

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		1	2	3	4
LOADING CONDITION		PATROL	PATROL	PATROL One Bomb-bay Tank	BOMBER 2-500# One Bomb-bay Tank
GROSS WEIGHT	LBS.	60000	60000	62900	63000
EMPTY WEIGHT - Actual -	LBS.	37160			
FUEL/OIL	GALS.	2814/156	2814/156	3214/156	3063/156
FIXED GUNS/AMMUNITION		None			
FLEXIBLE GUNS/AMMUNITION		8-.50 cal./3770 rds.			
ENGINE POWER USED FOR PERFORMANCE		MILITARY	NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.	57.3	57.3	60.0	60.1
POWER LOADING ①	LBS./BHP.	12.5	13.6	14.1	14.2
V-MAX. SEA LEVEL	MPH.	231	224	223	223
V-MAX./CRITICAL ALT.	MPH./FT.	287/26700	279/26600	275/26600	275/26600
V-STALL GROSS WEIGHT ②	MPH.	95	95	97.3	97.4
V-STALL WITHOUT FUEL ②	MPH.	80.5	80.5	81.0	81.9
TIME-TO-CLIMB -10000 FT.-	MIN.	10.1	11.8	13.1	13.3
TIME-TO-CLIMB -20000 FT.-	MIN.	21.4	25.0	28.0	28.3
SERVICE CEILING	FT.	32600	31900	31100	31000
TAKE-OFF DISTANCE -CALM-	FT.	2155	2155	2620	2645
TAKE-OFF DISTANCE -15 KN-	FT.				
TAKE-OFF DISTANCE -25 KN-	FT.				
TAKE-OFF DISTANCE -50 FT. OBST.	FT.	3990	3990	4490	4510
TAKE-OFF TIME	SECONDS				
RATE OF CLIMB -SL-	FT./MIN.	990	850	760	750
MAX. RANGE / V-AV. ③	ST. MI. / MPH.		3090/149	3440/151	3260/148
RANGE / V-AV. -60%NSP-③-	ST. MI. / MPH.				
SEARCH RADIUS / V-AV. -20%R-	NMI. / KN.		845/131	935/132	887/132
A.S.W. RADIUS / V-AV. -20%R-	NMI. / KN.				
SCOUT RADIUS	N MI.				
COMBAT RADIUS	N MI.				

ENGINE / PROP. GEAR RATIO		4 P. & W. R-1830-43 or -65 (16:9)		
ENGINE RATING BHP/RPM/ALT.	MILITARY	NORMAL		TAKE-OFF
		1200/2700/SL-25000'	1100/2550/SL-25000'	

TANKAGE IN GALLONS		OIL	FUEL	OFFENSIVE ARMAMENT
AUX. FIXED	PROTECTED	156	2814	FUSELAGE BOMB-BAYS:-
	UNPROTECTED			Bombs:-4-2000#, 8-1600#, 8-1000#, 12-500#, 12-250#, or 40-100#
	TOTAL - FIXED INTERNAL	156	2814	Depth Bombs:-8-650#, or 8-325#
	DROPPABLE			Mines: 8 MK 13 (4 with tail fuses only)
	DROPPABLE - S.S. - 2 @ 400 in forward bomb-bays		800	
	TOTAL	156	3614	
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS GIVEN IN NAUTICAL MILES & KNOTS			NOTE: Installation of the two bomb-bay tanks in the forward bomb-bays reduces above bomb-capacities by 50%.
	① BHP AT MAX. CRIT. ALT.			
	② STALL-WITH POWER			
	③ AT 1500' ALTITUDE			

SUPERSEDES 1 DECEMBER 1943

NAVAER-1519B (Rev. 9-44)

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		5	6	7	
LOADING CONDITION		BOMBER 8-1000#	BOMBER 8-1600#	FERRY Two Bomb-bay Tanks	
GROSS WEIGHT	LBS.	63000	63000	62000	
EMPTY WEIGHT - Actual -	LBS.	37160		35800	
FUEL/OIL	GALS.	2019/112	1272/70	3614/156	
FIXED GUNS/AMMUNITION		None		None	
FLEXIBLE GUNS/AMMUNITION		8-.50/3770		None	
ENGINE POWER USED FOR PERFORMANCE		NORMAL	NORMAL	NORMAL	
WING LOADING	LBS./SQ.FT.	60.1	60.1	59.1	
POWER LOADING ①	LBS./BHP	14.2	14.2	14.0	
V-MAX. SEA LEVEL	MPH.	223	223		
V-MAX./ CRITICAL ALT.	MPH./ FT.	275/26600	275/26600		
V-STALL. GROSS WEIGHT ②	MPH.	97.4	97.4	96.6	
V-STALL. WITHOUT FUEL ②	MPH.	87.4	91.2	77.9	
TIME-TO-CLIMB -10000FT.-	MIN.	13.3	13.3		
TIME-TO-CLIMB -20000FT.-	MIN.	28.3	28.3		
SERVICE CEILING	FT.	31000	31000		
TAKE-OFF DISTANCE -CALM-	FT.	2645	2645	2417	
TAKE-OFF DISTANCE -15 KN.-	FT.				
TAKE-OFF DISTANCE -25KN.-	FT.				
TAKE-OFF DISTANCE -50 FT. OBST.	FT.	4510	4510	4320	
TAKE-OFF DISTANCE	SECONDS				
RATE OF CLIMB -SL-	FT./ MIN.	750	750		
MAX. RANGE / V-AV. ③	ST. MI./ MPH.	2065/154	1255/155	4190/153	
RANGE / V-AV. -60%NSP-③-	ST. MI./ MPH.				
SEARCH RADIUS/V-AV. -20%R-	NMI./ KN.	553/134	343/135		
A. S. W. RADIUS / V-AV. -20%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

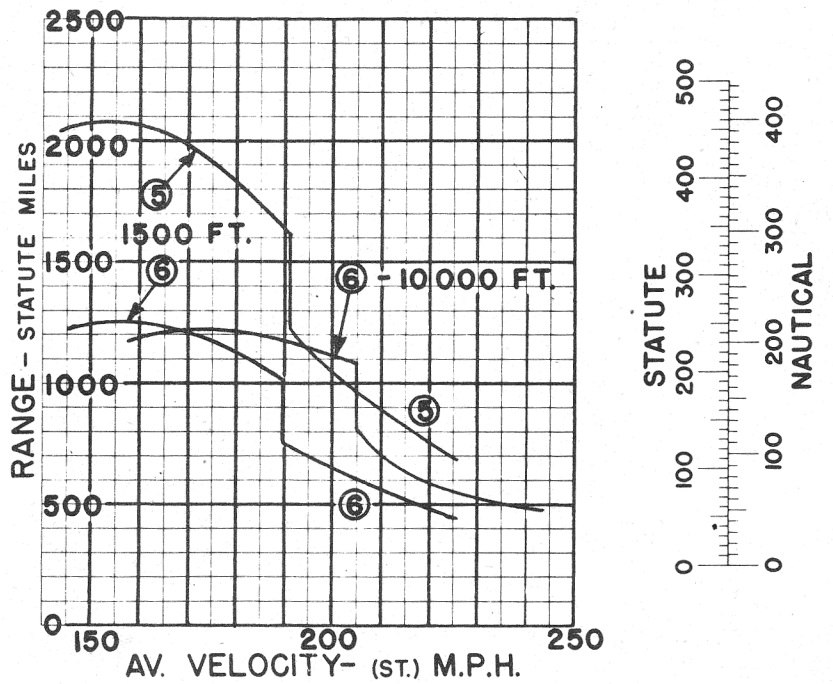
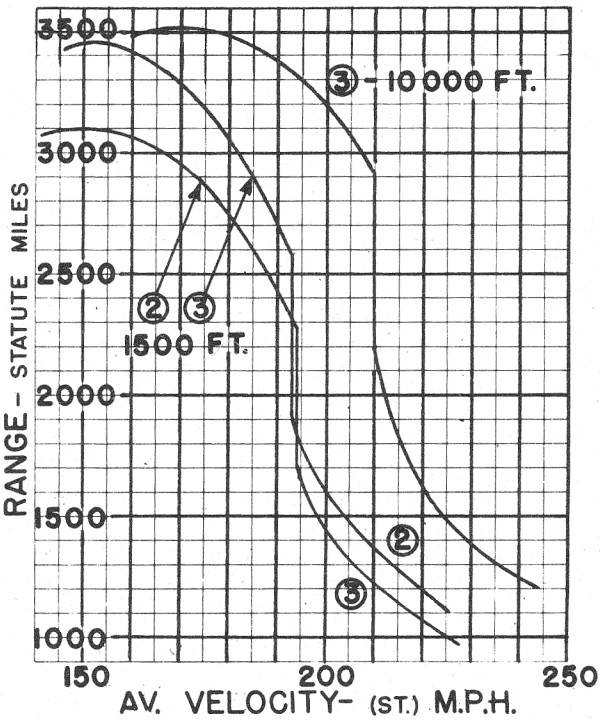
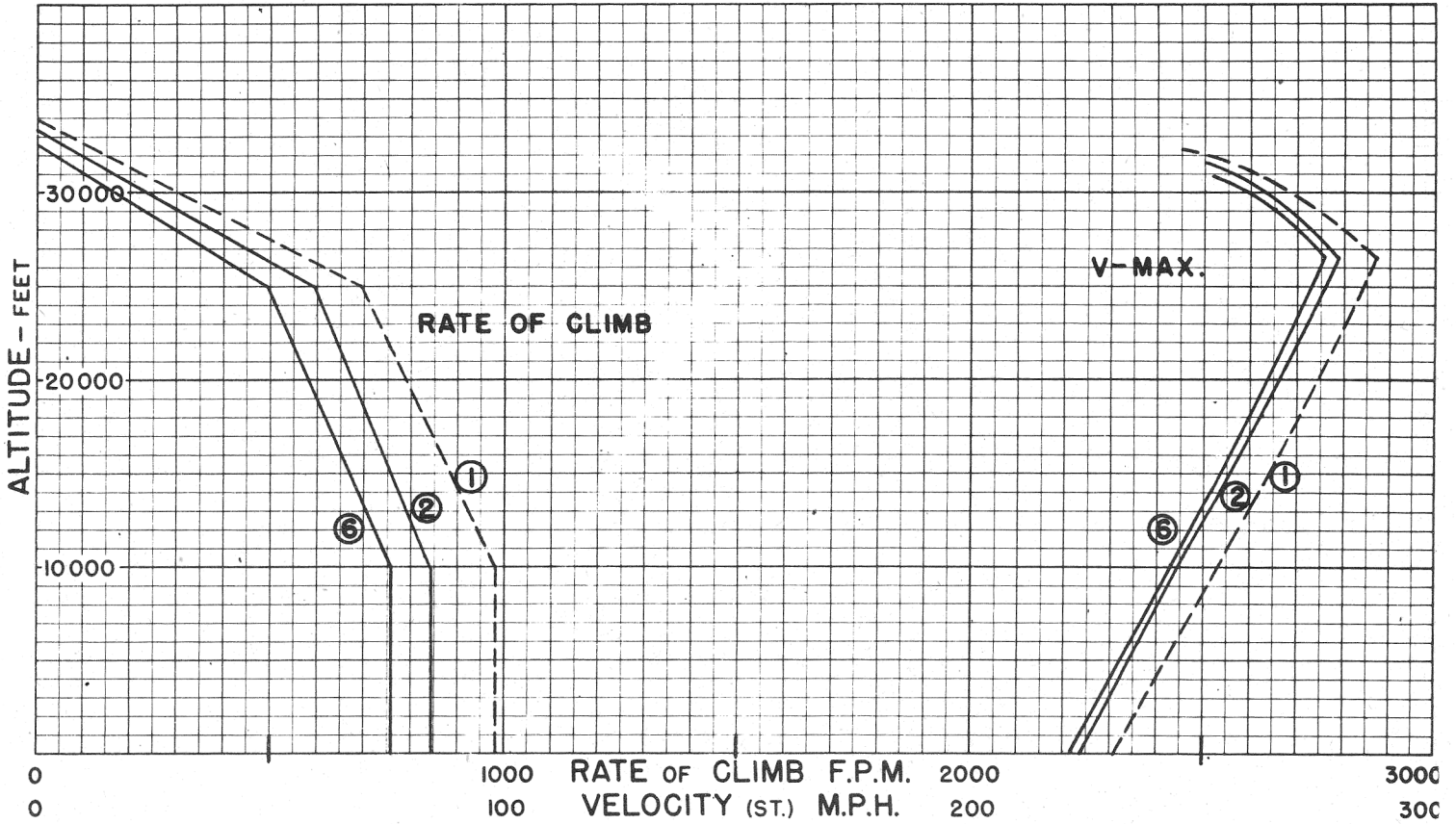
BY 5 PERCENT TO CONFORM WITH PAST EXPERIENCE.

Performance on these sheets computed with 6477A-0 propeller blades; installation of 6353A-18 blades increases take-off distance over 50 ft. obstacle by 200 ft., but has negligible effect on range and V-max. Performance for all conditions except ferry are computed with AN/APS-15 radar nacelle extended; with nacelle retracted, V max. at airplane critical altitude is increased 12 mph.

Practical Search Radius is 40% of range at V for max. 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.

Practical Search Radius is reduced 4 nautical miles for each minute of combat at 1500 ft. at military power.

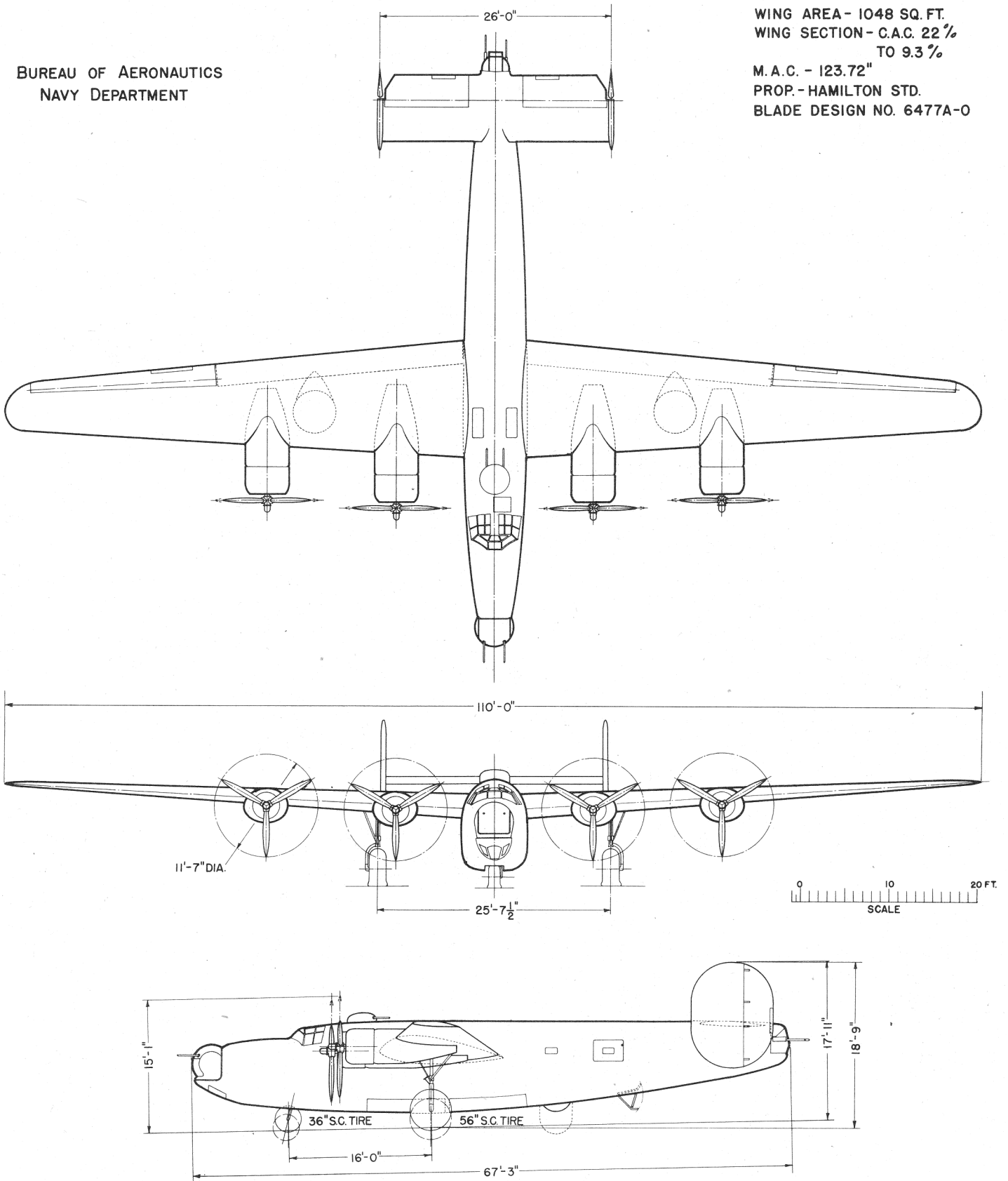
Performance on these sheets does not include the effect of de-icing equipment. Addition of wing and tail de-icer boots reduces max. range (col.2) 1.7% and reduces V max. 7 mph. at Airplane Critical Altitude.



○ 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.

