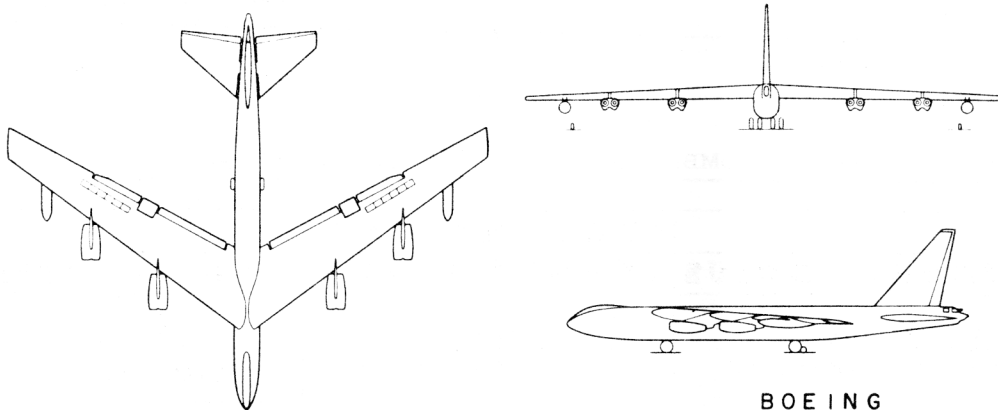


Characteristics Summary

BOMBER XB-52



BOEING

Wing area 4000 sq ft Length 152.7 ft
 Span 185.0 ft Height 48.25 ft

STATUS

The XB-52 passed through 4 preliminary design stages before the present configuration was decided upon as follows:

Date	Boeing Model No.	Gross Wt.(lb)	Power Plant
28 Jun 1946	462	360,000	(6) T35-1
7 Jan 1947	464-22	480,000	(4) T35-3
8 Dec 1947	464-35	280,000	(4) T35-5
27 Oct 1948	464-49	330,000	(8) YJ57-P-3
29 Mar 1950	464-67	390,000	(8) XJ57-P-1
6 Oct 1950	464-67	390,000 (W/O ATO)	(8) J57-P-(?)

Current development is as follows:

Present Design Initiated:	27 Oct 1948
Mock-up Inspection:	26 Apr 1949
Engine Nacelle Mock-up Inspection:	14 Jun 1950
First Flight (1st article):	Oct 1951 (est)
First Flight (2nd article):	Dec 1951(est)

POWER PLANT

The first and second aircraft will be powered with (8) YJ57-P-3 engines (8700 lb max thrust/SLS). These engines will subsequently be modified to give the following thrust ratings: MAX and MILITARY, 9250 lb (with variable area nozzle) and 9000 lb (with fixed area nozzle); NORMAL, 8700 lb. These ratings were used for performance shown in this chart, however, the model designation for this modified engine is undetermined. Further plans call for the addition of water injection and overspeed to increase take-off thrust. Consideration of future add-

ition of a short type take-off afterburner is dependent upon effect on fuel specifics.

Liquid ATO used for performance is 39,000 lb thrust for 60 seconds. This will be reduced to 20,000 lb ATO when water injection becomes available.

FEATURES

Crew: 5
 Auto.Cabin Pressurization
 E-4(mod.) Auto-Pilot
 Bomb-Navig.Radar, K1A
 Fire Control System, A3
 Quadricycle Landing Gear
 Vertical Camera Station
 Deceleration Parachute
 Aerodynamic Spoilers (air brake)
 ATO(liquid): 30,000#thrust
 Max Fuel Cap: 38,270 gal (incl. fuel for ATO)

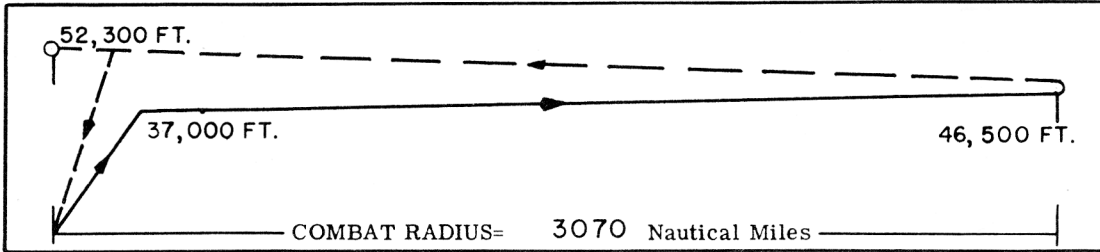
ARMAMENT

Turrets: 1
 Guns: 2x.50 cal
 Ammunition(tot.): 1200 rds
 Max Bomb Load: *25,000 lb
 Max Bomb Size: *25,000 lb
 *Space provisions only

2nd Ed 1 March 1951

(OR CHANGED TO *Unclassified*)
 BY AUTHORITY OF *8 March 61*
 (DATE OF REVIEW AUTHORITY)
 BY *a p s*
 NAME GRADE (UNIT) (DATE)

Characteristics Summary Basic Mission XB-52



PERFORMANCE		
COMBAT RADIUS	COMBAT RANGE	COMBAT SPEED
3070 naut. mi with 10,000 lb payload at 451 knots avg. in 13.6 hours.	6095 naut. mi with 10,000 lb payload at 454 knots avg. in 13.4 hours.	516 knots at 35,000 ft alt, max power
		MAXIMUM SPEED
		531 knots at 20,000 ft alt, max power
CLIMB	CEILING	TAKE-OFF
2400 fpm sea level, take-off weight normal power	39,500 ft 100 fpm, take-off weight normal power	ground run 7820ft no assist 4720ft ^(e) assisted
4550 fpm sea level, combat weight maximum power	46,500ft 500 fpm, combat weight maximum power	over 50 ft height 9700ft no assist 6220ft ^(e) assisted
LOAD	WEIGHTS	STALLING SPEED
Bombs: 10,000 lb Ammo: 1200 rds/.50 cal	Empty..... 155,200 lb Combat... 256,800 lb Take - off 390,000 lb limited by strength	127 knots flaps down, take-off weight
Fuel: 36,540 gal protected 70 % droppable 5 % external 5 %		TIME TO CLIMB —————

N O T E S

1. PERFORMANCE BASIS:
 (a) Estimated data
 (b) Fuel density: 6.0 lb/gal
 (c) In computing Radius and Range, specific fuel consumptions have been increased 5% to allow for variation of fuel flow in service aircraft.
 (d) Performance based on max thrust of 9250 lb (variable area nozzle) and normal of 8700 lb (fixed area).
 (e) With 30,000 lb thrust ATO (liquid), 60 sec. duration
 2. REVISION BASIS: Reissue

XB-52

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 Patterson Air Force Base
 Ohio 45433