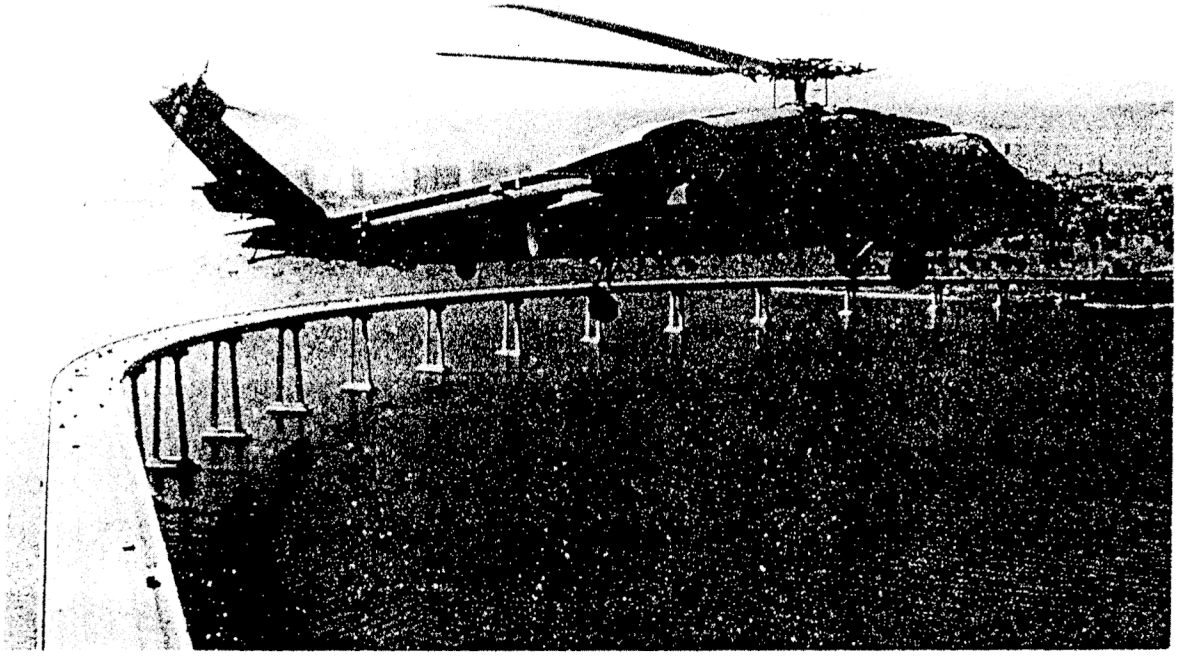
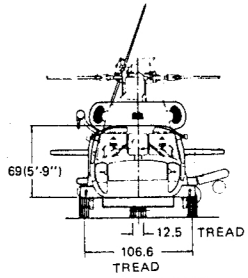


STANDARD AIRCRAFT CHARACTERISTICS

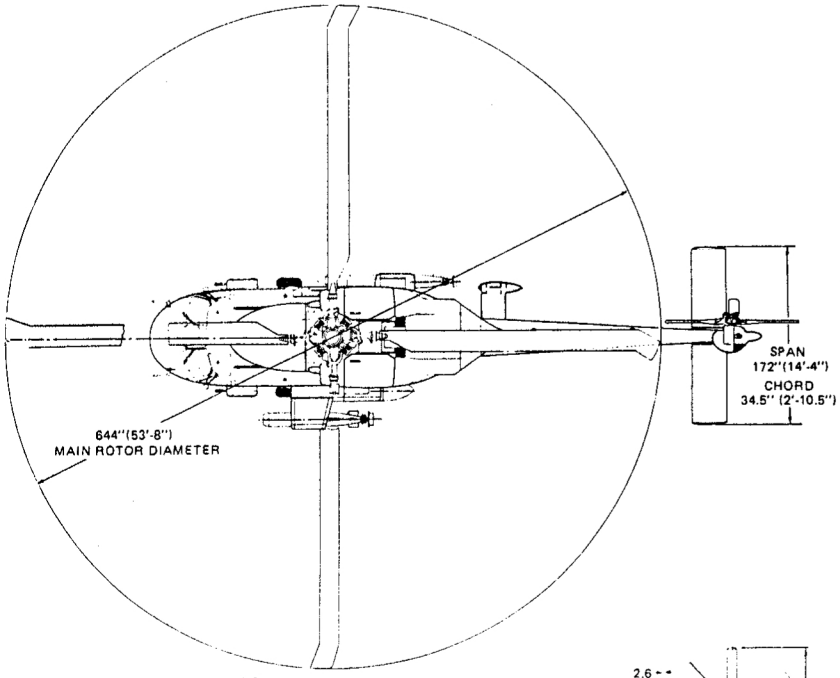
SH-60B SEA HAWK

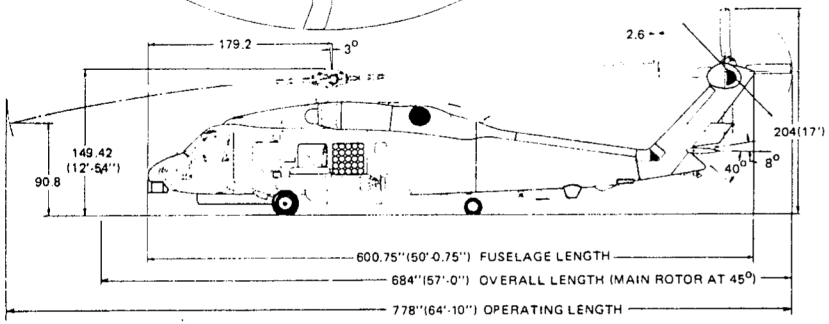
SIKORSKY AIRCRAFT

NAVAL AIR SYSTEMS COMMAND
NAVY DEPARTMENT



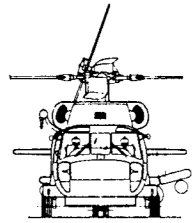
MAIN ROTOR DATA	
DISC AREA	2261 SQ FT
BLADE AREA (TOTAL)	186.8 SQ FT
BLADE SECTION	SC1095/SC1095 R8
BLADE CHORD	1.73 FT.
MAIN ROTOR GEAR RATIO	81.0:1



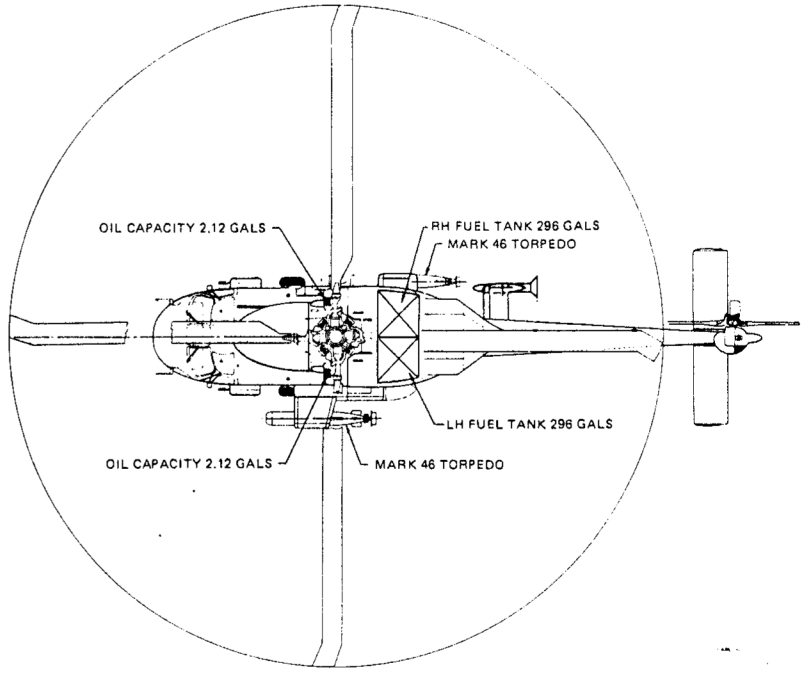


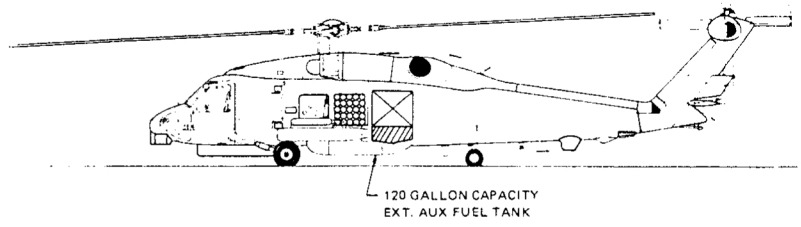
DESCRIPTIVE ARRANGEMENT

NAVAL AIR SYSTEMS COMMAND
NAVY DEPARTMENT



CODE
OIL
SELF SEALING FUEL TANKS
NON-SELF SEALING FUEL TANKS





ARMAMENT AND TANKAGE

POWER PLANT

No. & Model: 2 T700-GE-401
Manufacturer: General Electric Co.
Engine Spec No.: E1121
Type: Front Drive Turbo-Shaft

Gear Reduction Ratios
Engine Speed Decreaser: None
Main Rotor: 81.042
Tail Rotor: 17.566

RATINGS

	SHP	RPM	ALT
Intermediate	1690	20900	0
Maximum Continuous	1437	20900	0

ELECTRONICS

AN/ARR-75	Radio Receiving Set
TS-4101/UYS-1	Spectrum Analyzer
AN/ASQ-81C(V)4	Detecting Set, Magnetic
AN/ASQ-165A	Armament Control Indicator Set
AN/ARC-159(V)2	Communications Subsystem
TSEC/KY-28	Speech Security Equipment
AN/ARC-174A(V)2	HF Radio Set
AN/ARQ-44	Radio Terminal Set
OK-374/ASC	Control Group Communications Sys
AN/APX-100(V)1	RCVR-TRANS, Radio Set
KIT-1A/TSEC	Computer Transponder
AN/APX-76B(V)	Interrogator Set
KIR-1A/TSEC	Computer, Interrogater
CN-1493/A	Blanker, Interference
TSEC/KY-75	Tactical Speech Security Equip.
TSEC/KG-45(E)1	Communication Security Equip.
AN/AKY-14	Digital Data Computer (2)
AN/ASQ-164A	Control-Indicator Set
AN/ALQ-142	Receiver, Countermeasure Set
AN/APS-124	Radar Set
AN/APS-217A	Navigation Set, Radar
A/A24G-39	Control Assy Gyroscope
ML-1	Transmitter, Remote Compass
CV-3435/A	Converter Multiplexer
AN/ARN-118(V)	TACAN
AN/APN-194(V)	Altimeter Set, Electronic
AN/ARA-50	Direction Finder Group
R-1651/ARA	Receiver Radio
SA-2213/ASQ	Navigation Switching Interface
ID-2177/ASQ	Altitude Indicator
ID-2178/ASQ	Indicator, Bearing, Dist., Head
CV-3252	Converter Display
OU-103/A	Signal Data Converter Group
AS-3392/ASQ	Antenna UHF/TACAN
A4071/ASQ	Antenna, Flush
AS3390/ASQ	Antenna
MU-670/ASQ	Memory Unit Magnetic Tape
C10644/ASQ	Control Monitor

MISSION AND DESCRIPTION

The SH-60B SEAHAWK has as its prime LAMPS MK III missions Anti-Submarine Warfare (ASW) and Anti-Ship Surveillance and Targeting (ASST) which include detecting, classifying, locating and destroying hostile submarines over extended ranges. Secondary missions for the SH-60B include search and rescue, medical evacuation, and fleet support.

The SH-60B is derived from the UH-60A BLACK HAWK which is currently in service with the U. S. Army. Structural modifications have been made to the airframe to incorporate a completely redesigned tail landing gear to meet shipboard requirements, addition of a tail bumper, increased internal fuel tankage to provide capacity for LAMPS MK III missions, empennage modified to incorporate tail pylon and stabilator fold, and emergency flotation. Other features include main rotor automatic electric blade fold, addition of a rotor brake and doors and windows modified to facilitate emergency exits. The two T700-GE-401 engines provide additional contingency power and corrosion resistance. Modifications for LAMPS MK III mission equipment include provisions for avionics, sensor operator's station, pneumatic sonobuoy launcher, magnetic anomaly detector (MAD) pylon, provisions for external stores, rescue hoist, and an environmental control system.

DEVELOPMENT

First Flight: December, 1979

First Service Use: October, 1983

DIMENSIONS

Main Rotor
- Diameter: 53' 8"
- Disc Area: 2262 ft^2
- Blade Area: 186.6 ft^2
- No. of Blades: 4

Length
- Maximum: 64' 10"
- Blades and Tail Folded: 40' 11"

Height
- Maximum: 17' 5"
- Blades and Tail Folded: 13' 3"

Width
- Blades Folded: 10' 8.5"
- Tread: 8' 11"

WEIGHTS

Loading	Weight	L.F.
Empty	14782	-
Basic	14859	-

AS AMENDED

Maximum Takeoff	21884	2.67
Maximum Landing	21884	2.67

FUEL AND OIL

FUEL

Gal.	No. & Type of Tanks	Location
592	1 tank (2 cell) crash-worthy 7.62mm protection, 30 min fuel	Fuselage
240	2 External tanks	Pylons

Fuel Grade: JP-4, JP-5, JP-8
Fuel Spec: MIL-T-5624

OIL

Engine (gal.): 3.4
Spec: MIL-L-23699
Transmission (gal.): 7.5
Spec: DOD-L-85734

ORDNANCE

Torpedo MK-46-MOD-1 (3) or MK-50 (3) *
Sonobuoys (25)
Penguin Missile (1) *
*Substitute Penguin or up to two auxiliary fuel tanks for topedoes

ACCOMMODATIONS

Crew (Mission):	3
Cabin Size Dimensions:	
Length	11'
Width	6.33'
Height	4.52'
Useable Volume:	313 cu. ft.
Rescue Hoist Dimensions	54" x 44"h
Provision for Troop Seats	2
Provision for Litters	1
Rescue Hoist Capacity	600 lbs
Cargo Hook Capacity	6000 lbs
Dead Weight Cargo Floor	
Limit for L.F.	75 lb/ft^2
Max Cargo (external)	7000 lbs

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION			① CLEAN MISSION	② REQUIRED ASW TWO MK-46	③ DESIRED ASW TWO MK-46	④ ASST MISSION	⑤ FERRY MISSION
TAKE-OFF WEIGHT		lb.	19,508	21,481	21,481	21,388	21,388
Fuel internal/external (JP-5)		lb./lb.	4012/0	4012/0	4012/0	4012/1632	4012/1632
E AS AMENDED		lb.					
		lb./sq. ft.					
Vertical rate of climb at S.L.	(1)	fpm.	1000	80	80	130	130
Absolute hovering ceiling (OGE)	(1)	ft.	5650	680	680	1050	1050
Max. rate of climb at S.L.	(2)	fpm.	1910	1590	1590	1610	1610
Service ceiling	(2), (3)	ft.	14,600	12,100	12,100	12,200	12,200
Speed at S.L.	(2)	kn.	146	140	140	140	140
Max speed/altitude	(2)	kn./ft.	146/2,000	140/0	140/0	140/0	140/0
O.E.I. Service ceiling	(4)	ft.	5400	2800	2800	2900	2900
Min. speed (O.E.I.)	(4)	kn.	35	48	48	47	47
Max. speed (O.E.I.)	(4)	kn.	110	102	102	103	103
		n. mi.					-
AS AMENDED		hrs.					-
		kn.					-
		ft.					-
Range		n. mi.	464	408	423	565	637
Average cruising speed		kn.	126	127	127	129	125
Cruising altitude		ft.	10,000	5,000	7,000	1,500	10,000
Maximum endurance	(5)	hrs.	4.76	4.21	4.25	5.90	6.40
Endurance speed		kn.	76	74	76	71	78
Endurance altitude		ft.	10,000	5,000	7,000	1,500	10,000

NOTES

(1) At Intermediate Power, not to exceed Intermediate Transmission Rating.

(2) At maximum continuous power, not to exceed maximum continuous transmission rating.

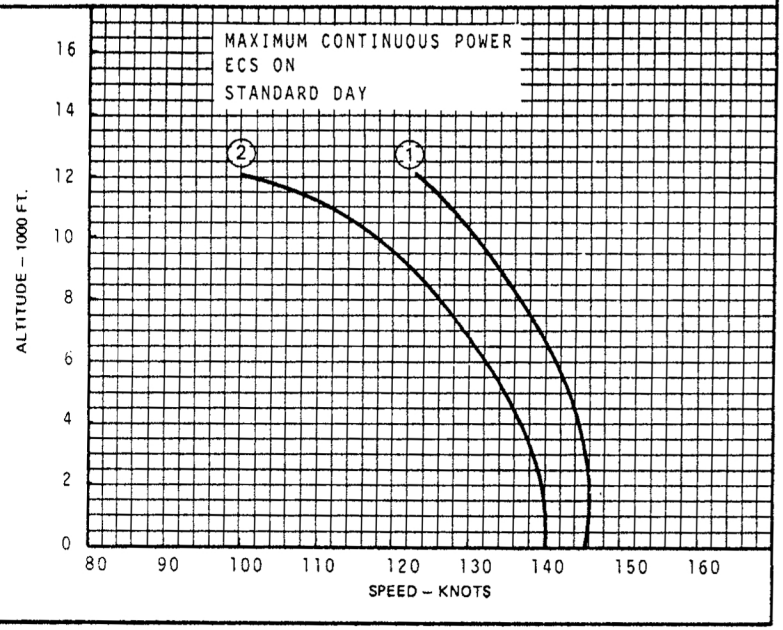
(3) Presently limited to 10,000 ft.

(4) Contingency rated power, not to exceed one engine inoperative transmission rating.

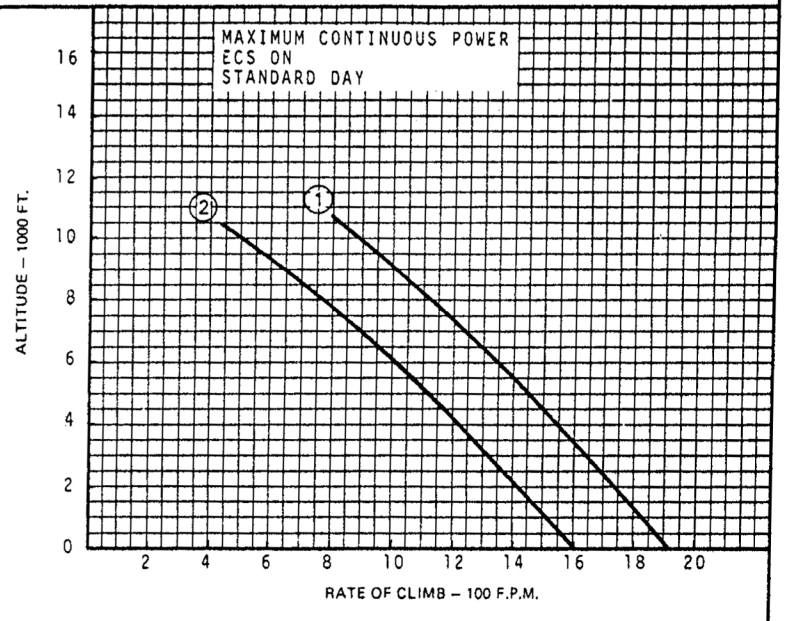
(5) Excludes 5 minute engine start and takeoff allowance and reserve.

(6) All performance data for standard day conditions

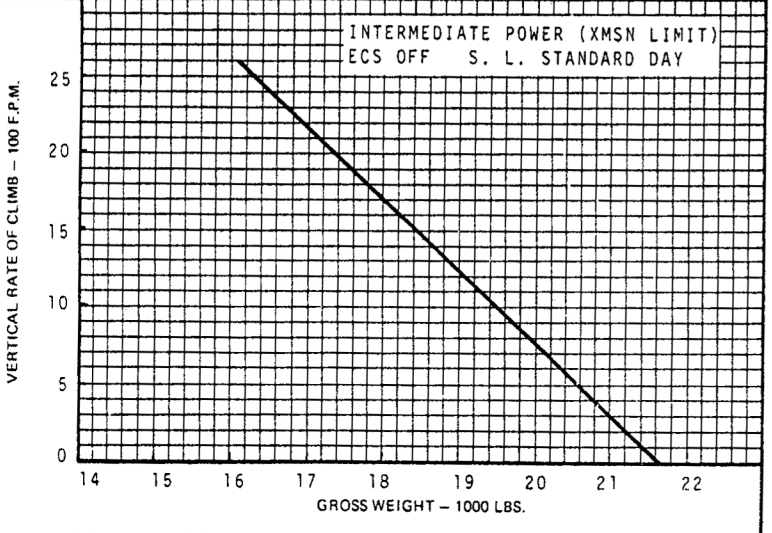
SPEED



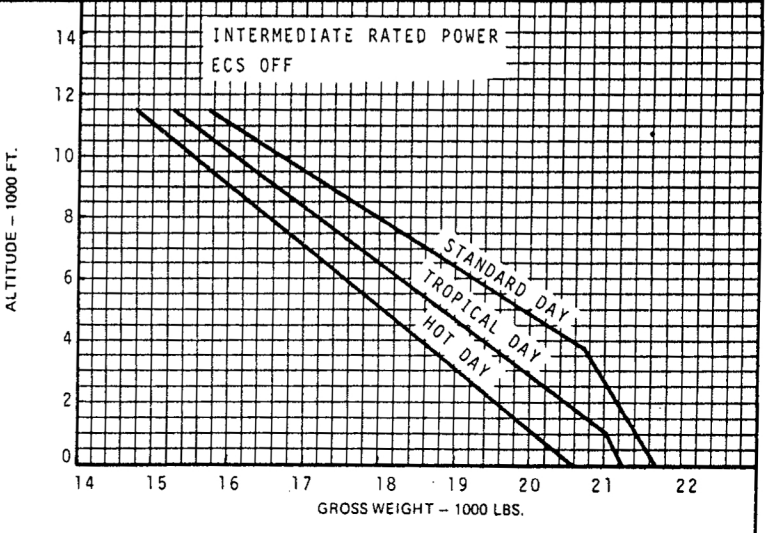
CLIMB



VERTICAL RATE OF CLIMB

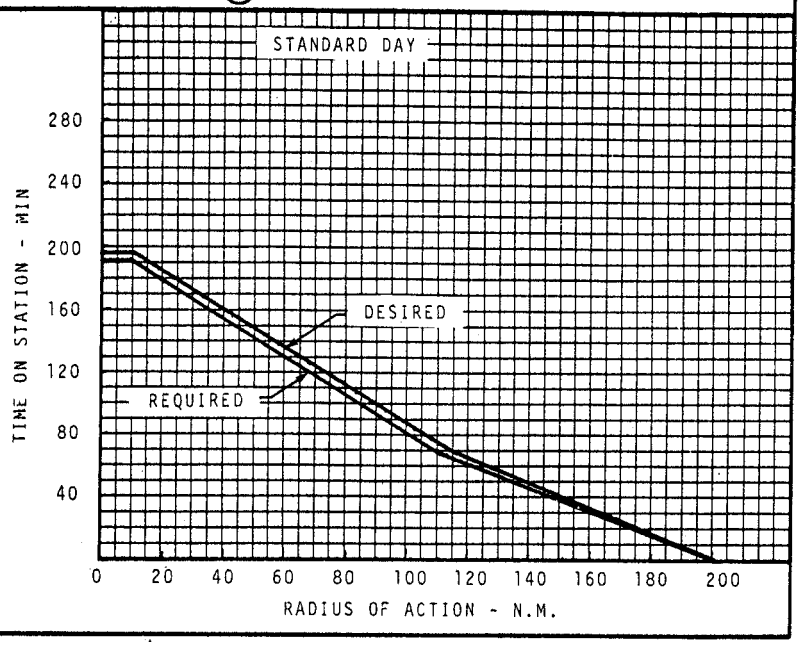


HOVER CEILING

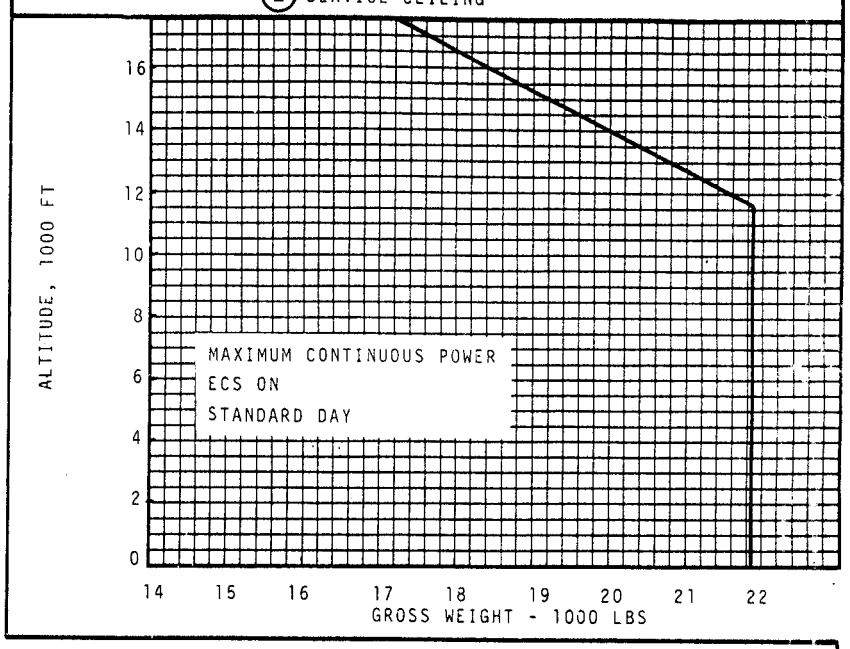


◯ LOADING CONDITION COLUMN NUMBER

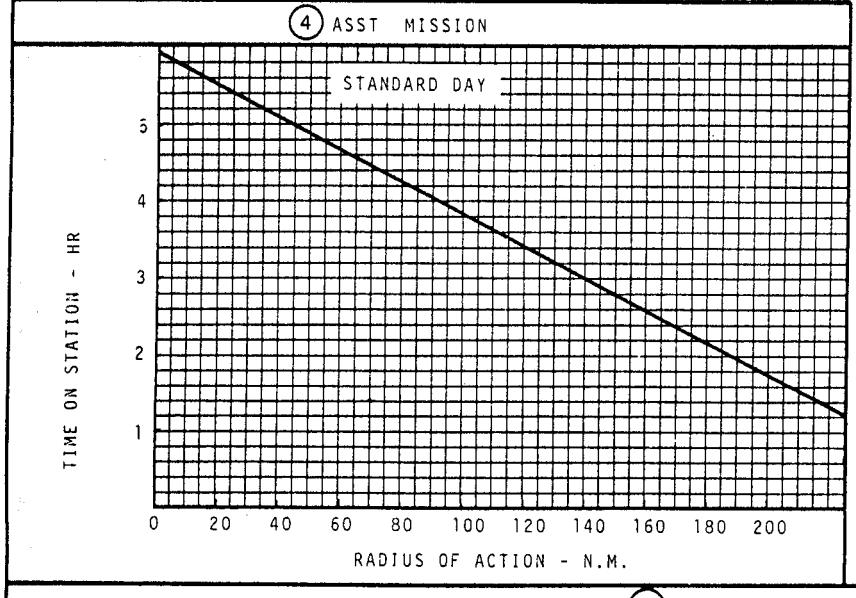
(2) ASW MISSION



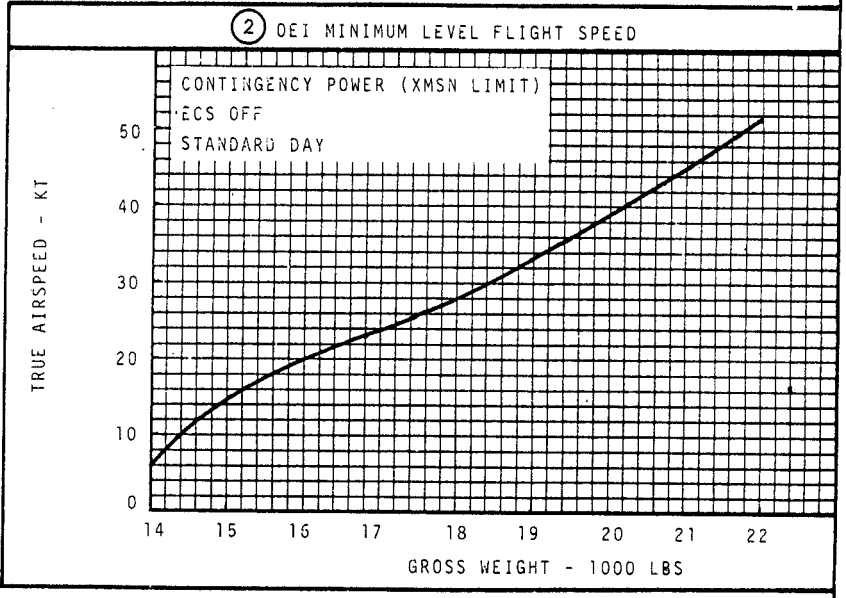
(2) SERVICE CEILING



(4) ASST MISSION



(2) OEI MINIMUM LEVEL FLIGHT SPEED



(○) LOADING CONDITION COLUMN NUMBER

NOTES

(1) CLEAN

Engine start and takeoff (no distance gained): Fuel for 5 minutes at maximum continuous power at sea level static condition.

Climb out: On course from sea level to best cruise altitude (not to exceed 10,000 ft) at BROC at maximum continuous power.

Cruise out: To target at speed for maximum range at best cruise altitude (not to exceed 10,000 ft).

Hover: 5 minutes at hover ceiling (not to exceed 10,000 ft), out of ground effect.

Cruise back: To home base at speed for maximum range at best cruise altitude (not to exceed 10,000 ft).

Descent to sea level: No fuel used, no distance or time gained.

Reserve: 10% of initial fuel or fuel for 20 minutes at speed for maximum range at sea level, whichever is greater.

AS AMENDED

(1) LOADING CONDITION COLUMN NUMBER

NOTES

(5)

FERRY	RANGE MISSION	ENDURANCE
Engine start and takeoff no distance gained. Fuel for 5 minutes at maximum continuous power at sea level static conditions.	Engine start and takeoff no distance gained. Fuel for 5 minutes at maximum continuous power at sea level static conditions.	Engine start and takeoff no distance gained. Fuel for 5 minutes at maximum continuous power at sea level static conditions.
Climb Out: On course from sea level to best cruise altitude (not to exceed 10,000 ft) BROC at maximum continuous power.	Climb out: On course from sea level to specified cruise altitude at maximum continuous power.	Climb out: From sea level to specified loiter altitude at maximum continuous power.
Cruise out: At speed for best range, at best cruise altitude.	Cruise out: At speed for best range at specified altitude.	Loiter: At speed for best endurance at specified altitude.
Descent to sea level: No fues used, no distance or time gained.	Descent to sea level: No fuel used, no distance or time gained.	Descent to sea level: No fuel used, no distance or time gained.
Reserve: 10% of initial fuel or fuel for 20 minutes at speed for maximum range at sea level, whichever is greater.	Reserve: 10% of initial fuel or fuel for 20 minutes at speed for maximum range at sea level, whichever is greater.	Reserve: 10% of initial fuel or fuel for 20 minutes at speed for maximum range at sea level, whichever is greater.

(○) LOADING CONDITION COLUMN NUMBER