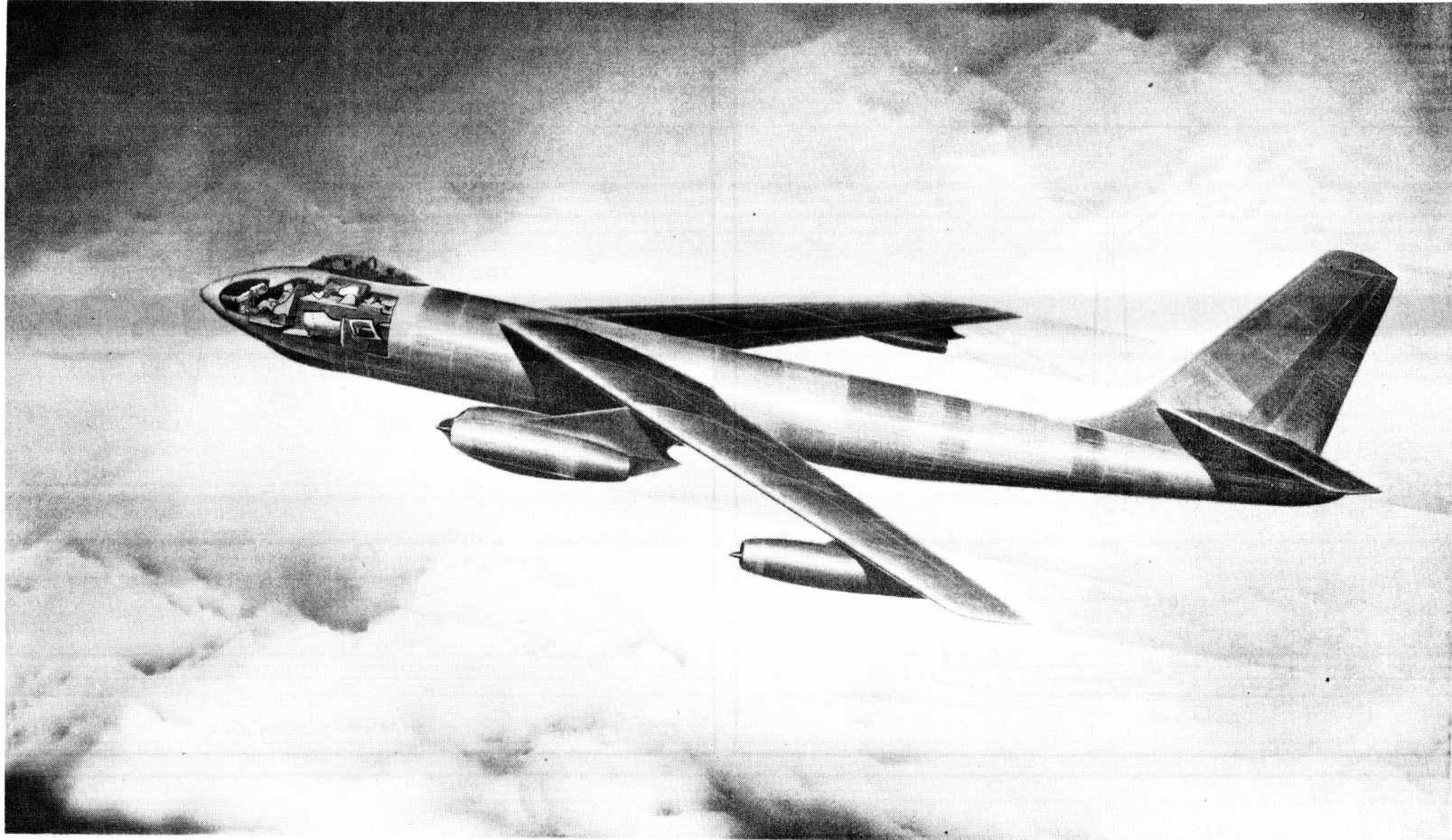


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2nd Ed; Add Nr 23; 26 Feb 53

A-1
B-47A char
SERVICE

C O N F I D E N T I A L



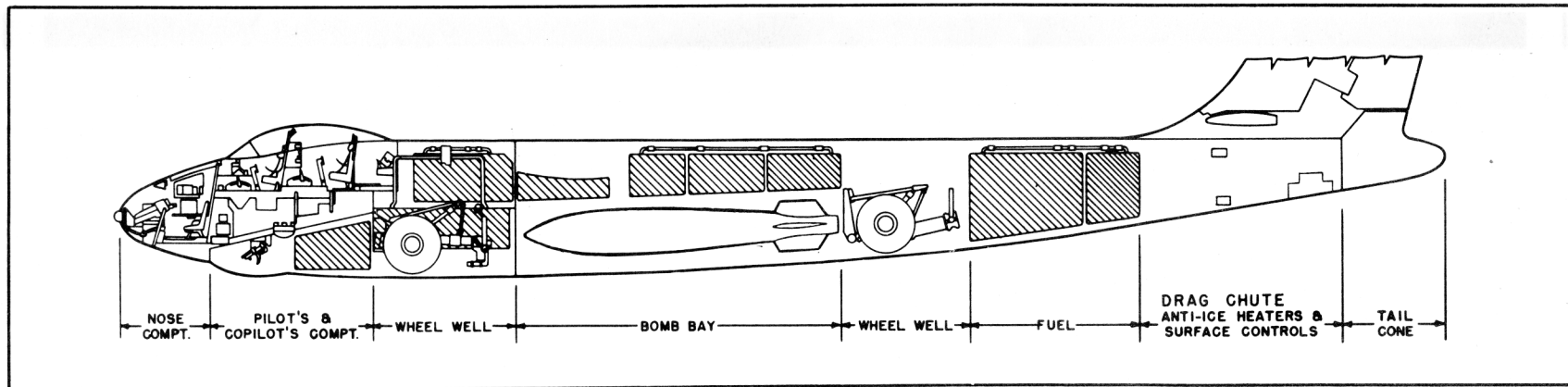
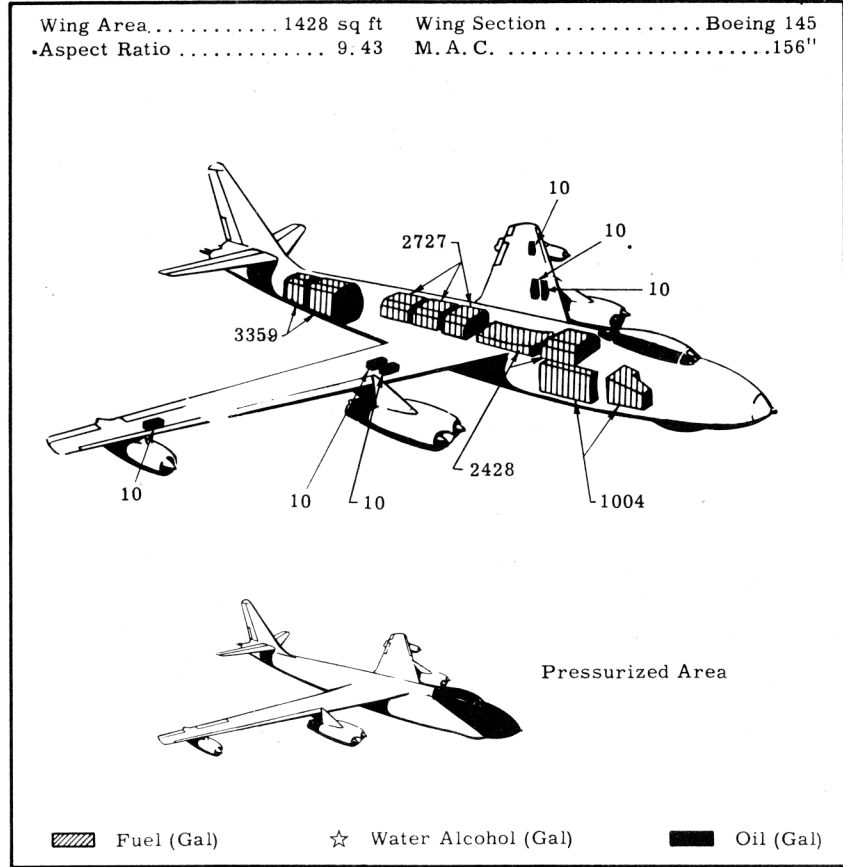
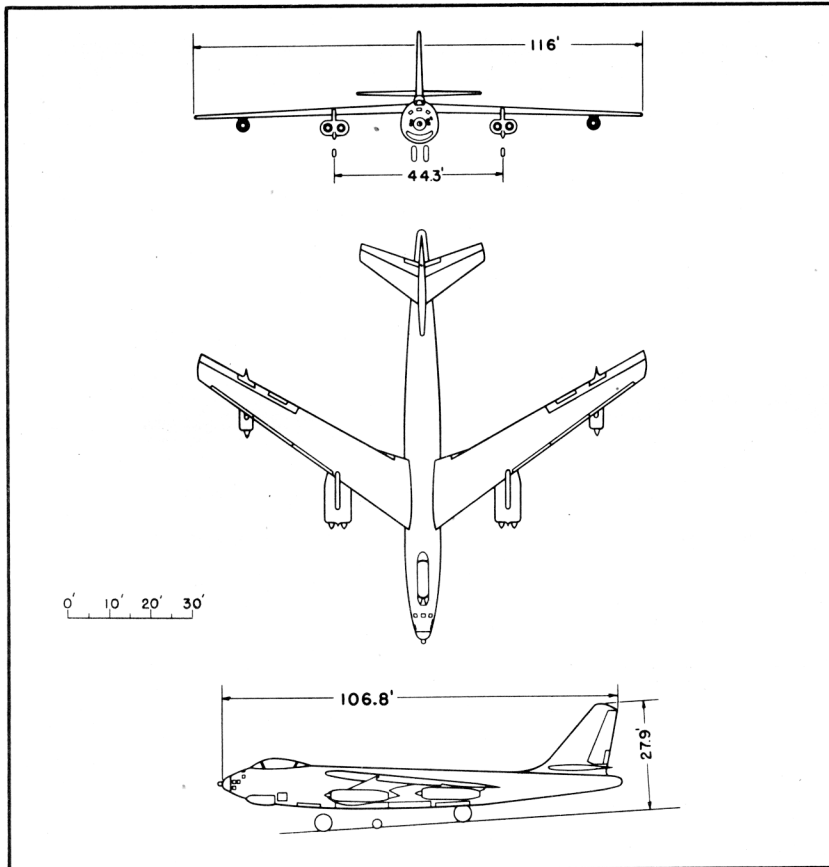
Standard Aircraft Characteristics

B-47A
STRAOTJET
Boeing

SIX J-47-GE-II
GENERAL ELECTRIC

BY AUTHORITY OF
COMMANDING GENERAL
WRIGHT AIR DEVELOPMENT CENTER
U. S. AIR FORCE

Classification cancelled
or changed to Unclassified
AUTH: AFSC AF-LC Doc. Class. Guide 1 Jan 64
By G. R. Sonnenborn 1995 1964 Das Dir 52-0-10
Signature and Grade 13 Dec 1966



POWER PLANT

No. & Model (6) J47-GE-11
 Mfr General Electric
 Engine Spec. No. E-583
 Type Axial Flow
 Length 144"
 Diameter 39"
 Weight (dry) 2475 lb
 Provisions for:
 *ATO Units

No. & Model (18) 14AS1000
 Mfr Aerojet
 Weight (loaded) 200 lb ea.
 *Serial No. 49-1901 does not have provisions for ATO.

ENGINE RATINGS

S. L. Static	LB	RPM	MIN
Max:	5200	7950	5
Mil:	5200	7950	30
Nor:	4730	7630	Cont

*ATO Units Provisions
 Thrust 18 x 1000 lb
 (14 seconds duration)
 *Serial No. 49-1901 does not have provisions for ATO.

DIMENSIONS

Wing
 Span 116.0'
 Incidence 2°45'
 Dihedral 0°
 Sweepback (LE) 36°37'
 Length 106.8'
 Height 27.9'
 Tread 44.3'

Mission and Description

Navy Equivalent: None Mfr's Model: 450-10-9

The B-47A is a high-speed, medium range, swept-wing jet bomber whose tactical mission is the destruction by bombs of land or naval materiel objectives.

The normal crew consists of a pilot, co-pilot-gunner and a bombardier-navigator. The crew compartment, located in the forward part of the fuselage, is pressurized and has complete heating and ventilating facilities. Seat ejection is provided for the normal crew.

The electrically-operated, bicycle-type main landing gear consists of steerable dual-wheel front gear and dual-wheel rear gear. The outrigger landing gear consists of a single wheel retracing into the inboard nacelle. A K-2 Bombing-Navigational System is provided in four (4) of the 10 "A" airplanes.

There are provisions for solid rocket augmentation for take-off and a braking parachute is provided for decreasing landing roll distance. NESA glass windshield provided for pilot. Hydraulic boost provided for all three control surfaces. Anti-skid device for braking.

A type MH-7 automatic pilot is installed.

Development

Design initiated: Dec 1945 (XB-47)
 First flight: Dec 1947 (XB-47)
 First flight: 25 Jun 1950
 Production completed; Jun 1951

B O M B S

No.	Size	Type
1	10,000	Special

Space and structural provisions
 1 22,000 G. P.
 1 12,000 G. P.
 2 4000 G. P.
 9 2000 G. P.
 16 1000 G. P.

Max Bomb Load 22,000 lb

G U N S

Space and provisions for tail turret mounting two (2) type M3, .50 cal machine guns.

Test installation of A-2 fire control system in aircraft Serial No. 1906.

Test installation of A-5 fire control in aircraft Serial No. 1908.

W E I G H T S

Loading	Lb	L. F.
Empty	73,240(E)	
Basic	74,524(E)	
Operating	79,457	
Design	125,000	3.0
Combat	*106,060	
Max T. O.	†157,000	2.0
Max Land	†157,000	

(E) Estimated
 *For Basic Mission
 †Limited by strength
 †Limited by max T. O.

F U E L

Location	No. Tanks	Gal.
Fus, main*	1	2428
Fus, ctr*	1	2727
Fus, aft*	1	3359
Fus, aux*	1	1004
*Self-sealing	Total	9518

Grade JP-3

OIL

Capacity (gal) 60
 Grade 1005

ELECTRONICS

VHF Command AN/ARC-3
 Radio Compass AN/ARN-6
 Interphone AAF Combat
 Marker Beacon RC-193A
 Glide Path *AN/ARN-5A
 I. F. F. *SCR-695B
 *Space provisions only

Loading and Performance—Typical Mission

C O N D I T I O N S	MAX RANGE BASIC MISSION	HIGH ALT MISSION	FERRY RANGE
	I	II	III
TAKE-OFF WEIGHT (lb)	151,324	151,324	141,324
Fuel at 6.5 lb/gal (grade JP-3) (lb)	61,867	61,867	61,867
Military load (Bombs) (lb)	10,000	10,000	None
Wing loading (lb/sq ft)	106	106	98.97
Stall speed (power off, landing configuration) (kn)	125	125	121
Take-off ground run at SL (ft)	6000	6000	5000
Take-off to clear 50 ft (ft)	7210	7210	6150
Rate of climb at SL ③ (fpm)	3375	3375	3700
Time: SL to 20,000 ft ③ (min)	7.9	7.9	7.2
Time: SL to 30,000 ft ③ (min)	14.7	14.7	13.3
Service ceiling (100 fpm) ③ (ft)	38,100	38,100	39,100
Service ceiling (one engine out) ② (ft)	35,500	35,500	37,300
COMBAT RANGE ④ (n. mi.)	2634	2325	2856
Average speed (kn)	416	413	424
Initial cruising altitude (ft)	33,000	38,000	36,000
Final cruising altitude (ft)	43,000	46,000	45,000
Total mission time (hr)	6.21	5.49	6.73
COMBAT RADIUS ④ (n. mi.)	1350	1200	—
Average speed (kn)	424	424	—
Initial cruising altitude (ft)	34,000	38,000	—
Bombing altitude (ft)	35,000	43,000	—
Bomb run speed ③ (kn)	474 ⑦	458	—
Final cruising altitude (ft)	45,800	45,000	—
Total mission time (hr)	6.45	5.76	—
COMBAT WEIGHT ⑤ (lb)	106,060	106,060	85,644
Combat altitude (ft)	35,000	43,000	45,000
Combat speed (kn)	474 ⑦	462	⑥
Combat climb ② (fpm)	2050	950	⑥
Combat ceiling (500 fpm) ② (ft)	44,300	44,300	⑥
Service ceiling (100 fpm) ② (ft)	46,200	46,000	⑥
Service ceiling (one engine out) ② (ft)	42,800	42,800	47,000
Max rate of climb at SL ② (fpm)	6200	6200	⑥
Max speed at 8800 ft ① ⑦ (kn)	521	521	⑥
LANDING WEIGHT (lb)	85,644	85,644	85,644
Ground roll at SL (ft)	4610	4610	4610
Ground roll (auxiliary brake) (ft)	2600	2600	2600
Total from 50 ft (ft)	5730	5730	5730
Total from 50 ft (auxiliary brake) (ft)	3720	3720	3720

NOTES

- ① Max power
- ② Military power
- ③ Normal power
- ④ Detailed descriptions of RADIUS and RANGE missions are given on page 6.
- ⑤ For Radius Mission if radius is shown
- ⑥ Data not available
- ⑦ Limited to Mach . 815 by buffeting

PERFORMANCE BASIS:

- (a) Data source: Flight test
- (b) Performance is based on powers shown on page 6

