

**AIRPLANE CHARACTERISTICS & PERFORMANCE**

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		1	2	3	4
LOADING CONDITION		PATROL	PATROL	BOMBER	BOMBER
		215 gallon B. B. Tank	215 gallon B. B. Tank	12-100# 215 gallon B. B. Tank	6-500#
GROSS WEIGHT	LBS.	33728	33728	34990	35106
EMPTY WEIGHT - Actual -	LBS.	20216			
FUEL/OIL	GALS.	1189/66	1189/66	1189/66	974/54
FIXED GUNS/AMMUNITION		1-75mm-21 rds.; 8-.50 cal./3200 rds.			
FLEXIBLE GUNS/AMMUNITION		6 - .50 cal. /2600 rds			
ENGINE POWER USED FOR PERFORMANCE		MILITARY	NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.	55.3	55.3	57.4	57.5
POWER LOADING ①	LBS./BHP.	11.6	12.5	13.0	13.0
V-MAX. SEA LEVEL	MPH.	265	253	251	251
V-MAX. AIRPLANE CRIT. ALT.	MPH.	275/12700	273/14400	270/14400	270/14400
V-STALL GROSS WEIGHT ②	MPH.		91.1	92.8	93.0
V-STALL WITHOUT FUEL ②	MPH.		80.8	82.8	84.9
TIME-TO-CLIMB -10000FT.-	MIN.	11.2	11.8	13.1	13.2
TIME-TO-CLIMB -20000FT.-	MIN.		19.0		
SERVICE CEILING	FT.	17160	20600	19900	19800
TAKE-OFF DISTANCE -CALM-	FT.		1358	1476	1495
TAKE-OFF DISTANCE -15 KN-	FT.		958	1050	1064
TAKE-OFF DISTANCE -25 KN-	FT.		722	802	813
TAKE-OFF TIME	SECONDS				
RATE OF CLIMB -SL-	FT./MIN.	1170	940	860	850
MAX RANGE/V-AV. ③	STMI/MPH.		2030/159	1950/162	1560/164
BOMBING RADIUS/V-AV -20%R-	NMI/KN.				
BOMBING RADIUS/V-AV -33%R-	NMI/KN.				
PATROL RADIUS/V-AV -20%R-	NMI/KN.				
PATROL RADIUS/V-AV -33%R-	NMI/KN.				
SEARCH RADIUS -20% R	NMI/KN		570/137	550/139	440/141
COMBAT RADIUS	N MI.				
ENGINE / PROP. GEAR RATIO		2 W. A. C. R-2600-13 or-29/16 to 9			
ENGINE RATING BHP/RPM/ALT.	MILITARY	NORMAL		TAKE-OFF	
	1700/2600/SL-3000	1500/2400/SL-5800		1700/2600	
	1450/2600/7800-12000	1350/2400/8900-13000			
TANKAGE IN GALLONS		OIL	FUEL	OFFENSIVE ARMAMENT	
AUX. FIXED	PROTECTED	76	974	FUSELAGE BOMB-BAY: (Internal)	
	UNPROTECTED			Bombs: 1-2000# 2-1600#	
	TOTAL - FIXED INTERNAL	76	974	3-1000#G. P. 6-500#	
	DROPPABLE Bomb Bay *		335	24-100# 8-250#	
	DROPPABLE Non-Self Sealing		585	3-650# 4-1000# A. P.	
	Bomb Bay Self Sealing (fixed)		215	Bombs With one 215 gal. B. B. tank*	
	TOTAL	76	1559	2-1000# 2-1600#	
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS GIVEN IN NAUTICAL MILES & KNOTS			4-500# 2-650#	
	① BHP AT MAX. CRIT. ALT.			4-325# 12-100#	
	② STALL-WITH POWER				
	③ AT 1500' ALTITUDE			Torpedo (External with BB doors open) 1-MK 13-2	

\* See page 2

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Practical search radius is 40% of range at V for maximum range at 1500 ft. with 20% of initial fuel load as allowance for warm-up, take-off, climb, and reserve. Bombs, torpedoes, radar and all droppable tanks are carried the entire distance. The radius is reduced 11 nautical miles for each minute of combat at 1500 ft. at military rated power.

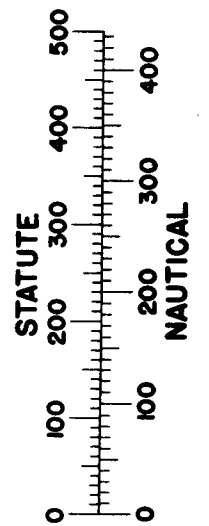
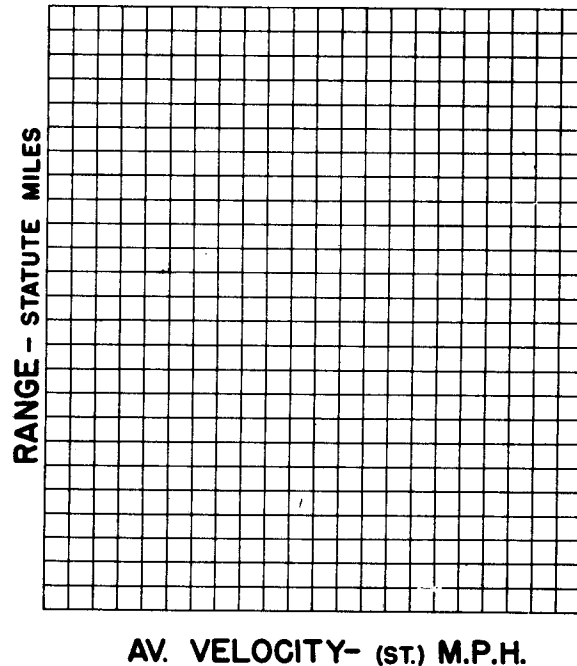
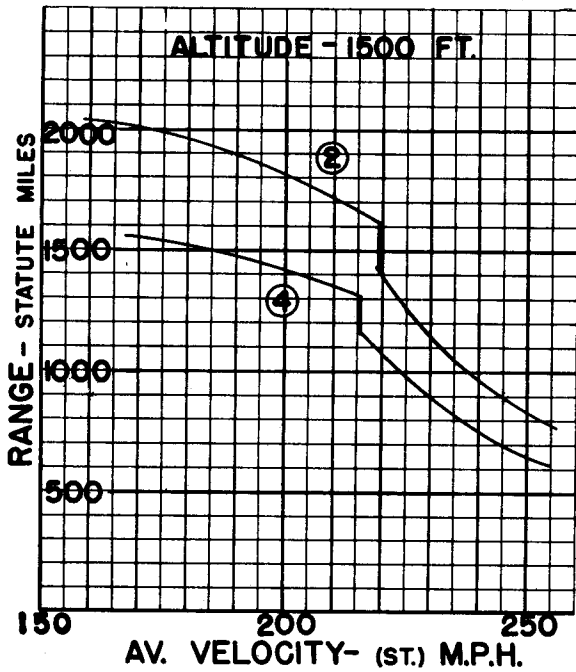
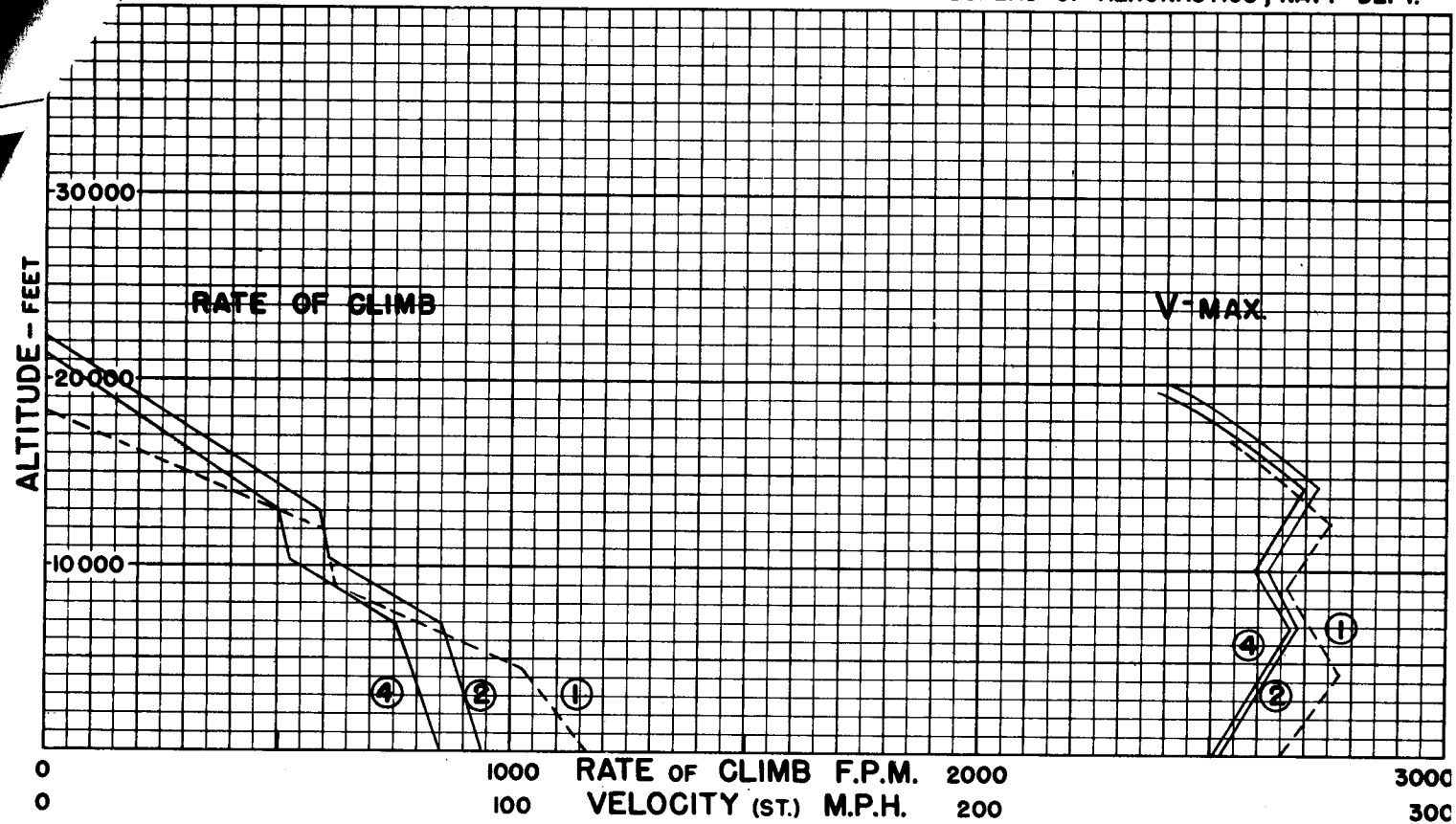
Engine ratings are AEL ratings. These do not conform with the engine data obtained in PBJ-1D flight tests. Flight test engine data are used in the performance calculations.

Performance is based on flight test. Range and radius are based on flight test fuel consumption data increased by 5 percent to conform with past experience.

Range for Ferry Condition:

Gross Weight -	31102 lbs.
Fuel/Oil -	1559/76
Max. Range/V-av. (1500') -	2850 mi./152 mph

- \*The following combinations of bombs and/or tanks are possible in the fuselage bomb-bay
1. One 585 gal. unprot. droppable tank and no bombs
  2. One 335 gal. unprot. droppable tank and no bombs
  3. One 335 gal. unprot. droppable tank and one 215 gal. protected (not droppable) tank.
  4. One 215 gal. protected (not droppable) tank and the bombs listed on page 1.

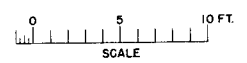
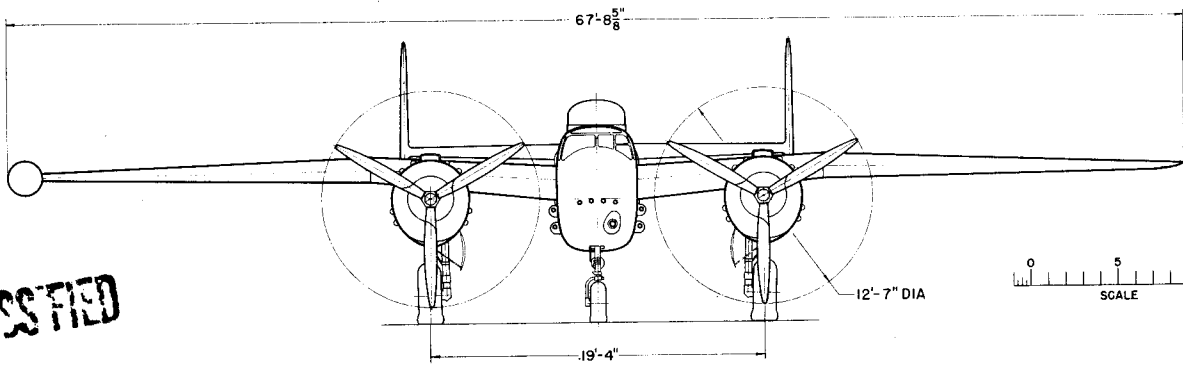
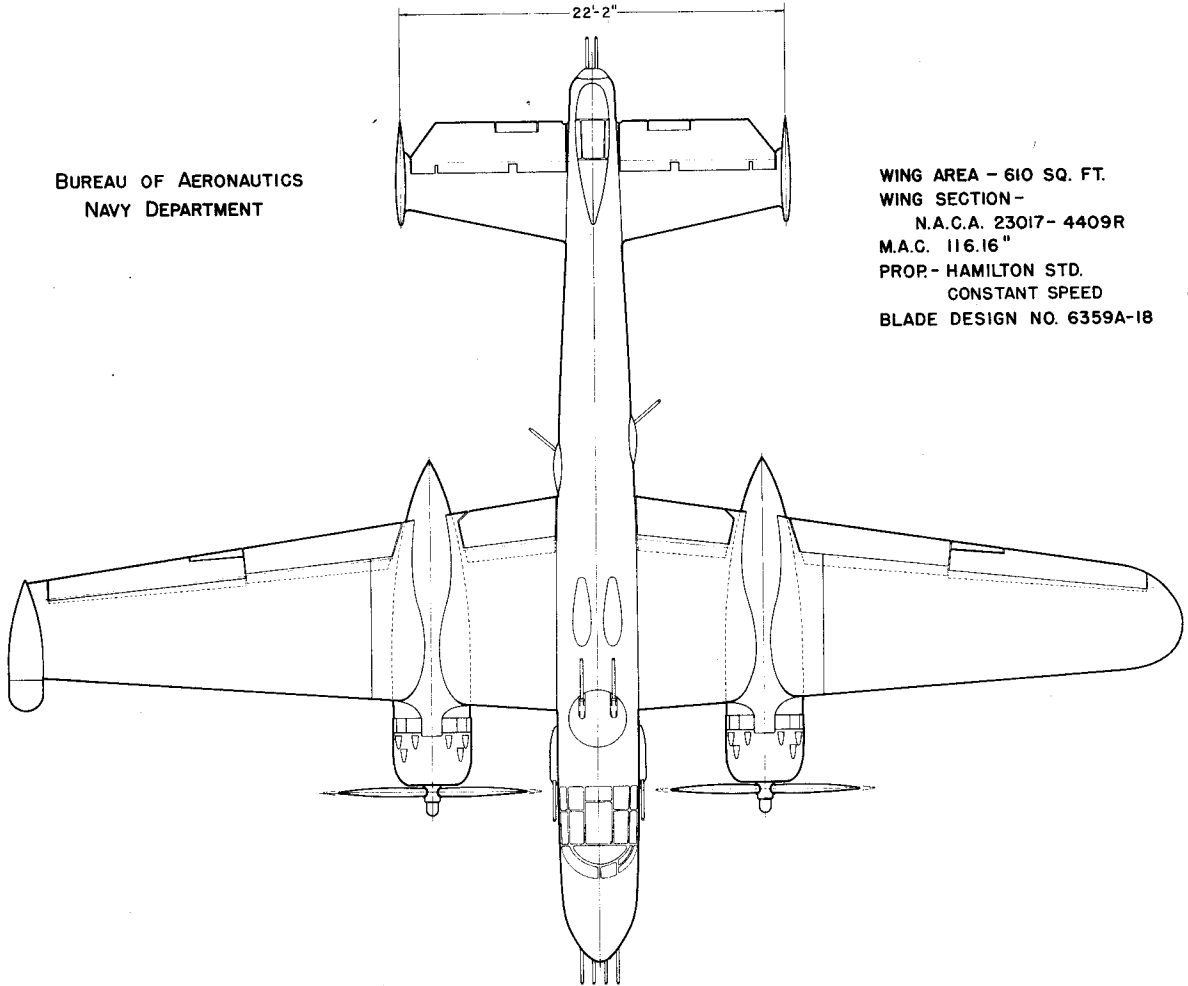


○ LOADING CONDITION COLUMN NUMBER

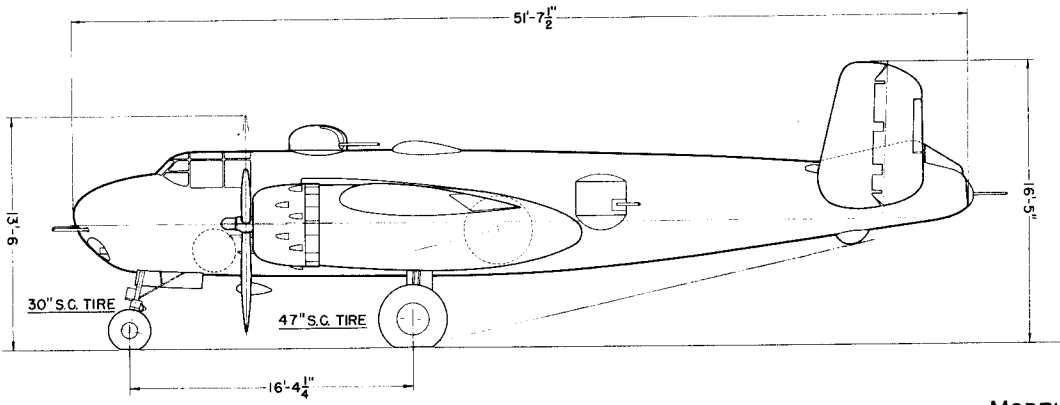
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BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

WING AREA - 610 SQ. FT.  
WING SECTION -  
N.A.C.A. 23017- 4409R  
M.A.C. 116.16"  
PROP. - HAMILTON STD.  
CONSTANT SPEED  
BLADE DESIGN NO. 6359A-18







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MODEL PBJ-1H

BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

-  ARMOR PLATE
-  DEFLECTION PLATE
-  SELF-SEALING TANKS
-  NON SELF-SEALING TANKS

- 1. PILOT FORWARD 294 LBS.
- 2. PILOT AFT 85 LBS.
- 3. CANNONEER 196 LBS.
- 4. TURRET 24 LBS.
- 5. SIDE WAIST 72 LBS.
- 6. TAIL TURRET 174 LBS.
- 7. SELF-SEALING CELLS 1321 LBS.

