



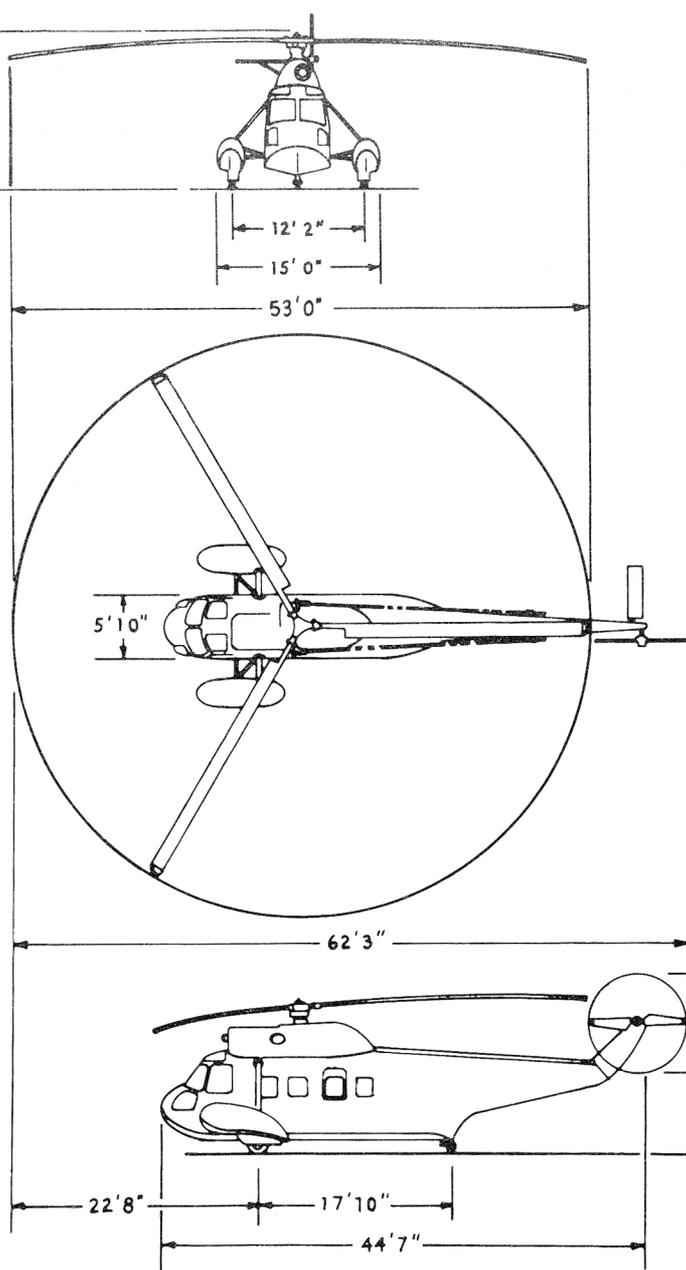
STANDARD AIRCRAFT CHARACTERISTICS S-62A/HH-52A

Revised Page 5 - Speed Curve Revised 12/13/61

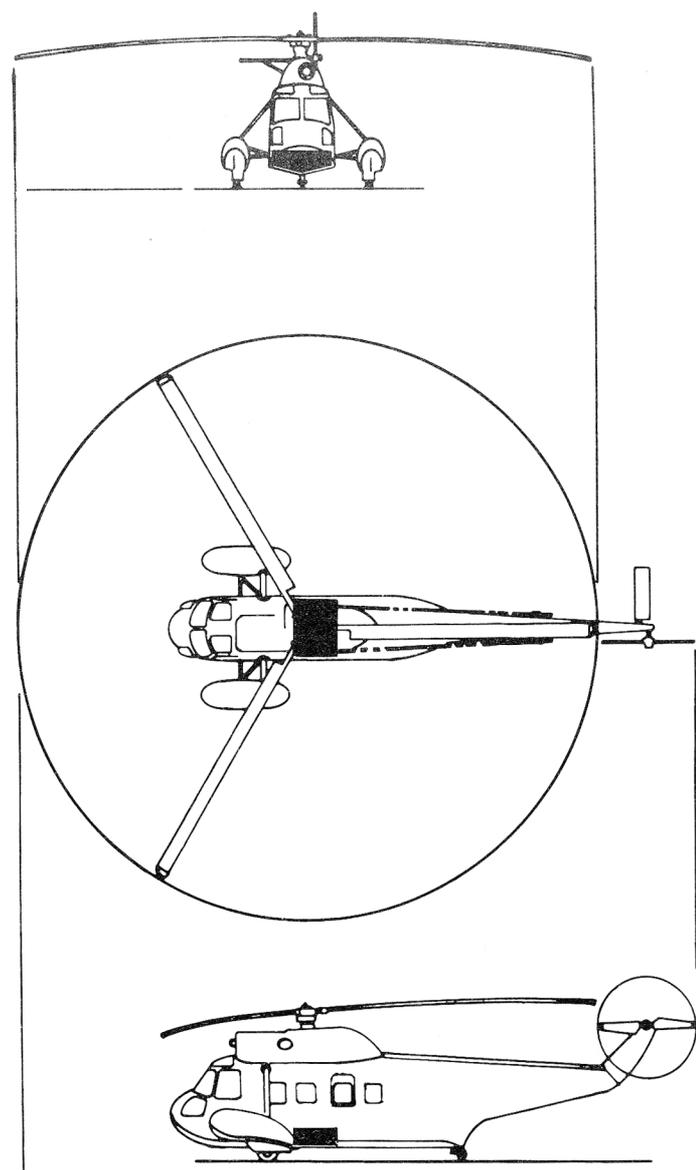
Standard Aircraft Characteristics NAVAER 1335A (REV. 1-55)

17 November 1961

Standard Aircraft Characteristics NAVALER 1335B (Rev. 1-55)



GENERAL ARRANGEMENT • S/62



TANKAGE ARRANGEMENT • S/62

POWER PLANT

No. and Model: (1) CT58-110-1
 Manufacturer: General Electric.
 Engine
 Spec. No.: E1038B (NOV 17, 1961)
 Type: Axial
 Weight (dry): 299 lb.
 Length: 55 inches
 Diameter: 16 inches

RATINGS

S.L. STATIC	SHP	RPM	MIN.
*MAX.	745	19000	Cont.
**MAX.	730	19000	5

*AT AMBIENT TEMP OF 104°F.
 **AT AMBIENT TEMP. OF 130°F.
 †DERATED BY FUEL CONTROL

(See Note 1, Performance Summary page).

ORDNANCE

NONE REQUIRED

MISSION AND DESCRIPTION

The primary mission shall be visual observation/reconnaissance. Basically designed for utility tasks, the helicopter is readily convertible for varying military uses such as casualty evacuation, rescue, and liaison. The commercial version (S-62A) has been certificated.

It is suitable for operation from LPH and CVS class carriers as well as established airfields, advance bases, and from the water.

This helicopter is of the all metal, single main rotor type with one anti-torque tail rotor. The main blades are manually foldable. The single turbine engine powered omniphibious helicopter has a flying boat type hull and retractable main landing gear. A large door provides convenient entrance and loading of equipment into the cabin. Access to the cockpit is attainable directly from the cabin. The aircraft is capable of operation by a crew of one pilot, although conventional helicopter controls are provided for pilot and co-pilot. The mechanical flight controls are augmented by a primary and secondary hydraulic servo system. An automatic stabilization device (STABE-AID) is also provided. Major dynamic components such as main rotor blades, rotor hub and upper half of transmission, tail rotor and drive assembly, and the primary flight control system, are the same as those used in the HRS (S-55) helicopter.

DIMENSIONS

Main Rotor Dia. .53'-0"
 Length (blades
 stowed)44'-6.5"
 Height (static) .14'-2.4"
 Width (blades
 stowed)15'-0"
 Tread12'-2"
 Disc Area, main .2206 sq. ft.
 Blade Area,
 main32.5 sq. ft.
 No. of Blades,
 main3

WEIGHTS

LOADING	POUNDS	L.F.
Empty	(e) 5379	
Basic	5392	
Design	7000	3.0
Combat	*6760	
Take-off	6996	
Max. Take-off	**8300	2.53
Max. Landing	**8300	2.53

(e) estimated

*as defined in MIL-C-5011A

**demonstrated in Navy evaluations.

FUEL AND OIL

LOCATION	NO. TANKS	GAL.
Fuselage	1	187
Self-Sealing	None	
Specification	MIL-J-5161E, 5624D	
Grade	JF-4	
	OIL	
Eng. Compt.	1	2.5
Specification	MIL-L-7808C MIL-L-25336	
Grade	Turbo oil 15	

ELECTRONICS

AN/ARC-52 Radio Set UHF
 AN/ARC-44 Radio Set VHF
 AIC-14 Interphone System
 AN/ARN-59 ADF
 COLLINS 618T2 Radio

PERFORMANCE SUMMARY					
TAKE-OFF LOADING CONDITION		OBSERVATION MISSION			
TAKE-OFF WEIGHT	lb.	6996			
Fuel	lb.	589			
Payload	lb.	800			
Disc loading	lb./sq.ft.	3.17			
Vertical rate of climb at S.L.	(B) fpm.	940			
Absolute hovering ceiling	(B) ft.	15700			
Max. rate of climb at S.L.	(A) fpm.	1480			
Service ceiling (100 fpm)	(A) ft.	15900			
Speed at S.L.	(A) kn.	95			
Max. speed/altitude	(A) kn./ft.	95/S.L.			
Combat range	n.mi.	-----			
Average cruising speed	kn.	-----			
Cruising altitude	ft.	-----			
Combat radius	n.mi.	50			
Average cruising speed	kn.	90			
Total radius mission time	hrs.	1.11			

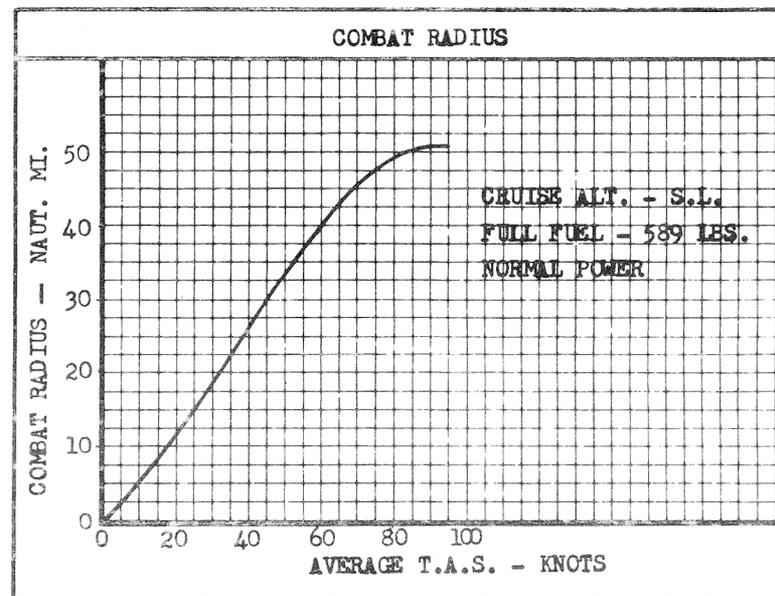
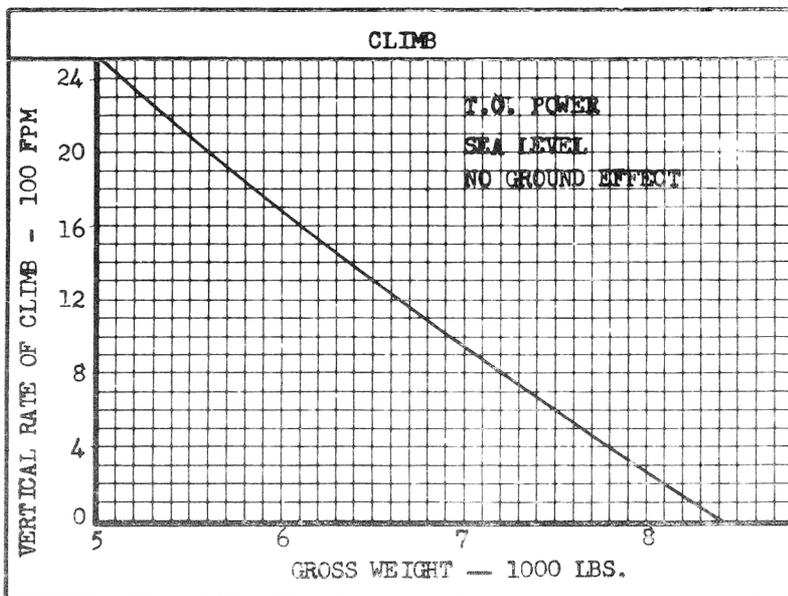
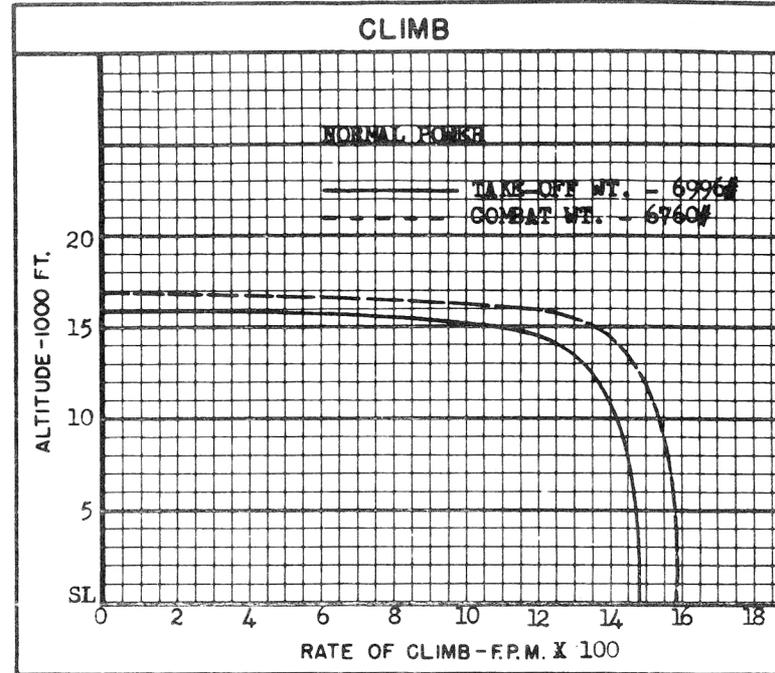
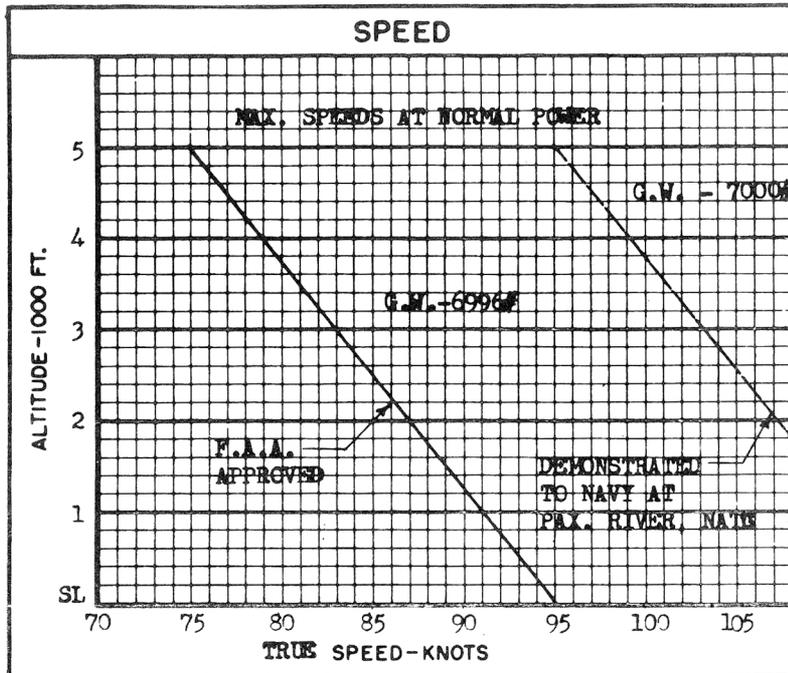
NOTES

- (A) Normal power
 (B) Take-off power

(1) Powers used in the above data differ from manufacturer's ratings as shown:

	<u>SHP</u>	<u>RPM</u>	<u>MINUTES</u>	<u>CRITICAL ALTITUDE</u>
(A) Normal power	670*	18200	Continuous	23,000 ft.
(B) Take-off power	730*	18970	5	20,400 ft.

*Transmission restriction



○ LOADING CONDITION COLUMN NUMBER

Standard Aircraft Characteristics NAVAL 1335E (Rev. 1-55)

NOTES

(A) Performance Basis:

- (1) ICAO standard conditions, no wind, single aircraft.
- (2) Calculated data substantiated by flight tests on S-62A helicopter.
- (3) Radius based on General Electric Spec. No. E-1025A (April, 1961) fuel consumption data using fuel grade JP-4.
- (4) Fuel consumption data are increased 5% above General Electric Spec. values.

(B) Flight Plan is as follows:

50 Na. Mi. Radius Mission

Warm-up and take-off at normal power at sea level. Cruise out at recommended cruise speeds to remote base and land. Without refueling, warm-up and take-off at sea level and return to home base at recommended cruise speeds. Range free allowance: 7 minutes at normal power for warm-up and take-off and 10% of initial fuel for reserve.

(C) Data do not include ground effect.

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Standard Aircraft Characteristics NAVAER 1935F (REV. 1-49)