Characteristics Summary

RECONNAISSANCE . . . . . RF-105B

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

AvailABILITY 

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>RESERVE</th>
<th>TOTAL</th>
</tr>
</thead>
</table>

PROCUREMENT 

<table>
<thead>
<tr>
<th>Number available</th>
<th>Number to be delivered in fiscal years</th>
</tr>
</thead>
</table>

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

Mfr's Model: AP-71

POWER PLANT

(1) YJ75-P-3
Pratt & Whitney

ENGINE RATINGS

S.L.S. LB - RPM - MIN
Max: *23,500 - 6940/8830 - 5
Ml: 15,500 - 6940/8830 - 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 Thrust Wing Root Inlet Ducts
Max Fuel Capacity: 2870 gal

ARMAMENT

Guns ....... 2 x 20 mm(3)-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/Oblique .... 12"
3 .... KA-2/Tri-Met .... 6"
or
1 .... KA-1/Tri-Met .... 36"
1 .... KA-1/Vertical .... 12"
or
1 .... KA-18/Vertical .... 136"

*24" lens may be used.
†24" or 36" lens may be used.
Strip camera

27 MAR 56
### Characteristics Summary Basic Mission

#### RF-105B

![Diagram](image)

**High Altitude Reconnaissance**  
(Without Gun Pods)

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#### Performance

<table>
<thead>
<tr>
<th>Combat Radius</th>
<th>Ferry Range</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1079 naut. mi with 860 lb payload</td>
<td>2252 naut. mi with 2870 gal fuel at 508 knots avg. in 4.44 hours at 43,922 lb T.O. wt.</td>
<td>Combat 110 knots at 40,000 ft alt., max power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MAX 1150 knots at 35,000 ft alt., max power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BASIC 1150 knots at 35,000 ft alt., max power</td>
</tr>
</tbody>
</table>

#### Climb Ceiling Take-Off

<table>
<thead>
<tr>
<th>Climb</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>6840 fpm sea level, take-off weight military power</td>
<td>37,700 ft 100 fpm, take-off weight military power</td>
</tr>
<tr>
<td>38,590 fpm sea level, combat weight maximum power</td>
<td>52,550 ft 500 fpm, combat weight maximum power</td>
</tr>
</tbody>
</table>

#### Load Weights Stallling Speed

<table>
<thead>
<tr>
<th>Load</th>
<th>Weights</th>
<th>Stalling Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo Equip . . . . . 860 lb</td>
<td>Empty . . . . 22,608 lb</td>
<td>167.3 knots power-off, landing configuration, take-off weight</td>
</tr>
<tr>
<td>Fuel: 2870 gal</td>
<td>Combat . . . . 32,303 lb</td>
<td></td>
</tr>
<tr>
<td>protected 51.2%</td>
<td>Take-off . . . 43,922 lb</td>
<td></td>
</tr>
<tr>
<td>droppable 47.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>external 47.0%</td>
<td>limited by mission</td>
<td></td>
</tr>
</tbody>
</table>

#### Time to Climb

- 6.15 min  
  SL to 30,000 ft, take-off wt, military power

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**Notes**

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.