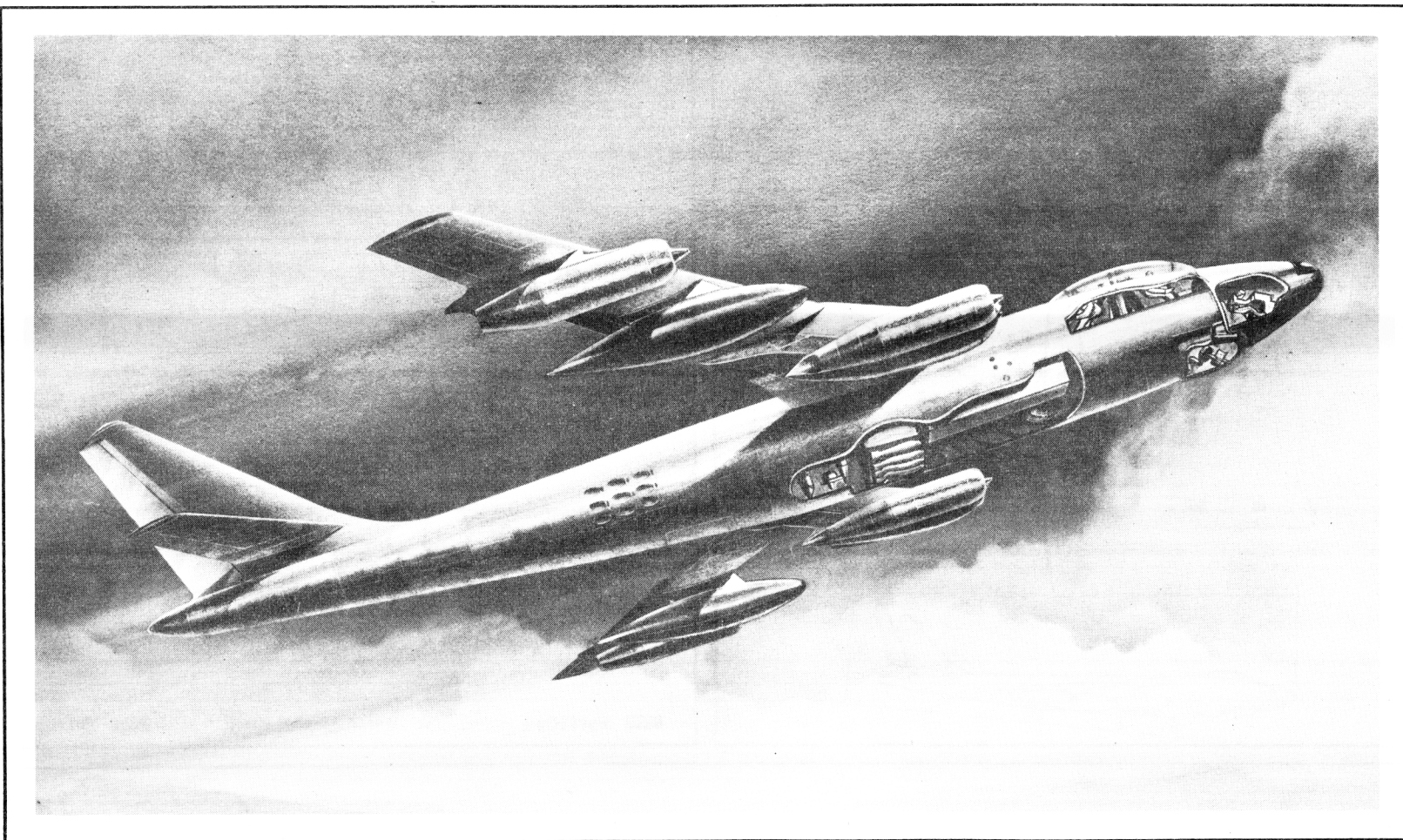


Unclassified
(Security Information)
~~SECRET~~

A-1
CRJ B-47B/char
PRELIMINARY

Classification cancelled
of changed to Unclassified
AUTH: AFSC-AT-2C Sec class Grade 1 Jan 64
BY: C. R. Lomelton 1 Apr 64 DOD DIR 5200.10
Signature and Grade 20 Feb 67



Standard Aircraft Characteristics

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

RB-47B
STRATOJET
Boeing

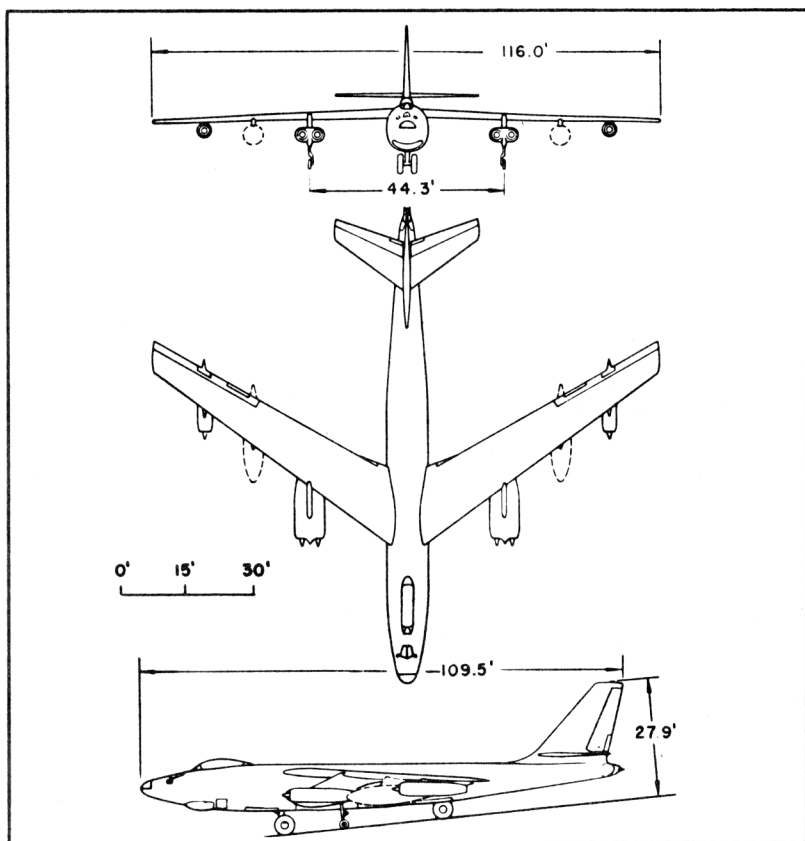
SIX J47-GE-II
GENERAL ELECTRIC

4 JANUARY 1952

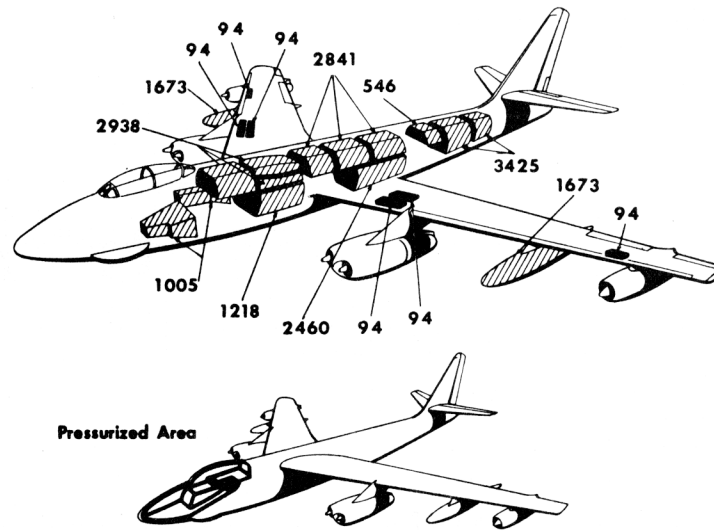
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RB-47B

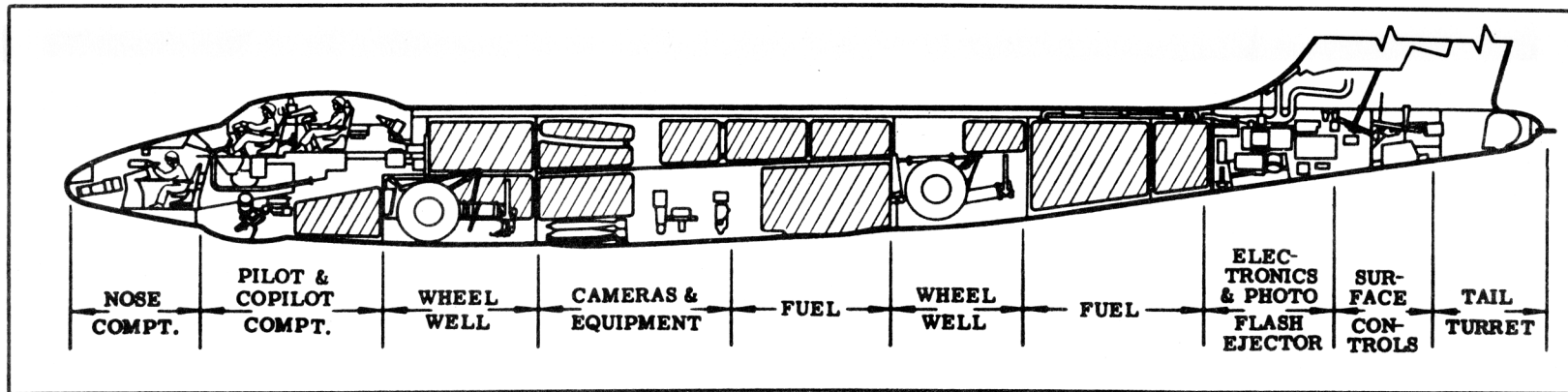
Unclassified



Wing Area 1428 sq ft Wing Section Boeing 145
Aspect Ratio 9.43 M. A. C. 156"



▨ Fuel (Gal) ☆ Water Alcohol (Gal) ■ Oil (Gal)



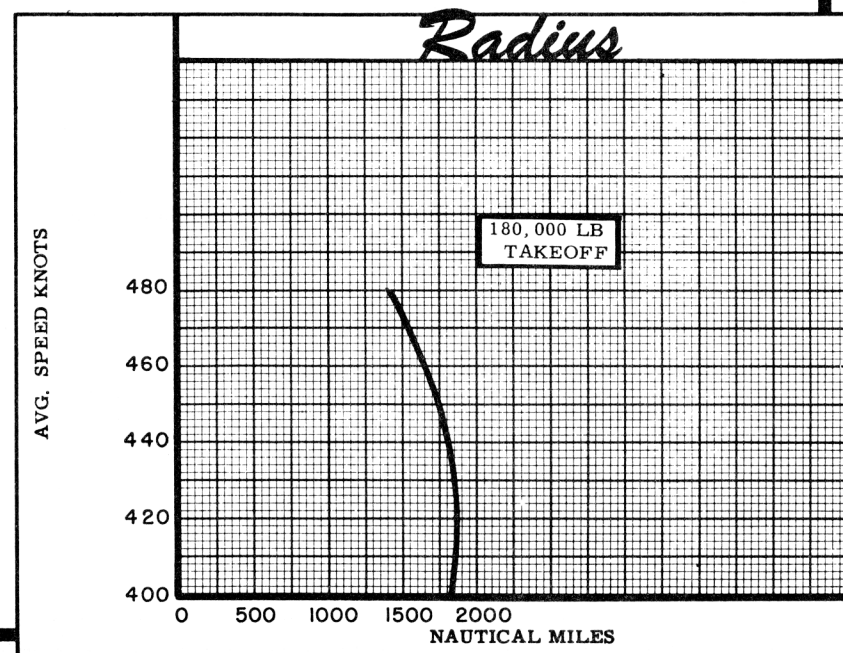
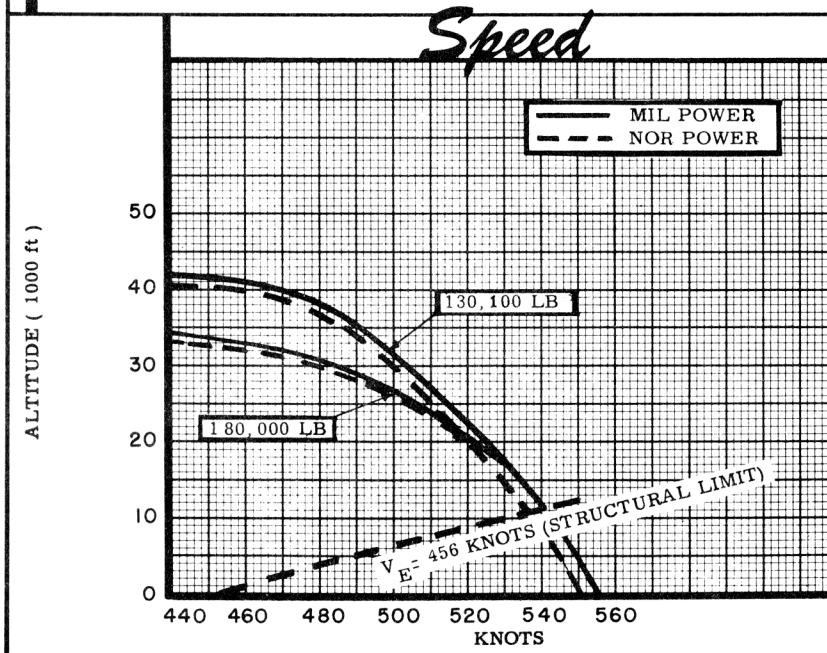
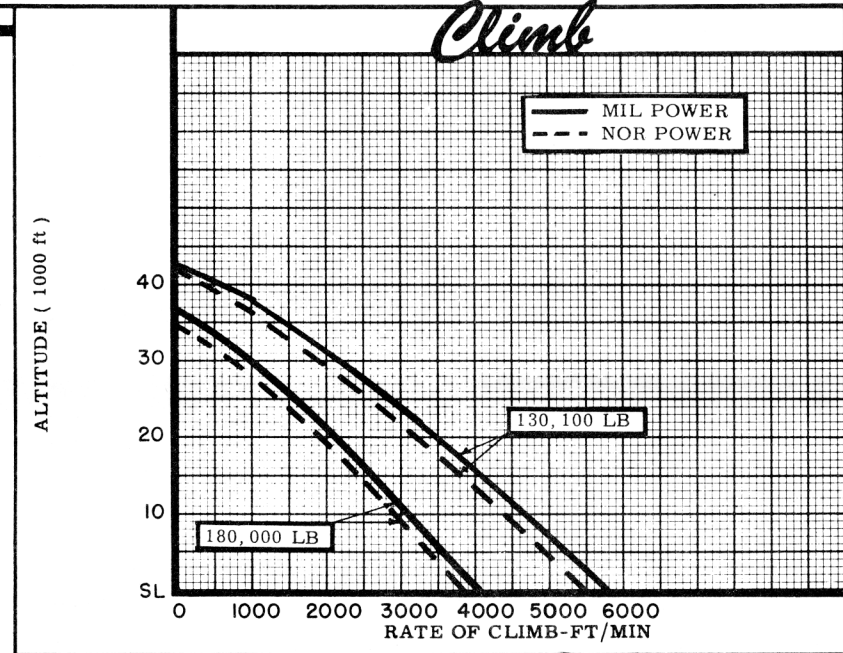
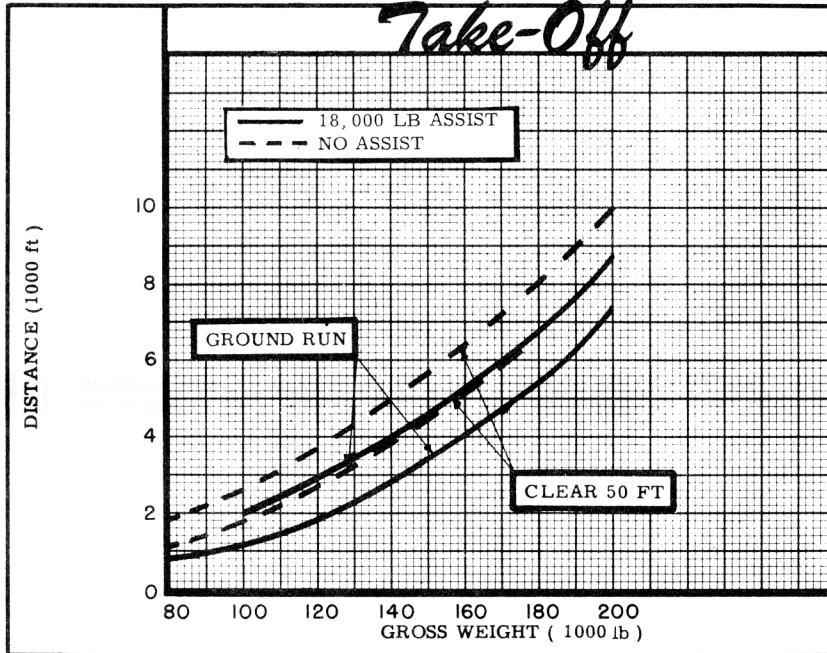
Loading and Performance - Typical Mission

C O N D I T I O N S	BASIC MISSION	TRAINER RADIUS
TAKE-OFF WEIGHT (lb)	I 180,000	II 163,000
Fuel at 6.5 lb/gal (grade JP-3) (lb)	92,800	72,500
Military load (lb)	None	None
Wing loading (lb/sq ft)	126.1	114.1
Stall speed (power off, landing configuration) (kn)	142	133
Take-off ground run at SL ① (ft)	6820	5200
Take-off ground run with ATO ① (ft)	5620	—
Take-off to clear 50 ft ① (ft)	8000	6400
Take-off to clear 50 ft with ATO ① (ft)	6840	—
Rate of climb at SL ② (fpm)	3800	4340
Time: SL to 25,000 ft ② (min)	9.6	8.2
Time: SL to 31,900 ft ② (min)	16.0	16.4
Service ceiling (100 fpm) ② (ft)	34,100	37,000
Service ceiling (one engine out) ② (ft)	N. A.	N. A.
COMBAT RANGE ③ (n. mi.)	3725	—
Average speed (kn)	428	—
Initial cruising altitude (ft)	31,900	—
Final cruising altitude (ft)	43,700	—
Total mission time (hr)	8.7	—
COMBAT RADIUS ③ (n. mi.)	1835	1500
Average speed (kn)	428	428
Initial cruising altitude (ft)	31,900	35,000
Bombing altitude (ft)	39,900	41,600
Bomb run speed ② (kn)	464	465
Final cruising altitude (ft)	43,700	44,300
Total mission time (hr)	8.7	7.1
COMBAT WEIGHT ④ (lb)	130,100	120,400
Combat altitude (ft)	35,000	41,600
Combat speed ① (kn)	490	464
Combat climb ① (fpm)	1350	500
Combat ceiling (500 fpm) ① (ft)	39,900	41,600
Service ceiling (100 fpm) ① (ft)	42,400	44,000
Service ceiling (one engine out) ① (ft)	N. A.	N. A.
Max rate of climb at SL ① (fpm)	5750	6180
Max speed at 11,000 ft ① ⑥ (kn)	539	539
LANDING WEIGHT (lb)	96,950	—
Ground roll at SL (ft)	N. A.	—
Ground roll (auxiliary brake) ⑤ (ft)	5080	—
Total from 50 ft (ft)	N. A.	—
Total from 50 ft (auxiliary brake) ⑤ (ft)	6380	—

NOTES

- ① Max power
- ② Normal power
- ③ Detailed descriptions of RADIUS and RANGE missions are given on page 6.
- ④ For Radius Mission if radius is shown.
- ⑤ With 32 foot ribbon braking parachute effective at touchdown, brakes applied at 40 knots
- ⑥ Limited by structure

PERFORMANCE BASIS:
 (a) Data source: Manufacturer's estimates based on flight test of B-47B (Data not substantiated by WADC)
 (b) Performance is based on powers on page 6



N O T E S

FORMULA: RADIUS MISSION I

Take-off, climb on course to 31,900 ft altitude at normal power and maximum rate of climb, cruise out at long range speeds increasing altitude with decreasing airplane weight, climb to target altitude at normal power, make normal power photographic run to target, take photographs, conduct normal power evasive action for 6 minutes, start cruise to home base arriving at 43,700 ft altitude. Range free allowances include 5 minutes normal power fuel consumption for starting engines and take-off, plus 6 minutes normal power evasive action and 10% of initial fuel for reserve.

FORMULA: RANGE MISSION I

Same as the outbound leg of the basic radius formula continued without taking photographs until 90% of the initial fuel has been used at 46,000 ft altitude, leaving 10% fuel reserve for combat, evasive action, landing reserve, or other considerations for which no distance credit is allowed.

FORMULA: RADIUS MISSION II

Same as the basic radius formula except no assist is used for take-off and no ammunition is carried. Take-off weight is limited to 163,000 lb to take-off in 6400 ft ground roll on an Air Force hot day. Initial altitude at start of cruise out is 35,000 ft and final altitude over the home base is 44,300 ft. Range free allowances are the same as for the basic radius formula.

GENERAL DATA:

(a) Drag data from flight tests of March 1950 (ref. Boeing Document D-10704).

(b) Normal technique for take-off with ATO - 15 second duration rockets fired 10 seconds before take-off. Take-off distances based upon estimated water injection augmentation of 17%.

(c) Landing distances are based on 6 engines at 50% RPM with 4 outboards cut at touchdown. Braking parachute effective at touchdown - brakes applied at 40 knots.

(d) Design landing weight 125,000 lb computed on basis of 12 ft/sec. ultimate rate of descent with 1 G wing lift. Maximum landing weight 180,000 lb based on approximately 8 ft/sec. ultimate rate of descent with 1 G wing lift.

(e) Performance shown herein is based on the J47-GE-23 engine ratings as shown below:

J47-GE-23			
S. L. Static	LB	RPM	MIN
Max:	5910	7950	5
Mil:	5620	7800	30
Nor:	5270	7630	Cont

CAMERAS

SPLIT VERTICAL CAMERA STATION: The split vertical camera station shall be made to accommodate two Type K-38 cameras with 24 inch or 36 inch lens with Type A-8B magazines. This station shall also be used for the oblique cameras of the multi-camera station comprised for three fixed K-38 cameras with 24 inch or 36 inch lens. The vertical station shall accommodate the third camera of the multiple arrangement.

VERTICAL STATION: The vertical camera station shall be made to accommodate optionally the following cameras:

- 1 K-37 camera with 36 in. lens and an A-8B magazine
- 1 K-17C camera with 6 in. lens and an A-9A or A-28 magazine
- 1 K-17C camera with 12 in. lens and an A-9A or A-28 magazine
- 1 K-17C camera with 24 in. lens and an A-9A or A-28 magazine
- 1 K-22A camera with 12 in. lens and an A-9A or A-28 magazine
- 1 K-22A camera with 24 in. lens and an A-9A or A-28 magazine
- 1 K-37 camera with 12 in. lens and an A-9A or A-28 magazine
- 1 T-11 camera with 6 in. lens
- 1 K-37 camera with 12 in. lens
- 1 K-38 camera with 24 in. lens or 36 in. lens

TRI-CAMERA STATION: The tri-camera station shall be made to accommodate optionally the following cameras:

- 3 S-14 cameras with 90mm stereo lens
- 3 S-14 cameras with 6 inch single lens
- 3 K-46 cameras with 7 inch lens
- 3 T-11 cameras with 6 inch lens

FORWARD OBLIQUE STATION: The forward oblique camera station shall be made to accommodate optionally the following cameras:

- 1 K-17C camera with 6 inch lens and an A-9A magazine
- 1 K-17C camera with 12 inch lens and an A-9A magazine
- 1 K-22A camera with 12 inch lens and an A-9A magazine
- 1 K-22A camera with 24 inch lens and an A-9A magazine
- 1 K-38 camera with 24 inch lens and an A-9A magazine
- 1 A-10 motion picture camera with 25mm, 50mm or 250mm lens cones and 1000 ft film magazine.

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