Characteristics Summary

BOMBER ................................................. B-52F

"STRATOFORTRESS" BOEING

Wing Area ......................... 4000 sq ft
Length ......................... 156.5 ft
Span ......................... 185.0 ft
Height (overall) ..................... 48.3 ft
Height (fin folded) .................. 21.5 ft

AVAILABILITY

<table>
<thead>
<tr>
<th>Number available (As of 1 Sep 63)</th>
<th>Number to be delivered in fiscal years</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST</td>
<td>INVENTORY</td>
</tr>
<tr>
<td>1</td>
<td>85</td>
</tr>
</tbody>
</table>

STATUS

1. The B-52F airplane differs from the B-52C, D, E by the installation of the J57-P-43WA engines in place of the J57-P-19, 29W, and installation of engine driven alternators.
2. Modification of the wing structure, addition of new pods; improvement to water injection sys-
   tem are items necessary for incorporation of the J57-P-43WA engines.
3. Program Initiated: ............ Nov 54
4. First Flight: ............. Mar 58
5. First Acceptance: ........... May 58
6. Out of production: .......... Dec 58

POWER PLANT

(3) J57-P-43WA***
Pratt & Whitney
ENGINE RATINGS

SLS LB - RPM MIN
Max: 13,750-6900/9650-5
MIL: 11,200-6400/9650-30
Nor: 9,900-6100/9350-Cont

** First figure represents low pressure spool; sec-
ond figure represents high pressure spool.
***Equipped with sound suppressors.

NOTE: At present there are no requirements for ATO.

FEATURES

Crew ......................... 6
Cabin pressurization, heating and cooling
Braking parachute
Quadricycle landing gear
Aerodynamic spoilers (air-
bake)
Strike camera station
ASB-4A high speed bombing radar
MD-9 fire control system
Folding fin
Crosswind steering
Engine driven alternators
Pneumatic driven, hyd. packs
Anti-Skid Brakes
A/A42G-11 Auto. Flt. Control
Max fuel cap: 41,553 gal

ARMAMENT

Turret ......................... 1
Guns : 4 x .50 cal (M-3)
Ammunition (tot): 2400 rds
BOMBS:
No.

New Series
27 (Family of Clusters)
(1000 lb ea)
Special Weapons
MK-15
MK-36
MK-50
MK-41
MK-43
MK-28

NOTE: Airplane will carry
4 ADM-20A & 2 AGM-28A
Missiles
Max Bomb Load: 2(2)17,730 lb

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### Characteristics Summary Basic Mission

**B-52F**

**Performance**

<table>
<thead>
<tr>
<th>Combat Radius</th>
<th>Ferry Range</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>3345 naut. mi with 10,000/400 lb payload at 454 knots avg. in 14.81 hours.</td>
<td>6930 naut. mi with 41,553 gal fuel at 454 knots avg. in 15.28 hours at 443,393 lb T.O. wt.</td>
<td>COMBAT 495 knots at 45,650 ft alt., mil power (TAS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MAX 553 knots at 20,500 ft alt., mil power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BASIC 521 knots at 35,000 ft alt., mil power</td>
</tr>
</tbody>
</table>

**Climb**

- 2300 fps sea level, take-off weight normal power
- 5680 fps sea level, combat weight military power

**Climbing**

- 37,800 ft 100 fps, take-off weight normal power
- 46,600 ft 500 fps, combat weight military power

**Load Weights**

| Bombs/Chaff: 10,000/400 lb Ammunition 2400 rds./50 cal | Empty... 164,936 lb | 147 knots initial buffet power-off, landing configuration, take-off weight. |
| Fuel: 40,970 gal protected 0 % | Combat... 283,800 lb |
| droppable 14.4 % | (b) Take-off 450,000 lb limited by structure (inflight) |
| external 14.4 % | TIME TO CLIMB |
| Density:(JP-4) lb/gal (6,5) | 19.8 min to cruise |
| altitude of 33,450 ft |

**Notes**

1. Performance Basis:
   - (a) Data Source: Flight Test
   - (b) Does not include 10,000 lb water
   - (c) Limited fuel capacity
   - (d) Limited by structure

2. Revision Basis: Data re coordinated by OCAMA July 64.
Characteristics Summary Basic Mission ............... B-52F

HIGH ALTITUDE REFUELED BOMBER BUDDY TYPE (KC-135A)

PERFORMANCE

<table>
<thead>
<tr>
<th>COMBAT RADIUS</th>
<th>FERRY RANGE</th>
<th>SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(e) 4160 naut. mi</td>
<td>4160 naut. mi</td>
<td>COMBAT 490 knots at 44,000 ft alt, max power</td>
</tr>
<tr>
<td>10,000/400 lb payload</td>
<td>(c) with 41,553 gal fuel</td>
<td>(d) MAX 553 knots at 20,500 ft alt, max power</td>
</tr>
<tr>
<td>at 460 knots avg.</td>
<td>at 433,393 lb T.O. wt.</td>
<td>BASIC 521 knots at 35,000 ft alt, max power</td>
</tr>
<tr>
<td>in 20.5 hours.</td>
<td>in 20.5 hours.</td>
<td></td>
</tr>
</tbody>
</table>

CLIMB

2300 fpm
sea level, take-off weight normal power

CEILING

37,800 ft
100 fpm, take-off weight normal power

TAKE-OFF

7000 ft
no assist max power

7000 ft
no assist max power

50 fpm, combat weight military power

over 50 ft height

LOAD WEIGHS

45,600 ft
500 fpm, combat weight military power

STALLING SPEED

9100 ft
no assist max power

147 knots
power-off, landing configuration, take-off weight

TIME TO CLIMB

20.0 min to cruise altitude of 33,450 ft.

Notes

1. Performance Basis:
   (a) Data Source: Flight Test
   (b) Does not include 10,000 lb water
   (c) Limited fuel capacity
   (d) Limited by structure
   (e) Surge valves closed; 3000 gal tanks on for refuel. Increase range by 2.4% when tanks are dropped after refuel.

2. Revision Basis: Data recoordinated by OCAMA July 64.