# Characteristics Summary

**BOMBER (SUPersonic) **

**YB-70**

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**VALKYRIE**

**NORTH AMERICAN**

Wing Area .................................. 6298 sq. ft.  
Length ..................................... 186.8 ft.  
Span ........................................ 105.0 ft.  
Height ...................................... 30.7 ft.

## AVAILABILITY

<table>
<thead>
<tr>
<th>Number available</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVE</td>
</tr>
<tr>
<td>FY 65</td>
</tr>
</tbody>
</table>

## PROCUREMENT

<table>
<thead>
<tr>
<th>Number to be delivered in fiscal years</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 65</td>
</tr>
</tbody>
</table>

## STATUS

1. Design Initiated: ...................... Nov 55  
2. Mock-up: ............................... Mar 59  
3. First Flight: ............................ Jan 65 (est)

Navy Equivalent: None  
Mfr's Model: NA-274

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## AIR VEHICLE

**POWER PLANT**

- (6) J93-GE-3 General Electric  
- S, L, S, LB RPM MIN.  
- Max: *28,500 6825 Cont.  
- Min: 20,500 6825 Cont.  
- Nor: 18,600 6825 Cont.  
- *With afterburner

**FEATURES**

- Crew ................................. 4  
- Canard type trimming device  
- Air frame constructed from steel and titanium  
- Variable area inlets  
- Convergent-divergent exhaust nozzle  
- Folding Wing Tips  
- Grade .................. JP-6  
- Max fuel capacity : 51,290 gal  

## MILITARY SUB-SYSTEMS

**GUIDANCE**

- Bombing, Navigation and Missile Launching  
- AN/AQS-28(V) Bombing Navigation  
- N3B Stellar Inertial Platform  
- Coherent Doppler Radar (K-Band)  
- Digital Computer  
- Coherent pulse-to-pulse tuned X-Band Bombing Radar  
- ASC Prelaunch Capability  
- High Resolution Presentation

**MISSION & TRAFFIC CONTROL**

- Instrument Landing System  
- IFF Transponder  
- HF Radio Set  
- SSB  
- UHF Command  
- AN/AAR-18(V)  
- Interphone  
- TACAN  
- AN/ARN-52(V)  
- Sk & R Transponder  
- AN/APX-135(V)

**DEFENSIVE SUBSYSTEM**

- AN/ALQ-24(V)**  
- AN/ALQ-24(V)  
- Infrared Surveillances & Countermeasures  
- RF Surveillance  
- ECM Modulators  
- ECM Amplifiers  
- ECM Filters  
- Chaff Equipment  
- Passive, Infrared & Electronic Countermeasures

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**MAR 61**

**SECREcy**

**YB-70**

**System 110A**

**57 U 4983**
**Characteristics Summary Basic Mission**

<table>
<thead>
<tr>
<th>PERFORMANCE</th>
<th>OPER. RANGE</th>
<th>SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMBAT RADIUS</strong></td>
<td>6450 naut. mi with 10,000 lb payload in 4.56 hours</td>
<td>CRUISE at max speed 1721 knots at 65,000-75,300 ft alt., min A/B</td>
</tr>
<tr>
<td><strong>CLIMB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sea level, take-off weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maximum power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,800 fps</td>
<td>85,000 ft</td>
<td></td>
</tr>
<tr>
<td>100 fps, operational weight (3)</td>
<td>7680 ft</td>
<td></td>
</tr>
<tr>
<td>maximum power</td>
<td>10,600 ft</td>
<td></td>
</tr>
<tr>
<td><strong>CEILING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sea level, operational weight (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maximum power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27,970 fps</td>
<td>84,700 ft</td>
<td></td>
</tr>
<tr>
<td>500 fps, operational weight (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maximum power</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LOAD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FUEL 51,488 Gal*</td>
<td>Empty 190,895 lb</td>
<td>165 knots T.O. wt</td>
</tr>
<tr>
<td>Protected 0%</td>
<td>Operational (3) 242,062 lb*</td>
<td>100.4 knots Landing wt. with canard flaps down</td>
</tr>
<tr>
<td>Droppable 0%</td>
<td>Take-off 554,609 lb</td>
<td></td>
</tr>
<tr>
<td>External 0%</td>
<td>* Limited by mission</td>
<td></td>
</tr>
</tbody>
</table>

**WEIGHTS**

<table>
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<tr>
<th>MIN. SAFE SPEED</th>
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<td>165 knots T.O. wt</td>
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<td>100.4 knots Landing wt. with canard flaps down</td>
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</table>

**NOTES**

1. Performance Basis: Estimated data
2. Revision Basis: Data re-coordinated
3. Operational weight is defined as the weight 1200 N. Mi prior to mission completion.