Characteristics Summary

BOMBER (SUPersonic)....... XB-70B Air Vehicle Nr 3

VALKYRIE
NORTH AMERICAN

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

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

STATUS

1. Design Initiated: .............. Nov 55
2. Mock-up: .................... Mar 59
3. First Flight ................. Dec 64 (est)
4. 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:  19,900 - 6825 - Cont
Nor:  17,700 - 6825 - Cont
*With afterburner

FEATURES

Crew ......................... 4
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: 46,745 gal
Grade ...................... JF-8

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:

1. ....................... Class A
2. ....................... Class B
3. ....................... Class C
6-8  ....................... Class D

Navy Equivalent: None
Mfr’s Model: NA-278

9 May 63
(AF 1, Addn 51) (23 of 106)
Characteristics Summary Basic Mission

XB-70B Air Vehicle Nr 3

PERFORMANCE

<table>
<thead>
<tr>
<th>COMBAT RADIUS</th>
<th>OPER. RANGE</th>
<th>SPEED</th>
</tr>
</thead>
</table>
| NOT APPLICABLE | 4644 naut. mi | CRUISE at max speed
|               | with 10,000 lb payload | 1721 knots at
|               | in 3.54 hours | 65,000 - 73,100 ft alt.
|               |               | min A/B |

CLIMB

<table>
<thead>
<tr>
<th>CLIMB</th>
<th>CEILING</th>
<th>TAKE-OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>7260 fpm</td>
<td>79250 ft</td>
<td>7900 ft</td>
</tr>
<tr>
<td>sea level, take-off weight</td>
<td>100 fpm, 291,036 lb (3) max</td>
<td>ground run</td>
</tr>
<tr>
<td>military power</td>
<td>maximum power</td>
<td>no assist</td>
</tr>
<tr>
<td>33,100 fpm</td>
<td>79000 ft</td>
<td>11,290 ft</td>
</tr>
<tr>
<td>sea level, 291,036 lb (3) max</td>
<td>500 fpm, 291,036 lb (3) max</td>
<td>assisted</td>
</tr>
<tr>
<td>maximum power</td>
<td>maximum power</td>
<td>over 50 ft height</td>
</tr>
</tbody>
</table>

LOAD WEIGHTS

<table>
<thead>
<tr>
<th>LOAD</th>
<th>WEIGHTS</th>
<th>MIN. SAFE SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000 lb Store</td>
<td>Empty..... 206,100 lb</td>
<td>163 knots T.O. wt.</td>
</tr>
<tr>
<td>Fuel: 45,869 gal</td>
<td>Combat... 291,036 lb (3)</td>
<td>109 knots Landing wt.</td>
</tr>
<tr>
<td>protected</td>
<td>0 %</td>
<td>with canard flaps down</td>
</tr>
<tr>
<td>droppable</td>
<td>0 %</td>
<td></td>
</tr>
<tr>
<td>external</td>
<td>0 %</td>
<td></td>
</tr>
<tr>
<td>Take-off</td>
<td>542,029 lb</td>
<td></td>
</tr>
</tbody>
</table>

NOTES

1. Performance Basis: Estimated data
2. Revision Basis: Recordinated. XB-70A (Veh #3) changed to XB-70B.
3. 291,036 lb is the weight 1200 N. Mi. prior to mission completion.

XB-70B Air Vehicle Nr 3
System 110A

SECRET

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