

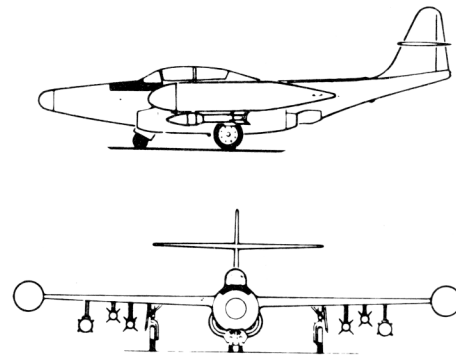
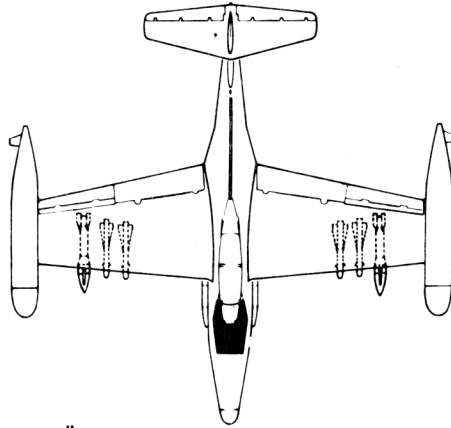
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Unclassified
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A-1
F-89J/CHAN
SERVICE

Characteristics Summary

FIGHTER (INTERCEPTOR) F-89J



"SCORPION"

NORTHROP

Wing Area (excludes tip tanks) . . . 606 sq ft Length 53.7 ft
Span (includes tip tanks) 59.7 ft Height 17.5 ft

AVAILABILITY

PROCUREMENT

Number available

Number to be delivered in fiscal years

| ACTIVE | RESERVE | TOTAL | | | | |
|--------|---------|-------|--|--|--|--|
| | | | | | | |

STATUS

1. The F-89J aircraft are F.89D's modified to incorporate the MB-1 rockets, GAR-2A missiles and the MG-12 fire control system
2. First flight (prototype): Apr 56
3. First flight (production): Aug 56
4. First acceptance: Nov 56
5. Production Completed: Feb 58

Navy Equivalent: None

Mfr's Model: N-160

POWER PLANT

(2) J35-A-35

Allison

ENGINE RATINGS

S.L.S. LB - RPM - MIN

Max: *7200 - 8000 - 5

Mil: 5440 - 8000 - 30

Nor: 4855 - 7680 - Cont

*With afterburner operating

Note: Values are with inlet screens retracted.

FEATURES

Crew 2

Pilot

Radar Operator

Alternate configuration consisting of rocket/fuel wing tip pods with (104) FFAR rockets plus (2) MB-1 rockets.

Jettisonable fuel tanks carried in lieu of MB-1 rocket installation.

Low pressure oxygen system

MG-12 Fire control system

E-11 Auto pilot

MB-1 Air-to-air rockets and

GAR-2A missiles carried

on under wing pylons.

Max fuel capacity: *2963 gal

*With 603 gal tip tanks;

2369 gal with rocket/fuel

tip pods.

ARMAMENT

Guns None

Bombs None

Rockets

. . . 2 x MB-1 Air-to-Air

plus

4 x GAR-2A

Alternate Configuration

Rockets

. . . 2 x MB-1 Air-to-Air

plus

104 x 2.75" FFAR

Black Book

CLASSIFICATION CANCELLED
(OR CHANGED TO *Unclassified*)
BY AUTHORITY *SP-5 Div 5700-10*
BY *A.R. Somerton 30 Dec 70*

Classification cancelled
or changed to *Unclassified*
AUTH: *AFSC AFHC Sec Chan. Lytle*
BY *A.R. Somerton 3 Apr 64*
Signature and Grade

1 OCT 58

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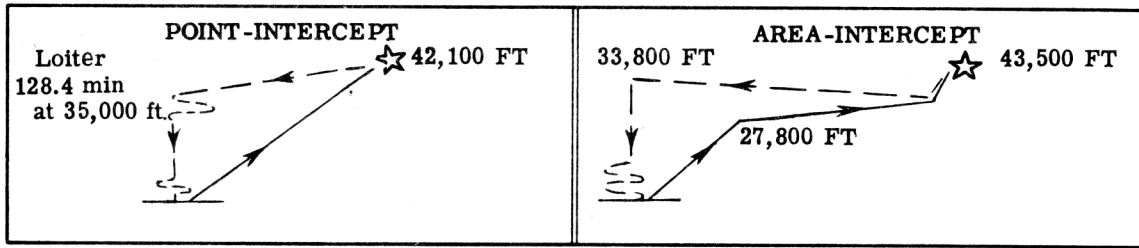
F-89J

Addendum Nr 9

OCT 15 1958

5700-4983

Characteristics Summary Basic Mission F-89J



| PERFORMANCE | | |
|---|--|---|
| INTERCEPT | FERRY RANGE | S P E E D |
| POINT Total Mission Time for Interception at 42,100 ft. Equals 151.2 minutes | 1498 naut. mi. with 2963 gal. fuel at 409 knots avg. in 3.71 hours at 47,688 lb. T.O. wt. | POINT COMBAT 452 knots at 42,100 ft. alt, max. power MAX ② 528 knots at 11,100 ft. alt, max. power BASIC 464 knots at 40,000 ft. alt. max. power |
| AREA 435 Nautical Miles at 402 Knots Average in 2.29 hours | | CLIMB |
| POINT 5160 fpm. at S.L. Take-Off Weight, Max. Power | POINT 44,700 ft. at 100 fpm, Take-Off Weight, Max Power | TAKE-OFF ground run AREA 3950 ft. no assist — ft. assisted |
| POINT 5850 fpm. at S.L. Combat Wt., Max. Pow. | POINT 42,100 ft at 500 fpm, Combat Weight, Max. Power | over 50 ft. height AREA 5700 ft. no assist — ft. assisted |
| LOAD Rockets: 4 x GAR-2A plus 2 x MB-1 Fuel: POINT 2363 gal. protected 0% droppable 0% external 51.0% AREA 2363 gal. 0% 0% 51.0% | WEIGHTS Empty 26,883 lb. Combat 39,879 lb. Point 37,420 lb. Area Take-off 45,575 lb. limited by mission | STALLING SPEED AREA 125 knots power-off, landing configuration, take-off weight TIME TO CLIMB POINT ① 17.8 Min. S.L. to 42,100 Ft. Take-off Weight, Max. Power |

N O T E S

- Performance Basis:
 - Phase IV Flight Test data
 - From standing start; includes 1.8 minutes for take-off and acceleration to climb speed.
 - MB-1 and GAR-2A rockets are carried throughout mission.
- Below 20,000 ft, limit IAS 450 Kn or M = 0.9, whichever is less. (airplane is temporarily, limited to 400 Kn IAS or M = 0.9, whichever is less, below 20,000 ft).
- Revision Basis: To reflect performance data based on Phase IV Flight Tests.