

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS-NAVY DEPT.

COLUMN NUMBER		1	2	3	4
LOADING CONDITION		BOMBER 2-500#	BOMBER 2-500#	BOMBER 8-1000#	BOMBER 2-500#
GROSS WEIGHT	LBS.	56000	56000	56000	60000
EMPTY WEIGHT - ACTUAL -	LBS.	36950			
FUEL/OIL	GALS.	2098/117	2098/117	1011/56	2723/151
FIXED GUNS / AMMUNITION		None			
FLEXIBLE GUNS / AMMUNITION		8-.50/3000			
ENGINE POWER USED FOR PERFORMANCE		MILITARY	NORMAL	NORMAL	NORMAL
WING LOADING	LBS/SQ.FT.	53.5	53.5	53.5	57.3
POWER LOADING ①	LBS/BHP.	11.7	12.7	12.7	13.6
V-MAX. SEA LEVEL	MPH.	228	222	222	220
V-MAX. AIRPLANE CRIT. ALT.	MPH.	285/26600	279/26500	279/26500	274/26500
V-STALL. GROSS WEIGHT. ②	MPH.	91.8	91.8	91.8	95.0
V-STALL. WITHOUT FUEL ②	MPH.	80.8	80.8	86.6	81.0
TIME-TO-CLIMB -10000FT.-	MIN.	9.4	10.5	10.5	12.1
TIME-TO-CLIMB -20000FT.-	MIN.	19.6	22.0	22.0	25.6
SERVICE CEILING	FT.	33400	32900	32900	31800
TAKE-OFF DISTANCE -CALM-	FT.		1810	1810	2355
TAKE-OFF DISTANCE -15 KN-	FT.		1331	1331	1751
TAKE-OFF DISTANCE -25 KN-	FT.		1034	1034	1388
RATE OF CLIMB -SL-	FT/MIN.	1100	950	950	830
MAX. RANGE / V-AV. ③	ST. MI / MPH.		2330/146	1085/149	2960/148
BOMBING RADIUS / V-AV. -20% R-	NMI / KN.		800/128	375/130	1010/130
BOMBING RADIUS / V-AV. -33% R-	NMI / KN.		660/129	310/130	830/131
PATROL RADIUS / V-AV. -20% R-	NMI / KN.				
PATROL RADIUS / V-AV. -33% R-	NMI / KN.				
SCOUT. RADIUS	NMI.				
COMBAT RADIUS	NMI.				
ENGINE / PROP. GEAR RATIO		4 P. & W. R-1830-43 or -65 (16:9) Turbo			
ENGINE RATING BHP/RPM/ALT.		NORMAL 1100/2550/SL-25000		MILITARY 1200/2700/SL-25000	
		1200/2700/Take-off			
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS GIVEN IN NAUTICAL MILES & KNOTS. ① BHP AT MAX. CRIT. ALT. ② STALL-WITHOUT POWER ③ AT 1500' ALTITUDE				

	TANKAGE IN GALLONS	OIL	FUEL	OFFENSIVE ARMAMENT
FIXED	PROTECTED	156	2814	FUSELAGE BOMB-BAY:
	UNPROTECTED			Bombs : 4-2000#, 8-1600#A.P., or 8-1000#A.P.
	TOTAL-INCL. PROT.	156	2814	8-500#, or 20-100#
	INCREASE-REMOVED PROTECTION	FIXED		Depth Bombs: 8-650# or 8-325#
AUX.	DROPPABLE - BOMB-BAY-PROT -			Mines : 4 MK 13
	DROPPABLE - 2 @ 400		800	
PROTECTED+UNPROTECTED+DROPPABLE.		156	3614	

REMARKS- Installation of one bomb-bay tank reduces total bomb capacity by 1/4; two bomb-bay tanks by 1/2.

see Addendum No 14.

SUPERSEDES 1/28/43

DATE - 1 DEC 1943

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CONFIDENTIAL

MODEL-PB4Y-1

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS-NAVY DEPT.

COLUMN NUMBER	5	6	7	
LOADING CONDITION	BOMBER 6-1000#	BOMBER 8-1600#	FERRY 2 B. B. Dropp Tanks	
GROSS WEIGHT LBS.	60000	60000	60000	
EMPTY WEIGHT - ACTUAL - LBS.	36950		35880	
FUEL/OIL GALS.	1940/107	880/49	3269/156	
FIXED GUNS/AMMUNITION	None			
FLEXIBLE GUNS/AMMUNITION	8-.50/3000		None	
ENGINE POWER USED FOR PERFORMANCE	NORMAL	NORMAL	NORMAL	
WING LOADING LBS/SQ.FT.	57.3	57.3	57.3	
POWER LOADING ① LBS/BHP.	13.6	13.6	13.6	
V-MAX. SEA LEVEL MPH.	220	220	220	
V-MAX. AIRPLANE CRIT. ALT. MPH.	274/26500	274/26500	274/26500	
V-STALL. GROSS WEIGHT. ② MPH.	95.0	95.0	95.0	
V-STALL. WITHOUT FUEL ② MPH.	85.2	90.8	77.9	
TIME-TO-CLIMB -10000FT.- MIN.	12.1	12.1	12.1	
TIME-TO-CLIMB -20000FT.- MIN.	25.6	25.6	25.6	
SERVICE CEILING FT.	31800	31800	31800	
TAKE-OFF DISTANCE -CALM- FT.	2355	2355	2355	
TAKE-OFF DISTANCE -15 KN- FT.	1751	1751	1751	
TAKE-OFF DISTANCE -25 KN- FT.	1388	1388	1388	
RATE OF CLIMB -SL- FT/MIN	830	830	830	
MAX. RANGE/V-AV. ③ ST.MI/MPH.	2040/150	885/153	3620/147	
BOMBING RADIUS/V-AV.-20% R- NMI/KN.	700/131	305/133		
BOMBING RADIUS/V-AV.-33% R- NMI/KN.	575/132	250/133		
PATROL RADIUS/V-AV.-20% R- NMI/KN.				
PATROL RADIUS/V-AV.-33% R- NMI/KN.				
SCOUT. RADIUS NMI.				
COMBAT RADIUS NMI.				

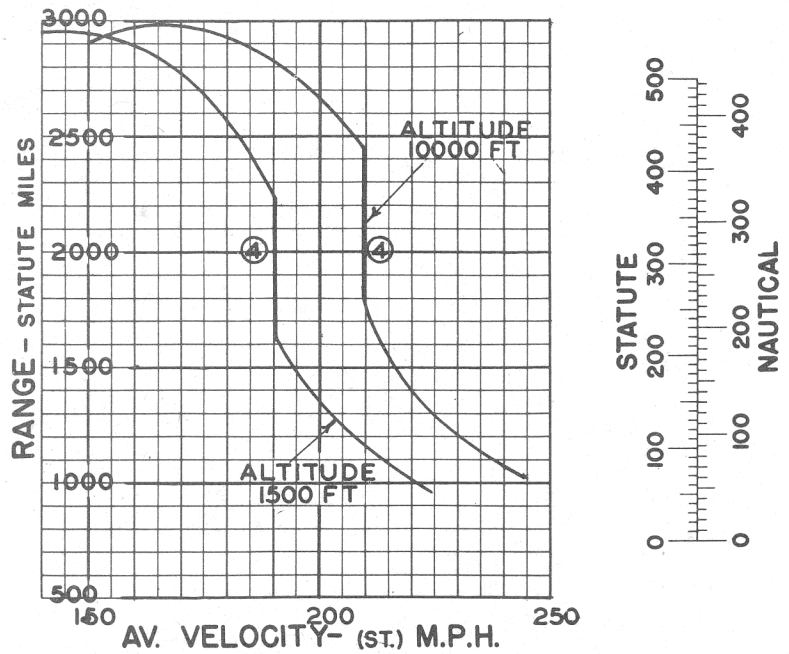
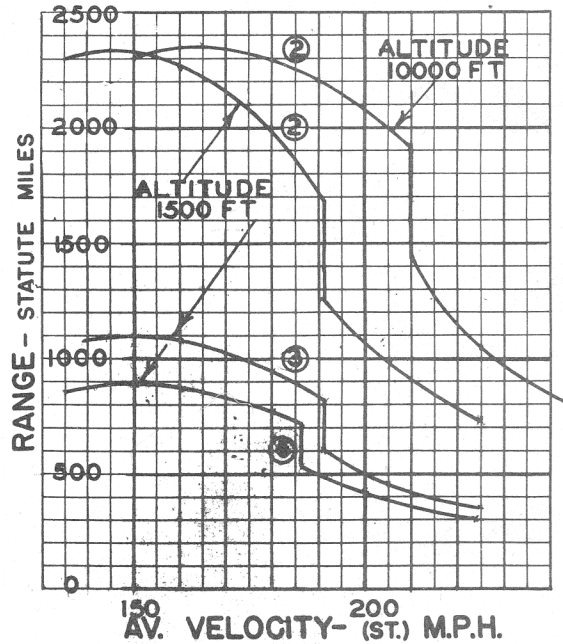
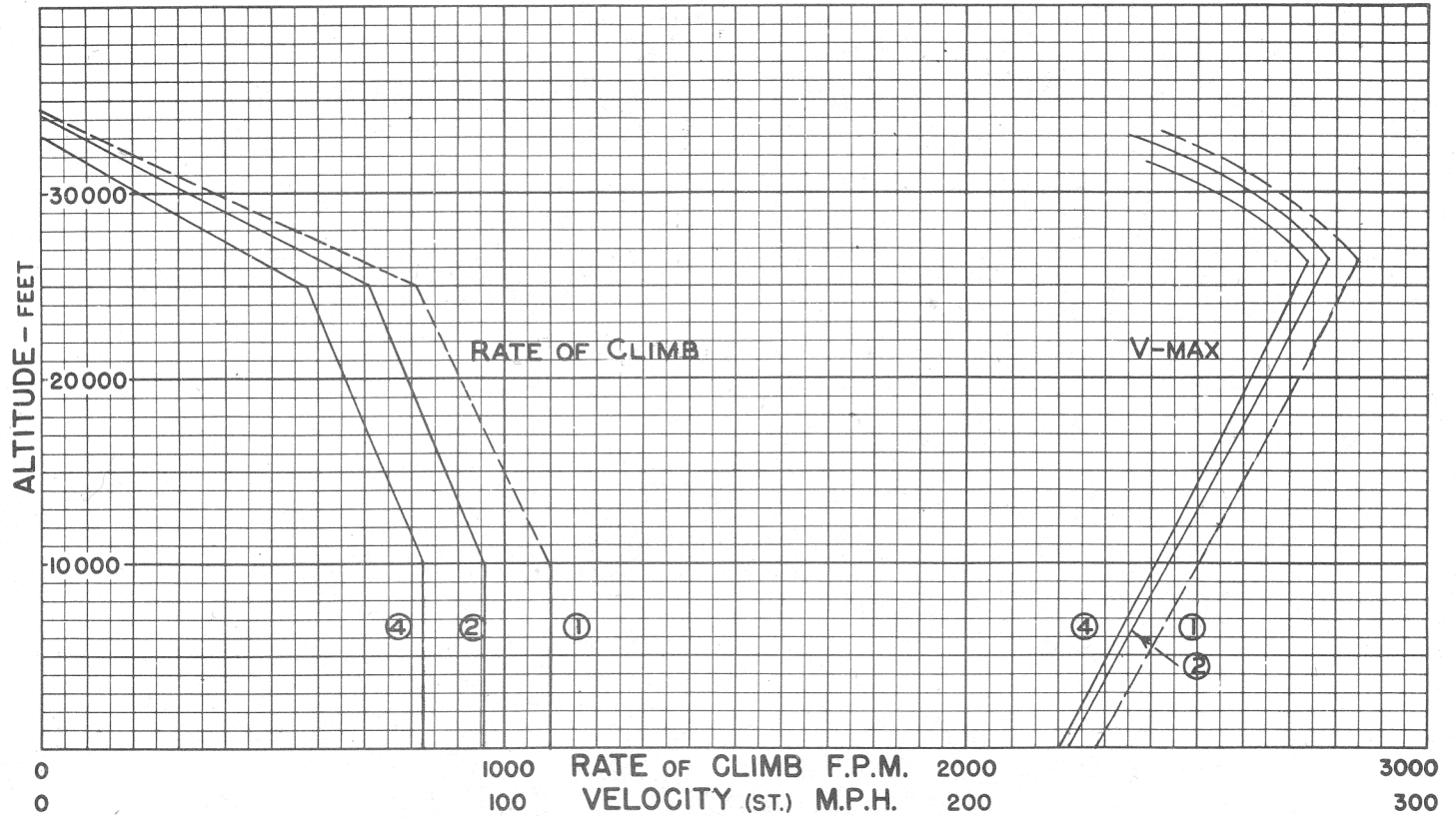
PERFORMANCE IS BASED ON- FLIGHT TEST

RANGE & RADIUS ARE BASED ON FLIGHT TEST FUEL CONSUMPTION DATA INCREASED BY 5 PERCENT TO CONFORM WITH PAST EXPERIENCE, except the auto-rich region of the speed-range curves are based on engine manufacturers fuel consumption data increased by 15%.

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.

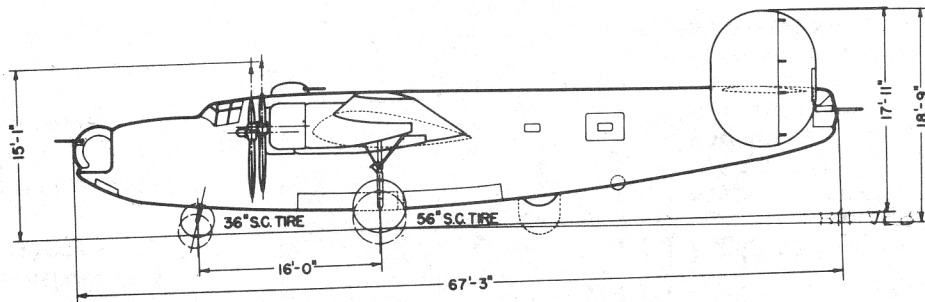
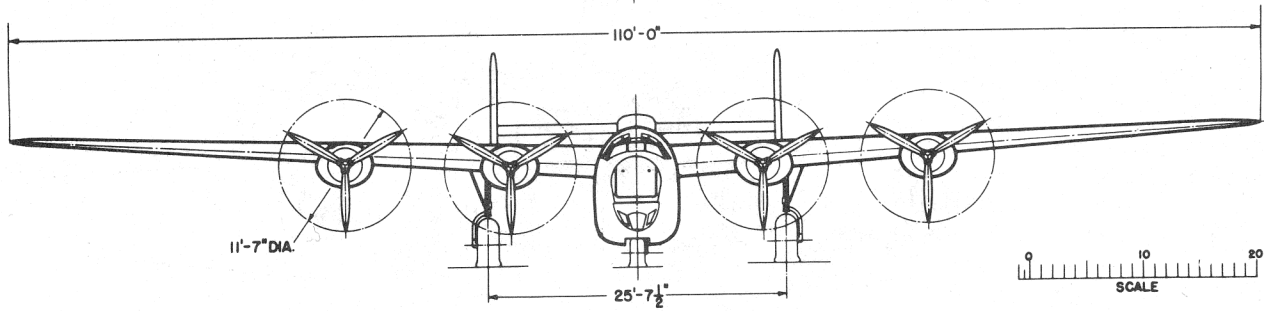
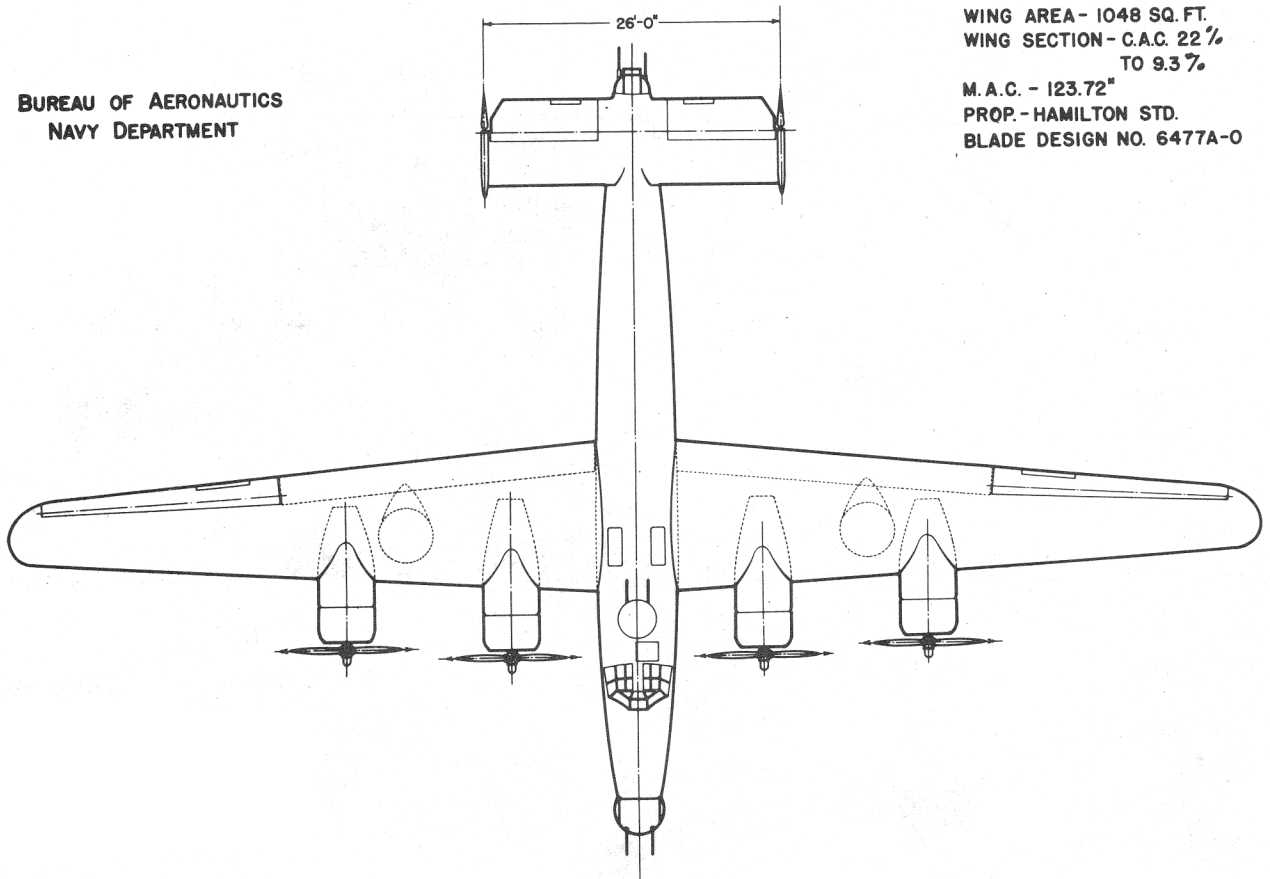
Reserve considered 20% for good flight conditions and 33% for adverse flight conditions.



○ LOADING CONDITION COLUMN NUMBER

BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

WING AREA - 1048 SQ. FT.  
WING SECTION - C.A.C. 22%  
TO 9.3%  
M. A. C. - 123.72"  
PROP. - HAMILTON STD.  
BLADE DESIGN NO. 6477A-0



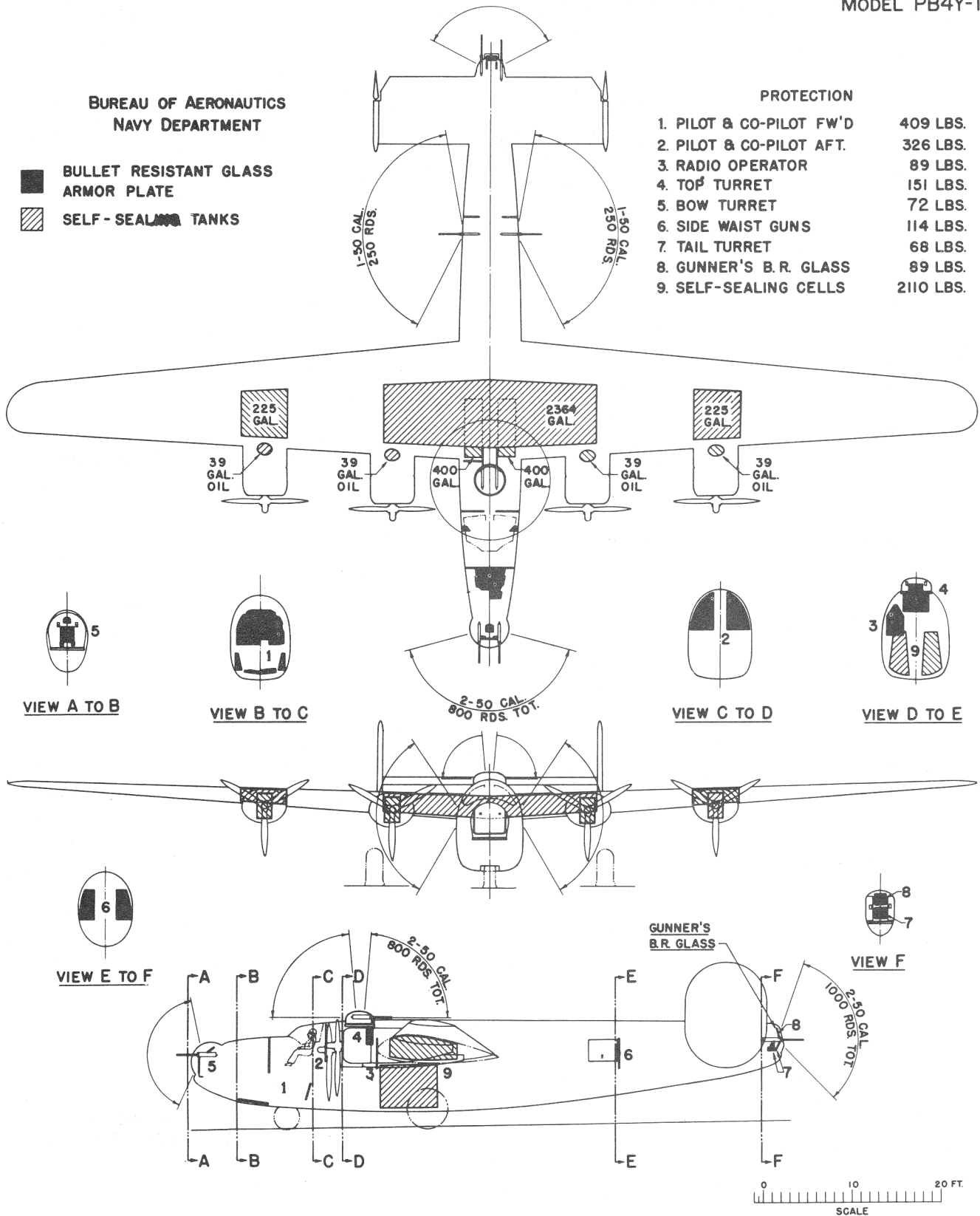
MODEL PB4Y-1

BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

- BULLET RESISTANT GLASS  
ARMOR PLATE
- ▨ SELF-SEALING TANKS

PROTECTION

1. PILOT & CO-PILOT FW'D	409 LBS.
2. PILOT & CO-PILOT AFT.	326 LBS.
3. RADIO OPERATOR	89 LBS.
4. TOP TURRET	151 LBS.
5. BOW TURRET	72 LBS.
6. SIDE WAIST GUNS	114 LBS.
7. TAIL TURRET	68 LBS.
8. GUNNER'S B.R. GLASS	89 LBS.
9. SELF-SEALING CELLS	2110 LBS.



VIEW A TO B

VIEW B TO C

VIEW C TO D

VIEW D TO E

VIEW E TO F

VIEW F

0 10 20 FT.  
SCALE