

YB-40 Variant

Operation Porcupine

The YB-40:

The Ammunition Stocker:

As we have noted, in order to tend and move the large stocks of extra ammunition carried by the craft, an 11th crewman was added as an "ammunition stocker". While his assigned position at takeoff was in the radio room, he had the duty to "float" among the compartments-notably between the radio room, waist and bomb bay areas, although all others were accessible. To reflect this role, institute the following when playing the YB-40:

1. So long as the ammunition stocker is functioning in that position, the transfer of ammunition among guns or reserve stocks may be carried out by the player at anytime-even during a wave-at no detriment to the B-17's ability to fire.
2. The player may place the stocker in any position in the plane, simply by putting his counter (which you must make) with any other. It may be moved freely about-even between waves.
3. In the case where a wounds roll is required for a compartment/position that the stocker currently occupied, roll one die: on a "1-4", the individual called for by the chart rolls for wounds; on a "5-6", the ammunition stocker rolls for wounds.
4. If a player so desires and the crewman manning a gun position is Seriously Wounded or KIA, the stocker may assume his duties-with a To Hit requirement of "6" for all his fire. If in such a role, he is assumed to be that gunner for as long as desired, and the above three rules do not apply. Obviously, any attack upon that position must now affect the stocker solely.

Armament Modifications:

In keeping with the historical changes in guns (now 16) and turrets, certain modifications in the rules for ammo loads and hit requirements are mandated. This is truly so when one considers the number of twin gun mounts and the new fields of fire the YB- 40 enjoyed. Institute the following:

1. In keeping with Mr. Meldrum's (see The GENERAL, Vol. 20, No. 6) comments about the chin turret on the B-17G and the ammunition supply associated with it, the following apply:
 - a) The Bendix chin turret may hit all levels of 12:00 o'clock, and the level and low sectors of both 10:30 and 1:30.

b) The required To Hit die roll against enemy aircraft for the Bendix chin turret guns is a "5" or "6".

c) Double-gun bonus applies.

d) Ammunition supply is 200 % greater than that carried by the B-17F/G (i.e., a total of 32 ammunition boxes for the chin turret).

2. No changes are instituted for the cheek guns.

3. The ammunition load for the forward top turret is now increased from 16 boxes by an additional 100% to 32 boxes. No other changes are in effect for this gun position.

4. The rear upper turret (which replaces the single .50 gun in the radio room) requires certain adaptations:

a) The weapon has 16 ammunition boxes available.

b) Its field of fire is expanded to include not only 6:00 o'clock High, but also the high and level sectors of 3:00 and 9:00 o'clock and 12:00 o'clock high. Additionally, the vertical dive may now be also fired at from this position (with a To Hit of "6"). All other To Hit requirements for the rear upper are the same as for the top turret in B-17.

c) Double-gun bonus applies.

5. All requirements for the ball turret remain the same except that its ammunition supply is increased to 24 boxes.

6. For the waist guns, the addition of twin .50-calibre gun mounts and power boosting to aid in counteracting the slipstream greatly

increased their effectiveness. Ammunition supply remains the same. Waist guns now receive the double-gun bonus. And due to the power boost, waist gunners require a "5-6" to hit a target.

7. The only modification required for the tail guns are an increase in ammunition supply to 25 boxes.

8. The usage of reserve ammunition stocks are such that 76 double-gun boxes are available. If the ammunition stocker is free, these rounds may be transferred to any gun position at any time; if he is not, such may be transferred only in zones in which no attacks are rolled or all attackers are driven off by friendly fire cover or other B-17s. Each double-gun ammo box counts as two for each cheek gun. Ammo may be exchanged between gun positions in keeping with the foregoing and the original rules.

9. Historically, when the mission required, the YB-40 could carry much more ammo than we have thus far credited it with (an extra 7000 rounds in the bomb bay). So, a player is given the option as commander of the craft to carry an additional 140 boxes of double-gun ammo.

Aircraft Modifications:

While the YB-40 was approved as a viable accompaniment for the B-17F by Army brass, it did have some defects. Due to the added weight of armor, it came in at approximately a ton heavier than an unloaded B-17F. Add to this the additional weight of a full ammunition supply, and we have a differential of 3720 pounds over an unloaded B-17F. The result was that while the YB-40 could maintain formation on the outbound passage, its weight forced the formation to slow their pace back to base in order to give the bombers the benefit of the protection of the YB-40s. To simulate all this, and other aspects of the nature of the experimental aircraft, the following rules are in effect:

1. Except in the target zone, the YB-40 is always considered to be the lead bomber in a squadron.
2. During the return trip from the target zone, the YB-40 suffers an additional + 1 on Table B-1 (Number of German Fighter Waves in Non-Designated Target Zone).
3. Due to the placement of additional armor behind the front compartment, a -1 is applied to all wounds die rolls for crewmen attacked from the 10:30, 1:30 and 12:00 level positions who are not in the nose.
4. Due to the placement of additional armor at the sides, all attacks from any 3:00 or 9:00 o'clock position that results in a wound die roll are also subject to a -1 modifier.
5. To reflect the additional armor plating placed around the engines, a -1 die roll modifier is applied to any engine hit sustained. This will increase the possibility that a hit on Table BI-1 (Wings) will cause superficial damage and eliminates the possibility of an oil tank hit.
6. The range of a YB-40 is limited to a maximum of six zones, unless the player specifies that an additional tank is stored in the bomb bay.
7. If a YB-40 should take a hit in the bomb bay compartment that would normally result in a "Bombs" result, there will be no effect unless the plane is carrying extra ammo or a fuel tank in the bomb bay. If either is the case, then a "1-4" would have no effect, and a "5-6" would detonate the ammo/fuel (resulting in the immediate loss of both aircraft and crew).

8. Due to its extra weight, if the YB-40 should lose the usage of one engine, the plane will immediately drop out of formation and expend two turns in each zone, unless the pilot elects to jettison all ammo supplies.

9. All rules not modified by the above are considered to be still in effect.

Other Suggestions

Having had more than our share of planes go down due to fuel tank fires, and after having seen several pieces of footage that showed B-17s landing with said fires, we began to question the results table dictate that a fuel tank fire would result only in a controlled or uncontrolled bailout, with no other options. While it was possible to land a plane with a fuel tank on fire, it was also possible to extinguish such. One tactic used was to dive out of formation. This brought its own problems, but it sure beat walking back to England. Therefore, we'd like to recommend that if a fuel tank fire occurs, an additional die roll be made with the following results: 1- fire out, plane out of formation, roll for leakage, 2- fire continues, roll for leakage, out of formation, may reroll in all subsequent zones, 3-4- controlled bailout, 5-6- uncontrolled bailout.

In his article, Mr. Bleyaert (see Vol. 23, No. 5 of The GENERAL) offers additional targets over Northern Europe for those who choose to fly out of Great Britain. While we agree with most of what he proposes, we are forced to question his rule (#4) concerning increased resistance over Germany. We freely admit that the bombers met heavier enemy activity once in German airspace; to reflect this he penalizes the Low Squadron with a modifier of +2 on Tables B-1 and B-2, thus increasing its chances of encountering enemy fighters. Yet he fails to extend this modifier to the other squadrons and, in fact, pointedly omits them. We feel that if extra fighters were encountered, they should be effective at all levels. One way to achieve this would be to simply add + 1 to any zone completely inside German territory; another would be to add + 1 to the die roll for all squadrons over Germany. With this last, the net result would be such that the squadron modifiers will be: Low-+2; Middle-0; and High-+ 1. A more adequate representation.

On to another concern-namely, a wings roll of "9" that results in an engine out. While it is a fact that an engine in a B-17 could be knocked out of action due to damage or other causes, the rules do not allow for the possibility that the engine could be restarted (as they often were). Therefore, in any zone after an engine has gone out due to reasons other than a runaway or oil tank fire, the player may roll to restart that engine. On a roll of "1", the engine restarts; on "2-5", it remains out; on "6", it seizes up completely and no more attempts may be made to restart it. Further, if the latter happens, a second die roll is immediately made;

upon a "6", fire breaks out (attempts may be made to extinguish this in accordance with B1-1).

Missions of the YB-40s:

<i>Date</i>	<i>Target</i>	<i>Number</i>	<i>Remarks</i>
5/29/43	St. Nazaire	8	One aborted
6/15/43	LeMans	4	Recalled due to weather
6/22/43	Huls	11	One lost
6/23/43	LeMans	8	Mission recalled
6/25/43	Hamburg	7	Two aborted; claimed two enemy aircraft
6/26/43	Paris	5	Claimed two enemy aircraft
6/28/43	St. Nazaire	1	Claimed one enemy aircraft
6/29/43	Paris	2	One aborted
7/4/43	Nantes	2	
	LeMans	1	
7/14/43	Villacoublay	5	The last mission as a group
7/17/43	Hannover	2	
7/24/43	Heroya	1	
7/26/43	Hannover	2	
7/28/43	Kassel	2	