Characteristics Summary

FIGHTER (Interceptor) ........ 1954 AWI

Wing area .................................. 401 sq ft Length ......................................... 73.6 ft
Span ............................................. 35.7 ft Height ......................................... 18.7 ft

<table>
<thead>
<tr>
<th>AVAILABILITY</th>
<th>PROCUREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number available</td>
<td>Number to be delivered in fiscal years</td>
</tr>
<tr>
<td>ACTIVE</td>
<td>RESERVE</td>
</tr>
</tbody>
</table>

STATUS

This summary reflects preliminary characteristics and performance estimates of one of three contractors proposals selected for Phase 1 development. Upon completion of Phase 1, further evaluation will be conducted for the purpose of selecting one of the designs for further development leading to a production contract.

Mfr's Model: AP-57

POWER PLANT

(1) YJ67-W-1
Wright

ENGINE RATINGS

S.L.S.  LB - RPM - MIN
Max:  *19,700 - 6600 - 30
Mil:  11,800 - 6600 - 30
Nor:  9700 - 6600 - Cont

*With afterburner operating

FEATURES

Crew: 1
Delta Wing
Braking Parachute
Afterburner convertible to Independent Ram Jet
Variable Incidence Wing
Continuous Int. & Ext. Purging System
Adjustable Cockpit
Single-Point Refueling
Ejection Seat
Max Fuel Capacity: 2420 gal

ARMAMENT

Guns: None
Bombs: None
Missiles: 6 x XAAM-2-A (Falcon)
Rockets: 36 x 2.75" FFAR

10 SEPTEMBER 1951

1954 AWI (REPUBLIC)
**Characteristics Summary Basic Mission**

**INTERCEPT**
- Maximum range 1,716 naut mi with 1,291 lb payload at 474 knots avg. in 3.56 hours.
- Maximum speed 782 knots at zero ft. alt.-max.power with Turbo-Jet.

**CLIMB CEILING**
- Take-off weight, max.power with turbo-jet: 23,400 lbs at S.L.
- Take-off weight, nor. power: 28,500 lbs at 100 fps.
- Take-off height: 3150 ft no assist assisted.

**LUCK WEIGHS**
- Armament: 36x2.75" FFAR and 6xXAM-2-1 (Falcon)
- Empty: 19,370 lb
- Combat: 23,550 lb
- Ram-jet: 30,000 lb max thrust 45,000 ft/speed of M=.30

**NOTES**
1. PERFORMANCE BASIS:
   a. Manufacturer's estimated data (not substantiated by WADC)
   b. Fuel density: 6.5 lb/gal (JP-3)
   c. Afterburner is used independently as a ram-jet when air is by-passed around the turbo-jet.
2. Powers used for performance calculations are as follows:
   - S.L.S. Max: 16,960 lb
   - YJ67-W-1 Max: 11,200 lb
   - Ram-jet: 30,000 lb max thrust 45,000 ft/speed of M=.30
3. For the Area-Intercept Mission
4. Includes time for take-off and acceleration.
5. REVISION BASIS: Initial issue.