**Characteristics Summary**

**FIGHTER (INTERCEPTOR) ..... ADV. F-89**

![Diagrams of aircraft](#)

- **Wing Area**: 650.7 sq ft
- **Length**: 58.7 ft
- **Span**: 59.2 ft
- **Height**: 19.5 ft

### AVAILABILITY

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>RESERVE</th>
<th>TOTAL</th>
</tr>
</thead>
</table>

### PROCUREMENT

<table>
<thead>
<tr>
<th>Number available</th>
<th>Number to be delivered in fiscal years</th>
</tr>
</thead>
</table>

### STATUS

1. Development of the F-89 series
2. Procurement directive for 12 aircraft
3. First prototype: Mar 53 (est)
4. Second prototype: May 53 (est)
5. First production: Jul 54 (est)
6. Delivery of 12 aircraft: Dec 54 (est)

**Navy Equivalent**: None

**Mfr’s Model**: N-81

### POWER PLANT

- **(2)XJ73-GE-5**
- **General Electric**

**ENGINE RATINGS**

- **S.L.S.**
  - **LB - RPM-MIN**
  - **Max**: 12,660 - 7950 - 5
  - **Mil**: 8765 - 7950 - 30
  - **Nor**: 7110 - 7473 - Cont
  - *With afterburner operating*

**NOTE**: Installation of higher thrust Allison J71-A- ( ) engines being considered.

### FEATURES

- **Crew**: 2
- **Speed Brakes**
- **Fuel Purging**
- **Rotop Allerons**
- **Mid-Wing Fuel, Landing Gear and Armament Nacelle**
- **Single Point Refueling**
- **E-6 Fire Control System**
- **Auto-pilot (Auto-Flite System)**
- **All-Weather Interception Radar**
- **Instrument Landing System**

**Max Fuel Capacity**: 1840 gal

### ARMAMENT

- **104 x 2.75” FFAR Rockets**
- **Wing Nacelles**
- **8 x MX-904 Missiles (Falcon)**
- **70 x 2.75” FFAR Rockets**
- **224 x 2.75” FFAR Rockets**
- **8x30 mm Guns/800 rds.**
- **4xT-110 Roc. Guns/100 rds.**
- **Fuselage Nose**
  - **4 x 30 mm Guns/400 rds.**
  - **or**
  - **2 x T-110 Roc. Guns/50 rds.**
  - **or**
  - **6 x 20 mm Guns/1200 rds.**

**3 DECEMBER 1951**
### Characteristics Summary Basic Mission...

**ADV. F-89**

- **Loiter 109 Min. at 35,000 Ft.**
- **Combat 5 Min. with max power at 50,000 Ft.**
- **Loiter 20 Min. at S.L. (reserve)**
- **Max power climb**

### Performance

<table>
<thead>
<tr>
<th>Performance</th>
<th>Combat Range</th>
<th>Combat Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Point</strong></td>
<td></td>
<td>495 knots at 50,000 ft. alt.-max.power</td>
</tr>
<tr>
<td>Total Mission Time for Interception at 50,000 ft. = 121.5 minutes(3)</td>
<td>(2) naut. mi with (2) lb payload</td>
<td></td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td></td>
<td><strong>Maximum Speed</strong></td>
</tr>
<tr>
<td>(2) Nautical Miles at (2) Knots Average in (2) hours.</td>
<td>at (2) knots avg.</td>
<td></td>
</tr>
</tbody>
</table>

### Climb Ceiling Take-Off

<table>
<thead>
<tr>
<th><strong>Climb</strong></th>
<th><strong>Ceiling</strong></th>
<th><strong>Take-Off</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>20,100 fpm. at S.L. Take-Off Weight, Max.Power</td>
<td>52,000 ft. at 500 fpm, Combat Wt., Max.Power</td>
<td>2210 ft ground run</td>
</tr>
<tr>
<td>21,700 fpm. at sea level Combat Wt., Max.Power</td>
<td></td>
<td>3010 ft over 50 ft height</td>
</tr>
</tbody>
</table>

### Load Weights Stalling Speed

- Empty: 32,255 lb
- Combat: 44,124 lb
- Take-Off: 47,647 lb

### Notes

1. **Performance Basis:**
   - (a) Based on contractor's preliminary estimated data (not substantiated by WADC) corrected to conform to Specification MIL-C5011A insofar as possible.
   - (b) Fuel density: 5.5 lb/gal (JP-3)
   - (c) Performance is based on the following.

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**Notes**

- S.L.S. LB RPM
  - Max: *13,050 100%
  - Mil: 9034 100%
  - Nor: 7330 94%
  - *With afterburner operating

- 2. Data not available at time of publication.
- 3. Includes 1.5 minutes for take-off and acceleration to best climb speed at sea level.
- 4. REVISION BASIS: Initial issue

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**ADVANCED F-89**

3 December 1951