ISSUE OF 6 PAGES

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER

LOADING CONDITION

GROSS WEIGHT LBS.

EMPTY WEIGHT Actual LBS.

FUEL/OIL GALS.

FIXED GUNS/AMMUNITION

FLEXIBLE GUNS/AMMUNITION

ENGINE POWER USED FOR PERFORMANCE

WING LOADING LBS/50 FT.

POWER LOADING 1 LBS/BHP.

V-MAX SEA LEVEL KNOTS.

V-MAX/Critical Alt. KNOTS.

V-STALL GROSS WEIGHT KILOGRAMS.

V-STALL Without FUEL KILOGRAMS.

TIME-TO-CLIMB -10000 FT. MIN.

SERVICE CEILING FT.

TAKE-OFF DISTANCE CALM WIND FT.

TAKE-OFF DISTANCE WIND 15 KNOTS FT.

TAKE-OFF DISTANCE WIND 25 KNOTS FT.

TAKE-OFF DISTANCE WIND 50 FT OBSTACLE FT.

TAKE-OFF TIME SECONDS.

RATE OF CLIMB ft/minute.

MAX RANGE / V-AV. nautical miles/minute.

WING LOADING LBS/50 FT.

POWER LOADING LBS/BHP.

V-MAX SEALEVEL KNOTS.

V-MAX/Critical Alt. KNOTS.

V-STALL GROSS WEIGHT KILOGRAMS.

V-STALL Without FUEL KILOGRAMS.

TIME-TO-CLIMB -10000 FT. MIN.

SERVICE CEILING FT.

TAKE-OFF DISTANCE CALM WIND FT.

TAKE-OFF DISTANCE WIND 15 KNOTS FT.

TAKE-OFF DISTANCE WIND 25 KNOTS FT.

TAKE-OFF DISTANCE WIND 50 FT OBSTACLE FT.

TAKE-OFF TIME SECONDS.

RATE OF CLIMB ft/minute.

MAX RANGE / V-AV. nautical miles/minute.

ENGINE/PROP GEAR RATIO W.A.C. 2600/20/16:9

Military Normal Take-off

1750/2600/31-4000 1600/2400/31-4500 1900/2800/ST

1450/2600/31-500 1350/2400/77200

ENGINE RATING BHP/PPM/ALT

PROTECTED

UNPROTECTED

TOTAL FIXED INTERNAL

DROPPABLE

DROPPABLE

TOTAL

TANKAGE IN GALLONS OIL FUEL

OFFENSIVE ARMAMENT

FUSELAGE BOMB BAY:

Bombs: 1-2000#, 1-1600#, 2-1000# A.P., -S.A.P.

1-1000# R.P., 2-500#, 5-100#, or 2-250

Depth Bombs: 1-650# or 2-325#

Torpedo: 1 MK 13-3

WING (external) Alternate with radar & drop tanks

Bombs: 2-1000#, 2-500#, or 6-100#, or 2-250

Depth Bombs: 2-650#, or 2-325#

NOTE: Bomb bay doors must be partially open while carrying 2000# bomb, torpedo, or 100 gal. tank in bomb bay.

Doors cycled after dropping.

DATE 1 Oct, 1946

CONFIDENTIAL

MODEL - SB2C-5
Performance is based on flight test of SB2C-5 airplane. Range and radius are based on SB2C-5 fuel consumption data increased by 15 percent to conform with past experience.

Combat Condition: Two wing bomb racks (MK 51-7) with sway bracing aboard; bombs, rocket launchers and AN/AQS-4 radar not aboard. Installation of 8 MK 5-1 launchers reduces Vmax to 249 km./16400 ft. at military power.

Two Mk. 51-7 wing bomb racks and sway bracing aboard in all conditions. AN/AQS-4 radar on wing bomb rack in Condition (3) only.

BOMBER COMBAT RADIUS FORMULA NO. B-1-CONDITIONS NO. 3, 4

<table>
<thead>
<tr>
<th>WARM-UP</th>
<th>RENDEZVOUS</th>
<th>CLIMB</th>
<th>CRUISE OUT</th>
<th>DROP TANKS</th>
<th>COMBAT</th>
<th>CRUISE BACK</th>
<th>RESERVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 min.</td>
<td>20 min. at</td>
<td>15000 ft.</td>
<td>at 15000 ft.</td>
<td>to 15000 ft.</td>
<td>at 1500 ft.</td>
<td>at 1500 ft.</td>
<td>60 min. at</td>
</tr>
<tr>
<td>1 min.</td>
<td>60% N.S.P.</td>
<td>at 180 kts.TAS</td>
<td></td>
<td></td>
<td></td>
<td>170 kts.TAS</td>
<td>60 min. at</td>
</tr>
<tr>
<td>Auto Lean, Auto Lean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto Lean, Auto Lean</td>
<td></td>
</tr>
</tbody>
</table>

SCOUTING RADIUS FORMULA NO. S-1-CONDITIONS NO. 2

RADIUS IS 1/3 RANGE AT VEL.FOR MAX.RANGE AT 1500 FT. Fuel for 20 min.warm-up,1 min.T.O. used at start of flight. Allowance for 60 min. at V.for max.range for rendezvous,landing and reserve carried ent. distance.

Practical scouting radius is reduced 6 nautical miles for each minute of military power operation.

Notes: (1) Engine ratings given on page 1 are ARL ratings. These ratings do not conform to engine data obtained from SB2C-5 flight test. The flight test data are used in the performance calculations.

(2) Rammed engine ratings for performance from flight tests of 1000 lb. bomber;

<table>
<thead>
<tr>
<th>Military</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750/2800/SL-5500</td>
<td>1600/2400/SL-5200</td>
</tr>
<tr>
<td>1450/2600/10600-16400</td>
<td>1350/2400/10000-17100</td>
</tr>
</tbody>
</table>
BUREAU OF NAVAL AERONAUTICS

PROTECTION
1. PILOT FORWARD 76 LBS.
2. PILOT AFT 79 LBS.
3. GUNNER 44 LBS.
4. SELF-SEALING CELLS 377 LBS.

2 x 20 M.M. CANNON 400 RDS. AMMUNITION

DROPPABLE TANKS

VIEW A TO B

VIEW B TO C

VIEW C

DECLASSIFIED