# Characteristics Summary

**BOMBER (SUPersonic)**: XB-70 Air Vehicle Nr 3

<table>
<thead>
<tr>
<th>VALKYRIE</th>
<th>NORTH AMERICAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Area: 6298 sq ft.</td>
<td>Length: 185.8 ft.</td>
</tr>
<tr>
<td>Span: 105.0 ft.</td>
<td>Height: 30.7 ft.</td>
</tr>
</tbody>
</table>

### AVAILABILITY

<table>
<thead>
<tr>
<th>Number available</th>
<th>PROCUREMENT</th>
<th>Number to be delivered in fiscal years</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST INVENTORY TOTAL FY 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

### STATUS

1. Design Initiated: Nov 55
2. Mock-up: Mar 59
3. First Flight: Jul 64 (est)

Prototype air vehicles are to be used to obtain test data in the B-70 flight spectrum.

### POWER PLANT

- **(6) YJ93-GE-3**
- General Electric
- S.L.S. LB - RPM - MIN
- Max: *28,000 - 6825 - Cont
- Mil: 19,500 - 6825 - Cont
- Nor: 17,700 - 6825 - Cont
- *With afterburner

### FEATURES

- Crew: 4
- Canard-type trimming device
- 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: 46,745 gal
- Grade: JP-6

### GUIDANCE

- Bomb-Nav Sys: AN/ASQ-28
- Frequency Diversity Radar with high resolution attachment
- Stellar Inertial Platform
- Doppler Radar
- Main & Emergency Digital Computers
- Operator's Console

### SPECIAL STORES

- **BOMBS:**
  - **Nbr.**
    - 1: Class A
    - 2: Class B
    - 3: Class C
    - 6-8: Class D

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20 Dec 61

(AFG 1, Addn 34) (25 of 104)
Characteristics Summary Basic Mission... XB-70 Air Vehicle Nr 3

M = 3.0

65,000 FT.
ACCELERATE 1.37 to 3.0 Mach

71,000 FT.
25,000 acceleration to 1.37 Mach
Operational Range 4650 N. Miles

PERFORMANCE

COMBAT RADIUS OPER. RANGE SPEED

NOT APPLICABLE 4650 naut. mi CRUISE at max speed with 10,000 lb payload

1721 knots at
65,000-71,000 ft alt.
min A/B

CLIMB CEILING TAKE-OFF

10,000 fpm 79,950 ft 7940 ft ground run
sea level, take-off weight 100 fpm, 288,467 lb (3)
maximum power

79,700 ft
over 50 ft height
no assist assisted

31,750 fpm
sea level, 274,557 lb (3)
maximum power

79,700 ft
no assist assisted

LOAD WEIGTHS MIN. SAFE SPEED

10,000 lb Store 205,284 lb

Empty..... 288,467 lb (3)

Fuel: 45,892 gal
protected 0 %
droppable 0 %
external 0 %

Take - off 542,029 lb
limited by mission

NOTES

1. Performance Basis: Estimated data
2. Revision Basis: Data recomnordinated and mfr's model nr changed.
3. 288,467 lb is the weight 1200 N.MI, prior to mission completion.