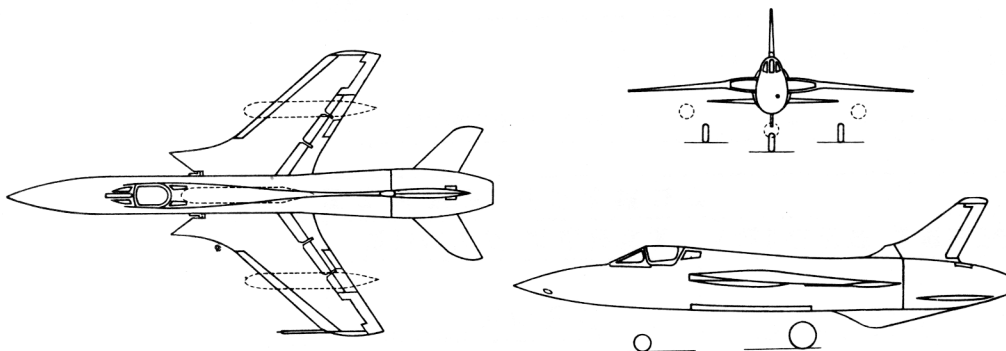


Characteristics Summary

FIGHTER YF-105B



REPUBLIC

Wing Area 385 sq ft Length 63.1 ft
 Span 34.9 ft Weight 17.5 ft

AVAILABILITY

PROCUREMENT

Number available

Number to be delivered in fiscal years

ACTIVE	RESERVE	TOTAL				

STATUS

- Same as the YF-105A except for J75 engine in lieu of the J57 engine, engine ram air ejector and area control fuselage.
- Mock-Up Date(With J57 engine): Oct 53
- First Flight: May 56 (est)

Navy Equivalent: None

Mfr's Model: AP-63

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 that of the high pressure spool.
 ‡ With Republic designed Ram Air Ejector

FEATURES

- Crew 1
- Area Control Fuselage
- Liquid Oxygen System
- Maneuvering Stabilizer
- Spoiler Aileron
- Fuselage Bomb Bay
- L.E. Wing Flaps
- Speed Brakes
- Drag Chute
- Integrated Auto Pilot
- XMA-8 Fire Control System
- In-Flight Refueling (Probe-Drogue)
- T-145 Weapons Release System
- Engine Ram Air Ejector
- Nose Wheel Steering
- Time of Flight Computer
- E-34 Radar Ranging Equip.

Max Fuel Capacity: 2850 gal

ARMAMENT

- Guns1 x 20mm(T-171D)
- Ammunition (tot).... 1130 rds
- Rockets:
- 5 pods(19 x 2.75" FFAR ea)
- Bombs:

Class(lb)	Int	Ext	Load
3000	—	2	2 x 3000
2000	—	3	3 x 2000
1000	1	4	5 x 1000
750	—	4	4 x 750
500	—	4	4 x 500

- Special Stores:

 - 1700 ... 1 ... — .. 1 x 1700

- Max Bomb Size:

 - (Int) 1700 lb
 - (Ext) 3000 lb

- Max Bomb Load ... 3000 lb

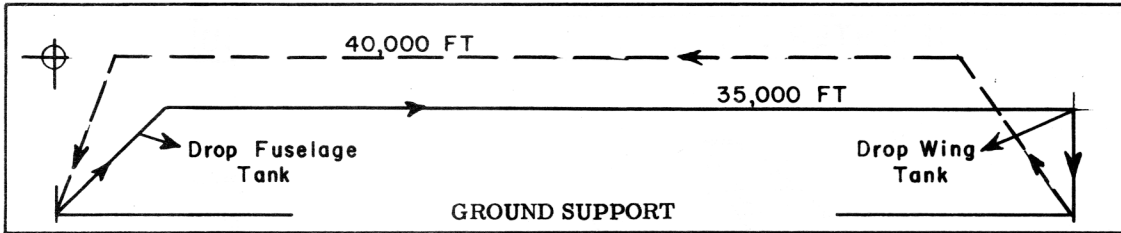
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Add 1/10; 1 Dec 57

DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

a.k. downlow 31 mar 67

4th Ed addn # 3

Characteristics Summary Basic Mission YF-105B



P E R F O R M A N C E		
C O M B A T R A D I U S	F E R R Y R A N G E	S P E E D
801 naut. mi with 2425 lb payload at 497 knots avg. in 3.31 hours.	2323 naut. mi with 2850 gal fuel at 505 knots avg. in 4.61 hours at 42,693 lb T.O. wt.	COMBAT 755 knots at zero ft alt, max power MAX 1129 knots at 35,000 ft alt, max power BASIC 755 knots at zero ft alt, max power
C L I M B	C E I L I N G	T A K E - O F F
6622 fpm sea level, take-off weight military power	37,750 ft 100 fpm, take-off weight military power	ground run 3500 ft no assist — ft assisted
42,261 fpm sea level, combat weight maximum power	53,390 ft 500 fpm, combat weight maximum power	over 50 ft height 4440 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
Ammunition1130 rds/20mm Bombs 1 x 1645 lb Fuel: 2500 gal protected 0 % droppable 54.0 % external 54.0 %	Empty..... 23,126 lb Combat... 30,601 lb Take - off 42,162 lb limited by space	164 knots power-off, landing config- uration, take-off weight TIME TO CLIMB 6.1 min SL to 30,000 ft, take-off wt, military power.

N O T E S

1. Performance Basis:
(a) Estimated data (Not substantiated by WADC).

2. Revision Basis To reflect latest characteristics and performance data.