TYPE: Very Heavy Bomber

PROJECT No.: MX-149

Contractor: Consolidated Vultee

No. on Contract: 1

Contract Number: WS5-AC-22352

Estimated Flight Date: July 1946

I. POWER PLANT

1. Number of Engines: 6

Mfr. & Type Engine: Pratt & Whitney R-4360-25

2. Supercharger: Type BH Dual Installation

3. Propeller: Curtiss 19' 8" Diameter, 3 Blades

Red. Gear Ratio: 381

4. Engine Ratings:

<table>
<thead>
<tr>
<th>THRUST</th>
<th>B. H. P.</th>
<th>R. P. M. (Eng.)</th>
<th>FT. ALT.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2700</td>
<td>S.L.</td>
</tr>
<tr>
<td>a.</td>
<td>Take Off</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Military</td>
<td>3000</td>
<td>2700</td>
</tr>
<tr>
<td>c.</td>
<td>Normal</td>
<td>2500</td>
<td>2500</td>
</tr>
<tr>
<td>d.</td>
<td>War Emergency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. PERFORMANCE

1. Speed in Level Flight

M. P. H. ALT. FEET THRUST OR B. H. P.


2. Rate of Climb

FT/MIN ALT. FEET WEIGHT

| a. War-Emergency Power Normal Rated | 790 | S.L.   | 278,000# |
| b. Military Power                  |     |        |          |

3. Time to Climb

MIN. ALT. FEET WEIGHT

| a. War-Emergency Power Normal Rated | 42  | 25,000 | 278,000# |
| b. Military Power                  |     |        |          |

4. Range

MILES M. P. H. FUEL GALS. CARGO OR BOMBS LBS.

| a. Design Gr. Wt. 278,000# | *9398 | 20,090 | 10,000# |
| b. Design Gr. Wt.          |       |        |         |
| d. Alt. Gr. Wt. 265,000#   | 3960  | 8,400  | 78,400# |

5. Service Ceiling

FT. ALT. B. H. P. WEIGHT

| a. With all Engines        | *35,200 | NRP    | 278,000# |
| b. With ½ Engines          | 15,700  | NRP    | 204,250# |

6. Take-Off & Land Over 50' Obs.

TAKE-OFF LANDING WEIGHT

| a. Design Gross Wt. 278,000# | 7030'  | 3,650' | 268,000# |
| b. Alt. Gross Wt. 265,000#   | 6080'  |        |          |

CLASSIFICATION CANCELLED

BY AUTHORITY OF INDIVIDUAL OR WRITTEN AUTHORIZATION

BY: R. F. Smith

CONFIDENTIAL

YB-36

15 August 1945 Revision
MODEL DESIGNATION: YB-36
TYPE: Very Heavy Bomber

III. CHARACTERISTICS

1. Weight Empty: 130,566 lbs
2. Design Gr. Wt.: 278,000 lbs
3. Alt. Gross Wt.: 265,000 lbs
4. Length: 162' 11/4"
5. Span: 230' 5"
6. Wing Area: 4,772 sq. ft.

(7) Wing Loading (#/Sq. Ft.)
Design Gr. Wt. 25.3
Alt. Gr. Wt. 23.2

(8) Power Loading (#/BHP) at Mil. Power
15.4

IV. ARMAMENT

(1) Guns and Cannons:

a. Normal
   2 20MM. - Nose - Remotely Controlled - 400
   2 20MM. - Forward Upper - Remotely Controlled - 600
   2 20MM. - Forward Lower - 600
   4 20MM. - Aft. Upper - 600
   2 20MM. - Aft. Lower - 600
   2 20MM. - Tail - AGL - 600

b. Alternate
   2 20MM. - Nose - Remotely Controlled - 400
   4 20MM. - Fwd. Upper - Remotely Controlled - 600
   4 20MM. - Fwd. Lower - 600
   4 20MM. - Aft. Upper - 600
   4 20MM. - Aft. Lower - 600
   2 20MM. - Tail - AGL - 600

(2) Bombs, Rockets:

<table>
<thead>
<tr>
<th>No.</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>4,000#</td>
</tr>
<tr>
<td>22</td>
<td>2,000#</td>
</tr>
<tr>
<td>14</td>
<td>1,000#</td>
</tr>
<tr>
<td>72</td>
<td>1,000#</td>
</tr>
<tr>
<td>132</td>
<td>500#</td>
</tr>
</tbody>
</table>

V. CREW

Normal: 13
Alternate: 17

VI. SPECIAL FEATURES:

- To be allocated for flak protection for crew and engines. Self-sealing panels to be installed on all sides of the fuel tanks with the exception of the top. The two inboard tanks will be unproctected.
- An exhaust gas purging system is to be provided for the two inboard tanks.
- There will be an individual gunner for each turret. Airplane will be pressurized, and the crew layout in the forward crew compartment is excellent insofar as crew arrangement and space and visibility are concerned.

VII. NOTES

* Due to inability of F & W to develop a two speed reduction gear (29 & 50) the following loss in performance has resulted for the D.G.W.

** Condition: Bi-speed 21 mph, service ceiling 560 feet, range 300 miles. In addition, 270 miles in range are lost due to higher specific fuel consumption (original s.f.c. values were based on normal leaning and speed adjustment.)

Wright-Patterson Air Force Museum
Ohio 45433

CONFIDENTIAL

W.O. 35433

CONFIDENTIAL

YB-36
17 August 1945
Revision