

**AIRPLANE CHARACTERISTICS & PERFORMANCE**

BUREAU OF AERONAUTICS, NAVY DEPT.

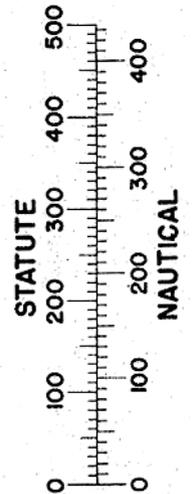
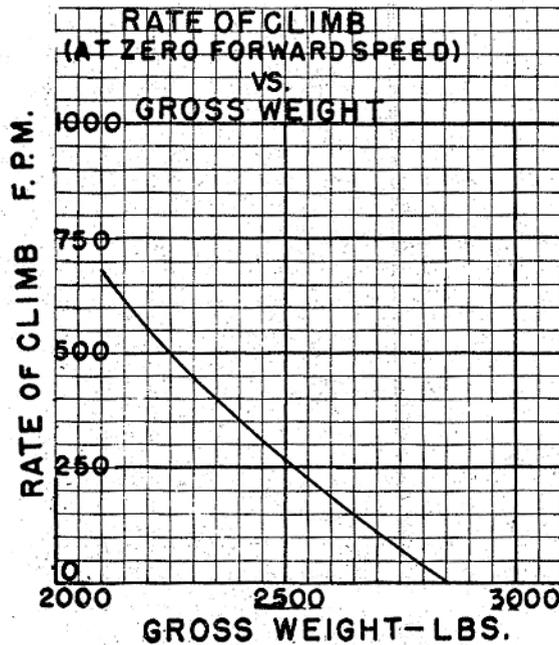
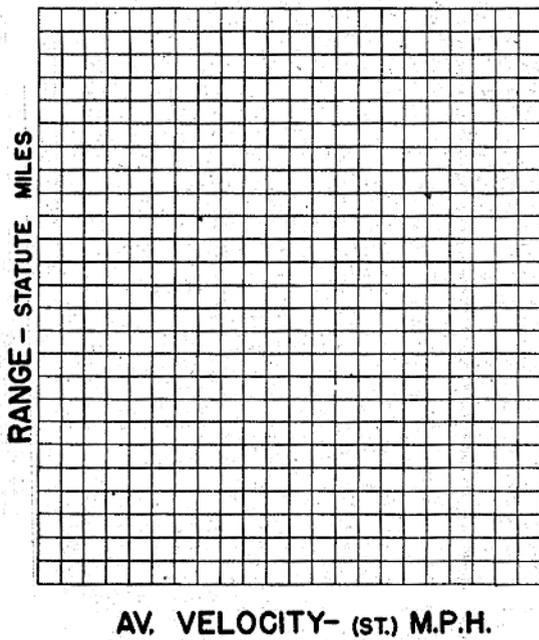
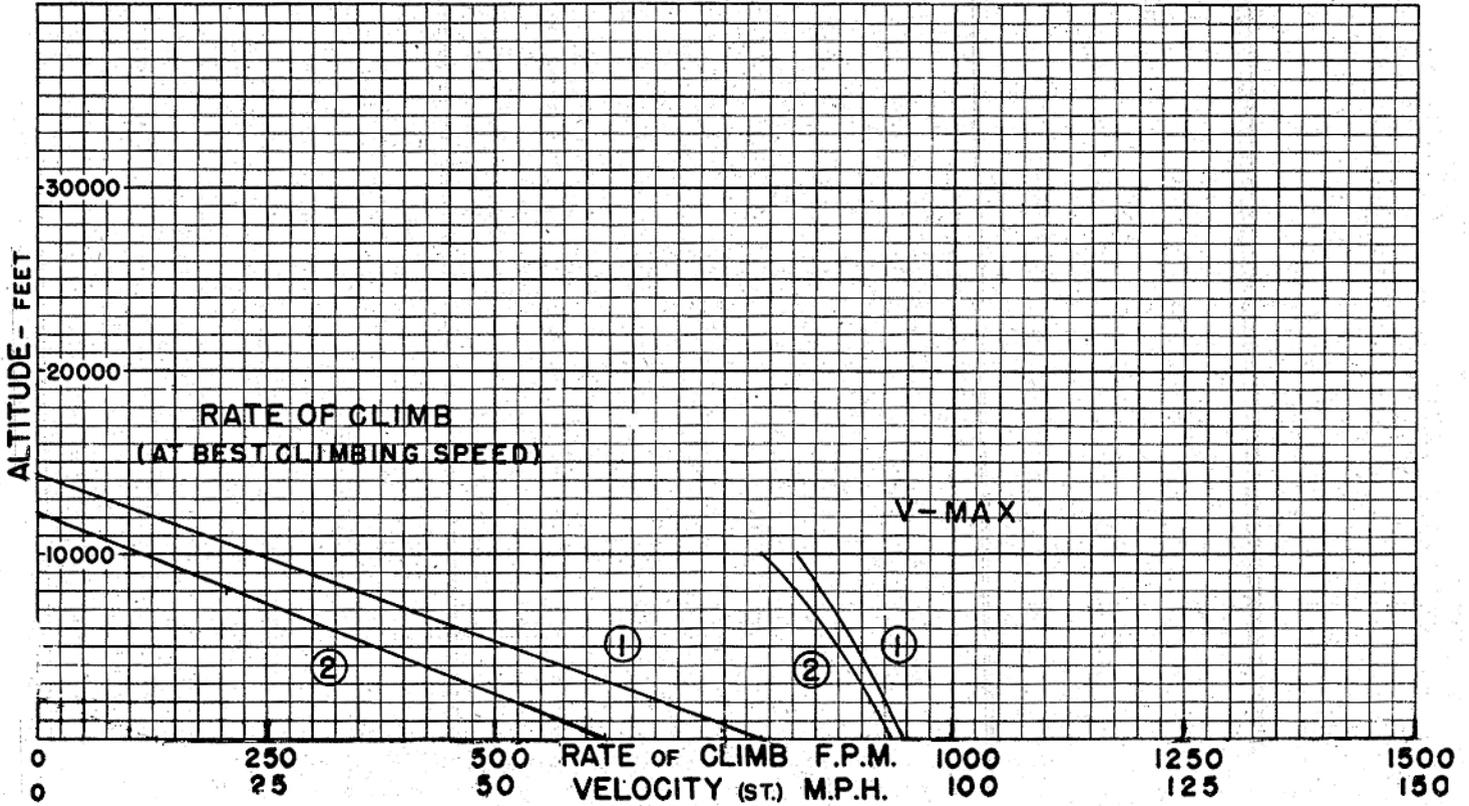
COLUMN NUMBER		1	2		
LOADING CONDITION		UTILITY	UTILITY		
GROSS WEIGHT	LBS.	2623	2904		
EMPTY WEIGHT	-ACTUAL- LBS.	2034			
FUEL/OIL	GALS.	20/4	67/4		
FIXED GUNS/AMMUNITION		None			
FLEXIBLE GUNS/AMMUNITION		None			
ENGINE POWER USED FOR PERFORMANCE		NORMAL	NORMAL		
DISC LOADING	LBS/SQ. FT.	2.31	2.56		
POWER LOADING	LBS/BHP.	11.16	12.36		
V-MAX. SEA LEVEL	MPH.	94	93		
MAX. RATE OF CLIMB S.L.-	FT/MIN.	780	620		
BEST CLIMBING SPEED -S.L.-	MPH.	46	48		
VERT. RATE OF CLIMB -S.L.-	FT/MIN.	155	-		
TIME-TO-CLIMB -5000 FT.-(2)	MIN.	7.9	10.4		
TIME-TO-CLIMB -10000 FT.-(2)	MIN.	22.0	33.9		
SERVICE CEILING	FT.	12400	10200		
ABS. HOVERING CEILING	FT.	2100			
MAX. RANGE / V-AV (3)	ST. MI./MPH.	74/90	245/90		
MAX. ENDURANCE/V-AVE. (5)	HRS/MPH.	1.8/47	3.5/47		

**NOTE:**

All performance figures are based on standard atmospheric conditions with no wind. S.L. data do not include ground effect. All performance, particularly hovering and climb, are adversely affected by increased temperature and relative humidity. Hovering and climb performance are improved by ground effect (at altitudes less than one rotor diameter above the ground) Hovering and climb performance are also materially improved by light horizontal winds of the order of 5-10 mph.

ENGINE/ROTOR GEAR RATIO		FRANKLIN 0-405-9 (.0772)	
ENGINE RATING BHP/RPM/ALT.	NORMAL	TAKE-OFF	
	235/3275/S.L.	235/3275/S.L.	
Ratings are net ratings after deducting cooling fan power losses			

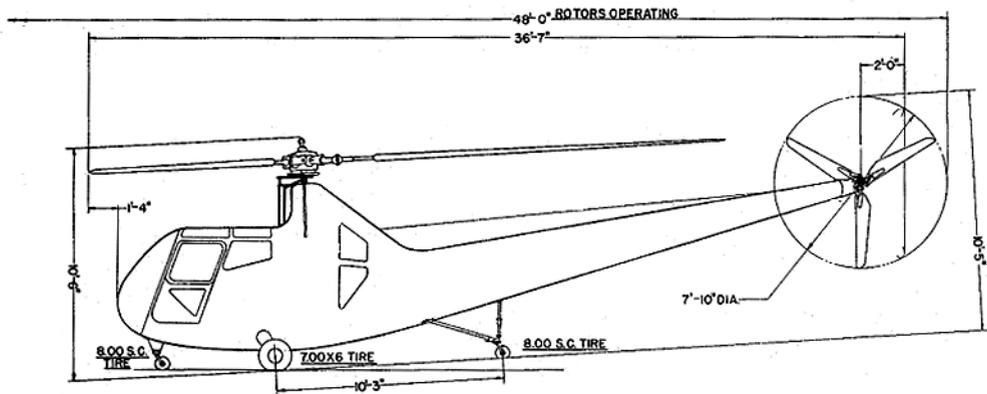
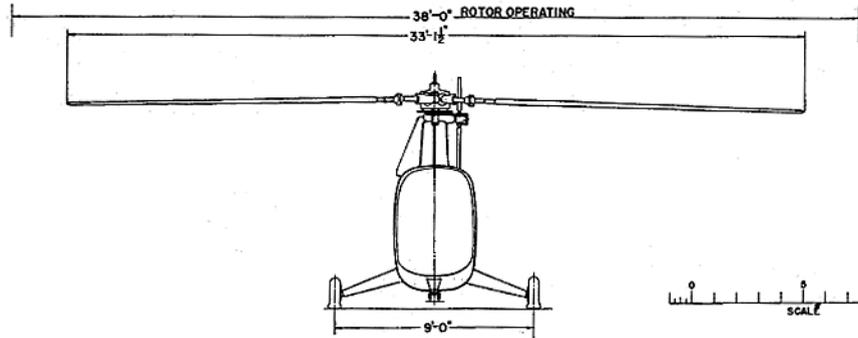
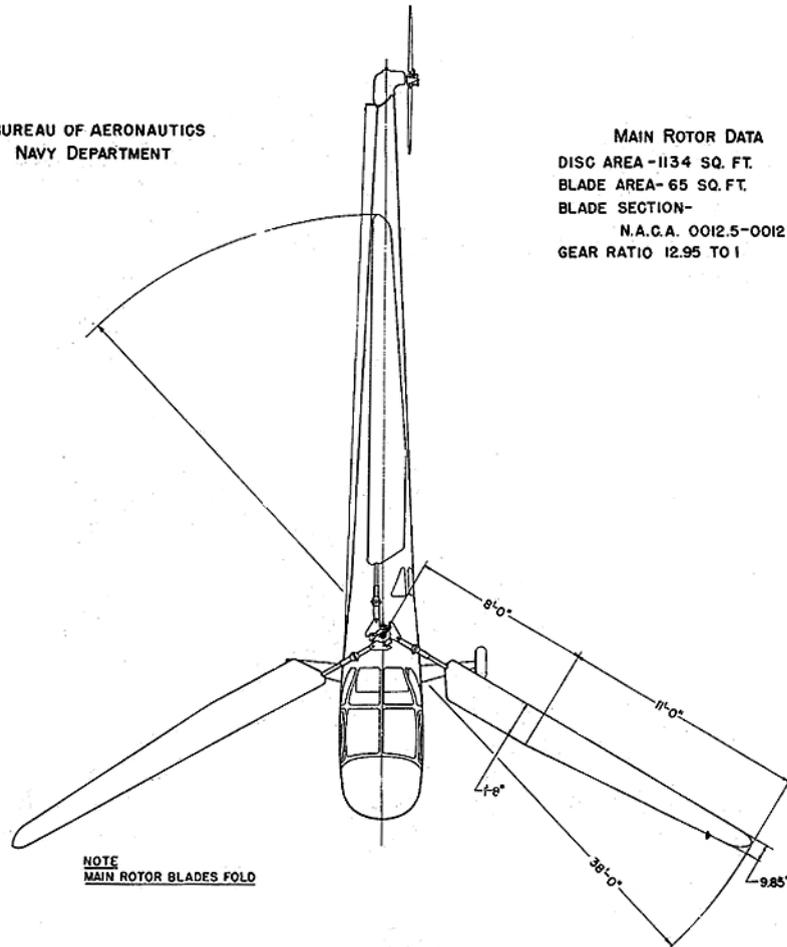
TANKAGE IN GALLONS		OIL	FUEL	
FIXED	PROTECTED			
	UNPROTECTED	4	67	WEIGHT EMPTY- Includes 56 lbs. of communicating equipment.
TOTAL - FIXED INTERNAL	4	67		
AUX.	DROPPABLE			USEFUL LOAD- Includes crew of two, pyrotechnics, trapped fuel and oil, and fuel and oil.
	DROPPABLE			
TOTAL	4	67	Performance is based on Calculations, Range and Endurance are based on engine requirement fuel consumption data increased by 15% to conform with past experience.	
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS GIVEN IN NAUTICAL MILES & KNOTS			
	① BHP AT MAX. CRIT. ALT.			
	② AT MAX R/C			
③ AT 1500 FT. ALTITUDE				



○ LOADING CONDITION COLUMN NUMBER

BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

MAIN ROTOR DATA  
DISC AREA - 1134 SQ. FT.  
BLADE AREA - 65 SQ. FT.  
BLADE SECTION -  
N.A.C.A. 0012.5-0012  
GEAR RATIO 12.95 TO 1



MODEL HOS-1