

A-1  
 F-89B (char)  
 (Security Information) (e)

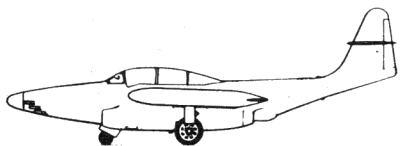
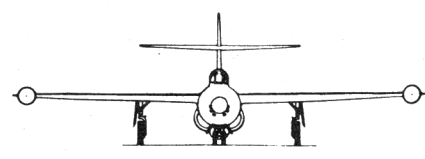
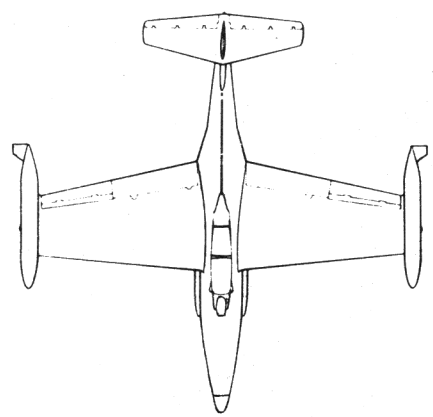
~~RESTRICTED~~

SERVICE

*Initial Issue*

# Characteristics Summary

FIGHTER (INTERCEPTOR) . . . . . F-89B



"SCORPION"

NORTHROP

Wing Area . . . . . 638 sq ft      Length . . . . . 53.5 ft  
 Span . . . . . 56.0 ft      Height . . . . . 17.5 ft

*Deleted: 4th Ed;  
 Add N 4; 5th App 55*

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

## STATUS

- The F-89B is similar to the modified F-89A except for minor structural and mechanical details. All F-89A airplanes except two flight test airplanes were modified to incorporate all the features of the F-89B's.
  - First Flight (XF-89): Aug 48
  - First Flight Prototype (YF-89A): Nov 49
  - First Acceptance (F-89A): Sep 50
  - First Acceptance (F-89B): Apr 51
  - Production Completed: Sep 51
- Navy Equivalent: None Mfr's Model: N-35

**POWER PLANT**

(2) J35-A-21B  
 Allison

**ENGINE RATINGS**

S.L.S. LB - RPM - MIN

Max: \*6800 - 7900 - 5  
 Mil: 5100 - 7900 - 30  
 Nor: 4400 - 7500 - Cont

\*With afterburner operating

NOTE: Values are for engine with fixed air inlet screens.

**FEATURES**

Crew (normal) . . . . . 2  
 Pilot  
 Radar Operator

Full Power Control System

Yaw Stabilizer

Zero Reader

All-weather Interception  
 Radar - AN/APG-33

E-1 Fire Control System

Split-Aileron Speed Brakes

Max Fuel Capacity: 1559 gal

**ARMAMENT**

Guns .. 6 x 20mm (M-24A-1)

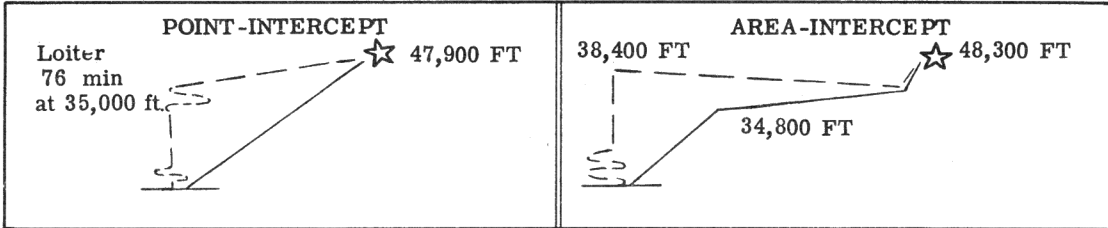
Ammunition(tot) ... 1200 rds

Rockets\* . . . . . None

Bombs\* . . . . . None

\*Requirements for provision for bombs and rockets deleted per Hq ARDC letter, dated 13 May 53.

# Characteristics Summary Basic Mission ..... F-89B



PERFORMANCE		
INTERCEPT	FERRY RANGE	S P E E D
<b>POINT</b> Total Mission Time for Interception at 47,900 ft. Equals 97.8 minutes  <b>300 AREA</b> Nautical Miles at 425 Knots Average in 1.55 hours	<b>754</b> naut. mi with 1559 gal fuel at 425 knots avg. in 1.82 hours at 36,074 lb T.O. wt.	<b>COMBAT 463</b> knots at 47,900 ft alt, max power  <b>MAX 546</b> knots at 10,500 (2) ft alt, max power  <b>BASIC 489</b> knots at 40,000 ft alt, max power
CLIMB	CEILING	TAKE-OFF
<b>POINT (2)</b> <b>9720</b> fpm. at S.L. Take-Off Weight, Max. Power	<b>POINT</b> <b>49,100</b> ft. at 100 fpm, Take-Off Weight, Max Power	ground run <b>AREA</b> <b>2450</b> ft.   — ft. no assist   assisted
<b>POINT (2)</b> <b>11,000</b> fpm. at S.L. Combat Wt., Max. Pow.	<b>POINT</b> <b>47,900</b> ft at 500 fpm, Combat Weight, Max. Power	over 50 ft. height <b>AREA</b> <b>3440</b> ft.   — ft. no assist   assisted
LOAD	WEIGHTS	STALLING SPEED
Ammunition: 1200rds/20mm  Fuel: 1559 gal protected 13 % croppable 0 % external 39 %	Empty..... 24,151 lb Combat... { 32,169 lb 31,507 lb Take - off 36,824 lb  limited by space	<b>AREA</b> <b>111</b> knots power-off, landing configuration, take-off weight  <b>TIME TO CLIMB</b> <b>POINT</b> S.L. to <b>22.8</b> min T.O. weight, max power <b>50,000</b> ft

- ### NOTES
- Performance Basis:  
(a) Based on flight tests of F-89A.
  - Below 20,000 ft. limit IAS = 470 knots or 0.9 Mach whichever is less (Airplane temporarily limited below 20,000 ft by interim T.O. 01-15FD-173, 4 Mar 53 to 425 kn IAS or 0.9 Mach whichever is less (Pending structural demonstrations).
  - Revision Basis:  
Initial Issue