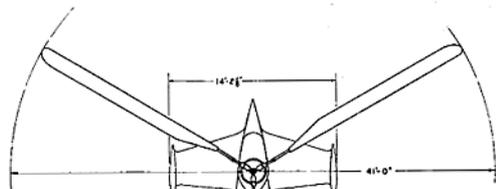


STANDARD AIRCRAFT CHARACTERISTICS
HRP-2 "RESCUER"

PIASECKI

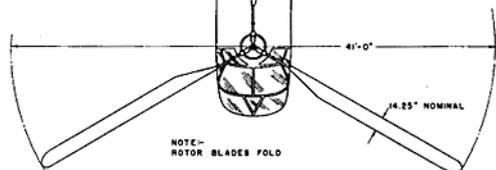
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NAVY DEPARTMENT



DISC AREA-2640 SQ. FT. (TOTAL)
BLADE AREA-135 SQ. FT. (TOTAL)

BLADES
AIRFOIL SECT BASIC OO-SERIES
CHORD (33.8 TO 45.5 SPAN) NACA 0017.5
CHORD (42 TO 71.5 SPAN) NACA 0012.5
CHORD (71.5 SPAN TO TIP) NACA 0012.0

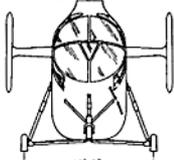
GEAR RATIO 8.05 TO 1



NOTE-
ROTOR BLADES FOLD

41'-0" ROTORS OPERATING

35'-8" ROTORS OPERATING

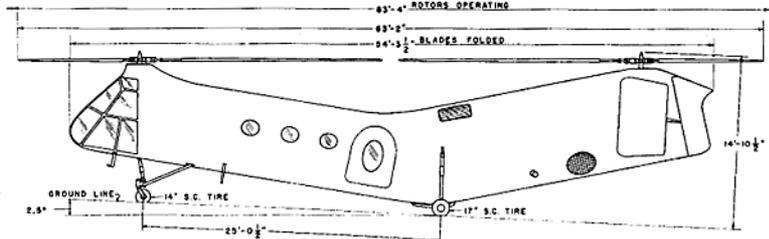


0 5 10 FT
SCALE

11'-2" ROTORS OPERATING

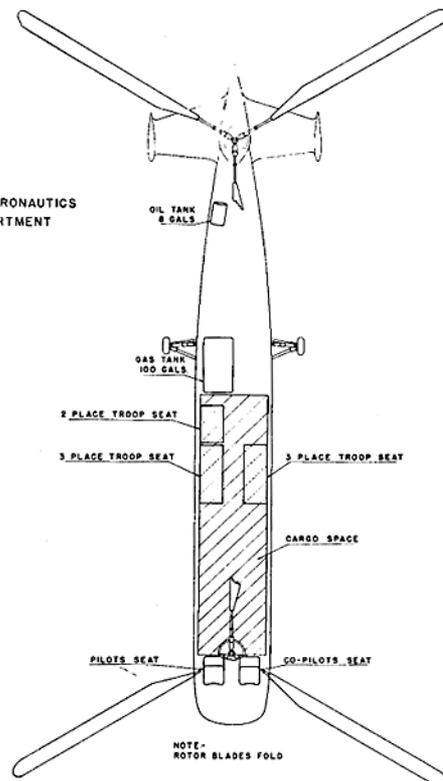
63'-2" ROTORS OPERATING

54'-3 1/2" BLADES FOLDED

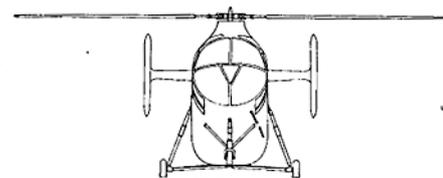


DESCRIPTIVE ARRANGEMENT

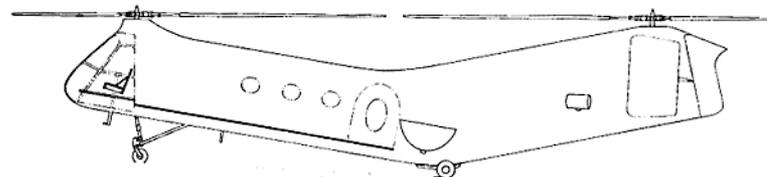
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NAVY DEPARTMENT



NOTE-
ROTOR BLADES FOLD



0 5 10 FT
SCALE



TANK INSTALLATION

Standard Aircraft Characteristics: HRP-2 (REV. 1-29)

MISSION AND DESCRIPTION

The HRP-2 helicopter is designed to perform cargo and passenger carrying missions. Rescue missions may be performed over water or inaccessible landing areas by means of a rescue hoist. Conversion to a transport for wounded personnel can be effected by the installation of six litters.

Dual controls are fitted. Folding seats for eight passengers are installed in the cargo compartment.

Improved performance over the HRP-1 is obtained by cleaner all metal fuselage design.

Mock-up date -- 29 March 1949

First flight -- production helicopter --
December 1949

Entered service -- 1 August 1950

DIMENSIONS

DISC AREA.....2,640 sq. ft.
ROTOR DIA.....41' - 0"
LENGTH.....83' - 4"
HEIGHT.....14' - 11"
TREAD.....11' - 2"
BLADE AREA.....135 sq. ft.

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	5,205.....	
BASIC.....	5,313.....	
DESIGN.....	6,978.....	2.75
MAX.T.O.....	7,500.....	2.5
DESIGN LAND...6,978.....		
MAX.LAND.....	7,500.....	

All weights are actual.

FUEL AND OIL

Gal.	No. Tanks	Location
100	1	Fuselage
FUEL GRADE.....91/98		
FUEL SPEC....MIL-F-5572		

OIL

CAPACITY (Gals.).....8
GRADE.....1100/1120
SPEC.....MIL-O-6082

ELECTRONICS

VHF TRANSCEIVER.....AN/ARC-1
RANGE RECEIVER.....AN/ARC-5

POWER PLANT

NO. & MODEL....(1) R-1340-AN-1
MFR.....Pratt and Whitney
SUPERCH.....1 Stage, 1 Speed
ROTOR GEAR RATIO.....0.111

RATINGS

	Bhp @	Rpm @	Alt.
T. O.	600	2,250	S.L.- 3,000'
NORMAL	550	2,200	5,000'

SPEC. NO. AN-1051

ACCOMMODATIONS

CREW.....2
PASSENGERS.....8
LITTERS.....6
HOIST CAPACITY.....400 lbs.
FLOOR AREA
 Restr. (Fwd.) 39.4 sq. ft.
 Cargo (Aft) 46.6 sq. ft.
 Total 86.0 sq. ft.
MAXIMUM FLOOR LOAD
 Restr. (Fwd.) 40 #/sq. ft.
 Cargo (Aft) 80 #/sq. ft.
DOOR SIZE.....5'-2" x 3'-10"



PERFORMANCE SUMMARY

LOADING CONDITION		(1) CARGO TRANSPORT	(2) PERSONNEL TRANSPORT	(3) CARGO PERSONNEL TRANSPORT
TAKE-OFF WEIGHT	lbs.	7,139	7,139	7,418
Fuel	lbs.	600	600	360
Pay Load	lbs.	766	800	1,300
Engine Power (Normal Rated)	bhp/rpm.	550/2,200	550/2,200	550/2,200
Disc Loading	lbs./sq.ft.	2.7	2.7	2.8
Power Loading	(A) lbs./bhp.	13.0	13.0	13.5
Maximum Speed-S.L.	(B) kn.	87	87	85
Maximum Speed/Alt.	(B) kn./ft.	90/5,000	90/5,000	88/5,000
Rate of Climb--S.L.	(B) ft./min.	780	780	660
Speed for Rate of Climb--S.L.	(B) kn.	47	47	47
Time-to-Climb 5,000 ft.	(B) min.	6.7	6.7	8.4
Time-to-Climb 10,000 ft.	(B) min.	23.9	23.9	--
Service Ceiling	(B) ft.	9,800	9,800	8,800
Vertical Rate of Climb--S.L. (B/C)	ft./min.	40/360	40/360	--/140
Abs. Hover Ceil. No Grd. Effect (B/C)	ft.	1,300/4,600	1,300/4,600	--/3,300
Abs. Hover Ceil. In Grd. Effect (B/C)	ft.	5,800/6,000	5,800/6,000	2,900/4,800
Combat Range/Vav 1,500 ft.	n.mi./kn.	120/66	120/66	65/72
Max. Endur./Vav 1,500 ft.	hr./kn.	2.2/46	2.2/46	1.1/47

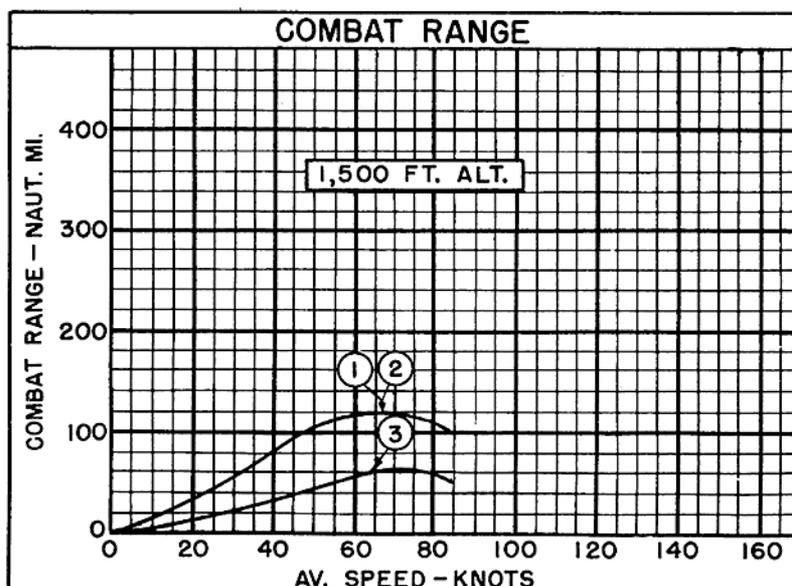
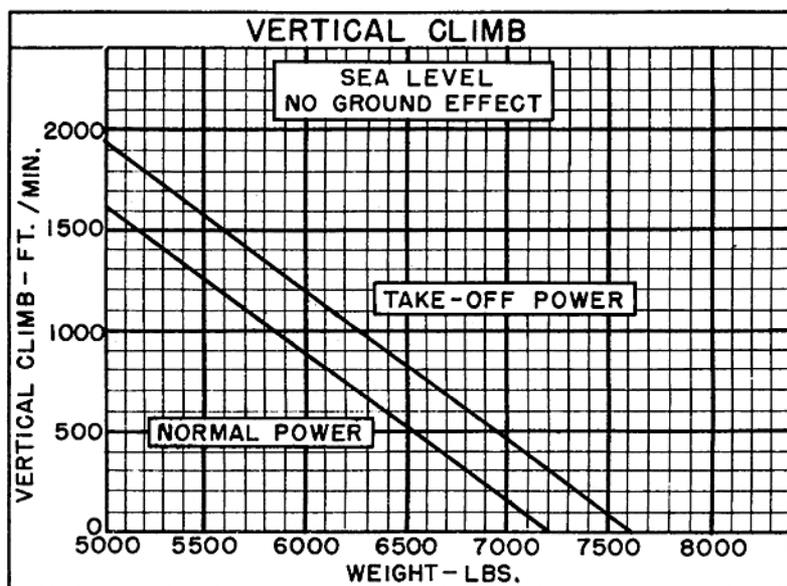
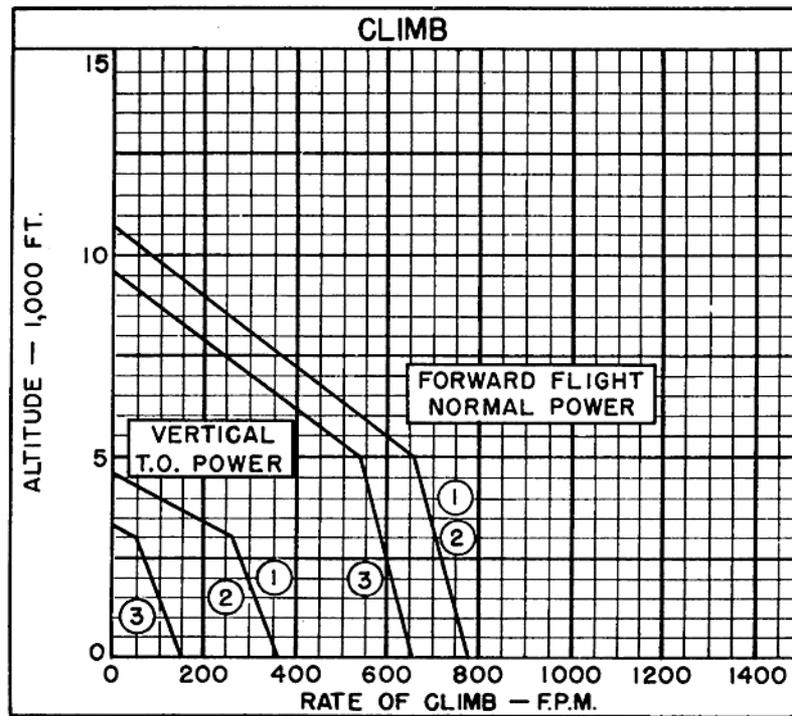
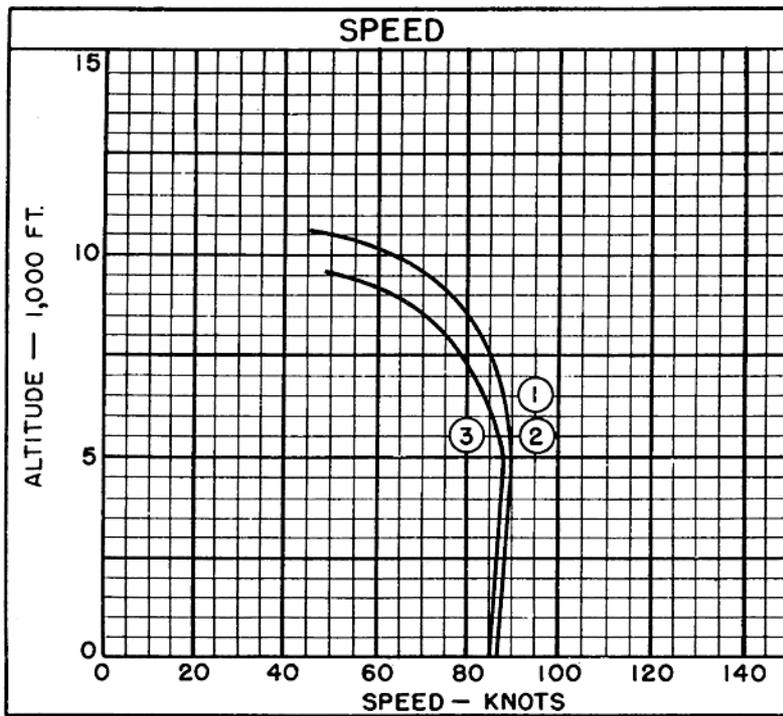
NOTES

- (A) BHP at Maximum Critical Altitude
 (B) Normal BHP
 (C) Take-Off Power

Performance is based on flight test of XHRP-1, HRP-1, and HRP-2 helicopters.

Combat range and maximum endurance are based on 2,000 RPM, full rich mixture, and flight test fuel consumption data increased by 5%.

Performance in ground effect is based on the assumption that height of rotor discs is equivalent radius above ground. (Equivalent radius = 29.0 feet for HRP-2).



○ LOADING CONDITION COLUMN NUMBER

Standard Aircraft Characteristics NAVAER 1335E (REV. 2-50)