



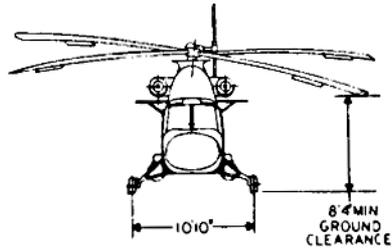
STANDARD AIRCRAFT CHARACTERISTICS

UH-2C "SEASPRITE"

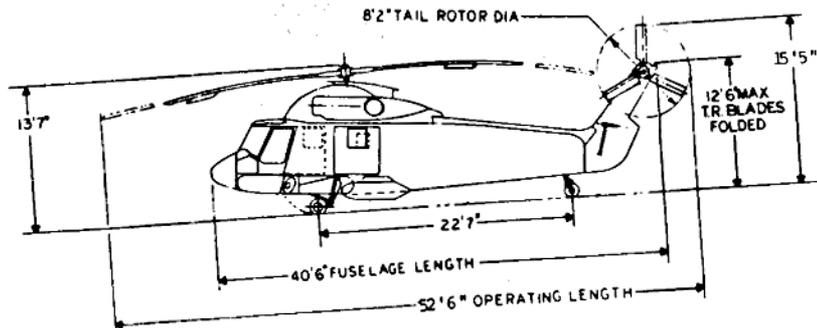
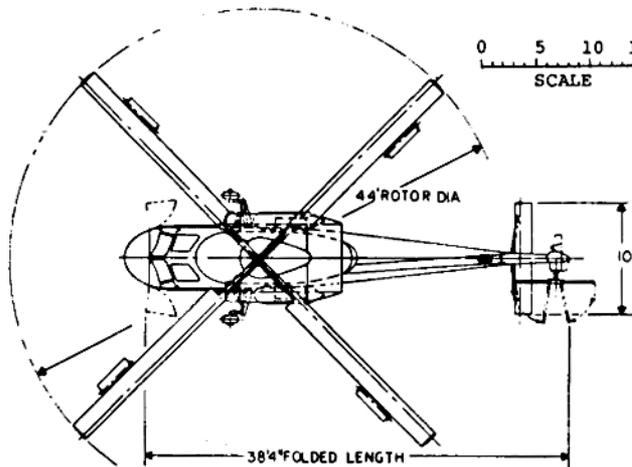
KAMAN

NAVAL AIR SYSTEMS COMMAND
NAVY DEPARTMENTMAIN ROTOR

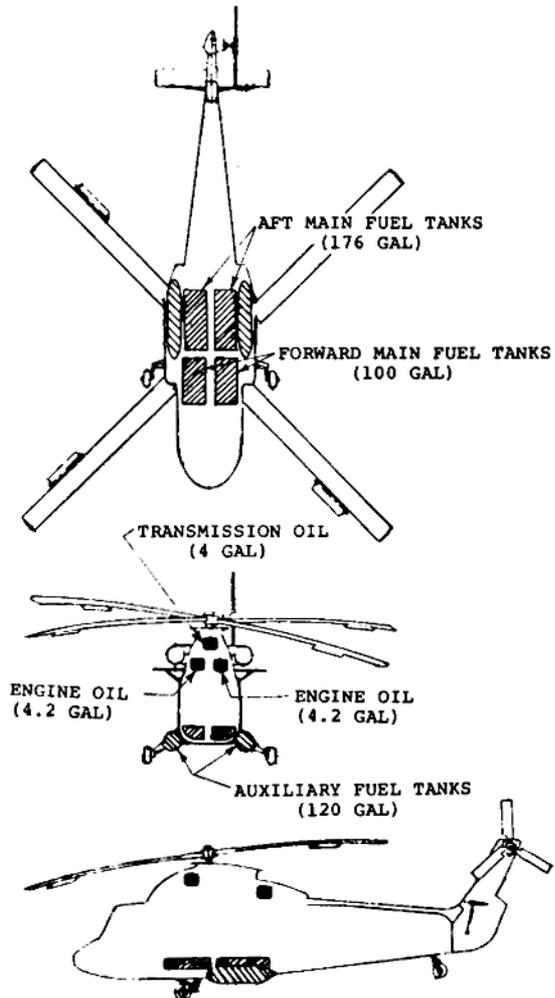
DISC AREA 1520.5 SQ. FT.
 BLADE AREA 158.3 SQ. FT.
 AIRFOIL SECTION NACA 23012 MOD.
 ENGINE/ROTOR GEAR RATIO 67.4:1



0 5 10 15 FT.
SCALE



DESCRIPTIVE ARRANGEMENT

NAVAL AIR SYSTEMS COMMAND
NAVY DEPARTMENT

TANKAGE

POWER PLANT	MISSION AND DESCRIPTION	WEIGHTS																																	
<p>NO. & MODEL (2) T58- -8B MFR GENERAL ELECTRIC</p> <p><u>GEAR REDUCTION RATIOS</u></p> <p>ENGINE SPEED DECREASER. 0.31 MAIN ROTOR 0.048 TAIL ROTOR 0.29</p> <p>RATINGS</p> <table border="1"> <thead> <tr> <th></th> <th><u>SHP</u></th> <th><u>RPM</u></th> <th><u>ALT</u></th> </tr> </thead> <tbody> <tr> <td>MIL</td> <td>1250</td> <td>19500</td> <td>S.S.L.</td> </tr> <tr> <td>NORM</td> <td>1050</td> <td>19500</td> <td>S.S.L.</td> </tr> </tbody> </table> <p>G.E. ENGINE SPEC. NO. E1025-D MARCH 15, 1966</p>		<u>SHP</u>	<u>RPM</u>	<u>ALT</u>	MIL	1250	19500	S.S.L.	NORM	1050	19500	S.S.L.	<p>THE PRIMARY MISSION OF THE UH-2C HELICOPTER IS TO ACCOMPLISH GENERAL UTILITY TASKS, WHICH INCLUDE PLANE GUARD FOR CARRIER AIRCRAFT OPERATIONS, SEARCH AND RESCUE MISSIONS, GUN FIRE OBSERVATION, RECONNAISSANCE, COURIER SERVICE, PERSONNEL TRANSFER FROM SHIP TO SHIP TO SHORE, EVACUATION OF WOUNDED, RADIOLOGICAL RECONNAISSANCE, EMERGENCY SUPPLY AND RE-SUPPLY, TACTICAL AIR CONTROLLER OPERATIONS.</p> <p>THE UH-2C IS A TWIN TURBOSHAFT ENGINE POWERED, SINGLE FOUR-BLADED ROTOR HELICOPTER WITH AN ANTI-TORQUE TAIL ROTOR. THE MAIN ROTOR IS CONTROLLED BY AERODYNAMIC SERVO FLAPS ACTUATED BY CONVENTIONAL PILOT'S COCKPIT CONTROLS.</p> <p>THE UH-2C IS A GROWTH VERSION OF THE UH-2A/B MODEL WITH A SECOND ENGINE ADDED FOR TWIN ENGINE RELIABILITY. AN OVERLOAD GROSS WEIGHT INCREASE TO 11614 POUNDS PROVIDES IMPROVED USEFUL LOAD CAPABILITY.</p>	<table border="1"> <thead> <tr> <th><u>LOADING</u></th> <th><u>LSB.</u></th> <th><u>L.F.</u></th> </tr> </thead> <tbody> <tr> <td>EMPTY (1) (A)</td> <td>7583</td> <td></td> </tr> <tr> <td>BASIC (2)</td> <td>7848</td> <td></td> </tr> <tr> <td>DESIGN</td> <td>9876</td> <td>2.6</td> </tr> <tr> <td>OVERLOAD</td> <td>11614</td> <td>2.2</td> </tr> <tr> <td>MAX. T.O.</td> <td>11614</td> <td>2.2</td> </tr> <tr> <td>MAX. LANDING</td> <td>11614</td> <td>2.2</td> </tr> </tbody> </table> <p>(1) INCLUDES ELECTRONICS LISTED IN BOX. (2) INCLUDES FLOTATION GEAR, AN/APA-89, CARGO HOOK AND AUXILIARY FUEL TANK BRACKETS AND PLUMBING.</p>	<u>LOADING</u>	<u>LSB.</u>	<u>L.F.</u>	EMPTY (1) (A)	7583		BASIC (2)	7848		DESIGN	9876	2.6	OVERLOAD	11614	2.2	MAX. T.O.	11614	2.2	MAX. LANDING	11614	2.2
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<p>UHF RADIO SET AN/ARC-52 MHF RADIO SET AN/ARC-39 RADAR IDENT. AN/APX-6B L.F. ADF AN/ARN-59 TACAN RADIO AN/ARN-52V DIRECTION FINDER (UHF) AN/ARA-25 RADAR ALTIMETER AN/APN-117 RAWS APQ-107 GROUND SPEED SYSTEM AN/APN-130 COMPASS MA-1 ASE NAV COMPUTER ASA-13A ICS AN/AIC-14 PLOTING BOARD PT-429</p> <p>PROVISIONS: CODER GROUP AN/APA-89</p>	<p>DEVELOPMENT</p> <p>FIRST FLIGHT FEBRUARY 1965 SERVICE USE SEPTEMBER 1967</p>	<p>FUEL</p> <table border="1"> <thead> <tr> <th><u>GAL.</u></th> <th><u>NO. TANKS</u></th> <th><u>LOCATION</u></th> </tr> </thead> <tbody> <tr> <td>276</td> <td>4</td> <td>FUSELAGE</td> </tr> <tr> <td>120</td> <td>2 (AUX)</td> <td>EXTERNAL</td> </tr> </tbody> </table> <p>FUEL GRADE - JP-4/JP-5 FUEL SPEC - MIL-T-5624</p> <p>OIL</p> <table border="1"> <tbody> <tr> <td>ENGINE (GAL.)</td> <td>8.4</td> </tr> <tr> <td>SPEC: MIL-L-23699</td> <td></td> </tr> <tr> <td>TRANSMISSION (GAL.)</td> <td>4.0</td> </tr> <tr> <td>SPEC: MIL-L-23699</td> <td></td> </tr> </tbody> </table>	<u>GAL.</u>	<u>NO. TANKS</u>	<u>LOCATION</u>	276	4	FUSELAGE	120	2 (AUX)	EXTERNAL	ENGINE (GAL.)	8.4	SPEC: MIL-L-23699		TRANSMISSION (GAL.)	4.0	SPEC: MIL-L-23699																	
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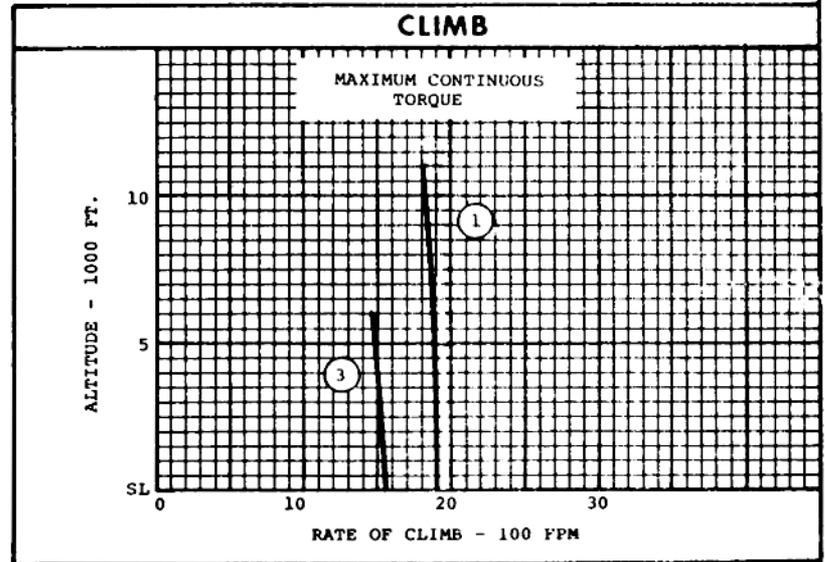
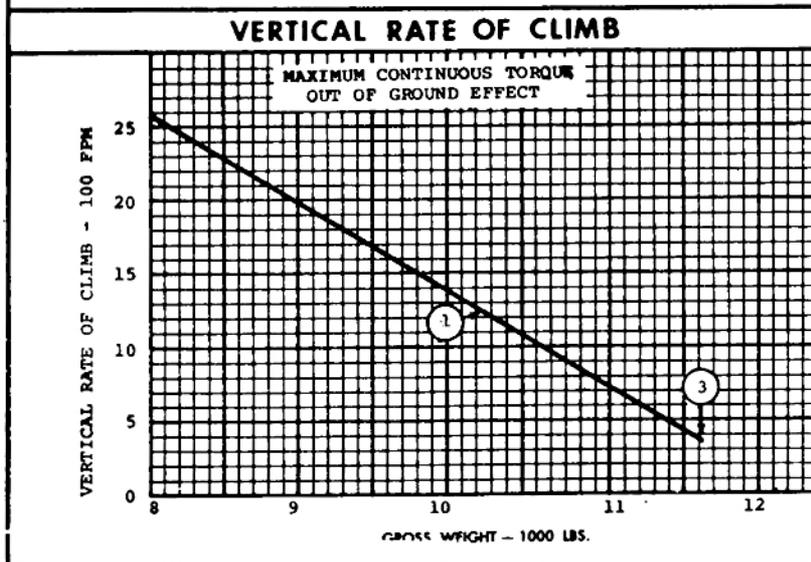
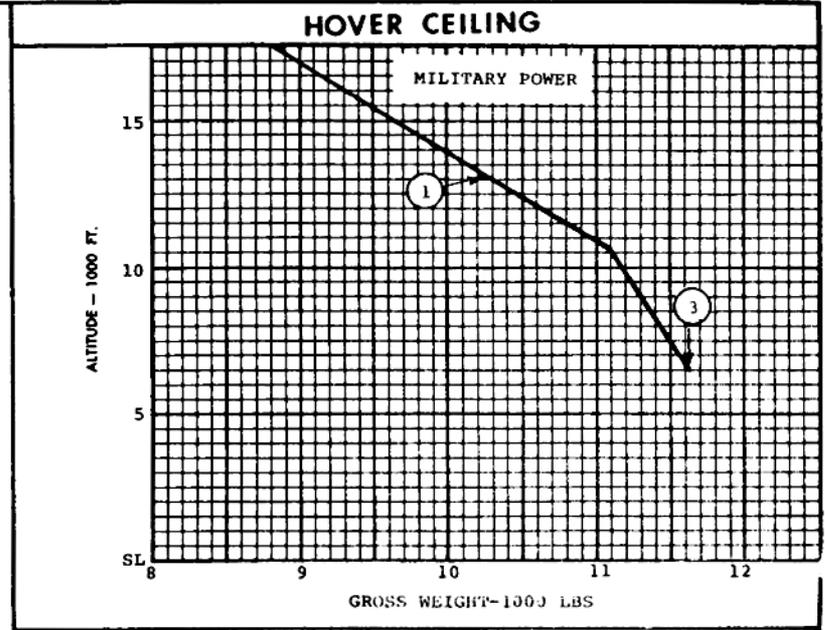
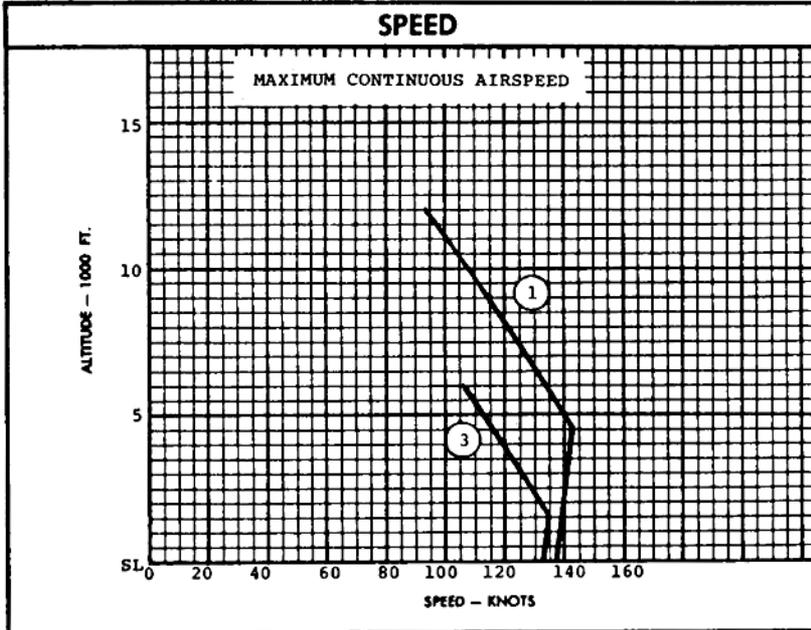
PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION	① UTILITY	② RESCUE	③ CARGO	④ FERRY
TAKE-OFF WEIGHT LB.	10229	11525	11614	11125
FUEL INTERNAL/EXTERNAL (JP-5) LB.	1877/-	1877/816	520/-	1877/816
PAYLOAD (A) LB.	-/800	400/1200	2742	-
DISC LOADING LB./SQ.FT.	6.7	7.6	7.6	7.3
VERTICAL RATE OF CLIMB AT S.L. (B) FPM.	1230	400	360	450
ABSOLUTE HOVERING CEILING (OGE) (C) FT.	13200	7300	6500	14300
MAX. RATE OF CLIMB AT S.L. (B) FPM.	1900	1560	1540	1570
OEI SERVICE CEILING (100 FPM) (C) (D) FT.	12000	8600	8400	7000
SPEED AT S.L. (B) KN.	136	129	133	130
MAX. SPEED/ALTITUDE (B) KN/FT.	141/1100	132/2000	134/1500	134/2900
COMBAT RADIUS N.MI.	109	152	-	-
AVERAGE CRUISING SPEED KN.	130	130	-	-
CRUISING ALTITUDE FT.	5000	5000	-	-
RANGE N.MI.	237	324	50	364
AVERAGE CRUISING SPEED KN.	130	130	130	110
CRUISING ALTITUDE FT.	5000	5000	SL	7500/10000
MAXIMUM ENDURANCE HRS.	2.3	3.3	-	-
ENDURANCE SPEED KN.	70	70	-	-
ENDURANCE ALTITUDE FT.	SL	SL	-	-

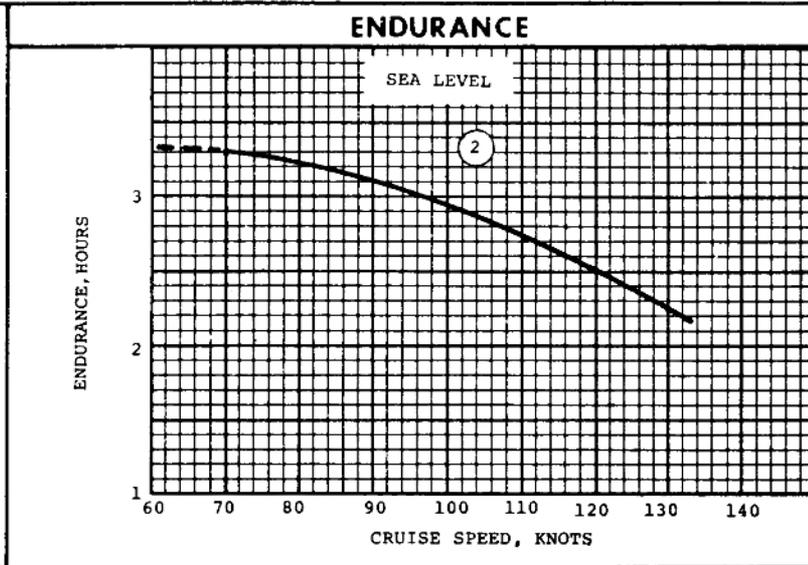
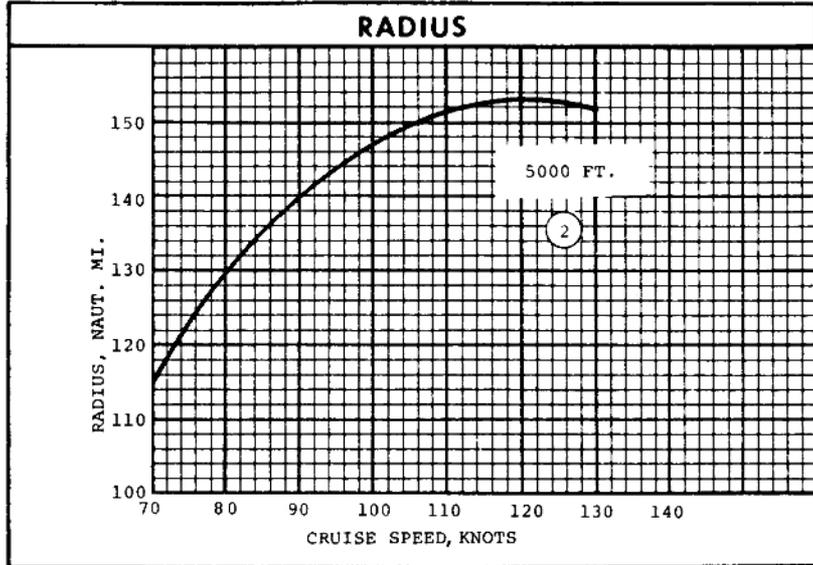
NOTES

- (A) OUT/RETURN PAYLOAD FOR RADIUS MISSIONS
 (B) MAXIMUM CONTINUOUS TORQUE
 (C) MILITARY POWER
 (D) ONE ENGINE INOPERATIVE

PERFORMANCE BASIS: NATC AND KAMAN FLIGHT TEST DATA
 ENGINE SPECIFICATION POWER AND FUEL FLOWS



○ LOADING CONDITION COLUMN NUMBER



○ LOADING CONDITION COLUMN NUMBER

NOTES

① ②

RADIUS MISSION

WARM-UP AND TAKE-OFF: 2 MINUTES AT SEA LEVEL AT MAXIMUM CONTINUOUS TORQUE

CLIMB: ON COURSE TO 5000 FT

CRUISE OUT: AT 5000 FT AND AT SPEED FOR BEST RANGE

DESCEND: TO SEA LEVEL

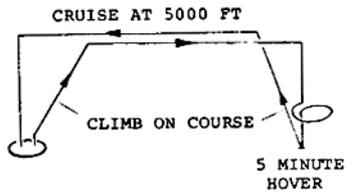
HOVER: 5 MINUTES AT SEA LEVEL WHILE PICKING UP 800 LB PAYLOAD

CLIMB: ON COURSE TO 5000 FT

CRUISE BACK: AT 5000 FT AND AT SPEED FOR BEST RANGE

DESCEND: TO SEA LEVEL

RESERVE: 10 PERCENT OF INITIAL FUEL



① ② ③ ④

RANGE MISSION

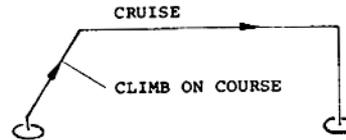
WARM-UP AND TAKE-OFF: 2 MINUTES AT SEA LEVEL AT MAXIMUM CONTINUOUS TORQUE

CLIMB: ON COURSE TO CRUISE ALTITUDE

CRUISE: AT SPEED FOR BEST RANGE

DESCEND: TO SEA LEVEL

RESERVE: 10 PERCENT OF INITIAL FUEL



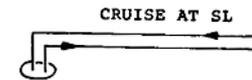
① ②

ENDURANCE MISSION

WARM-UP AND TAKE-OFF: 2 MINUTES AT SEA LEVEL AT MAXIMUM CONTINUOUS TORQUE

CRUISE: AT SPEED FOR MAXIMUM ENDURANCE AT SEA LEVEL

RESERVE: 10 PERCENT OF INITIAL FUEL



○ LOADING CONDITION COLUMN NUMBER