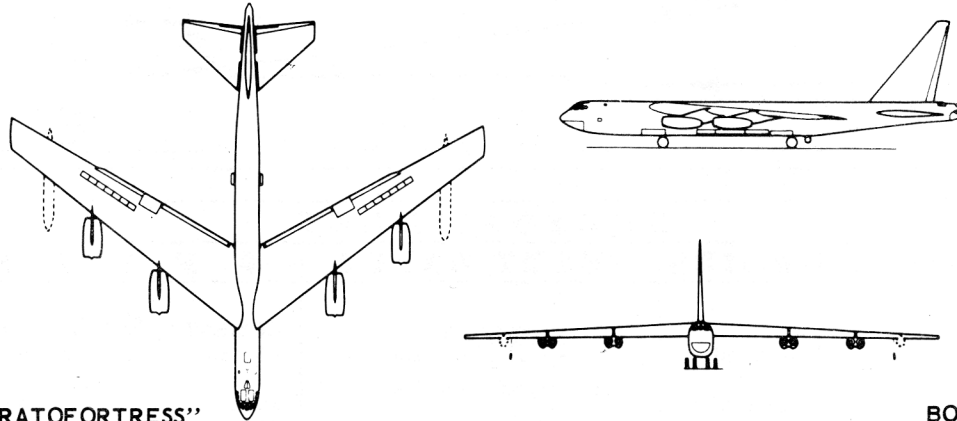


# Characteristics Summary

BOMBER ..... B-52F



“STRATOFORTRESS”

BOEING

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

AVAILABILITY			PROCUREMENT			
Number available (As of 1 Sep 63)			Number to be delivered in fiscal years			
TEST	INVENTORY	TOTAL	FY 63			
1	85	86	0			

## STATUS

- 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-19W, 29W, and installation of engine driven alternators.
  - Modification of the wing structure, addition of new pods; improvement to water injection system  
Navy Equivalent: None
  - 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
- Mfr's Model: 464-260

## POWER PLANT

(8) J57-P-43WA\*\*\*  
 Pratt & Whitney  
 ENGINE RATINGS  
 SLS LB - \*\*RPM - MIN  
 Max:\*13,750-6900/9650- 5  
 Mil: 11,200-6400/9650- 30  
 Nor: 9,500-6100/9350-Cont  
 \* Wet  
 \*\* First figure represents low pressure spool; second figure represents high pressure spool.  
 \*\*\*Equipped with sound suppressors.

NOTE: At present there are no requirements for ATO.

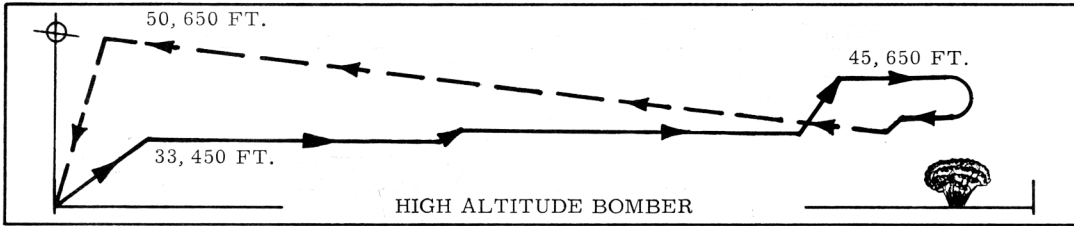
## FEATURES

Crew ..... 6  
 Cabin pressurization, heating and cooling  
 Braking parachute  
 Quadricycle landing gear  
 Aerodynamic spoilers (air-brake)  
 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-39  
 MK-41  
 MK-43  
 MK-28  
 NOTE: Airplane will carry 4 ADM-20A & 2 AGM-28A Missiles  
 Max Bomb Load:(2)17,700 lb

*Characteristics Summary Basic Mission* ..... B-52F



PERFORMANCE		
COMBAT RADIUS	FERRY RANGE	S P E E D
<p><b>3345</b> naut. mi</p> <p>with 10,000/400 lb payload</p> <p>at 454 knots avg.</p> <p>in 14.81 hours.</p>	<p><b>6930</b> naut. mi</p> <p>(c) with 41,553 gal fuel</p> <p>at 454 knots avg.</p> <p>(b) in 15.28 hours</p> <p>at 443,393 lb T.O. wt.</p>	<p>COMBAT <b>495</b> (TAS) knots at 45,650 ft alt, mil power</p> <p>MAX <b>553</b> (d) knots at 20,500 ft alt, mil power</p> <p>BASIC <b>521</b> knots at 35,000 ft alt, mil power</p>
C L I M B	C F I L I N G	T A K E - O F F
<p><b>2300</b> fpm</p> <p>sea level, take-off weight</p> <p>normal power</p>	<p><b>37,800</b> ft</p> <p>100 fpm, take-off weight</p> <p>normal power</p>	<p>ground run</p> <p><b>7000</b> ft   Max Power</p>
<p><b>5680</b> fpm</p> <p>sea level, combat weight</p> <p>military power</p>	<p><b>46,600</b> ft</p> <p>500 fpm, combat weight</p> <p>military power</p>	<p>over 50 ft height</p> <p><b>9100</b> ft   Max Power</p>
L O A D	W E I G H T S	S T A L L I N G S P E E D
<p>Bombs/Chaff: 10,000/400 lb</p> <p>Ammunition 2400 rds/.50 cal</p> <p>Fuel: 40,970 gal</p> <p>protected 0 %</p> <p>droppable 14.4 %</p> <p>external 14.4 %</p> <p>Density:(JP-4) lb/gal (6.5)</p>	<p>Empty..... 164,936 lb</p> <p>Combat... 283,600 lb</p> <p>(b) Take - off 450,000 lb</p> <p>limited by structure (inflight)</p>	<p>147 knots initial buffet power-off, landing configuration, take-off weight.</p>
		T I M E T O C L I M B
		<p>19.8 min to cruise</p> <p>altitude of 33,450 ft</p>

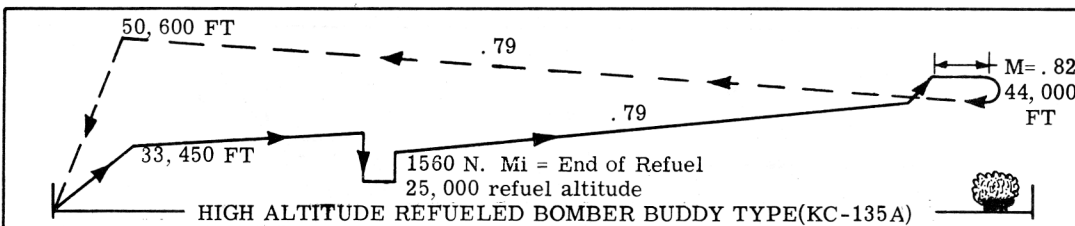
**N O T E S**

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 reCOORDINATED by OCAMA July 64.

*Characteristics Summary Basic Mission* ..... B-52F



**PERFORMANCE**

<b>COMBAT RADIUS</b>	<b>FERRY RANGE</b>	<b>S P E E D</b>
(e) <b>4160</b> naut. mi 10,000/400 lb payload at 460 knots avg. in 20.5 hours.	_____ naut. mi (c) with 41,553 gal fuel at _____ knots avg. in _____ hours at 443,393 lb T.O. wt.	(TAS) COMBAT <b>490</b> knots at 44,000 ft alt, max power (d) MAX <b>553</b> knots at 20,500 ft alt, max power BASIC <b>521</b> knots at 35,000 ft alt, max power
<b>C L I M B</b>	<b>C E I L I N G</b>	<b>T A K E - O F F</b>
<b>2300</b> fpm sea level, take-off weight normal power	<b>37,800</b> ft 100 fpm, take-off weight normal power	ground run <b>7000</b> ft no assist   max power
<b>4850</b> fpm sea level, combat weight military power	<b>45,600</b> ft 500 fpm, combat weight military power	over 50 ft height <b>9100</b> ft no assist   max power
<b>L O A D</b>	<b>W E I G H T S</b>	<b>S T A L L I N G S P E E D</b>
Bombo/Chaff: 10,000/400 lb Ammunition 2400 rds/.50 cal  Fuel: 40,970 gal protected 0 % droppable 14.4 % external 14.4 % Density: JP-4 lb/gal (6.5)	Empty..... 164,936 lb Combat... 320,000 lb (b) Take - off 450,000 lb  limited by structure (inflight)	<b>147</b> knots power-off, landing config- uration, take-off weight  <b>TIME TO CLIMB</b>  20.0 min to cruise altitude of 33,450 ft.

**N O T E S**

- Performance Basis:
  - Data Source: Flight Test
  - Does not include 10,000 lb water
  - Limited fuel capacity
  - Limited by structure
  - Surge valves closed; 3000 gal tanks on for refuel. Increase range by 2.4% when tanks are dropped after refuel.
- Revision Basis: Data re-coordinated by OCAMA July 64.