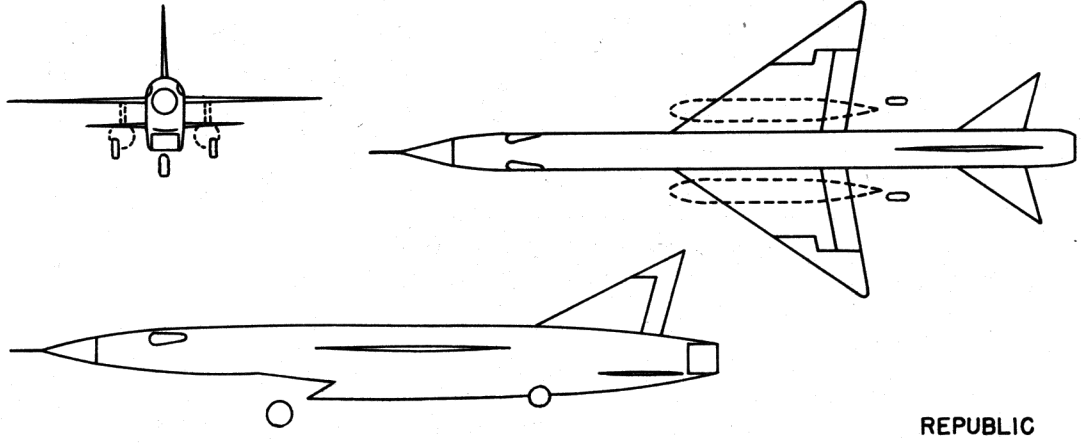


Characteristics Summary

FIGHTER (INTERCEPTOR)..... XF-103



REPUBLIC

Wing Area 401 sq ft Length 76.8 ft
Span 34.4 ft Height 16.6 ft

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

STATUS

- | | |
|------------------------------|-------------------------------|
| 1. Design Initiated: Apr 50 | 3. Mock-Up: Mar 53 |
| 2. Contract Approved: Sep 51 | 4. First Flight: (est) Feb 57 |
| Navy Equivalent: None | |
| Mfr's Model: AP-57 | |

POWER PLANT

†(1) YJ67-W-3/XRJ55-W-1
Wright
ENGINE RATINGS

	Turbo-Jet
S.L.S.	LB - RPM - MIN
Max:	*22,350 - 6175 - 5
Mil:	12,950 - 6175 - 30
Nor:	11,400 - 6175 - Cont

*With afterburner operating

Ram-Jet

Design Mach No. 3.0
Altitude (ft) 55,000
Thrust (lb) 18,800

†Double cycle engine with ramjet operating as afterburner.

FEATURES

Crew 1

Delta Wing and Tail
Single Point Refueling
Integrated Electronic System (MX-1179)
Titanium Structure
Ramjet convertible to afterburner for turbo jet
Capsule Pilot Ejection
Double Slotted Flaps
Air Conditioning System
Cockpit Pressurization
Drag Chute (Ring-slot)
Retractable Rocket Launchers
Flush Type Canopy

Max Fuel Cap: ... 2440 gal

ARMAMENT

Guns None

Bombs None

Rockets.. 36 x 2.75' FFAR
plus
6 x XGAR-1A

Revised to reflect latest characteristics and performance data. 1 Ju/57

White one for this date

Classification cancelled ~~Confidential~~ *unclassified* or changed to ~~Confidential~~ *unclassified*

AUTH: AFSC - AFPC Sec. Com. Guide -009 D14 5200.10

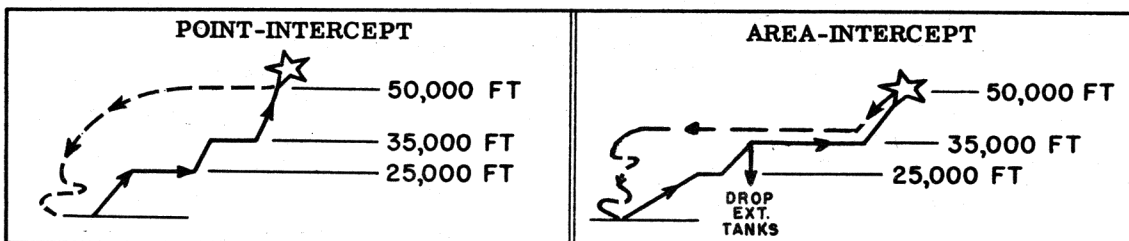
By A. R. Lovelorn 3 Apr 64 15 Dec 1966 30 March 60

Signature and Grade

3rd Ed addn #10

537/C-12000

Characteristics Summary Basic Mission XF-103



PERFORMANCE

INTERCEPT	FERRY RANGE	S P E E D
POINT Total Mission Time for Interception at 50,000 ft. Equals 12.1 minutes 213 AREA Nautical Miles at 589 Knots Average in 0.83 hours	1343 naut. mi. with 2440 gal. fuel at 545 knots avg. in 2.52 hours at 41,791 lb. T.O. wt.	(c) POINT COMBAT 1724 knots at 50,000 ft. alt, max. power MAX 1724 knots at 45-70,000 ft. alt, max. power BASIC 1724 knots at 50,000 ft. alt. max. power
CLIMB	CEILING	TAKE-OFF
(d) POINT 25,100 fpm. at S.L. Take-Off Weight, Max. Power	(c) POINT 69,600 ft. at 100 fpm, Take-Off Weight, Max Power	ground run AREA 3680 ft. _____ ft. no assist assisted
(c) POINT 41,000 fpm. at S.L. Combat Wt., Max. Pow.	(c) POINT 69,200 ft at 500 fpm, Combat Weight, Max. Power	over 50 ft. height AREA 5070 ft. _____ ft. no assist assisted
L O A D	W E I G H T S	STALLING SPEED
Rockets: (6) XGAR-1A plus (36) 2.75" FFAR Fuel POINT AREA 1800 gal. 2374 gal. protected 0 % 0 % droppable 0 % 24.2 % external 0 % 24.2 %	Empty 24,949 lb. Combat 31,219 lb. Point 33,764 lb. Area Take-off 38,505 lb. Point 42,864 lb. Area limited by mission	AREA 156 knots power-off, landing configuration, take-off weight TIME TO CLIMB POINT 7.1 Min. S.L. to 50,000 Ft. (b) Take-off Weight, Max. Power

NOTES

- Performance Basis:
 - Estimated data (Not substantiated by WADC)
 - Turbo-jet to 35,000 ft; Ram-jet from 35,000 ft to 50,000 ft.
 - With Ram-jet
 - With Turbo-jet
- Revision Basis: To reflect latest performance data.