

ISSUE OF 6 PAGES  
 AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS-NAVY DEPT.

COLUMN NUMBER		1	2	3	4
LOADING CONDITION		A.S. PATROL 6-325#	A.S. PATROL 6-325#	A.S. PATROL 6-325#	BOMBER 4-1000#
GROSS WEIGHT	LBS.	30700	30700	33000	33000
EMPTY WEIGHT	-Estimated- LBS.	21370			
FUEL/OIL	GALS.	655/36	655/36	1014/56	712/40
FIXED GUNS/AMMUNITION		5.50 cal./1250 rds.			
FLEXIBLE GUNS/AMMUNITION		4.50 cal./1300 rds.			
ENGINE POWER USED FOR PERFORMANCE		MILITARY	NORMAL	NORMAL	NORMAL
WING LOADING	LBS/SQ.FT.	44.9	44.9	48.2	48.2
POWER LOADING ①	LBS/BHP.	9.6	10.6	11.4	11.4
V-MAX. SEA LEVEL	MPH.	289	265	264	264
V-MAX. AIRPLANE CRIT. ALT.	MPH.	307/15200	293/14700	291/14700	291/14700
V-STALL. GROSS WEIGHT. ②	MPH.	81.4	81.4	84.4	84.4
V-STALL. WITHOUT FUEL ②	MPH.	76.0	76.0	76.2	78.7
TIME-TO-CLIMB -10000FT.-	MIN.	6.6	7.8	8.9	8.9
TIME-TO-CLIMB -20000FT.-	MIN.	16.5	20.6	25.5	25.5
SERVICE CEILING	FT.	26300	24700	23500	23500
TAKE-OFF DISTANCE -CALM-	FT.	1420	1420	1726	1726
TAKE-OFF DISTANCE -15 KN-	FT.	929	929	1147	1147
TAKE-OFF DISTANCE -25 KN-	FT.	658	658	825	825
RATE OF CLIMB -SL-	FT/MIN	1950	1390	1220	1220
MAX. RANGE /V-AV. ③	ST.MI/MPH.		1090/165	1650/165	1135/167
BOMBING RADIUS /V-AV.-20% R-	NMI/KN.				390/145
BOMBING RADIUS /V-AV.-33% R-	NMI/KN.				320/145
PATROL RADIUS /V-AV.-20% R-	NMI/KN.		250/143	380/143	
PATROL RADIUS /V-AV.-33% R-	NMI/KN.		205/144	310/144	
SCOUT. RADIUS	NMI.				
COMBAT RADIUS	NMI.				
ENGINE /PROP.GEAR RATIO		2 P&W R-2800-31 (16:9)			
ENGINE RATING BHP/RPM/ALT.		NORMAL 1600/2400/S.L. - 5700 1450/2400/9200-13000		MILITARY 2000/2700/S.L. - 1500 1600/2700/7400-13500	
		2000/2700/Take-off			
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS GIVEN IN NAUTICAL MILES & KNOTS ① BHP AT MAX.CRIT.ALT. ② STALL-WITH POWER ③ AT 1500' ALTITUDE				

	TANKAGE IN GALLONS	OIL	FUEL	OFFENSIVE ARMAMENT
FIXED	PROTECTED-See Note - p.2 -	40	1155	BOMB-BAY: (Internal)
	UNPROTECTED	78		Bombs: 4-1000# or 6-500#
	TOTAL-INCL PROT.	118	1155	Depth Bombs: 4-650# or 6-325#
	INCREASE-REMOVED PROTECTION	FIXED		Torpedo: 1-Mk.13-2 or Mk.13-1
AUX.	Bomb-Bay - Fixed - Unprot.		247	
	DROPPABLE - Wing - 2@150-		300	WINGS: (External)#
	DROPPABLE			Bombs: 2-1000# or 2-500#
	PROTECTED+UNPROTECTED+DROPPABLE		1702	Depth Bombs: 2-650# or 2-325#

REMARKS- Bombs cannot be carried in bomb-bay with droppable tank installed.

\* Two wing bomb-racks available for either bombs or droppable fuel tanks.

SUPERSEDES 1 DEC 1943

DATE-1 FEB 1944

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MODEL- PV-2

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS-NAVY DEPT.

COLUMN NUMBER	5	6	7	8
LOADING CONDITION	BOMBER 4-1000# Int. 2-1000# Ext.	BOMBER 6-500# Ext. 2-500# Int.	TORPEDO 1 Mk13-2	FERRY Two tanks External
GROSS WEIGHT LBS.	33000	33000	33000	33000
EMPTY WEIGHT <i>Estimated</i> LBS.	21370			20810
FUEL/OIL GALS.	392/22	693/38	1010/58	1628/90
FIXED GUNS/AMMUNITION	5-.50 cal./1250 rds.			None
FLEXIBLE GUNS/AMMUNITION	4-.50 cal./1300 rds.			None
ENGINE POWER USED FOR PERFORMANCE	NORMAL	NORMAL	NORMAL	NORMAL
WING LOADING LBS/SQ.FT.	48.2	48.2	48.2	48.2
POWER LOADING ① LBS/BHP.	11.4	11.4	11.4	11.4
V-MAX. SEA LEVEL MPH	249	255	264	251/
V-MAX. AIRPLANE CRIT. ALT. MPH	274/14700	281/14700	291/14700	277/14700
V-STALL. GROSS WEIGHT. ② MPH	84.4	84.4	84.4	84.4
V-STALL. WITHOUT FUEL ② MPH	81.3	78.9	76.3	70.8
TIME-TO-CLIMB -10000FT.- MIN.	9.3	9.1	8.9	9.2
TIME-TO-CLIMB -20000FT.- MIN.	26.9	26.9	25.5	26.3
SERVICE CEILING FT.	22800	23000	23500	23000
TAKE-OFF DISTANCE -CALM- FT.	1804	1776	1726	1796
TAKE-OFF DISTANCE -15 KN- FT.	1199	1180	1147	1194
TAKE-OFF DISTANCE -25 KN- FT.	862	849	825	858
RATE OF CLIMB -SL- FT/MIN	1180	1195	1220	1180
MAX. RANGE/V-AV. ③ ST.MI/MPH.	560/164	1060/164	1640/165	2595/160
BOMBING RADIUS/V-AV.-20% R- NMI/KN.	195/142	360/142	560/143	
BOMBING RADIUS/V-AV.-33% R- NMI/KN.	160/143	300/143	465/144	
PATROL RADIUS/V-AV.-20% R- NMI/KN.				
PATROL RADIUS/V-AV.-33% R- NMI/KN.				
SCOUT. RADIUS NMI.				
COMBAT RADIUS NMI.				

PERFORMANCE IS BASED ON- FLIGHT TEST (PROTOTYPE)

RANGE & RADIUS ARE BASED ON ENGINE REQUIREMENT FUEL CONSUMPTION DATA INCREASED BY 15 PERCENT TO CONFORM WITH PAST EXPERIENCE.

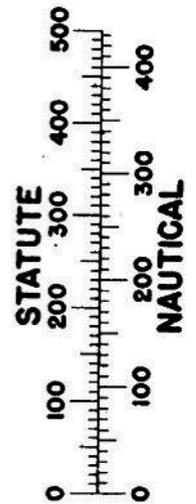
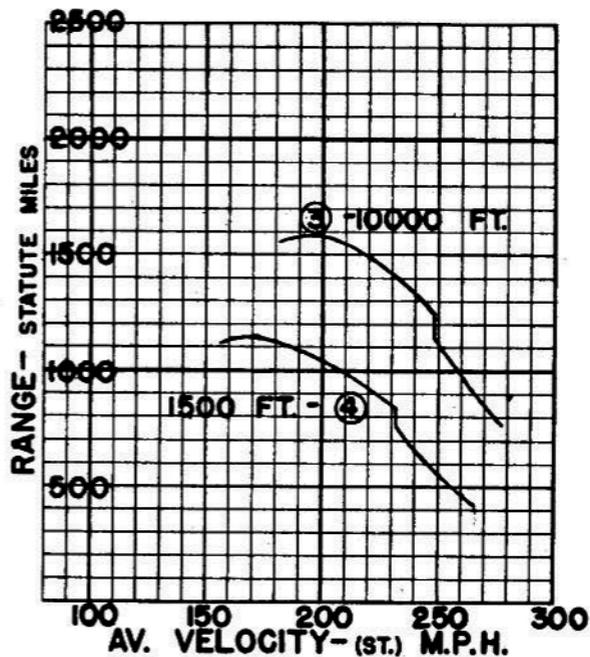
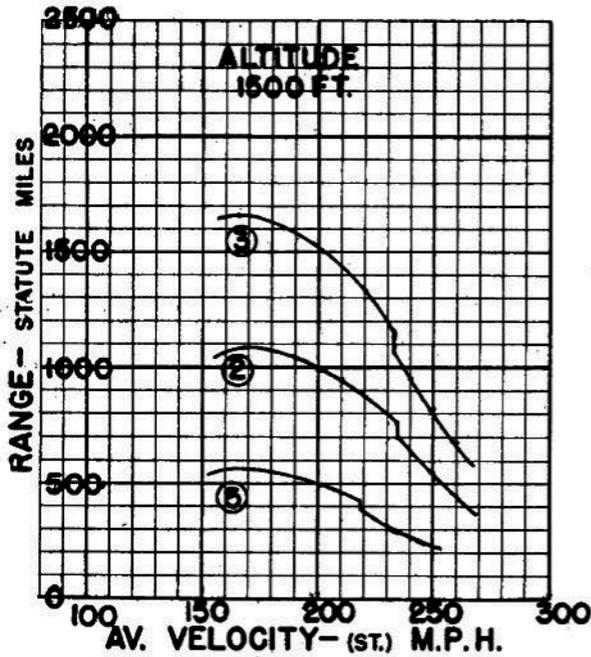
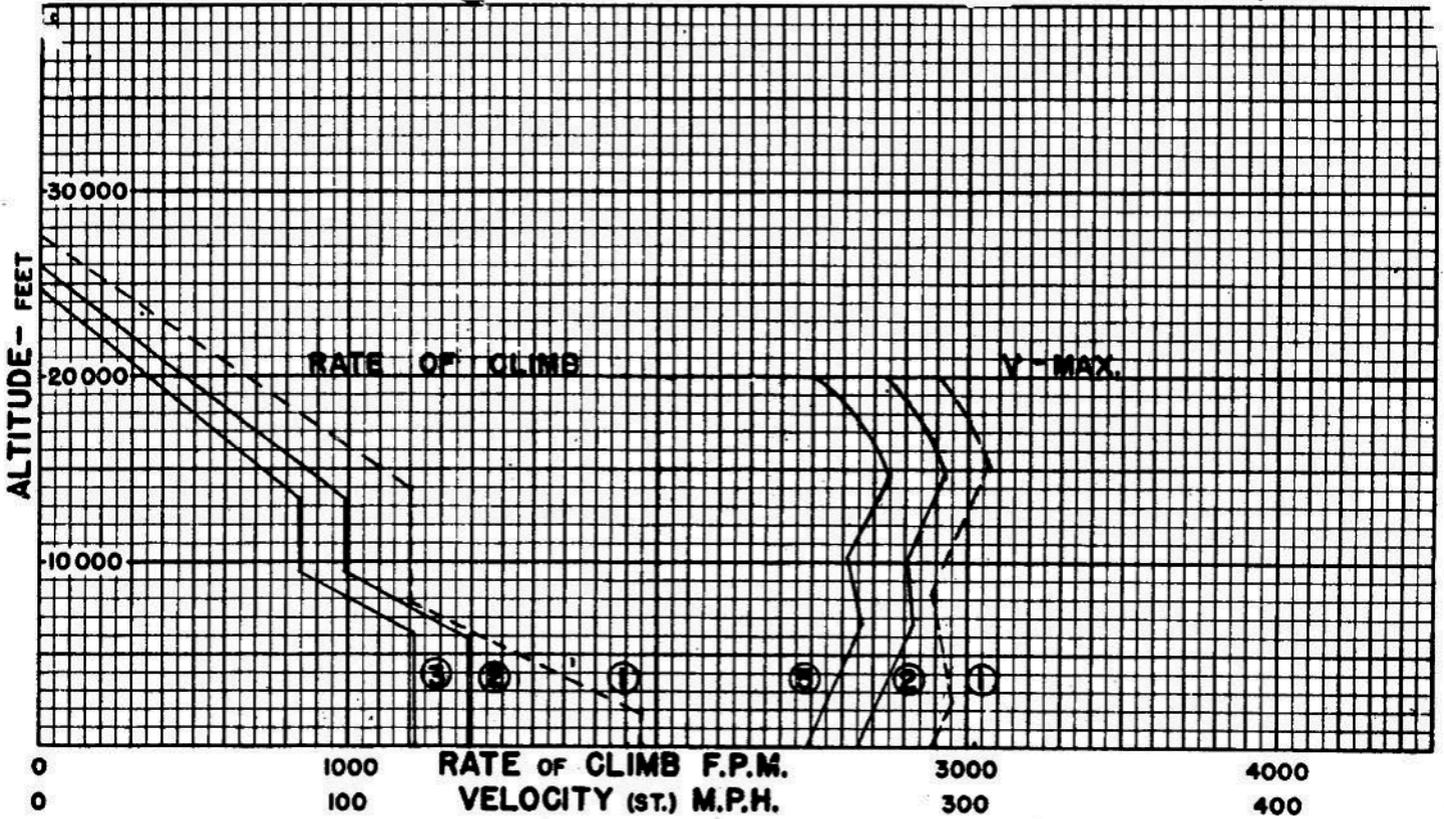
Practical Patrol Radius (Patrol and A.S. Loadings) is 1/3 of range at V for max. range at 1500' with fuel taken out for reserve.

Practical Patrol Bombing Radius (Bomber and Torpedo Loadings) is 1/2 of range at V for max. range at 1500' with fuel taken out for reserve.

Reserve considered 20% for good flight conditions and 33% for adverse flight conditions.

The following changes are incorporated: - Pending: Installation of chin guns (3-50/750); Installation of outer wing self-sealing cells.

Protected oil capacity is protected against .30 cal. gunfire only by "Armorite."



○ LOADING CONDITION COLUMN NUMBER



BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

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

**PROTECTION**

1. PILOT & CO-PILOT FW'D	190.5 LBS.
2. PILOT & CO-PILOT AFT	163 LBS.
3. PILOT FLOOR	37.5 LBS.
4. RADIO OPERATER	163.5 LBS.
5. TURRET	166.5 LBS.
6. TUNNEL	92.5 LBS.
7. SELF-SEALING CELLS	1294 LBS.

NOTE: 20-GAL. OIL TANKS PROTECTED FROM 30 GAL. BY 'ARMORITE'

