NAVAER-1518A (Rev. 9-44)

ISSUE OF 6 PAGES

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		1	2	3	4
LOADING CONDITION		COMBAT *	COMBAT *	BOMBER 1-1000#	BOMBER 1-1000# Two Tanks External
GROSS WEIGHT	LBS.	14042	14042	15042	15871
EMPTY WEIGHT - Actual -	LBS.	10400			
FUEL / OIL	GALS.	320/18	320/18	320/18	436/25
FIXED GUNS/AMMUNITION		2-20 m.m./400 rds.			
FLEXIBLE GUNS/AMMUNITION		2-.30 cal./2000 rds.			
ENGINE POWER USED FOR PERFORMANCE		MILITARY	NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.	33.3	33.3	35.7	37.6
POWER LOADING ①	LBS./BHP.	9.7	10.4	11.1	11.7
V-MAX. SEA LEVEL	MPH.	269	261	260	246
V-MAX./CRITICAL ALT.	MPH./FT.	294/16,700	286/16,400	284/16,400	267/16,200
V-STALL GROSS WEIGHT ②	MPH.	79.5	79.5	82.3	84.4
V-STALL WITHOUT FUEL ②	MPH.	73.8	73.8	76.8	77.2
TIME-TO-CLIMB -10000 FT-	MIN.	6.5	6.9	7.8	8.9
TIME-TO-CLIMB -20000 FT-	MIN.	15.3	17.0	19.7	23.3
SERVICE CEILING	FT.	29,300	28,400	27,200	25,800
TAKE-OFF DISTANCE -CALM-	FT.		701	836	1010
TAKE-OFF DISTANCE -15 KN-	FT.		435	528	651
TAKE-OFF DISTANCE -25 KN-	FT.		291	365	457
TAKE-OFF DISTANCE -50 FT. OBST.	FT.				
TAKE-OFF TIME	SECONDS				
RATE OF CLIMB -SL-	FT./MIN.	1830	1630	1460	1290
MAX. RANGE / V-AV. ③	ST. MI./MPH.		1235/158	1165/149	1420/153
RANGE / V-AV. -60%NSP-③-	ST. MI./MPH.				
SEARCH RADIUS / V-AV. -20%R-	NMI./KN.				
A.S.W. RADIUS / V-AV. -20%R-	NMI./KN.				
SCOUT RADIUS	N MI.				
COMBAT RADIUS	N MI.			265	375

ENGINE / PROP. GEAR RATIO W.A.C. R-2600-20 (16:9)

ENGINE RATING BHP/RPM/ALT.	MILITARY	NORMAL	TAKE-OFF
	1750/2600/SL-3200	1600/2400/SL-5000'	
	1850/2600/8400-15000	1350/2400/9700-14800'	1900/2800/SL

TANKAGE IN GALLONS		OIL	FUEL
AUX. FIXED	PROTECTED	25	320
	UNPROTECTED		
	TOTAL - FIXED INTERNAL	25	320
	DROPPABLE - Wings - 2 @ 58		116
	DROPPABLE - B.B. - unprot.		130
	TOTAL	25	566

OFFENSIVE ARMAMENT

FUSELAGE BOMB-BAY:
Bombs: 2-1000# A.P., 1-1600#, 1-1000#, 2-250, 2-500#, 5-100#
Depth Bombs: 1-650# or 2-325#
Torpedo : 1 Mk13-3 **
WINGS: -
Bombs: 6-100#: Depth Bombs: 2-325#

** Torpedo loading requires partial opening of bomb-bay doors and installation of torpedo supporting truss.

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

* See Note - Page 2

SUPERSEDES 1 MARCH 1944

DATE 1 NOVEMBER 1944

MODEL SB2C-3

MODEL-SB2C-3

NAVAER-1519B (Rev. 9-46)

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		5	6	7	8
LOADING CONDITION		BOMBER 1-1600# Two Tanks External	TORPEDO 1 MK13-3	SCOUT One B.B. Tank Plus Two Wing Tanks	ROCKET 1-1000# Plus 8-5"A.R.
GROSS WEIGHT	LBS.	16471	16317	15684	15714
EMPTY WEIGHT - actual -	LBS.	10400			10432
FUEL/OIL	GALS.	436/25	320/18	566/25	320/18
FIXED GUNS/AMMUNITION		2-20 mm./400 rds.			
FLEXIBLE GUNS/AMMUNITION		2-.30 cal./2000 rds.			
ENGINE POWER USED FOR PERFORMANCE		NORMAL	NORMAL	NORMAL	NORMAL
WING LOADING	LBS/SQ.FT.	39.1	38.8	37.2	37.3
POWER LOADING ①	LBS./BHP.	12.2	12.1	11.6	11.6
V-MAX. SEA LEVEL	MPH.	245	233	246	249
V-MAX./ CRITICAL ALT.	MPH./ FT.	265/16,200	250/16,000	267/16,200	270/16,200
V-STALL. GROSS WEIGHT ②	MPH.	86.0	85.7	84.0	86.1
V-STALL. WITHOUT FUEL ②	MPH.	78.9	80.4	74.3	80.6
TIME-TO-CLIMB -10000 FT.-	MIN.	9.7	9.8	8.7	8.7
TIME-TO-CLIMB -20000 FT.-	MIN.	26.1	26.6	22.6	22.6
SERVICE CEILING	FT.	25,000	24,600	25,900	26,000
TAKE-OFF DISTANCE -CALM-	FT.	1120	1186	987	1042
TAKE-OFF DISTANCE -15 KN.-	FT.	739	777	629	685
TAKE-OFF DISTANCE -25 KN.-	FT.	515	540	440	480
TAKE-OFF DISTANCE -50 FT. OBST.	FT.				
TAKE-OFF DISTANCE	SECONDS				
RATE OF CLIMB -SL-	FT./ MIN.	1,210	1,200	1,320	1,320
MAX. RANGE / V-AV. ③	ST. MI./ MPH.	1380/156	965/157	1925/153	1065/165
RANGE / V-AV. -60%NSP-③-	ST. MI./ MPH.				
SEARCH RADIUS/ V-AV. -20%R-	NMI./ KN.				
A. S. W. RADIUS/ V-AV. -20%R-	NMI./ KN.				
SCOUT RADIUS	NMI.			500	
COMBAT RADIUS	NMI.	360	190		245

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.

* COMBAT CONDITION: ASB radar, two wing bomb-racks (MK51-7) aboard; Bombs, sway bracing and rocket launchers not aboard; Enclosures in the closed position. Installation of 8 MK5-1 launchers reduces V max. to 291 mph. at 16,600 ft. (military power)

CLEAN CONDITION : Combat Condition with ASB radar and bomb-racks removed; V max.-SL-276 mph.; V max. = 302/16800 (military power)

FERRY CONDITION : Gross Weight (radar, armor and armament removed) = 14624 with 566 gals. fuel, max. range at 1500 ft. is 2080 st. miles at 153 mph.

ROCKET CONDITION: Rockets suspended from 8 MK5-1 launchers.

NOTE: Two MK51-7 wing bomb-racks in all conditions except "CLEAN"
ASB radar in all conditions except "CLEAN" & "FERRY"

The following changes are incorporated: Contract - thru DZ

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

PRACTICAL COMBAT RADIUS is based on 20 min. warm-up and idling; 1 min. take-off; 20 min. rendezvous at 60% normal sea-level power and auto-lean; climb to 15000 ft. at 60% * n.s.p. and auto-lean; cruise-out at 15000 ft. at 180 knots true air speed and auto-lean; drop unprotected droppable tanks; dive; drop bombs or torpedoes; combat at 1500 ft. for 5 min. at full military power plus 10 min. at full normal power; cruise-back at 1500 ft. at 170 knots T.A.S. and auto-lean; 60 min. at V for max. range and auto-lean as allowance for rendezvous landing and reserve. Radius includes distance covered in climb but not in descent.

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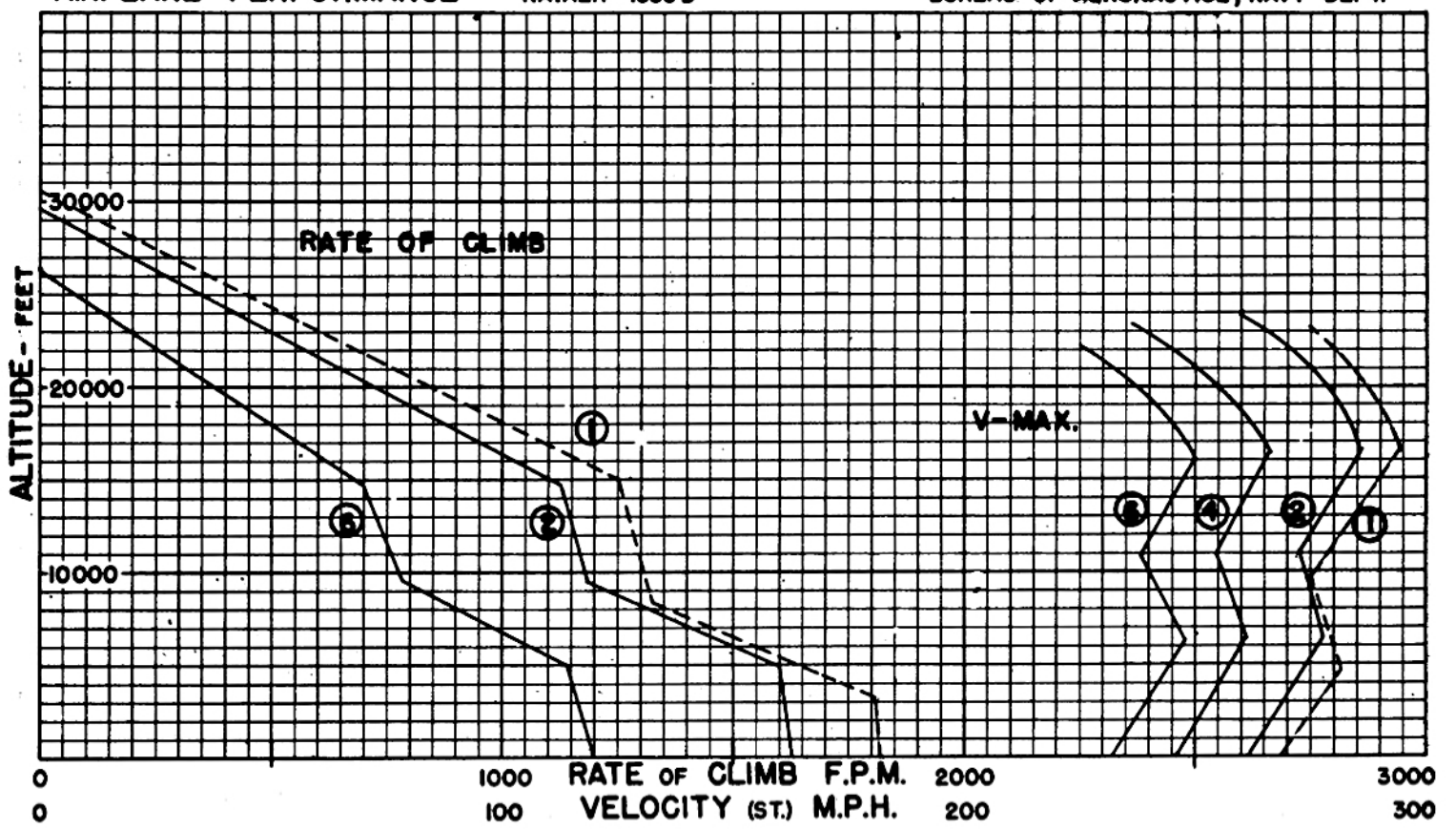
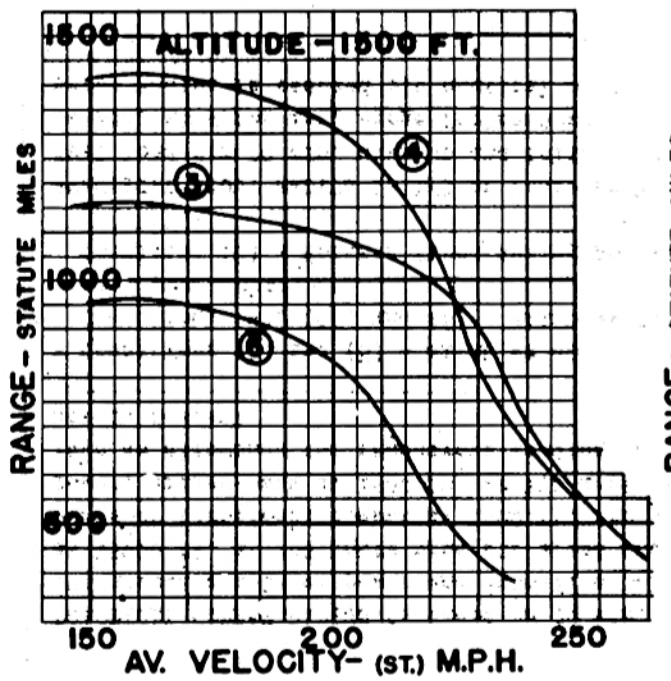
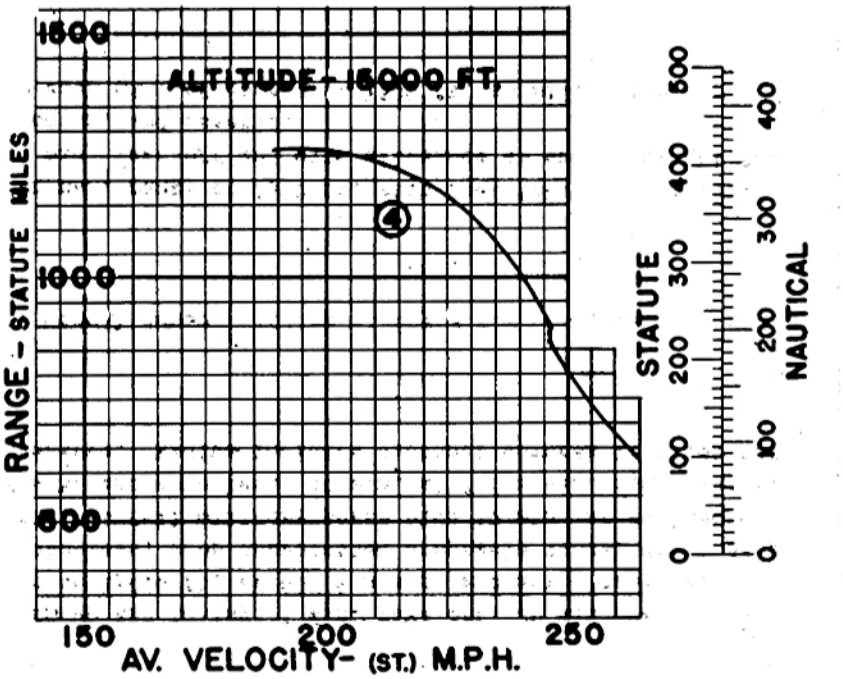
* Conditions (3) and (8) - climb at 60% power.
  Conditions (4), (5), and (6) - climb at full normal power. (Climb at 60% N.S.P. is less than 400 feet per minute)
  Condition (8) - Rockets fired during combat.

PRACTICAL SCOUT RADIUS is 1/3 of range at V for max. range at 1500 ft. with fuel taken from initial fuel load for 20 min. warm-up and idling and 1 min. take-off and with allowance at end of flight for 60 min. at V for max. range for rendezvous, landing, and reserve.
Scout Radius is reduced 3.6 nautical miles for each min. of combat at 1500 ft. at military power.

AIRPLANE PERFORMANCE NAVAER-1335B BUREAU OF AERONAUTICS, NAVY DEPT.



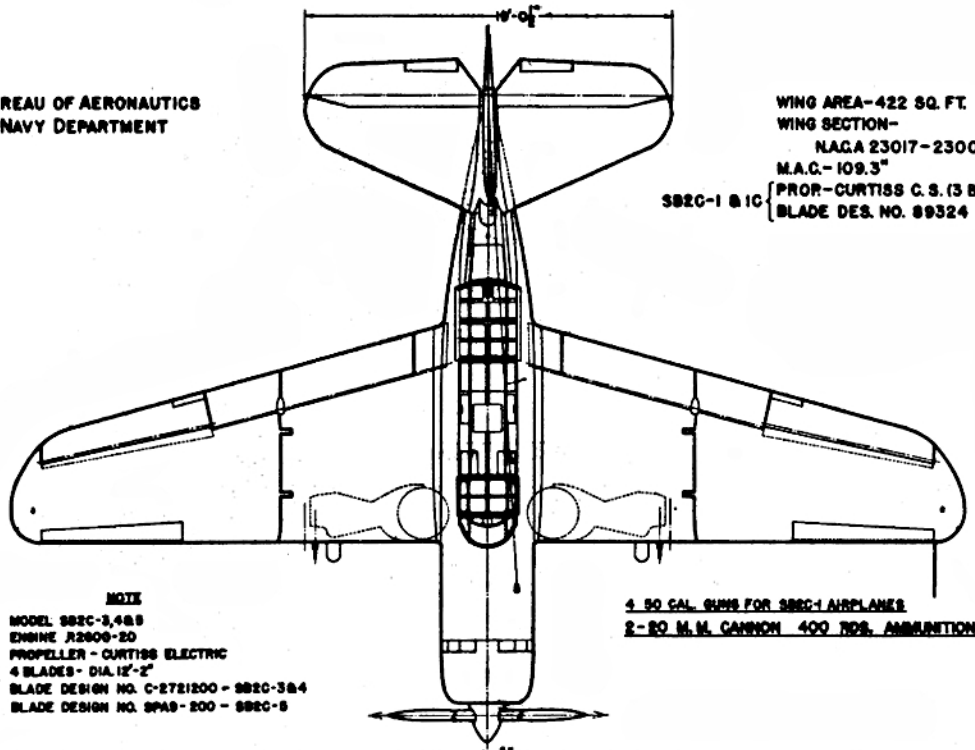




○ LOADING CONDITION COLUMN NUMBER

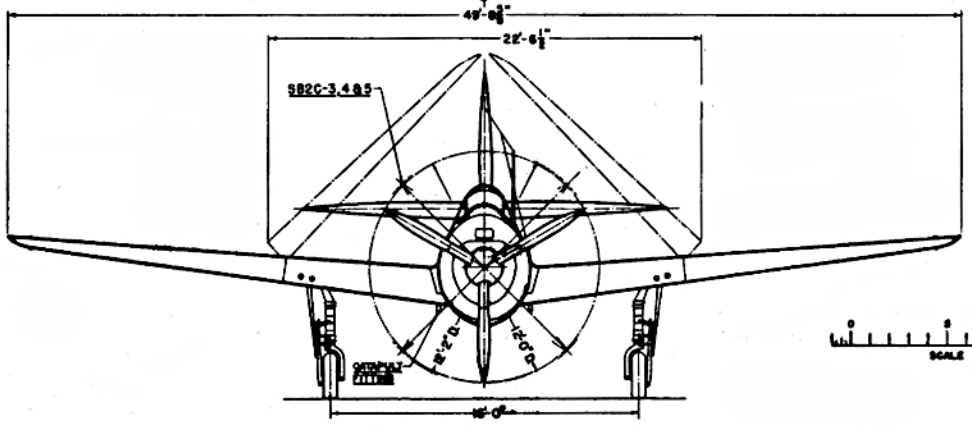
BUREAU OF AERONAUTICS
NAVY DEPARTMENT

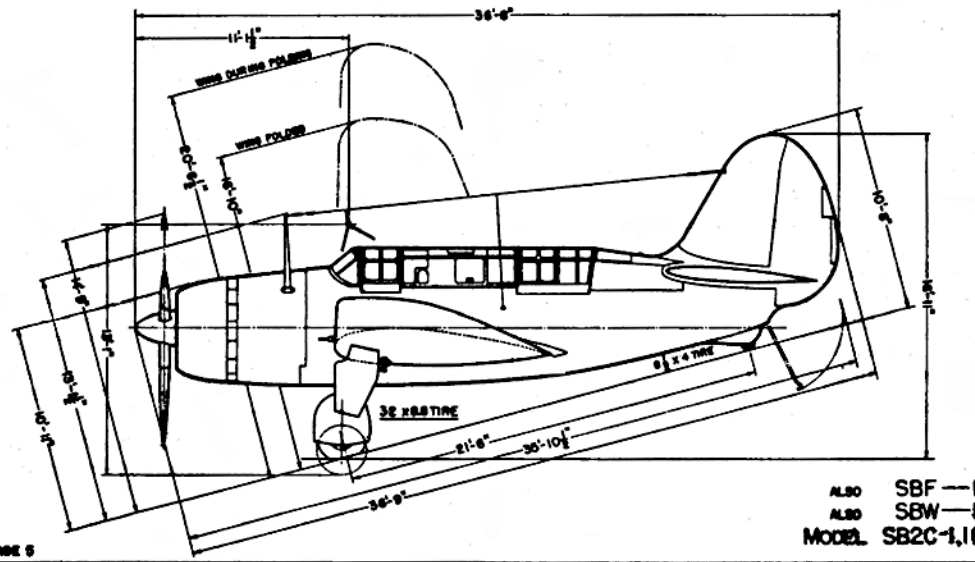
WING AREA-422 SQ. FT.
WING SECTION-
NACA 23017-23009
M.A.C.-109.3"
SB2C-1 & 1C { PROP-CURTISS C.S. (3 BLADE)
BLADE DES. NO. 89324



NOTE
MODEL SB2C-3,4&5
ENGINE R2600-20
PROPELLER - CURTISS ELECTRIC
4 BLADES - DIA. 12'-2"
BLADE DESIGN NO. C-2721200 - SB2C-3&4
BLADE DESIGN NO. SPA5-200 - SB2C-5

4 50 CAL. GUNS FOR SB2C-1 AIRPLANES
2-20 M.M. CANNON 400 RDS. AMMUNITION





ALSO SBF—1,3&4
ALSO SBW—1,3,4&5
MODEL SB2C-1,1C,3,4&5

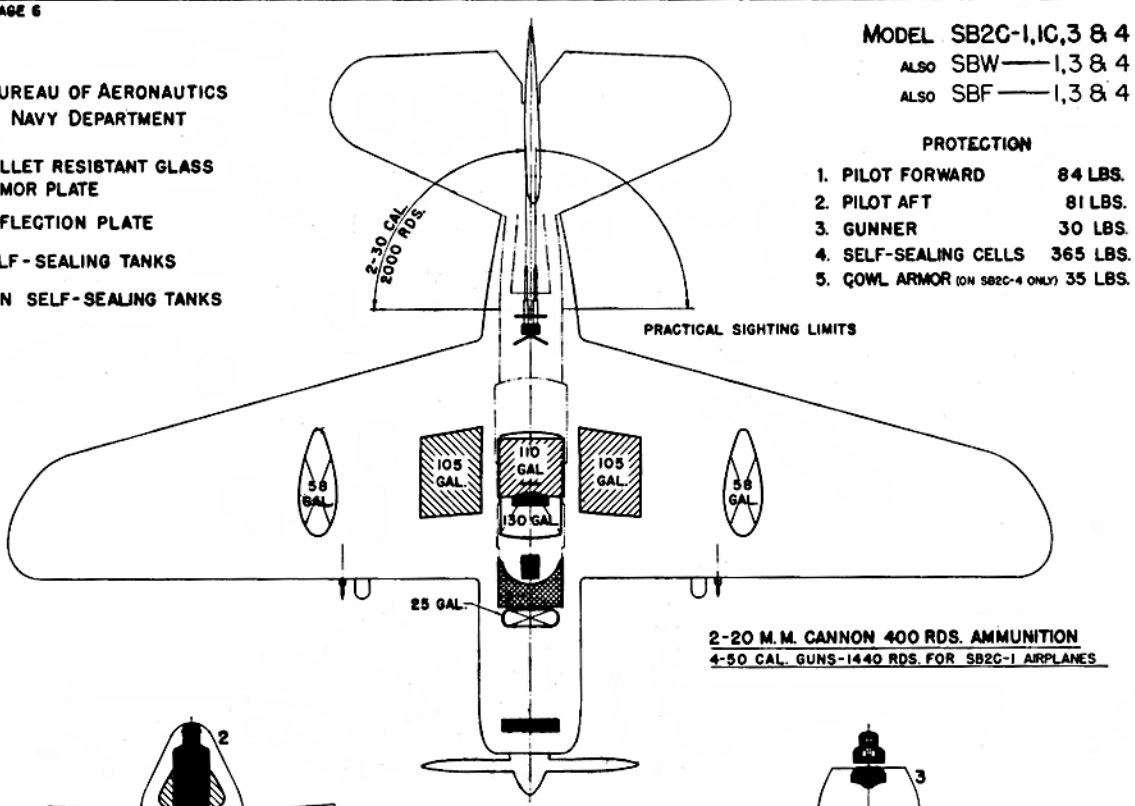
BUREAU OF AERONAUTICS
NAVY DEPARTMENT

MODEL SB2C-1,1C,3 & 4
ALSO SBW——1,3 & 4
ALSO SBF——1,3 & 4

- BULLET RESISTANT GLASS ARMOR PLATE
- DEFLECTION PLATE
- SELF-SEALING TANKS
- NON SELF-SEALING TANKS

PROTECTION

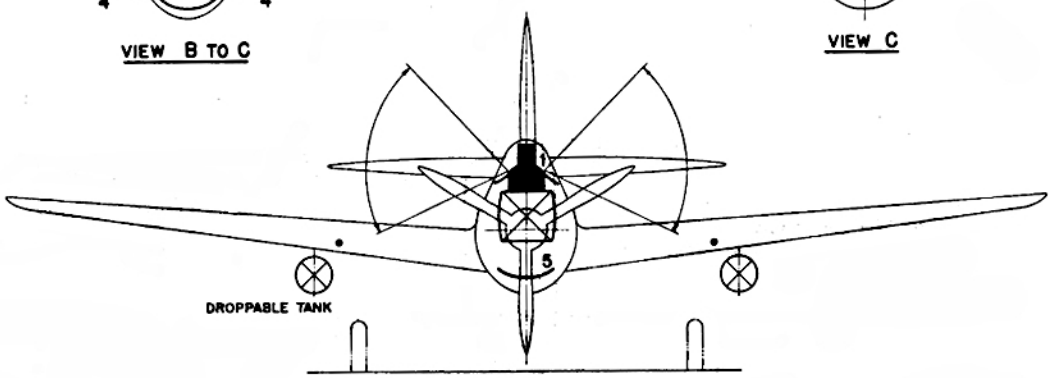
1. PILOT FORWARD	84 LBS.
2. PILOT AFT	81 LBS.
3. GUNNER	30 LBS.
4. SELF-SEALING CELLS	365 LBS.
5. COWL ARMOR (ON SB2C-4 ONLY)	35 LBS.



2-20 M.M. CANNON 400 RDS. AMMUNITION
4-50 CAL. GUNS-1440 RDS. FOR SB2C-1 AIRPLANES

VIEW B TO C

VIEW C



VIEW A TO B