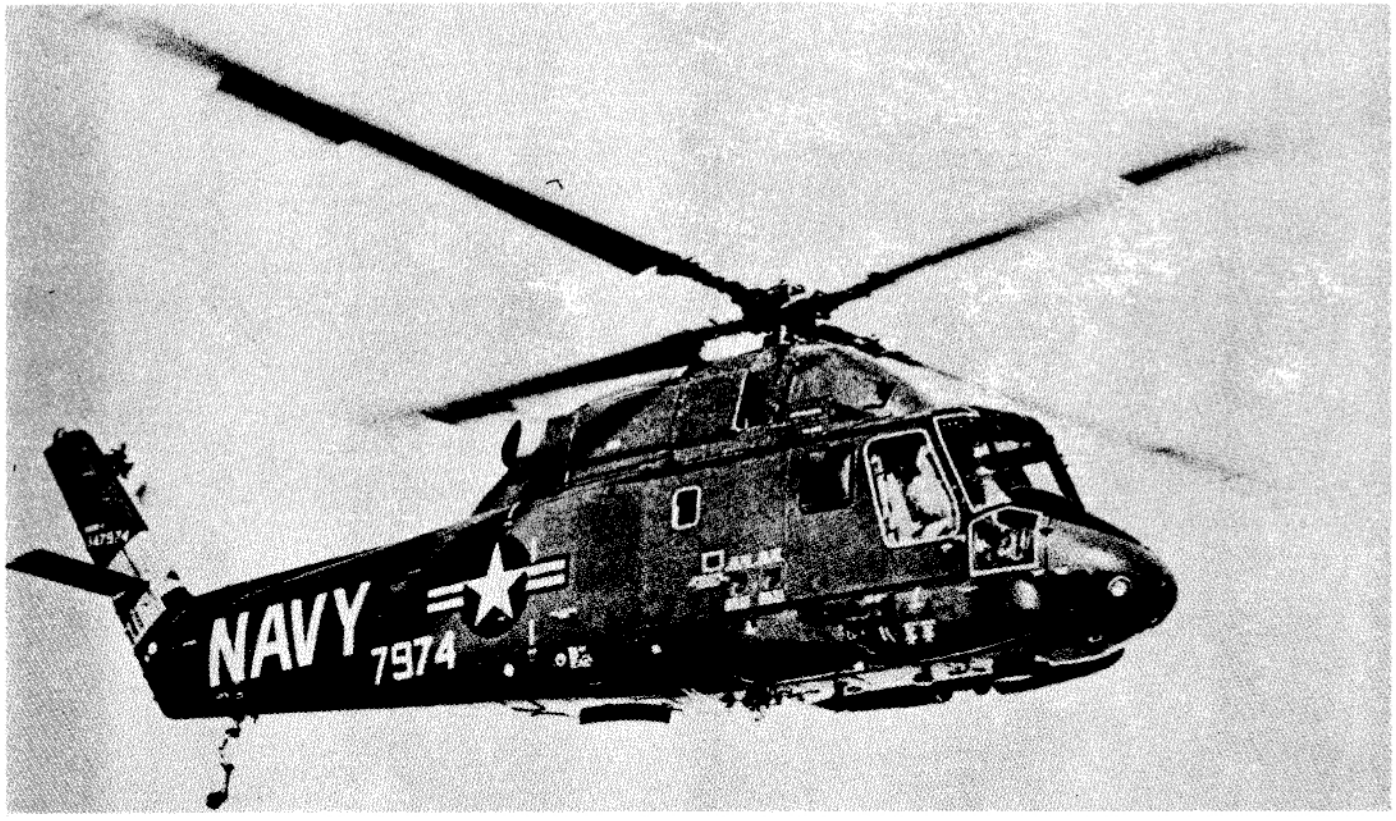
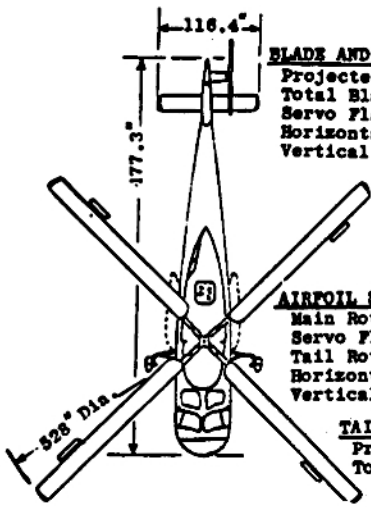


STANDARD AIRCRAFT CHARACTERISTICS

UH-2A SEASPRITE



BLADE AND CONTROL SURFACE AREAS

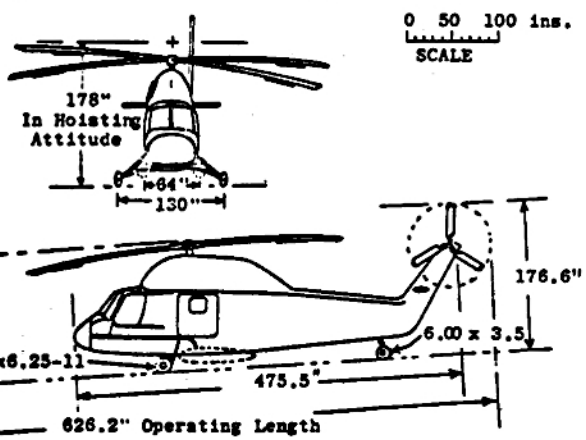
Projected Disc Area	1520.5 Sq.Ft.
Total Blade Area	127.0 Sq.Ft.
Servo Flaps, Total	9.9 Sq.Ft.
Horizontal Tail	14.5 Sq.Ft.
Vertical Fin	18.1 Sq.Ft.

AIRFOIL SECTIONS

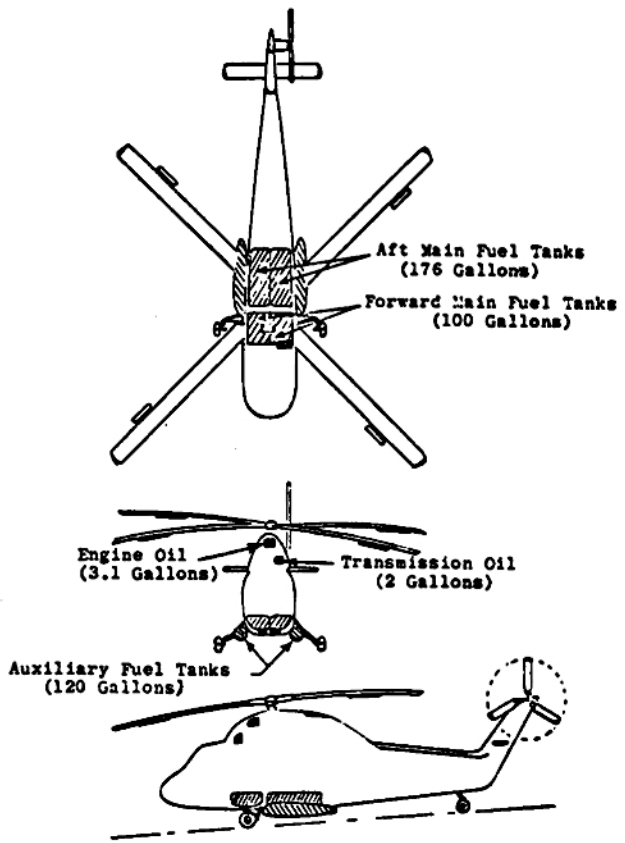
Main Rotor	NACA 23012 (Mod)
Servo Flap, Main Rotor	NACA 63_3-018
Tail Rotor	NACA 53_1-012
Horizontal Tail	NACA 0012
Vertical Fin	NACA 0025

TAIL ROTOR SURFACE AREAS

Projected Disc Area	50.4 Sq.Ft.
Total Blade Area	6.5 Sq.Ft.



DESCRIPTIVE ARRANGEMENT



TANKAGE INSTALLATION

POWER PLANT

No. & Model ... (1) T58-GE-8B
Mfr ..... GENERAL ELECTRIC
ROTOR GEAR
RATIO 0.047
TAIL ROTOR
RATIO 0.28

RATINGS

	ESHP	RPM	ALT
MIL	1250	19500	S.S.L.
NORM	1050	19500	S.S.L.

ENGINE SPEC. NO. E-1025-A

APRIL 1, 1961

ELECTRONICS

UHF RADIO SET AN/ARC-52
MHF RADIO SET AN/ARC-39
RADAR IDENT. AN/APX-6B
CODER GROUP AN/APA-89
VIDEO CODER KY-81/APA-89
L.F. ADF AN/ARN-59
TACAN RADIO AN/ARN-21
DIRECTION FINDER
(UHF) AN/ARA-25
RADAR ALTIMETER.. AN/APN-117
GROUND SPEED
SYSTEM AN/APN-130
COMPASS MA-1
ASE
NAV COMPUTER..... ASA-13A
ICS AN/41C-14

TACTICAL DISPLAY
PLOTTING BOARD PT-429

MISSION AND DESCRIPTION

THE PRIMARY MISSION OF THE UH-2A 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, AERIAL SPRAYING OF INSECTICIDES, EMERGENCY SUPPLY AND RE-SUPPLY, WIRE-LAYING AND TACTICAL AIR CONTROLLER OPERATIONS.

THE UH-2A IS A TURBO-ENGINE POWERED, SINGLE FOUR-BLADED ROTOR HELICOPTER WITH AN ANTI-TORQUE TAIL ROTOR. THE MAIN ROTOR IS CONTROLLED BY AERODYNAMIC SERVO FLAP ACTUATED BY CONVENTIONAL PILOT'S COCKPIT CONTROLS

DEVELOPMENT

FIRST FLIGHT .....JULY 1959
SERVICE USE (FIP)..... OCTOBER 1962

DIMENSIONS

MAIN ROTOR

DISC AREA .... 1520.5 SQ. FT.
BLADE AREA .... 127.0 SQ. FT.
NO. OF BLADES..... 4.0
DIAMETER ..... 44' - 0"
LENGTH (BLADES
FOLDED) ..... 39' - 7.5"
HEIGHT (MAX.)..... 13' - 6.3"
TREAD ..... 10' - 10"
STABILIZER
AREA ..... 14.5 SQ. FT.

WEIGHTS

LOADING	LBS	L.F.
EMPTY	6110	
BASIC	6248	
NORMAL	8637	2.98
OVERLOAD	10000	2.54
MAX. T.O.	10000	2.54
MAX. LANDING	10000	2.54

FUEL AND OIL

GAL.	NO. TANKS	LOCATION
276	4	FUSELAGE
120	2 (AUX)	EXTERNAL

FUEL GRADE - JP-4/JP-5
FUEL SPEC - MIL-F-5624

OIL

ENGINE (GAL.) 3.1
SPEC: MIL-L-7808
TRANSMISSION (GAL.) 2.0
SPEC: MIL-L-7808

ACCOMODATIONS

PILOT 1
CO-PILOT 1
PASSENGERS 4

OR

PILOT 1
CO-PILOT 1
ATTENDANT 1
LITTERS 2

RESCUE HOIST CAP. ..... 600 LB

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION		UTILITY 1-PILOT 1-COPILOT	UTILITY (OVER-LOAD) 1 PILOT 1 COPILOT 4 PASSENGERS	UTILITY 1-PILOT 1-COPILOT 2-CREWMAN	FERRY 1-PILOT 1-COPILOT	
TAKE-OFF WEIGHT	lb.	8637	10000	9037	9558	
Fuel (JP-5) INT/EXT	lb.	1878/ -	1878/431	1878 / -	1878/789	
Payload	lb.	0	800	0	0	
Disc loading	lb./sq.ft.	5.68	6.58	5.94	6.30	
Vertical rate of climb at S.L. (A)	fpm.	800	-	515	170	
Absolute hovering ceiling (OGE) (A)	ft.	4600	-	2800	700	
Max. rate of climb at S.L. (A)	fpm.	1740	1190	1570	1360	
Service ceiling (100 fpm) (A)	ft.	15000 (c)	14300	15000 (c)	15000 (c)	
Speed at S.L. (A)/ (B)	kn.	140/129.3	129/116	139/128	131/119	
Max. speed/altitude (A)	kn./ft.	140/SL	129/SL	139/SL	131/SL	
COMBAT RADIUS	n.mi.	167	188	165	-	
Average cruising speed	kn.	125	125	125	-	
Cruising altitude	ft.	SL	SL	SL	-	
FERRY RANGE	n.mi.	-	-	-	465	
Average cruising speed	kn.	-	-	-	119	
CRUISING ALT.	FT.	-	-	-	SL	
MAXIMUM ENDURANCE	HRS.	3.8	4.4	3.7	-	
ENDURANCE SPEED	KN.	58	59	58	-	
ENDURANCE ALTITUDE	FT.	SL	SL	SL	-	
PLANE GUARD ENDURANCE	HRS.	3.5	4.0	3.4	-	
ENDURANCE SPEED	KN.	30	30	30	-	
ENDURANCE ALTITUDE	FT.	SL	SL	SL	-	

(A) MILITARY RATED POWER
(B) NORMAL RATED POWER
(C) LIMIT OF PRESENT ENVELOPE

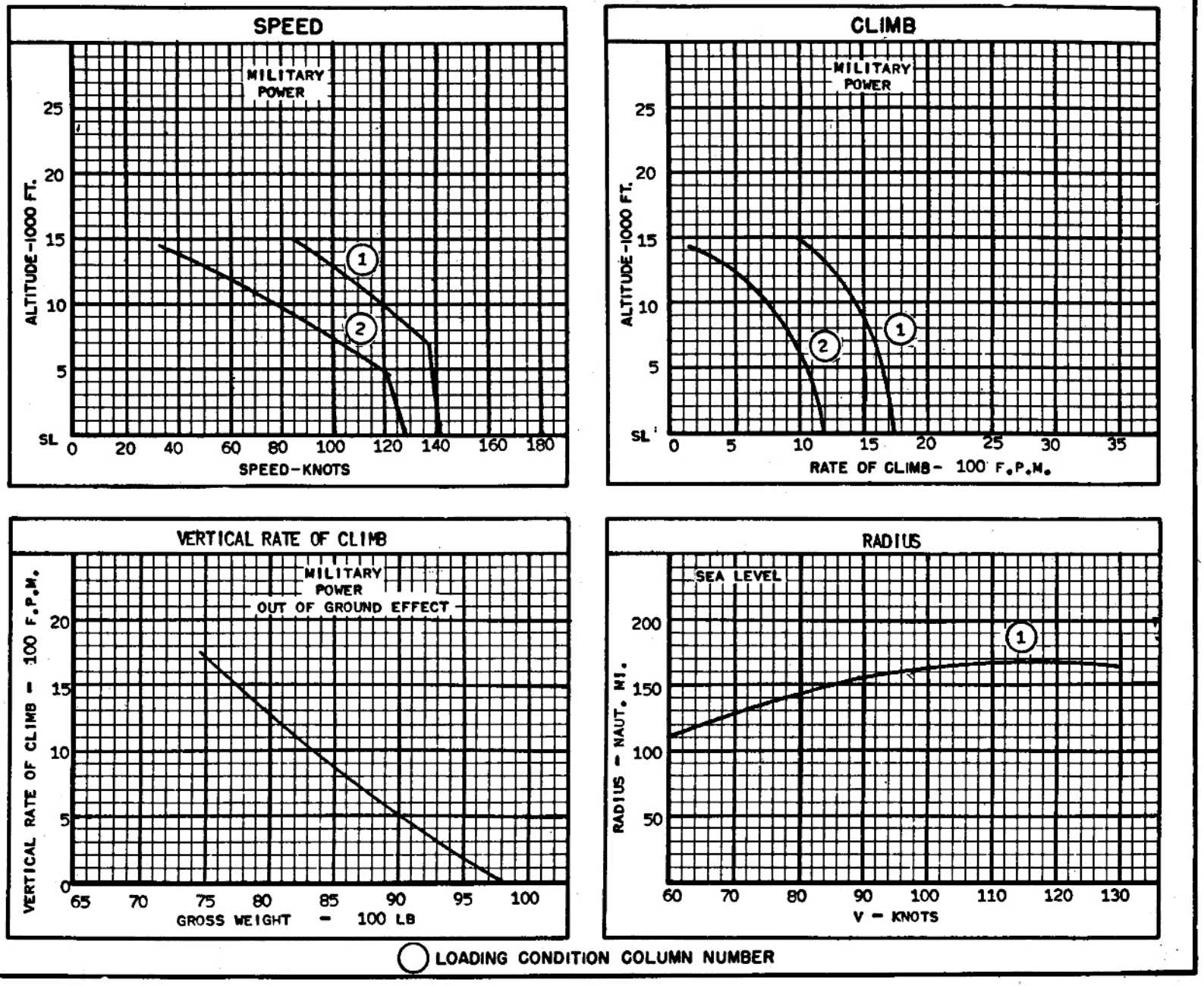
PERFORMANCE BASIS: NATC FLIGHT TEST
RANGE & RADIUS BASED ON DEMO FUEL FLOWS

MAXIMUM ENDURANCE

WARM-UP AND TAKE-OFF: 3 MINS AT SEA LEVEL AT NORMAL RATED POWER
CRUISE: AT SPEED FOR MAXIMUM ENDURANCE AT SEA LEVEL
RESERVE: 10% INITIAL FUEL LOAD

RADIUS

WARM-UP AND TAKE OFF: 7 MINUTES AT SEA LEVEL AT NORMAL RATED POWER.
CRUISE OUT: AT NOT LESS THAN 125 KTS AT SEA LEVEL AT NOT MORE THAN 95% NORMAL POWER
HOVER: AT OBJECTIVE PICK UP 800 POUNDS PAYLOAD (NO FUEL CONSUMED ALLOWED FOR AT TAKE-OFF)
CRUISE BACK: AT NOT LESS THAN 125 KTS AT SEA LEVEL AT NOT MORE THAN 95% NORMAL RATED POWER
RESERVE: 10% INITIAL FUEL LOAD



NOTES

FERRY RANGE

WARM-UP and TAKE-OFF: 5 mins at normal rated power at sea level.
CRUISE: At speed for maximum range at sea level.
RESERVE: 10% initial fuel load.

PLANE GUARD ENDURANCE

WARM-UP and TAKE-OFF: 3 mins at normal rated power at sea level.
CRUISE: At 30 kts at sea level
RESERVE: 10% initial fuel load.

Mission Time: Exclude Warmup, Take-off and Reserve Loiter Time
Cycle Time: Excludes Warmup and Take-off Time

(1) LOADING CONDITION COLUMN NUMBER