Characteristics Summary

BOMBER (SUPersonic) ..... XB-70A Air Vehicle Nr 2

Valkyrie

Wing Area .................. 6298 sq ft. Length .................. 165.8 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>
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</table>

Procurement

Number to be delivered in fiscal years

1  

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.

Navy Equivalent: None

Mfr's Model: NA-278

Power Plant

(6) YJ93-GE-3
General Electric
S.L.S. LB - RPM - MIN
Max: *29,000 - 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: 42,326 gal
Grade ............. JP-6

Special Stores

NOT APPLICABLE

11 May 64

[AFG 1, Addn 63]
### Performance Summary

**Basic Mission**

- **M = 3.0**
- **Operational Range:** 4077 N. Miles

#### Characteristic Summary

- **Max Speed:**
  - 172 knots at 65,000 - 71,725 ft alt, Min A/B power

#### Combat Radius

- **4077 naut. mi** with 42,326 gal fuel

#### Operating Range

- **7279 fpm** sea level, take-off weight, military power
- **77,100 ft** 100 fpm, combat weight, max. power
- **30,017 fpm** sea level, combat weight, maximum power
- **76,850 ft** 500 fpm, combat weight, maximum power

#### Climb

- **7279 fpm** ground run, take-off weight, military power
- **11,290 ft** no assist, over 50 ft height, assisted

#### Climbing

- **77,100 ft** no assist, 100 fpm, combat weight, max. power

#### Take-off

- **7900 ft** no assist, 100 fpm, combat weight, max. power

#### Load Weights

- **Empty:** 248,600 lb
- **Combat:** 319,486 lb
- **Take-off:** 542,029 lb

#### Min. Safe Speed

- **163 Knots - T. O. Wt**
- **14.7 Knots - Landing Wt**

#### Time to Climb

- **11,290 ft** assisted

### Notes

1. **Performance Basis:**
   - (a) Based on current estimated weight of air vehicle including ballast, flight test instrumentation & instrumentation package.
   - (b) 319,486 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.