Characteristics Summary

BOMBER (SUPersonic) .... Xb-70A Air Vehicle Nr 1

Valkyrie

NORTH AMERICAN

Wing Area ................... 6298 sq ft. Length ..................... 185.8 ft.
Span .......................... 105.0 ft. Height .................... 30.7 ft.

Availability

<table>
<thead>
<tr>
<th>TEST</th>
<th>INVENTORY</th>
<th>TOTAL</th>
<th>FY 65</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

Procurement

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

Status

1. Design Initiated: ............... Nov 55
2. Mock-up: ........................ Mar 59
3. First Flight, Air Vehicle Nr 1. Aug 64(est)
4. First Flight Air Vehicle Nr 2. Nov 64(est)
5. Experimental air vehicles are to be used to obtain test data in the B-70 flight spectrum.
6. Roll out at contractor's plant... 11 May 64

Navy Equivalent: None

Mfr's Model: NA-278

Power Plant

(6) YJ93-GE-3
General Electric
S.L.S. LB - RPM - MIN
Max: *28,000 - 6825 - Cont
Mil: 19,900 - 6825 - Cont
Nor: 17,700 - 6825 - Cont
*With afterburner

Features

Crew .......................... 2
Canard
Airframe constructed from steel and titanium
Variable area inlet
Convergent-divergent exhaust nozzle
Folding wing tips
ILS ......................... AN/ARN-58
IFF radar .................. AN/APX-46
UHF command ....... AN/ARC-50
Interphone ...... AN/AIC-18
TACAN ................. AN/ARN-65

Max fuel capacity: 40,108 gal
Grade ................. JP-6

Special Stores

Not Applicable

11 May 64
(AFG 1, Addn 63)
**Characteristics Summary Basic Mission**  

**XB-70A Air Vehicle Nr 1**

- **M = 3.0**
- **OPERATIONAL RANGE - 3773 N. MILES**

### Performance

<table>
<thead>
<tr>
<th>COMBAT RANGE</th>
<th>OPERATING RANGE</th>
<th>SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT APPLICABLE</td>
<td>3773 naut. mi</td>
<td>MAX 1721 knots at 65,000-70,920 ft alt, min A/B power</td>
</tr>
</tbody>
</table>

### Climb

<table>
<thead>
<tr>
<th>C F I L I N G</th>
</tr>
</thead>
<tbody>
<tr>
<td>7400 fpsm sea level, take-off weight mil power</td>
</tr>
<tr>
<td>76900 ft 100 fpsm, combat weight max power</td>
</tr>
<tr>
<td>29372 fpsm sea level, combat weight maximum power</td>
</tr>
<tr>
<td>76600 ft 500 fpsm, combat weight max power</td>
</tr>
</tbody>
</table>

### Take-Off

- **ground run** 7600 ft |
- **over 50 ft height** 10900 ft |

### Load Weights

- Empty..... 254,539 lb
- Combat... 326,502 lb
- Take-off 533,105 lb

### Min. Safe Speed

- 162 knots - T. O. Wt.
- 116 knots - Landing Wt

### Time to Climb

- **NOTES**
  1. Performance Basis:
     - (a) Performance is based on current estimated weight of air vehicle including ballast, flight test instrumentation and instrumentation package.
     - (b) 326,502 lbs is the weight 1200 N Miles prior to mission completion

Revision Basis: XB-70A Air Vehicle Nr 1 & 2 now shown on separate summaries  
XB-70B Air Vehicle Nr 3 terminated