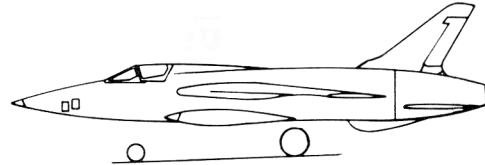
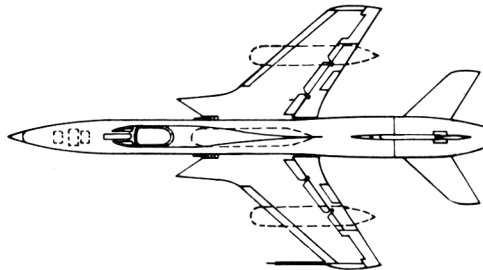


# Characteristics Summary

RECONNAISSANCE . . . . . RF-105B



REPUBLIC

Wing Area . . . . . 385.0 sq ft    Length . . . . . 63.3 ft  
Span . . . . . 34.9 ft    Height . . . . . 19.7 ft

## AVAILABILITY

## PROCUREMENT

Number available			Number to be delivered in fiscal years			
ACTIVE	RESERVE	TOTAL				

## STATUS

1. Similar to the F-105B except for the fuselage nose which houses the photo equipment, cockpit changes, external gun pods and a 340 gal fuel tank installed in the space provided for the bomb bay.  
Navy Equivalent: None
  2. Mock-Up Date: Jun 55
  3. First Flight: Jan 57(est)
- Mfr's Model: AP-71

## POWER PLANT

(1) YJ75-P-3  
Pratt & Whitney

ENGINE RATINGS

S.L.S. LB - †RPM - MIN

Max: \*23,500 - 6940/8930 - 5  
Mil: 15,500 - 6940/8930 - 30  
Nor: 13,700 - 6470/8570 -  
Cont

\*With afterburner operating

† First figure represents RPM of the low pressure spool while the second is that of the high pressure spool.

## FEATURES

- Crew . . . . . 1
- Liquid Oxygen System
- Integrated Automatic Flight Control System
- Ram Air Ejector
- USAF Universal Camera Control System
- Removable External Gun Pods
- In-Flight Refueling (Probe & Drogue)
- Drag Chute
- Chaff Dispenser
- N-9 Gun Sight
- Speed Brakes
- Nose Wheel Steering
- Constant Area, Variable Throat Wing Root Inlet Ducts
- Max Fuel Capacity: 2870 gal

## ARMAMENT

Guns . . . . 2 x 20 mm(M-39)  
Ammunition (tot) ...600 rds  
Rockets . . . . . None

## CAMERAS

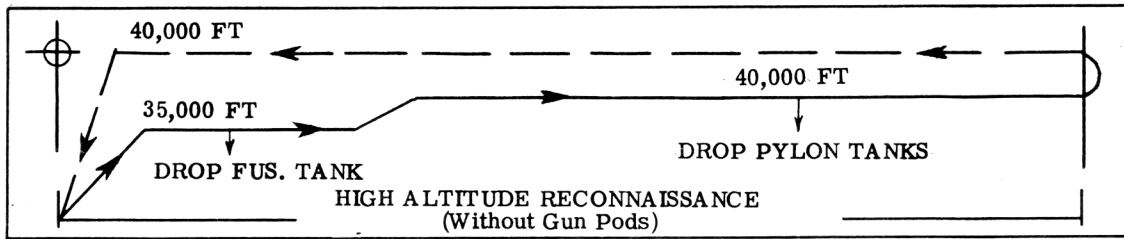
- | No.     | Type/Station       | Lens  |
|---------|--------------------|-------|
| 1 . . . | KA-2/Oblique . .   | *12'' |
|         | or                 |       |
| 1 . . . | KA-1/Oblique . .   | *36'' |
| 1 . . . | KA-2/Rotable . .   | 12''  |
| 3 . . . | KA-2/Tri-Met . .   | 6''   |
|         | or                 |       |
| 1 . . . | KA-1/Tri-Met . .   | 36''  |
| 1 . . . | KA-1/Vertical . †  | 12''  |
|         | or                 |       |
| 1 . . . | KA-18/Vertical . . | 36''  |
- \*24'' lens may be used.  
†24'' or 36'' lens may be used.  
‡Strip camera

*Deleted: 4th Ed, Add N-33  
31 Jan 57*

*Approved for Release  
OR CHANGE TO (Classification)  
BY AUTHORITY OF Defense Research  
AND ANALYSIS AUTHORITY  
(NAME AND TITLE OF AUTHORITY)  
(DATE)*

*4th Ed addn #14*

*Characteristics Summary Basic Mission . . . . . RF-105B*



P E R F O R M A N C E		
COMBAT RADIUS	FERRY RANGE	S P E E D
1079 naut. mi with 860 lb payload at 506 knots avg. in 4.26 hours.	2252 naut. mi with 2870 gal fuel at 508 knots avg. in 4.44 hours at 43,922 lb T.O. wt.	COMBAT 1110 knots at 40,000 ft alt, max power MAX 1150 knots at 35,000 ft alt, max power BASIC 1150 knots at 35,000 ft alt, max power
C L I M B	C E I L I N G	T A K E - O F F
6840 fpm sea level, take-off weight military power	37,700 ft 100 fpm, take-off weight military power	ground run 3875 ft no assist   _____ ft assisted
38,590 fpm sea level, combat weight maximum power	52,550 ft 500 fpm, combat weight maximum power	over 50 ft height 4975 ft no assist   _____ ft assisted
L O A D	W E I G H T S	S T A L L I N G S P E E D
Photo Equip . . . . . 860 lb	Empty..... 22,608 lb Combat... 32,303 lb Take - off 43,922 lb limited by mission	167.3 knots power-off, landing config- uration, take-off weight
Fuel: 2870 gal protected 51.2 % droppable 47.0 % external 47.0 %		<b>T I M E T O C L I M B</b> 6.15 min SL to 30,000 ft, take-off wt, military power

**N O T E S**

1. Performance Basis:  
 (a) Contractor's estimated data. (Not substantiated by WADC)  
 (b) Data shown is without gun pods.  
 2. Revision Basis: To reflect latest characteristics and performance data.