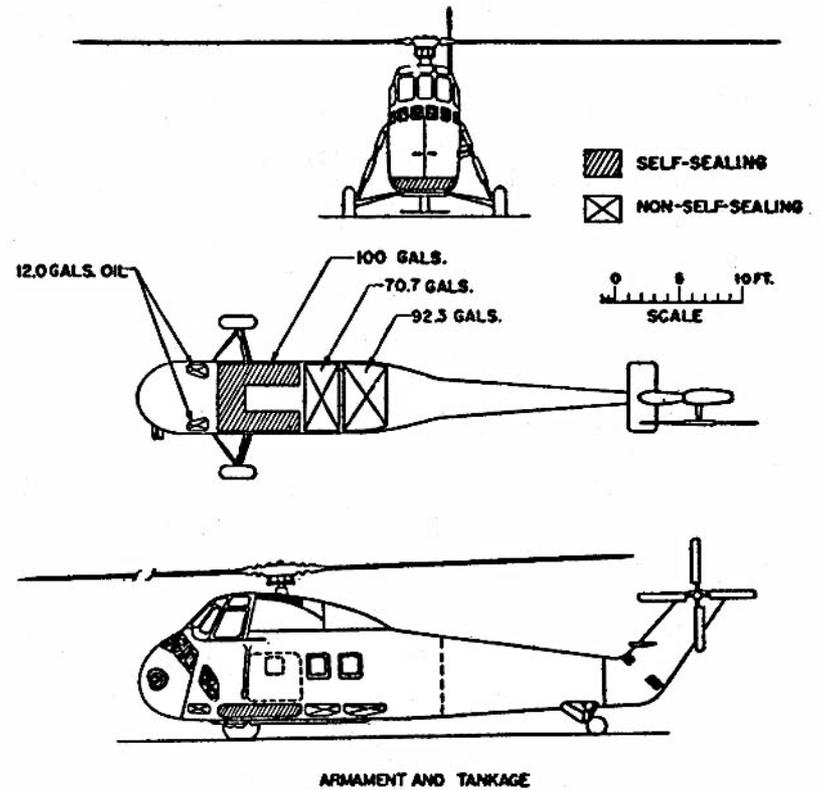
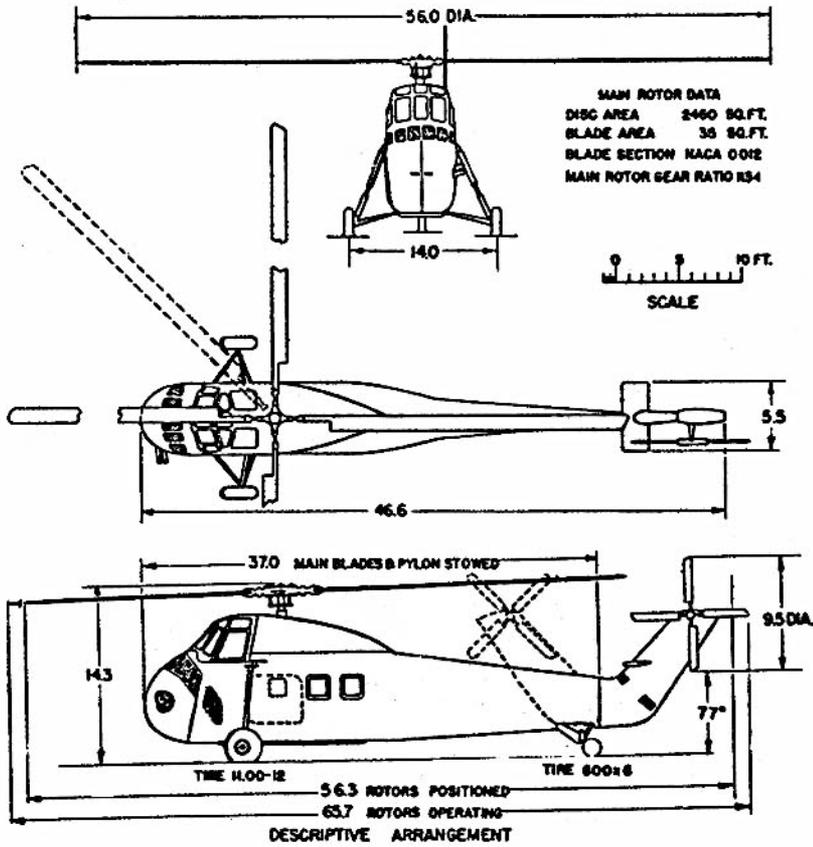




STANDARD AIRCRAFT CHARACTERISTICS

UH-34D



POWER PLANT					MISSION AND DESCRIPTION		WEIGHTS																										
NO. & MODEL	(1)R-1820-84				<p>The principal mission of this helicopter is to transport general cargo and large aircraft maintenance spare components.</p> <p>The HUS-1 is a four bladed all metal main rotor type helicopter with a four bladed all metal automatic torque compensating tail rotor. The engine is mounted in the nose facing rearward inclined 35° from the horizontal. This helicopter incorporates a dual control system of the conventional stick and rudder pedal type, supplemented by a collective pitch control lever synchronized with the throttle to provide constant rotor speed. Automatic stabilization equipment is provided capable of maneuvering and maintaining heading, altitude, and attitude established by the pilot under stick and pedal free conditions. The tail pylon and main rotor blades fold without disconnecting transmission or controls, thus permitting stowage on the smallest carrier or cruiser deck elevator. The fixed type landing gear consists of a main two wheel alighting gear and a tail wheel.</p> <p>Hoist Capacity 400#</p>	LOADING			LBS	L.F.																							
MFR	WRIGHT					EMPTY	8090																										
SUPERCH	1 STAGE, 1 SPEED					BASIC	8598																										
ROTOR GEAR RATIO	11.3 to 1					DESIGN	11305	2.68																									
TAIL ROTOR RATIO	1.9 to 1					MAX T.O.	13300	2.29																									
<p>RATINGS</p> <table border="1"> <thead> <tr> <th></th> <th>BHP</th> <th>RPM</th> <th>ALT</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>T. O.</td> <td>1525</td> <td>2800</td> <td>700'</td> <td>5 Min.</td> </tr> <tr> <td>MIL.</td> <td>1425</td> <td>2700</td> <td>2400'</td> <td>30 Min.</td> </tr> <tr> <td>NORM.</td> <td>1275</td> <td>2500</td> <td>3500'</td> <td>Cont.</td> </tr> </tbody> </table> <p>ENGINE SPEC. N-895 of 26 Nov 1952</p>						BHP	RPM	ALT	TIME	T. O.	1525	2800	700'	5 Min.	MIL.	1425	2700	2400'	30 Min.	NORM.	1275	2500	3500'	Cont.	<p>All weights are actual</p> <p>FUEL AND OIL</p> <table border="1"> <thead> <tr> <th>NO. Tanks</th> <th>Gals</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>263</td> <td>Fuselage</td> </tr> </tbody> </table> <p>FUEL GRADE.....115/145 FUEL SPECF-5572-1</p> <p>OIL</p> <p>Capacity (Gals).....12.4 Grade1065/1100 Spec.MIL-L-6082A</p> <p>ELECTRONICS</p> <p>UHF RADIO SET AN/ARC-55 MHF..... AN/ARC-39 ICS AN/AIC-4A RADAR ALTIMETER AN/APN-117 FINDER GROUP AN/ARA-25 RADAR ID SET AN/APX-6 CODER GROUP.....AN/APA-89 ADF AN/ARN-59 TACAN AN/ARN-21 FM RADIO SET AN/ARC-44 COURSE INDICATOR ... ID-250/ARN VIDEO CODER KY-81/APA-89</p>			NO. Tanks	Gals	Location	3	263	Fuselage
	BHP	RPM	ALT	TIME																													
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NO. Tanks	Gals	Location																															
3	263	Fuselage																															
<p>ACCOMMODATIONS</p> <p>Crew (Pilot & Co-Pilot)2 Troops12</p> <p>or</p> <p>Litters 8</p>					<p>DEVELOPMENT</p> <p>First Flight.....January 1957 Service UseJanuary 1957</p>																												
<p>CARGO</p> <p>Internal/Capacity.....4000 lbs. External Capacity5000 lbs. (on sling)</p> <p>Cargo Compartment:</p> <p>Length.....13' 7" Width4' 11" Height 6' 0"</p>					<p>DIMENSIONS</p> <p>ROTOR DIA 56' 0" DISC AREA 2460 sq. ft. *LENGTH 37' 0" HEIGHT (MAX) 15' 8" TREAD 12' 0" STABILIZER AREA..... 12.4 sq. ft.</p> <p>*ROTOR AND TAIL PYLON FOLDED.</p>																												

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION		(1) Cargo Transport	(2) Troop Transport	(3) Combat Evacuation	(4) Cargo Transport (Overload)	(5) Ferry Range
TAKE-OFF WEIGHT	LB.	11297	12936	11837	13300	10284
FUEL	LB.	1240	1446	1562	504	1562
PAYLOAD	LB.	1335	2700	1520	4110.9	--
DISC LOADING	LB./SQ.FT.	4.59	5.26	4.82	5.41	4.18
VERTICAL RATE OF CLIMB AT S.L. (B)	FPM.	1350	500	1060	320	1910
ABSOLUTE HOVERING CEILING (B)	FT.	7900	3875	6480	3000	10700
MAX. RATE OF CLIMB AT S.L. (B)	FPM.	2020	1570	1860	1475	2350
SERVICE CEILING (100 FPM.) (A)	FT.	14300	10800	13100	10000	16550
SPEED AT S.L. (A)	KN.	132	123	129	121	135
MAX. SPEED/ALTITUDE (A)	KN./FT.	132/S.L.	123/S.L.	139/S.L.	121/S.L.	135/S.L.
COMBAT RANGE (A)	N.MI.	210	218	263	58	298
AVERAGE CRUISING SPEED	KN.	94	98	94	99	93
CRUISING ALTITUDE	FT.	1500	1500	1500	1500	1500
COMBAT RADIUS (A)	N.MI.	100	110	128	24	--
AVERAGE CRUISING SPEED (C)(D)	KN.	94/93	98/93	94/93	99/93	--
Cruising Altitude	ft.	1500	1500	1500	1500	--

NOTES:

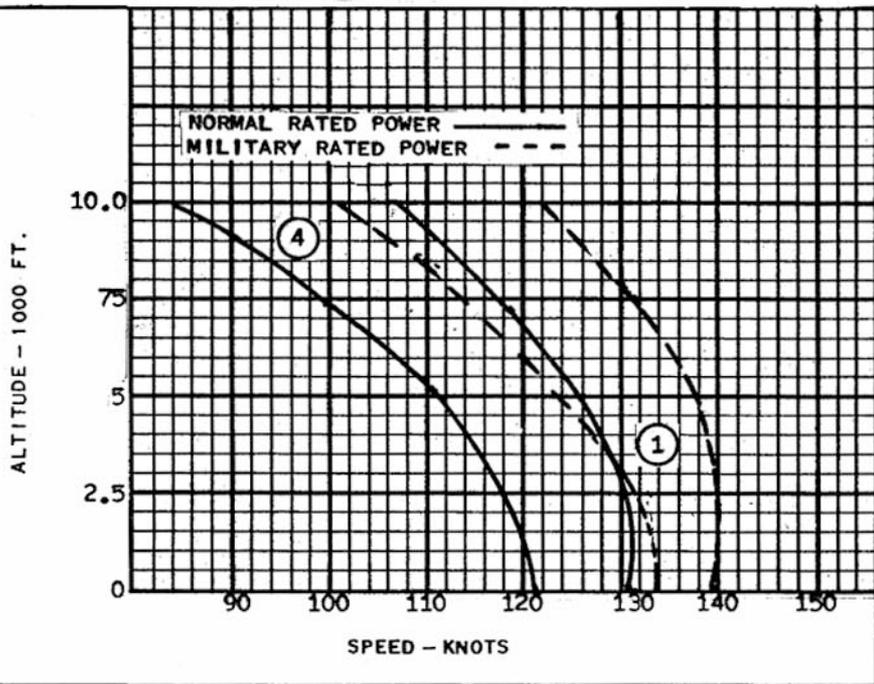
- (A) NORMAL RATED POWER
- (B) TAKE-OFF POWER
- (C) AVERAGE CRUISE SPEED OUTGOING
- (D) AVERAGE CRUISE SPEED RETURNING

PERFORMANCE BASIS: NATESTCEN Evaluation of HSS-1 and HUS-1 helicopters.

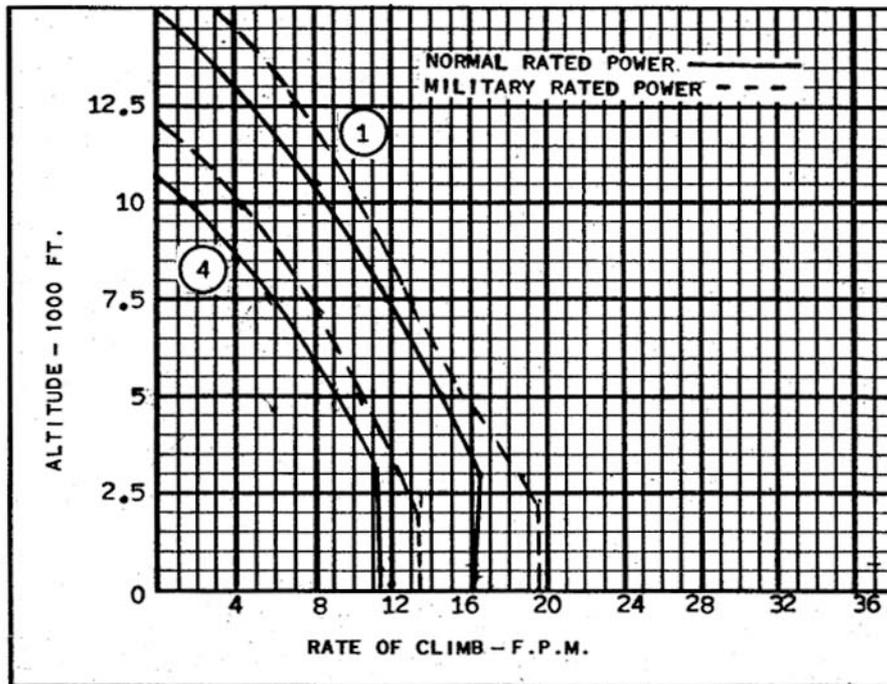
RANGE AND RADIUS Are based upon NATESTCEN fuel consumption data.

All performance is out of ground effect and for standard atmospheric conditions.

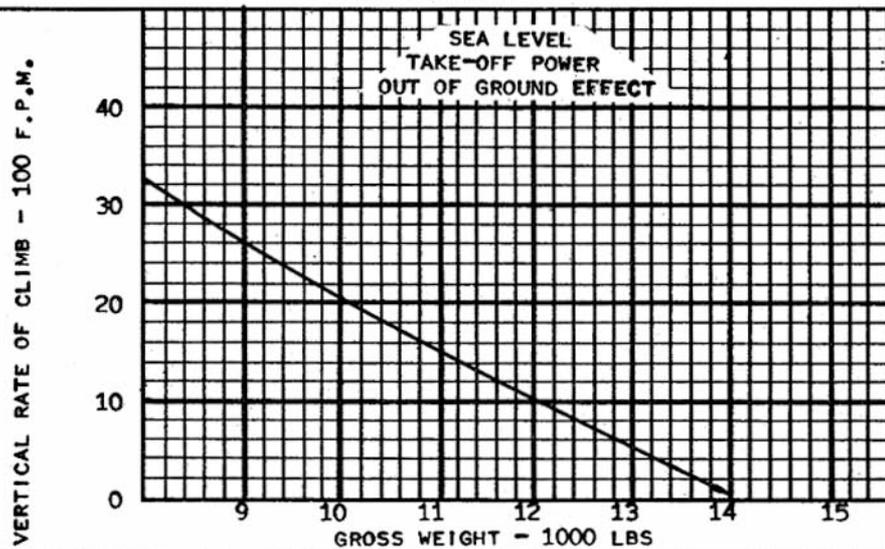
SPEED



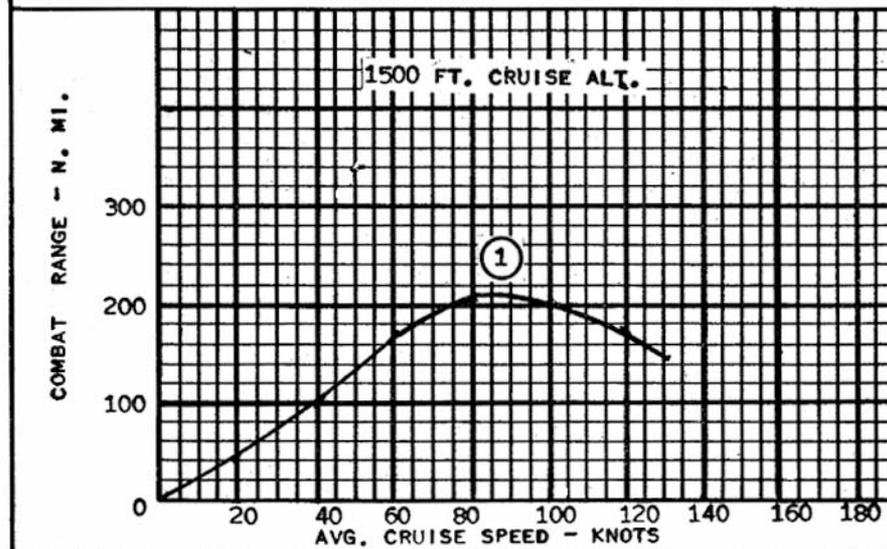
CLIMB



VERTICAL CLIMB



COMBAT RANGE



○ LOADING CONDITION CODE NUMBER

NOTES

COMBAT RADIUS MISSION:

Warm-up and Take-off: 10 Minutes at Normal Rated Power
Climb: To 1500 feet at Normal Rated Power
Cruise: At long range speed to advanced area
Land: Deposit Cargo or Discharge Troops
Climb: To 1500 feet at Normal Rated Power
Cruise: Back to base at speed for best range
Reserve: 10% of initial fuel load

EVACUATION MISSION:

Warm-up and Take-off: 10 Minutes at Normal Rated Power
Climb: To 1500 feet at Normal Rated Power
Cruise: At long range speed to advanced area
Land: Pick up evacuees (8)
Climb: To 1500 feet at Normal Rated Power
Cruise: Back to base at speed for best range
Reserve: 10% of initial fuel load

COMBAT RANGE MISSION:

Warm-up and Take-off: 5 minute at Normal Rated Power
Climb: To 1500 feet at Normal Rated Power
Cruise: At speed for best range
Reserve: 10% of initial fuel load