmission-driven AC generators
- One 35 kVA APU-driven AC generator
- Redundant power distribution
- External power with monitoring panel
- Controllable searchlight with normal and IR lighting
- Dual mode, NVG compatible, position, anti-collision, and landing / hover lights
- One AC and one 28 VDC cabin utility receptacle
- NVG friendly rotor head and deck lights

Available Maritime Mission Equipment

Tactical Sensor Operator Station

- Slide-away sensor operator console and operator seat
- Multi-function tactical display
- Control display unit
- Multi-slew controller
- Data receptacle (PCMCIA)

Acoustic Sensor Operator Station

- Sonar operator console and operator seat
- Large high resolution sonar LCD display
- Sonar control display unit
- Sonar control unit
- Sonar dome control
- Sonar cable angle control
- Acoustic processing unit

Sensor Suite

- Radar APS-143B(V)3 with ISAR provisions
- Electro-optical surveillance system, AAS-44
- Dipping sonar HELRAS
- Digital video recorder

Aircraft Survivability Suite

- Electronic support measures LR-100 ESM
- Countermeasure dispenser ALE-47 CMDS
- IRCM ALQ-144(V)5

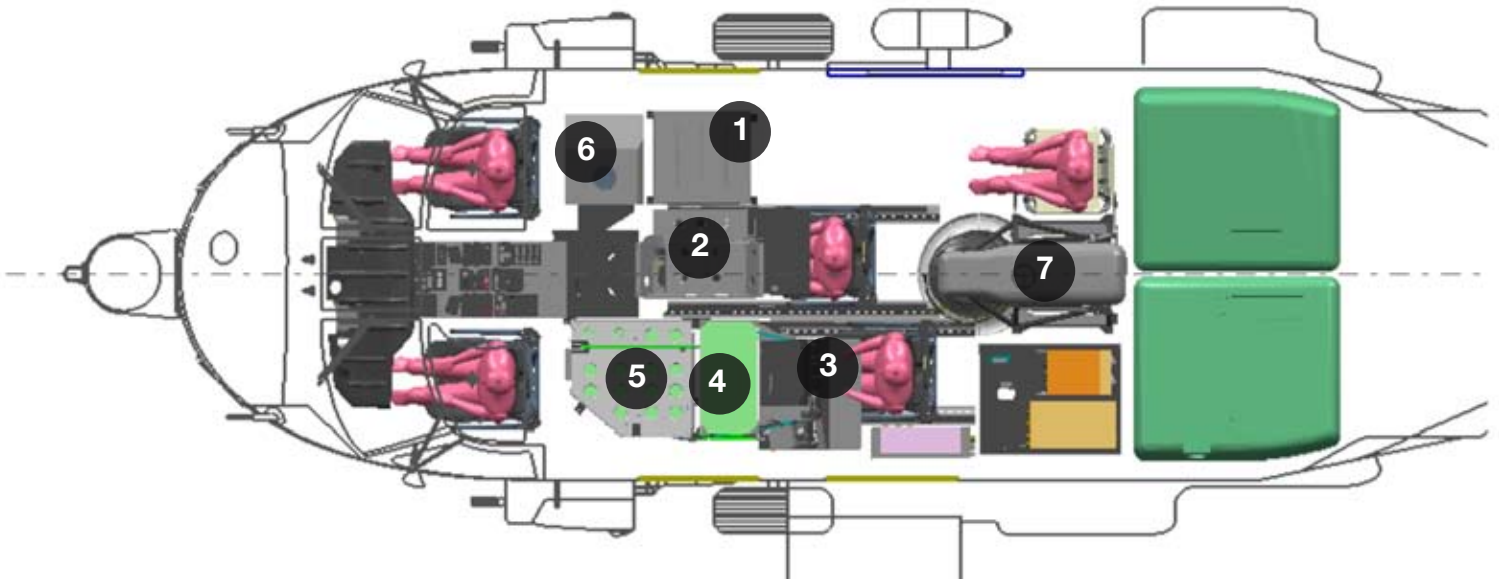
Weapons Suite

- Crew served weapons (7.62mm – 20mm)
- Weapons management system with full provisions to accommodate the following:
 - A244 torpedo
 - MK46 torpedoes
 - Penguin ASM
 - Hellfire missile (4)

Optional Mission Equipment

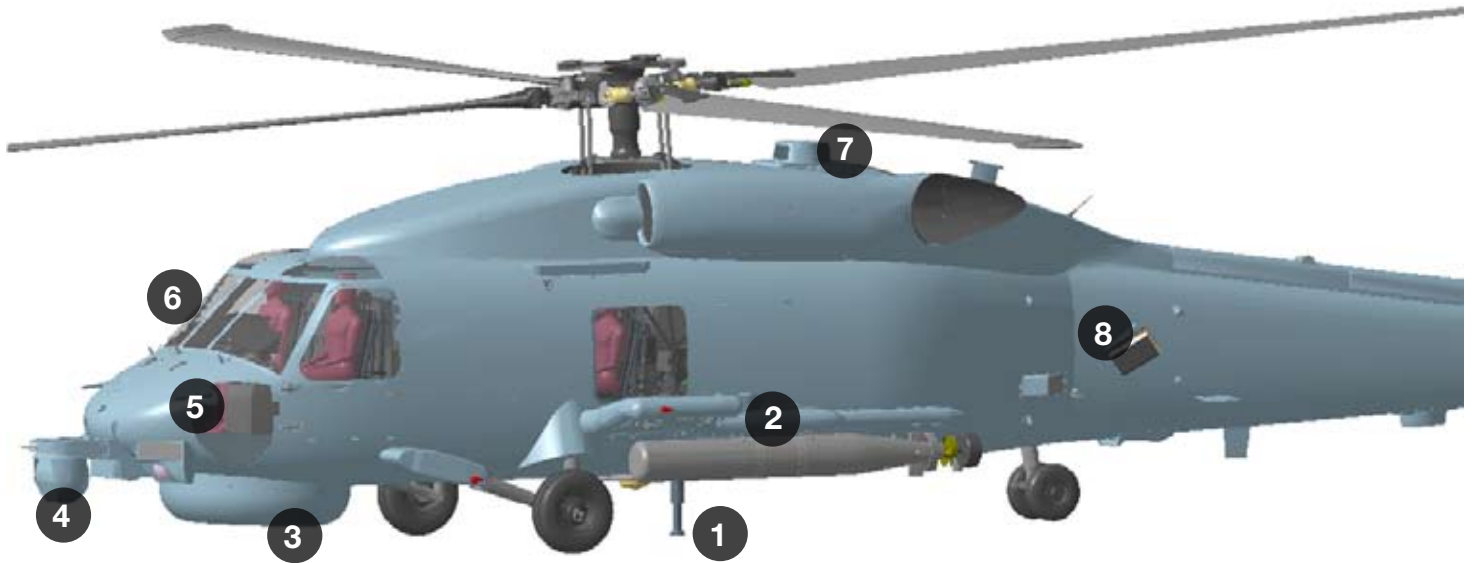
- Emergency flotation system
- Two external auxiliary fuel tanks 456 liters (120 gal) each
- Cargo hook 2,729 kg (6,000lb) capacity
- Rescue hoist 272kg (600lb) capacity
- Fast Rope Insertion-Extraction System (FRIES)
- CASEVAC Litter 2 each
- CVR/FDR Integrated cockpit voice and flight data recorder
- Hover Infrared Suppression System (HIRSS)
- Wire strike protection system
- RAST completion
- ASIST completion
- Heads-up display

Cabin



- 1 Tactical sensor operator equipment rack
- 2 Tactical sensor operator console
- 3 Acoustic sensor operator console
- 4 Acoustic sensor operator auxiliary equipment rack
- 5 Acoustic sensor operator equipment rack
- 6 CFR Rack
- 7 Sonar reeling machine and transducer

External Airframe

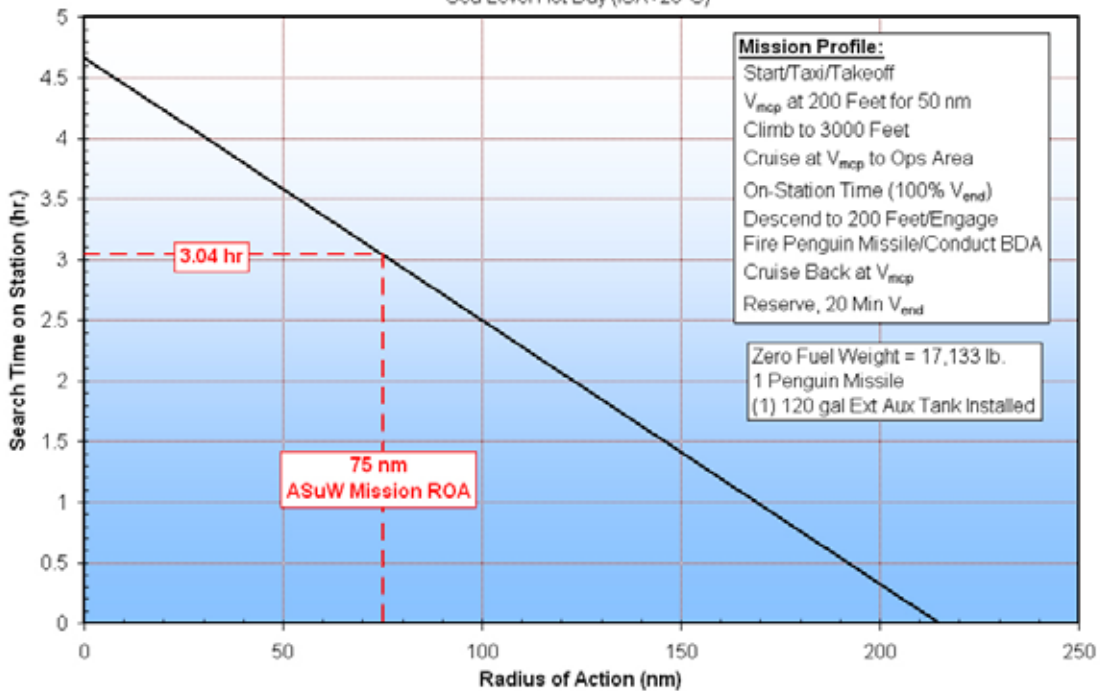


- 1 ASIST probe
- 2 External stores pylon
- 3 Search radar
- 4 Electro-optical surveillance system
- 5 Electronic Support Measures (ESM)
- 6 Spall resistant windshield and cockpit structure
- 7 IR Countermeasure provision
- 8 Aircraft Survivability Equipment provisions

Mission Performance

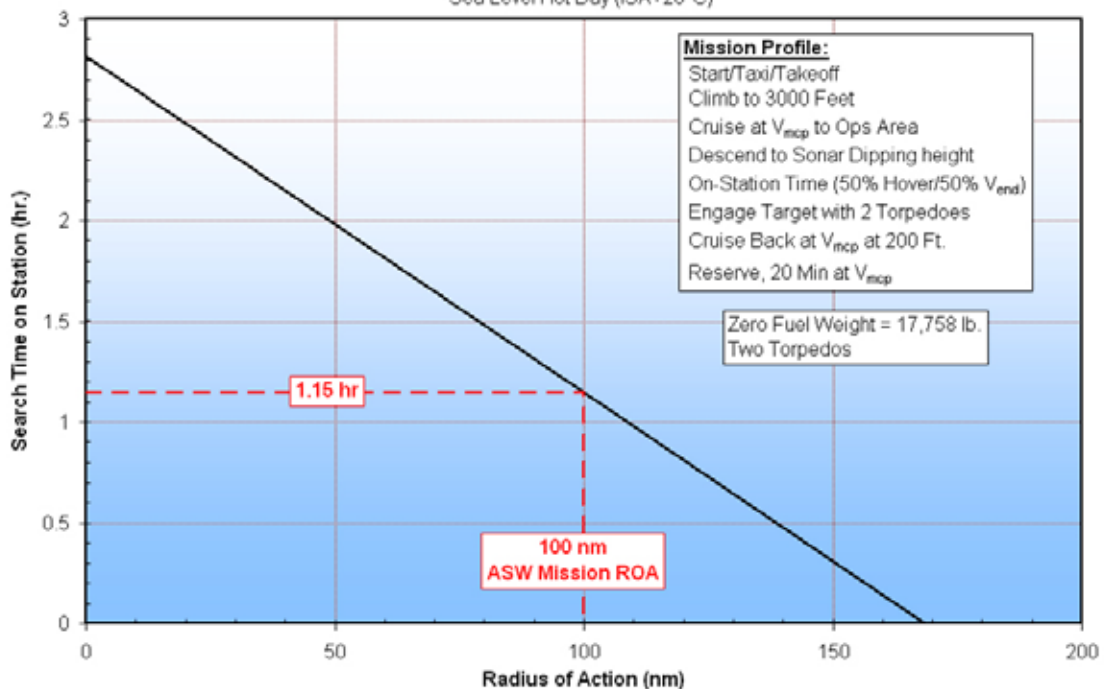
S-70B ASuW Armed Configuration: ASuW Mission Time-on-Station

Sea Level Hot Day (ISA+20°C)



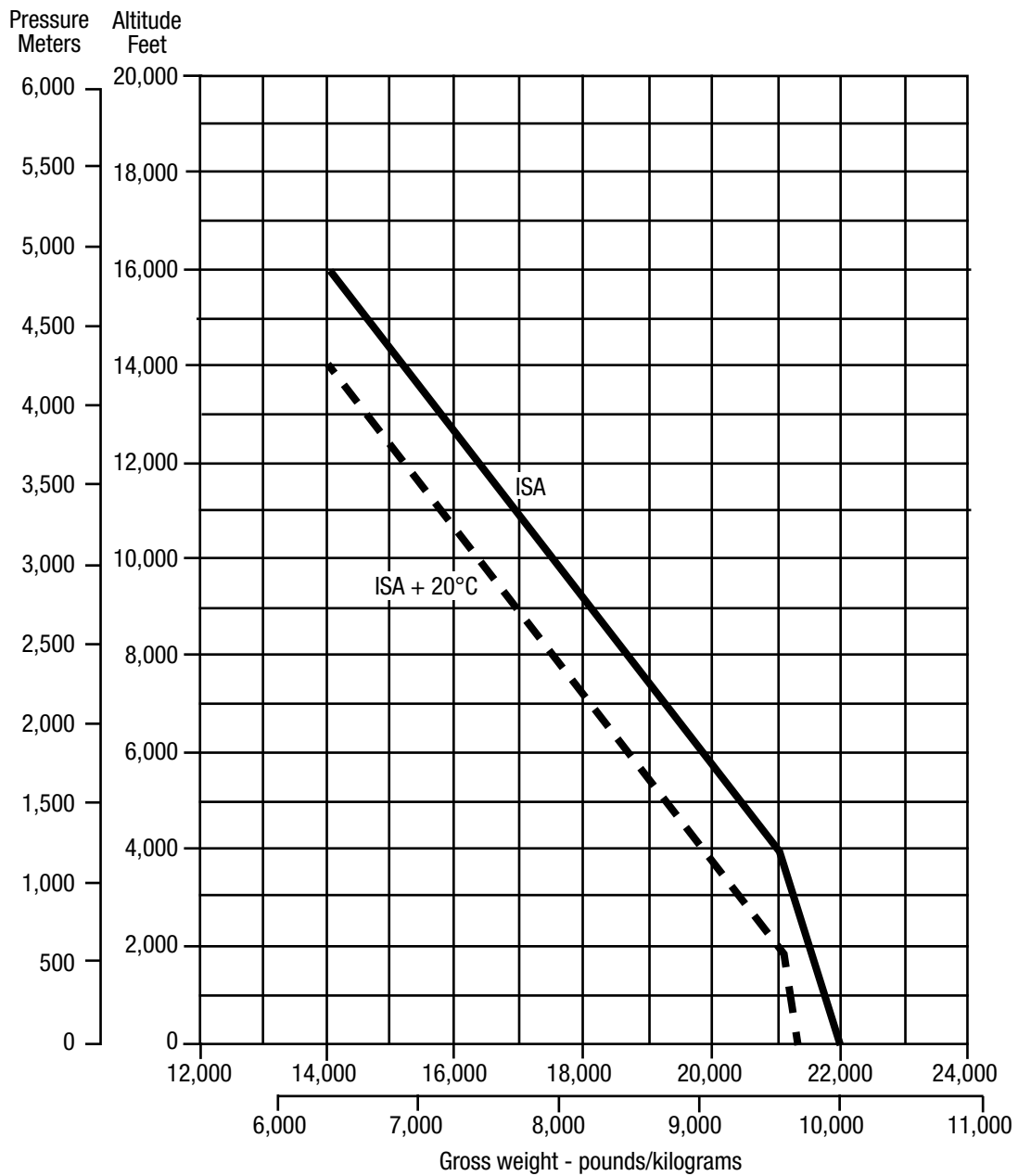
S-70B ASW Armed Configuration: ASW Mission Time-on-Station

Sea Level Hot Day (ISA+20°C)



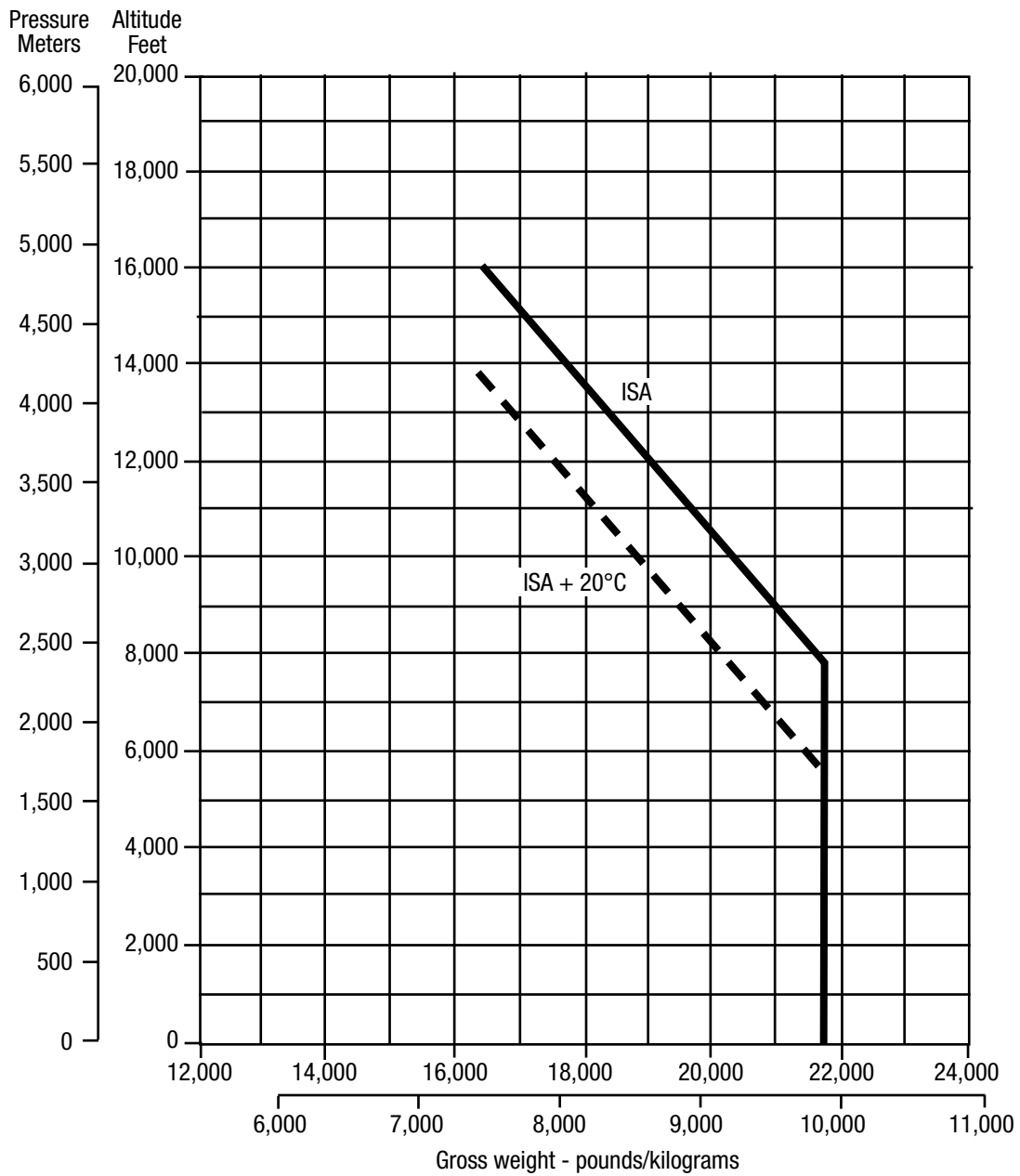
Mission Performance

Hover Ceiling Out of Ground Effect



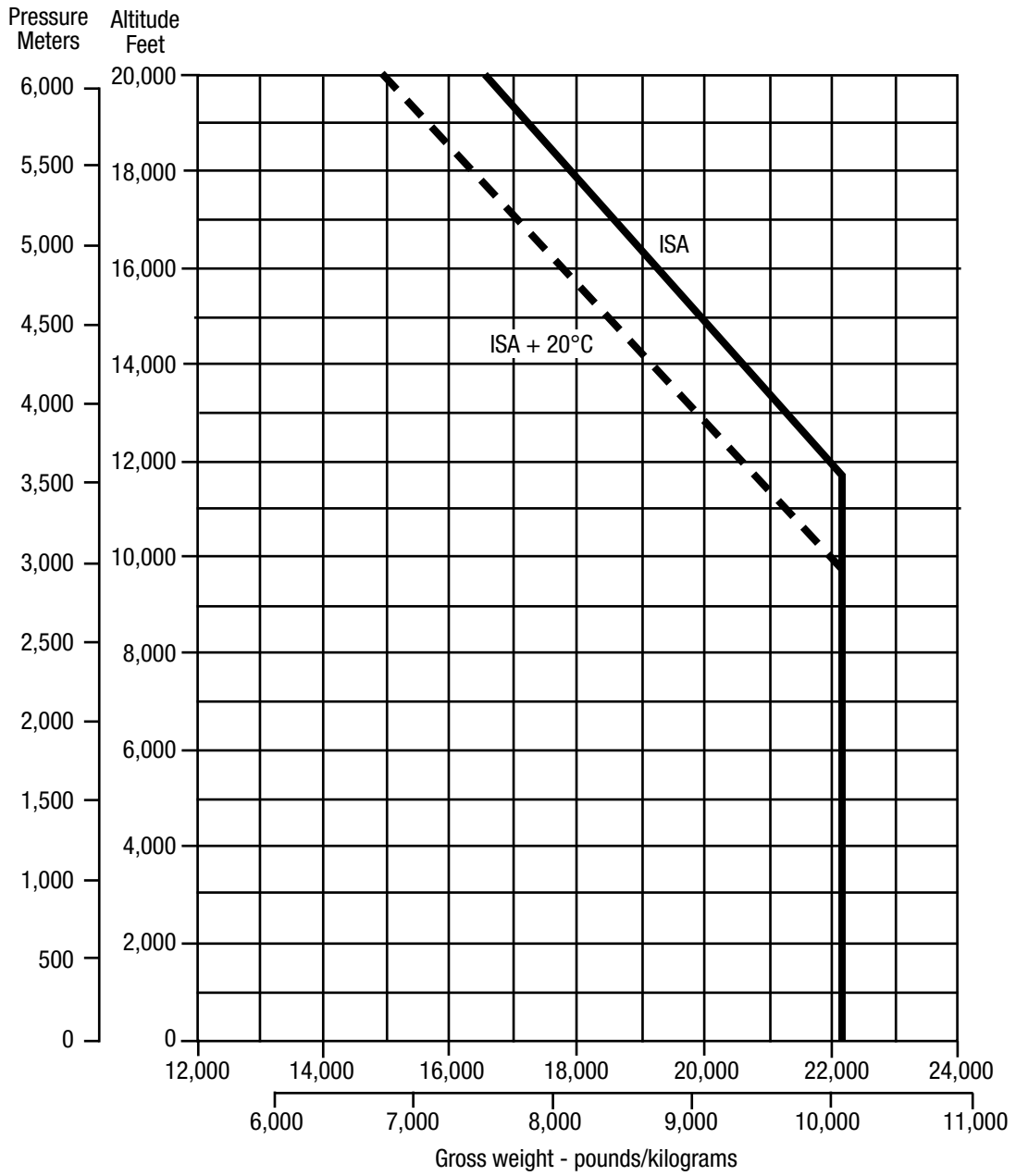
Mission Performance

Hover Ceiling In Ground Effect



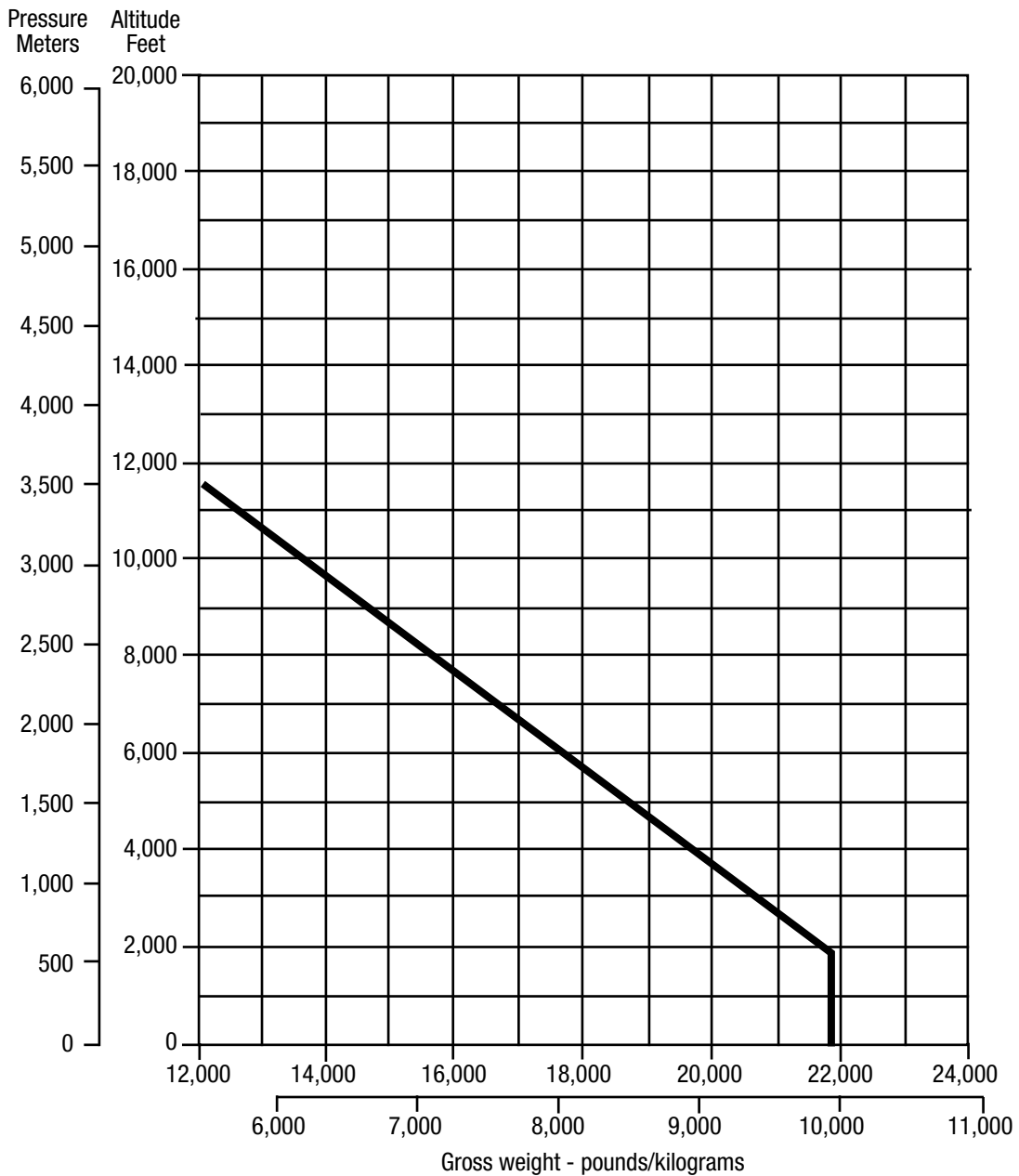
Mission Performance

Twin Engine Service Ceiling IRP, 100 FPM/30.5 MPM Rate of Climb, VBROC



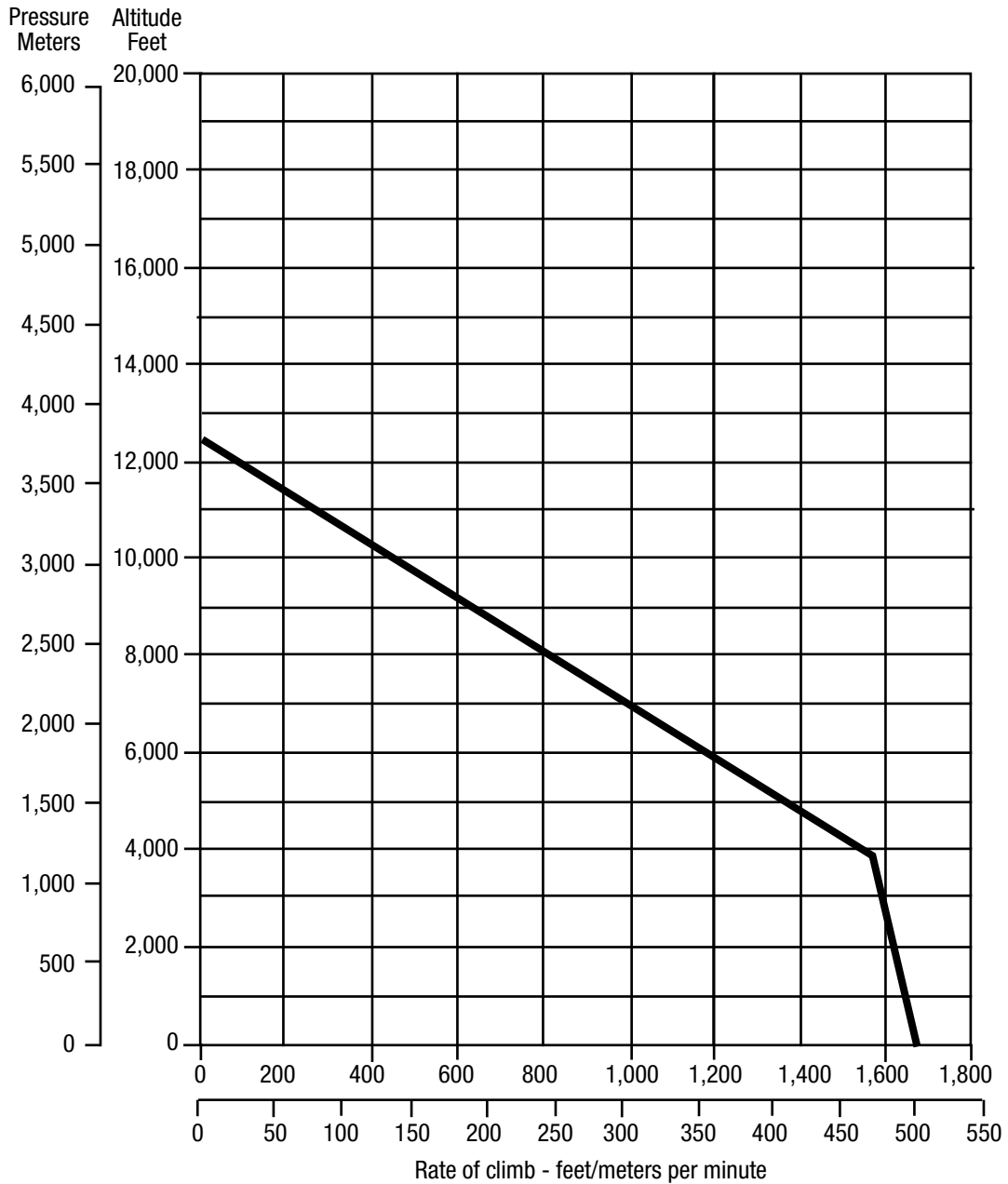
Mission Performance

One Engine Inoperative (OEI) Service Ceiling IRP, 100 FPM/30.5 MPM Rate of Climb, Standard Day



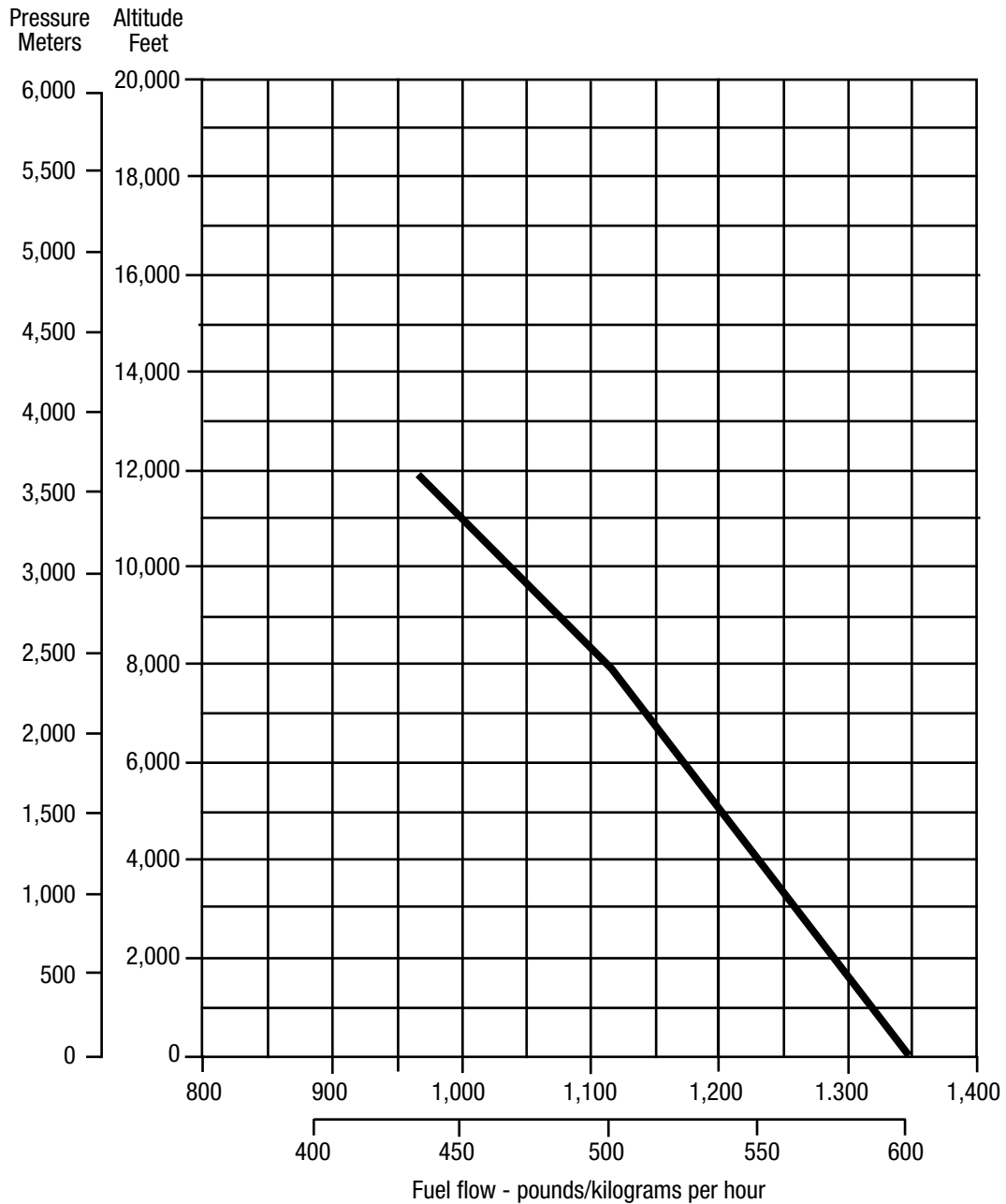
Mission Performance

Best Rate of Climb at IRP 21,884 Pounds/9,927 Kilograms, Standard Day



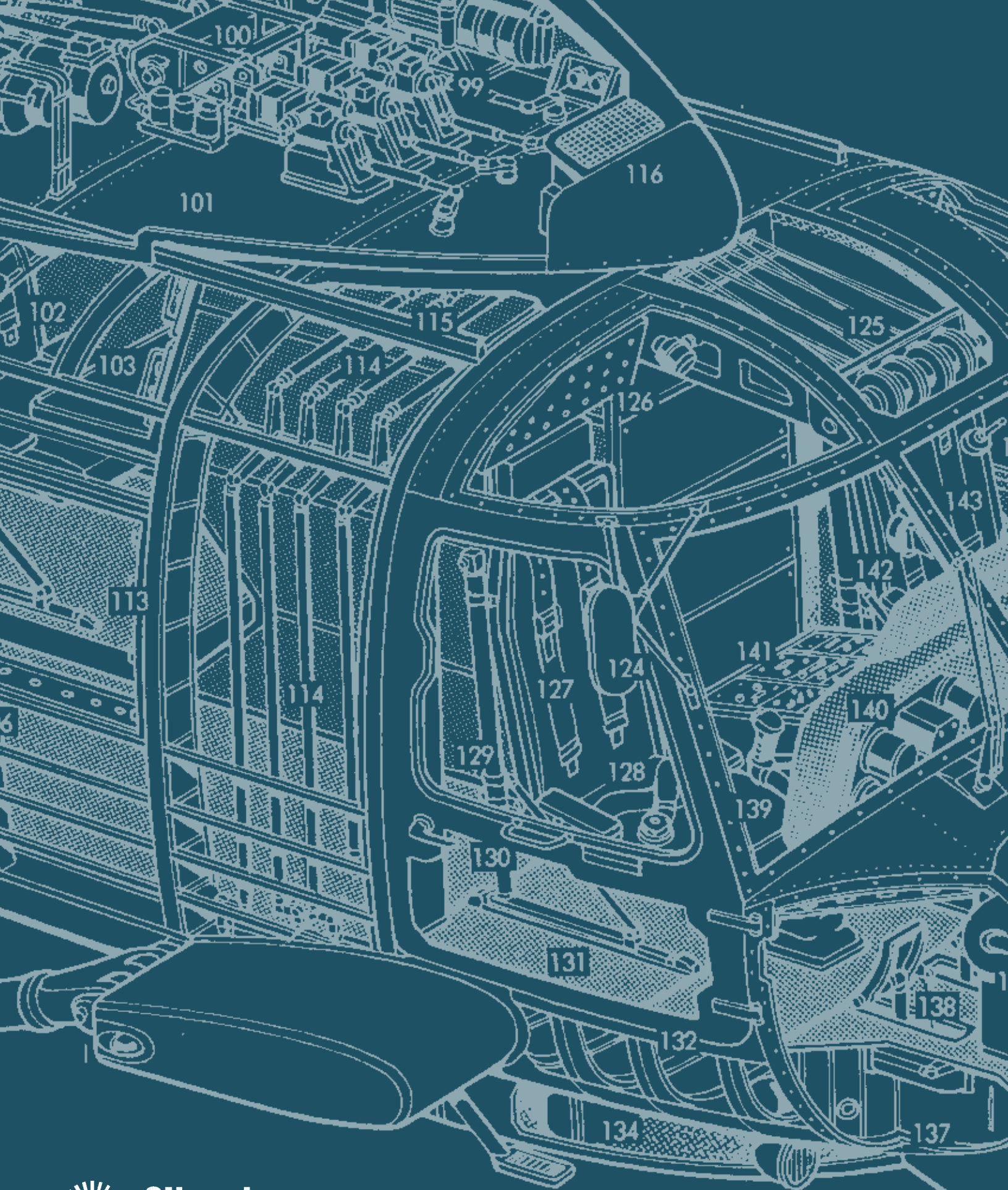
Mission Performance

Fuel Flow at Maximum Continuous Power ISA + 20°C



Notes

Notes



Sikorsky

A United Technologies Company

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6900 Main Street, Stratford, Connecticut 06615 USA
+1 (800) WINGED-S (946-4337) or +1 (203) 386-4282
www.sikorsky.com

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