

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

| COLUMN NUMBER | | 1 | 2 | 3 | 4 |
|---|--|---|-------------------------------|-------------------------------|---|
| LOADING CONDITION | | PATROL 4 BOMB-BAY TANKS | PATROL 4 BOMB-BAY TANKS | PATROL 4 BOMB-BAY TANKS | TORPEDO 2 MK13-3 ONE BOMB-BAY TANK |
| GROSS WEIGHT | LBS. | 77729 | 77729 | 77729 | 74659 |
| EMPTY WEIGHT (ACTUAL) | LBS. | 45739 | | | |
| FUEL / OIL | GALS. | 4200/151 | 4200/151 | 4200/151 | 3150/109 |
| FIXED GUNS/AMMUNITION | | NONE | | | |
| FLEXIBLE GUNS/AMMUNITION | | 6-.50 Cal./1800 Rds. 2-20MM/600 Rds.-(Gunsight - see pg. 3) | | | |
| ENGINE POWER USED FOR PERFORMANCE | | MILITARY MILITARY JET | MILITARY | NORMAL | NORMAL |
| WING LOADING | LBS./SQ.FT. | 59.8 | 59.8 | 59.8 | 57.4 |
| POWER LOADING ① | LBS./BHP. | | 16.2 | 17.7 | 17.0 |
| V-MAX. SEA LEVEL | KN. | 315 | 237 | 219 | 220 |
| V-MAX. | KN./FT. | 343/19100 | 251/17800 | 243/17300 | 246/17300 |
| V-STALL GROSS WEIGHT ② | KN. | 85.7 | 85.7 | 85.7 | 84.0 |
| V-STALL WITHOUT FUEL ② | KN. | 70.4 | 70.4 | 70.4 | 72.6 |
| TIME-TO-CLIMB -10000FT- | MIN. | 4.5 | 11.0 | 14.2 | 12.9 |
| TIME-TO-CLIMB -20000FT- | MIN. | 10.1 | 29.6 | 36.7 | 32.3 |
| SERVICE CEILING | FT. | 32800 | 23400 | 22600 | 23600 |
| TAKE-OFF DISTANCE -CALM- (4) | FT. | 2287(1361) | 2287(1361) | 2287(1361) | 2056(1236) |
| TAKE-OFF DISTANCE -15 KN- (4) | FT. | 1606(956) | 1606(956) | 1606(956) | 1434(861) |
| TAKE-OFF DISTANCE -25 KN- (4) | FT. | 1208(719) | 1208(719) | 1208(719) | 1069(643) |
| TAKE-OFF DISTANCE -50 FT. OBST. | FT. | | | | |
| TAKE-OFF TIME | SECONDS | | | | |
| RATE OF CLIMB -SL- | FT./MIN. | 2380 | 1030 | 740 | 820 |
| MAX. RANGE / V-AV. ③ | N MI./KN. | | | 3675/148 | 2750/148 |
| RANGE / V-AV. -60% NSP-③- | N MI./KN. | | | | |
| SEARCH RADIUS / V-AV. -20% R-(P-2) | N MI./KN. | | | 1150/146. | 865/146 |
| A.S.W. RADIUS/V-AV. -20% R- | N MI./KN. | | | | |
| SCOUT RADIUS | N MI. | | | | |
| COMBAT RADIUS | N MI. | | | | |
| ENGINE / PROP. GEAR RATIO 2-P&W R-4360-4/.425 | | | | | |
| ENGINE RATING BHP/RPM/ALT. | MILITARY | NORMAL | | TAKE OFF | |
| | 2950/2700/3.L. | 2428/2550/S.L. | | 2975/2700/S.L. | |
| | 3000/2700/3000 | 2500/2550/5000 | | | |
| | 2400/2700/16200 | 2200/2550/15750 | | | |
| 2- Allison J-33-A-17 TURBO-JET ENGINES | | | | | |
| | MILITARY | NORMAL | | | |
| | 3825# Static Thrust/11500 RPM/S.L. | 3275# Static Thrust/11000 RPM/S.L. | | | |
| TANKAGE IN GALLONS | | OIL | FUEL | OFFENSIVE ARMAMENT | |
| AUX. FIXED | PROTECTED | | 2800 | SEE PAGE 3 | |
| | UNPROTECTED | 151 | | | |
| | TOTAL - FIXED INTERNAL | 151 | 2800 | | |
| | DROPPABLE | | | | |
| | DROPPABLE BOMB-BAY-PROT. 4 @ 350 GALS. | | 1400 | | |
| TOTAL | 151 | 4200 | | | |
| NOTE | ① BHP AT MAX. CRIT. ALT. | | | | |
| | ② STALL - WITH POWER | | | | |
| | ③ AT 1500' ALTITUDE | | | | |
| | (4) Parenthesized figures included Military Jet Power) | | | | |

Supersedes 1 June 1947

DATE 1 AUGUST 1947

American Aviation Historical Society Archives - www.aaahs-online.org

MODEL-XP4M-1

A-1727

NAVAER-1519B (REV. 2-47)

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

| COLUMN NUMBER | | 5 | | |
|--------------------------------------|---------------|--------------------------------------|--|--|
| LOADING CONDITION | | MINE LAYER 6-2000# | | |
| GROSS WEIGHT | LBS. | 79657 | | |
| EMPTY WEIGHT | (ACTUAL) LBS. | 45739 | | |
| FUEL/OIL | GALS. | 2800/90 | | |
| FIXED GUNS/AMMUNITION | | NONE | | |
| FLEXIBLE GUNS/AMMUNITION | | 6-.50 Cal/1800 Rds. 2-20 MM/600 Rds. | | |
| ENGINE POWER USED FOR PERFORMANCE | | NORMAL | | |
| WING LOADING | LBS./SQ.FT. | 61.3 | | |
| POWER LOADING ① | LBS./BHP | 18.1 | | |
| V-MAX. SEA LEVEL | KN. | 218 | | |
| V-MAX./ CRITICAL ALT. | KN/FT. | 242/17200 | | |
| V-STALL GROSS WEIGHT ② | KN. | 86.7 | | |
| V-STALL WITHOUT FUEL ② | KN. | 77.0 | | |
| TIME-TO-CLIMB -10000FT.- | MIN. | 14.9 | | |
| TIME-TO-CLIMB -20000FT.- | MIN. | 39.1 | | |
| SERVICE CEILING | FT. | 22200 | | |
| TAKE-OFF DISTANCE -CALM- | FT. | 2447(1444) | | |
| TAKE-OFF DISTANCE -15 KN.- | FT. | 1727(1020) | | |
| TAKE-OFF DISTANCE -25KN.- | FT. | 1304(770) | | |
| TAKE-OFF DISTANCE -50 FT OBST. | FT. | | | |
| TAKE-OFF TIME | SECONDS | | | |
| RATE OF CLIMB -SL- | FT/MIN. | 710 | | |
| MAX. RANGE / V-AV. ③ | NMI./KN. | 2270/153 | | |
| RANGE / V-AV. -60% NSP-③- | NMI./KN. | | | |
| SEARCH RADIUS / V-AV. -20% R- (P-2) | NMI./KN. | 725/153 | | |
| A.S.W. RADIUS / V-AV. -20% R- | NMI./KN. | | | |
| SCOUT RADIUS | NMI. | | | |
| COMBAT RADIUS | NMI. | | | |

PERFORMANCE IS BASED ON - CALCULATIONS

RANGE & RADIUS ARE BASED ON AER. ENGINE LAB.

FUEL CONSUMPTION DATA INCREASED

BY 15 PERCENT TO CONFORM WITH PAST EXPERIENCE. Turbo-Jet Engine Fuel Consumption Data Increased by

7.5%

Search Radius Formula No. P-2

Radius is 40% range at vel. for max. range at 1500 ft. with conventional engines only. Allowance of 20% of initial fuel load for warm-up, take-off, climb and reserve is carried entire distance. Bombs, radar, tanks also carried entire distance.

Practical search radius is reduced approximately 14 n. mi. for each minute of combat at 1500 ft. at jet military rated thrust plus engine military rated power.

Performance for all conditions is shown with AN/APS-33 radar nacelle extended. Effect of retracting radar nacelle is negligible.

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

OFFENSIVE ARMAMENT

FUSELAGE BOMB-BAY:

Group 1:

Bombs: 24-100#, 12-250#, 12-500#, 12-1000#, or 8-1000# G.P.
Depth Bombs: 12-325#, 12-350#, or 12-700#.
Mines: 8-MK19-1(540#), 12-MK36(1000#), 8-MK13(1000#), 8-MK13-5(1000#), or
12 AN-MK26-1(1000#).
Frag. Clusters: 24-AN-M1A1(100#), or 12-AN-M4(100#).
Smoke Bombs: 12-MK3(100#), or 12-MK1-1(50#).

Note: Installation of one, two, or three bomb-bay tanks reduces bomb capacities in Group 1, 25%, 50% or 75% respectively.

Group 2:

Bombs: 6-1600#, or 6-2000#.
Mines: 6-MK25(2000#).

Note: Installation of one or two bomb-bay tanks reduces bomb capacities in Group 2, 33% or 66% respectively.

Group 3:

Torpedoes: 2-MK13-3(2188#).
Mines 2-1600#, or 2-1860#.

Note: One or two bomb-bay tanks may be carried with Group 3 mine loadings, and one (forward) bomb-bay tank may be carried with Group 3 torpedo loading (This horizontal bomb-bay allows a multitude of bomb loading arrangements without modification of bomb-bay.).

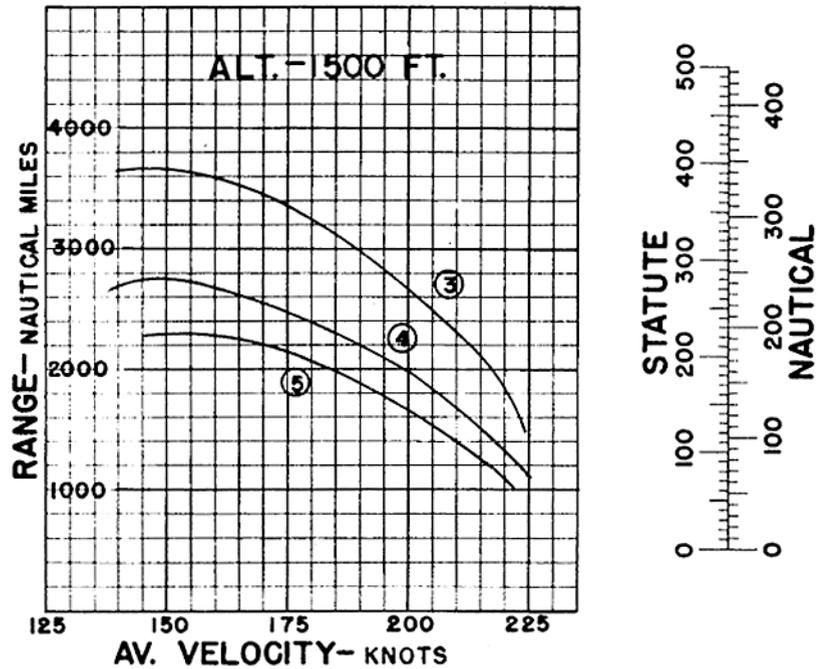
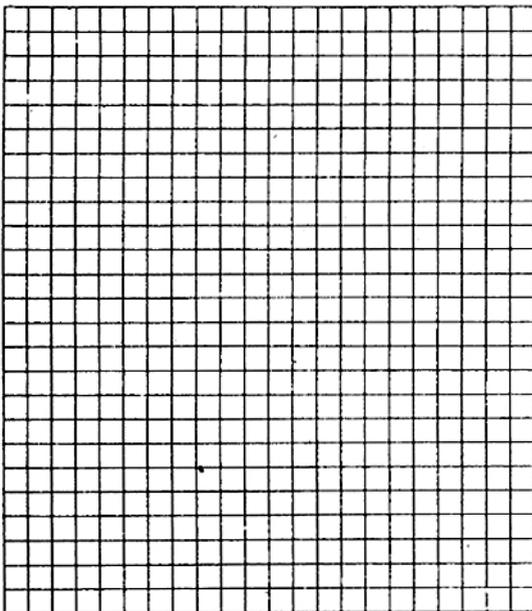
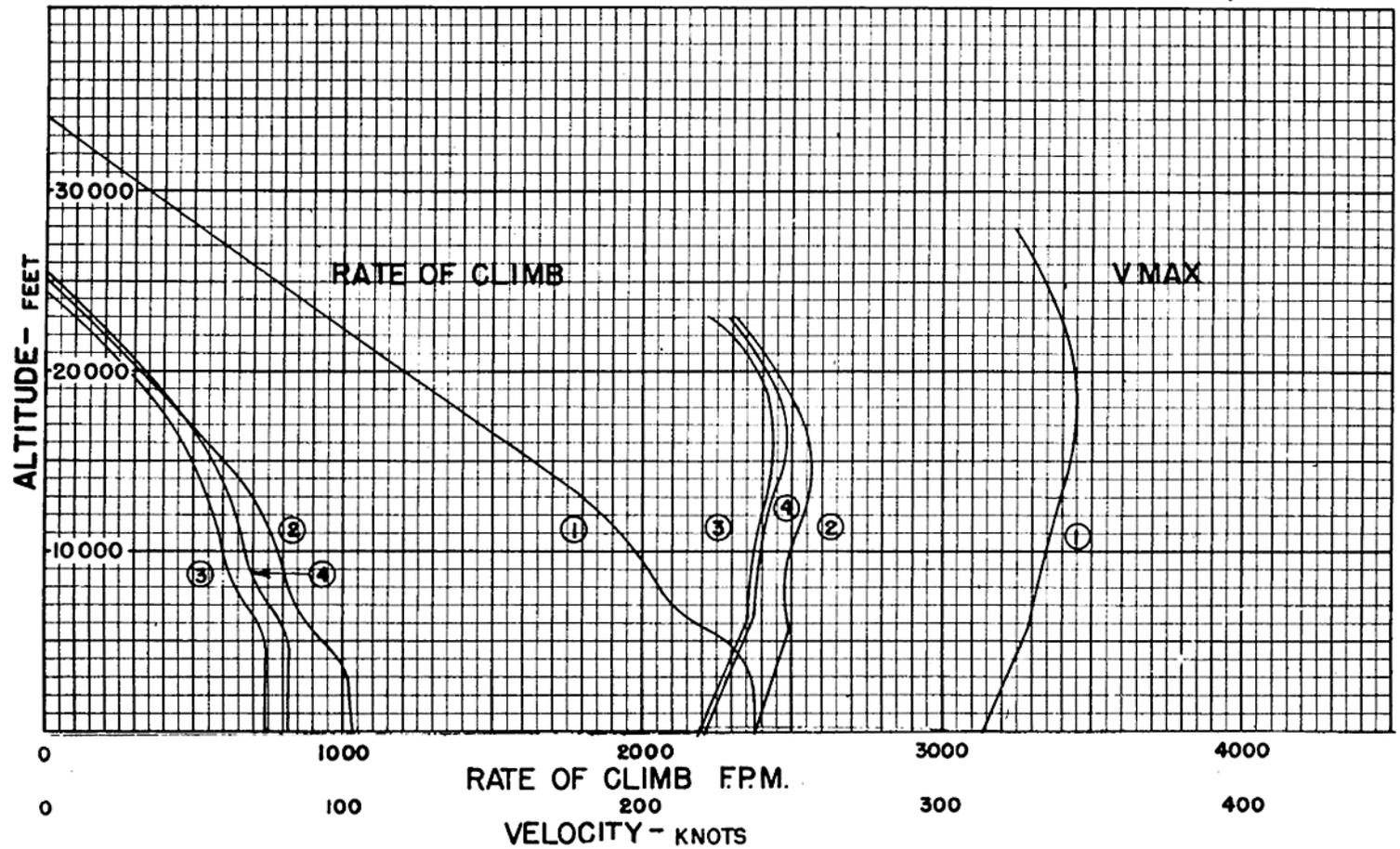
Gunsights:

Deck Turret - MK-9 Sight.
Side Waist Turret - MK-9 Sight.
Tail Turret - S-4 Sight Assembly.
Bow Turret - MK18-Mod 4 Sight.

AIRPLANE PERFORMANCE

NAVAER-1335 D (REV. 2-47)

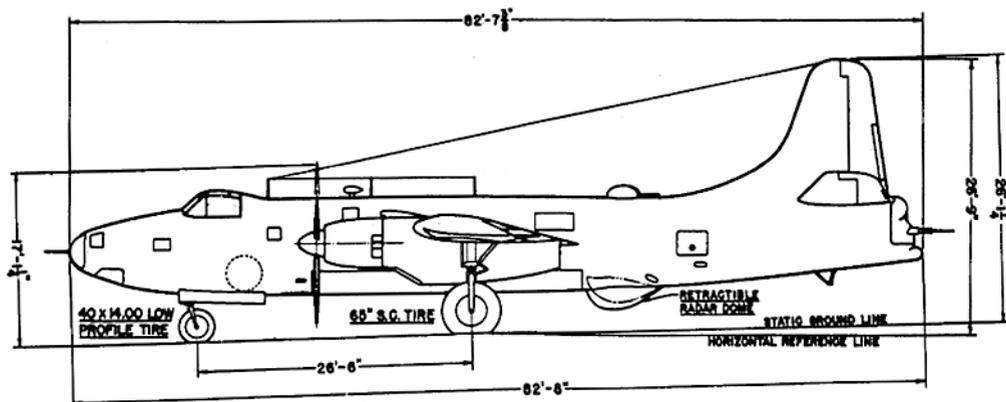
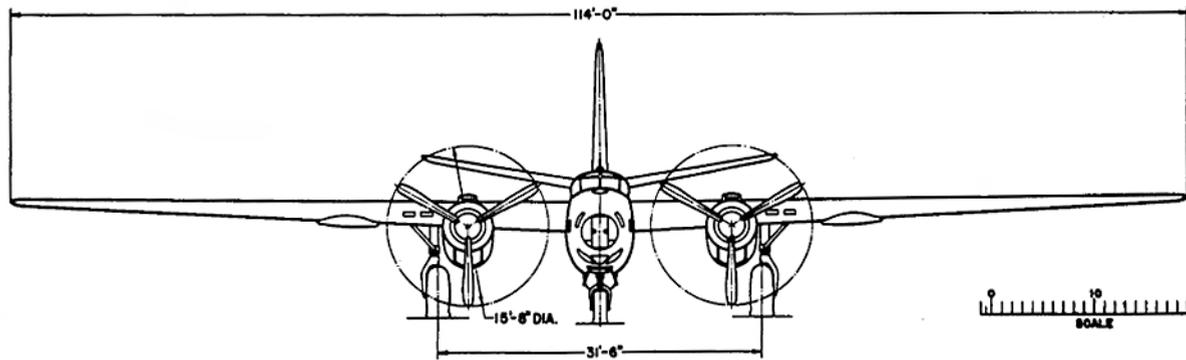
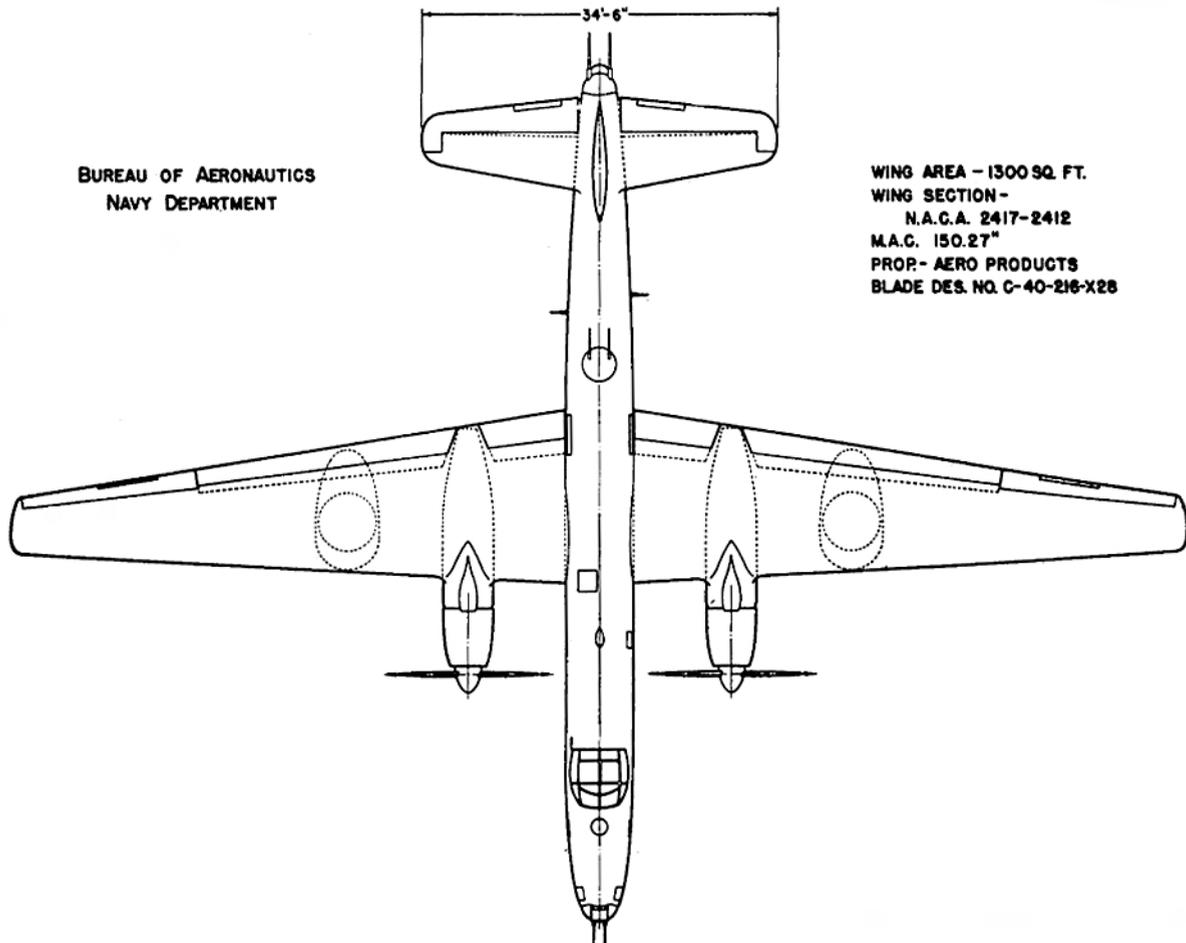
BUREAU OF AERONAUTICS, NAVY DEPT.



○ LOADING CONDITION COLUMN NUMBER

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA - 1300 SQ. FT.
WING SECTION -
N.A.C.A. 2417-2412
M.A.C. 150.27"
PROP - AERO PRODUCTS
BLADE DES. NO. C-40-216-X28



MODEL XP4M-1

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

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

PROTECTION

- | | |
|--------------------------|-----------|
| 1. BOW TURRET | 79 LBS. |
| 2. PILOT & CO-PILOT FWD. | 204 LBS. |
| 3. DECK TURRET | 144 LBS. |
| 4. TAIL TURRET | 176 LBS. |
| 5. OIL COOLER | 40 LBS. |
| 6. ENGINE ACCESSORIES | 25 LBS. |
| 7. SELF-SEALING CELLS | 3004 LBS. |

