

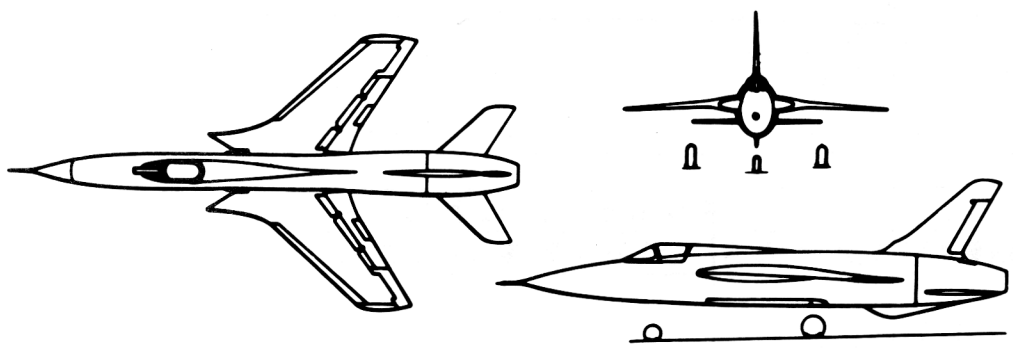
*AI
F-105D-31/Char*

UNCLASSIFIED

SERVICE

Characteristics Summary

FIGHTER F-105D-31



"THUNDERCHIEF"

REPUBLIC

Wing Area 385 sq ft Length 64.4 ft
Span 34.9 ft Height 19.7 ft

AVAILABILITY			PROCUREMENT			
Number available			Number to be delivered in fiscal years			
TEST	INVENTORY	TOTAL				

STATUS

- | | |
|--|--------------------------------------|
| 1. Similar to the F-105B except for installation of the J75-P-19W engine with water injection in lieu of the -19 engine and incorporation of the adverse weather navigation, attack equipment, and integrated instruments. | 2. First flight: Jun 59 |
| | 3. First acceptance: Jul 59 |
| | 4. Production completed Feb 64 |
| | 5. Delivery completed Feb 64 |
- Navy Equivalent: None Mfr's Model: AP 63-31

POWER PLANT

(1) J75-P-19W
Pratt & Whitney
ENGINE RATINGS

S. L. S.	LB	RPM	MIN
T. O. *	26,500	6900/9090	2.5 ‡
Max †	24,500	6400/8990	15
Mil	16,100	6440/9000	30
Nor	14,300	6080/8750	Cont

*With water and afterburner
†With afterburner operating
‡Limited by water supply

FEATURES

Crew 1
Area control fuselage
Liquid oxygen system
Fuselage bomb bay
L. E. wing flaps
Drag chute
Integrated auto pilot
Inflight refueling (probe-drogue & boom receptacle)
Engine ram air ejector
AN/ASG-19 fire control system (R-14A Radar)
AN/-APN-131 doppler navigation
Nose wheel steering
Spoiler/aileron combination
Max fuel capacity 3100 gal

ARMAMENT

Guns: 1 x 20mm (M-61)
Ammo: (tot) 1028 rds

ROCKETS
6 x LAU-3/A, -18/A
6 x LAU-10/A

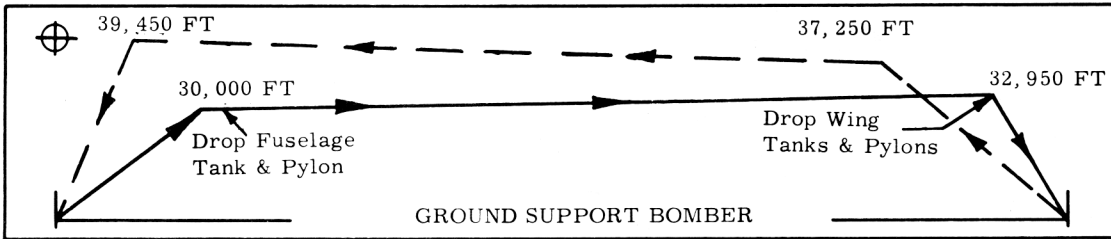
MISSILES
4 x AGM-12B
4 x AIM-9B

SPECIAL STORES
4 x MK-28
4 x MK-43

BOMBS
16 x M-117 750 lb
2 x M-118 3000 lb
9 x M-116A-2 (Fire)
9 x BLU-1/B (Fire)
16 x MC-1 (Chemical)
16 x M-129 (Leaflet)

MINES
9 x MLU-10/B

Characteristics Summary Basic Mission F-105D-31



PERFORMANCE		
COMBAT RADIUS	FERRY RANGE	S P E E D
② 543(676) naut. mi ammo plus with MK-28 payload at 507 knots avg. in 2.23 hours.	1917 naut. mi with 3100 gal fuel at 507 knots avg. in 3.78 hours at 49,371 lb T.O. wt.	COMBAT 726 knots at zero ft alt, max power MAX 1192 knots at 36,089 ft alt, max power BASIC 726 knots at zero ft alt, max power
C L I M B	C F I L I N G	T A K E - O F F
4650 fpm sea level, take-off weight military power	32,100 ft 100 fpm, take-off weight military power	③ ground run 4270 ft ft no assist
34,000 fpm sea level, combat weight maximum power	48,500 ft 500 fpm, combat weight maximum power	③ over 50 ft height 5830 ft ft no assist
L O A D	W E I G H T S	S T A L L I N G S P E E D
Ammo 1000 rds/20mm Special Store MK-28 Fuel: 2710 gal protected 0 % droppable 57.2 % external 57.2 %	Empty..... 26,855 lb Combat... 35,637 lb Take - off 48,976 lb limited by mission	180.6 knots power-off, landing config- uration, take-off weight TIME TO CLIMB 1.75 min S. L. to 35,000 ft. combat wt, max power

- N O T E S**
1. Performance Basis: Flight Test Data
 2. Wing tanks with 2235 lb of fuel are dropped prior to combat. Radius in parenthesis is calculated carrying wing tanks in combat.
 3. With water injection.
 4. These data, although published as F-105D-31, are representative of the F-105D aircraft.
 5. Revision Basis: To reflect changes in Armament.