Characteristics Summary

FIGHTER (INTERCEPTOR) ............. XF-99

"BOMARC" BOEING

Wing Area .................... 104.5 sq ft  Length ....................... 41.2 ft
Span ........................ 18.1 ft  Height ....................... 10.3 ft

AVAILABILITY  PROCUREMENT

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

STATUS

1. Design and Development Phase Initiated: Dec 50
2. First Flight: 10 Sep 52
3. Phase I has been completed.
4. Phase II has progressed to the initiation of detail design, fabrication & testing R&D Vehicles.
5. Five of a total of 49 R&D XF-99's launched
6. R&D Completion: Aug 56 (est)

Navy Equivalent: None
Mfr's Model: 624

POWER PLANT

(2) XJR43-MA-3 Marquardt

THRUST RATINGS
ALT - LB - MACH
60,000 - 1730 - 2.50

BOOSTER
No. & Type: (1) XLR59-AJ-5
Mfr .......... Aerojet
Max Thrust (lb) ... 35,000
Duration (sec) ... 30

NOTE: No external booster required. Liquid Rocket Engine integral to pilotless aircraft for launch and boost phase.

FEATURES

Delta Wing
Wing Tip Ailerons
Tapered Cylindrical Body
Vertical Fin and Fin Tip Rudder
Movable Tail Surfaces

Max Fuel Cap: .... 269 gal
Max Oxidizer Cap: 154 gal

GUIDANCE

SYSTEM
(a) INITIAL: Preset Command
(b) MID-COURSE: Command
(c) TERMINAL: Active-Pulse-Radar-Target Seeker

CONTROL
Type ..... Autopilot Servo
### Characteristics Summary Basic Mission

**INTERCEPTOR MISSION**

- **Endurance**
  - Approximately 5.5 min.
  - 125 naut mi.
  - with 300 lb payload
  - at 1363 knots avg.
  - in 5.5 min

- **Range**
  - MAX 1437 knots at 60,000 ft alt, max power

- **Launching**
  - Launched vertically from a subterranean protective shelter

- **Climb**
  - 60,000 ft in approximately 1 min.

- **Altitude**
  - Cruise alt constant at 60,000 ft.
  - End Cruise 60,000 ft.

### Performance

<table>
<thead>
<tr>
<th>Load</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warhead: 300 lb</td>
<td>Empty 4500 lb</td>
</tr>
<tr>
<td>Fuel 269 gal</td>
<td>Launch 12,000 lb</td>
</tr>
<tr>
<td>Oxidizer 154 gal</td>
<td></td>
</tr>
<tr>
<td>protected 0 %</td>
<td></td>
</tr>
<tr>
<td>droppable 0 %</td>
<td></td>
</tr>
<tr>
<td>external 0 %</td>
<td></td>
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</tbody>
</table>

### Notes

1. **Performance Basis:**
   - (a) Estimated data (Not substantiated by WADC)

2. **Revision Basis:** To reflect latest characteristics and performance data.