RESTRICTED AN 01-20EF - 1

FOR OFFICIAL USE ONLY

PILOT'S FLIGHT OPERATING INSTRUCTIONS

FOR

ARMY MODELS

B-17 F and G

And

YB-40

Armed Escort Model

This publication shall not be carried in aircraft on combat missions or when there is a reasonable chance of falling into the hands of the enemy.

CHAPTER 1 B-17 F & G Models

If you are flying a B-17 F or G Model bomber use **Table 5-12 - B-17 F & G Models Area Damage Table** and **Tables 5-13 - B-17 F & G Models - Tables A1 thru A8** to resolve the damage to your bomber. These tables are found below.

If you are using the optional rules YB-40 Armed Escort Model Bomber you will find its tables in Chapter 2 of the Pilot's Manual for the B-17 F & G Model Bombers.

Typical B-17F and G models carried 10 man crews. Four officers (Pilot, Co-Pilot, Bombardier and Navigator) and 6 enlisted men (Engineer/Top Turret Gunner, Two Waist Gunners, Ball Turret gunner, Tail Gunner and Radio Operator) made up the crew. There was no nose gunner for the chin turret on the B-17G. It was operated by either the Bombardier or Navigator as were the cheek guns.

Table 5-12 B-17 F & G Models AREA DAMAGE TABLES Roll 2D6: Attack from 10:30 / 12 / 1:30 O'clock

	HIGH			LEVEL		LOW
ROLL	AREA HIT	RO)LL	AREA HIT	ROLL	AREA HIT
2	Instruments		2	Instruments	2	Instruments
3	Radio Room	3	3	Radio Room	3	Radio Room
4	Waist	2	4	Waist	4	Waist
5	Pilot Compartment	4	5	Nose	5	Pilot Compartment
6	Wing: Roll 1D6:	(6	Wing: Roll 1D6:	6	Wing: Roll 1D6:
	1-3, Left			1-3 , Left		1-3, Left
	4-6 , Right			4-6 , Right		4-6, Right
7	Superficial Damage		7	Superficial Damage	7	Superficial Damage
8	Nose	8	8	Pilot Compartment	8	Nose
9	Bomb Bay	9	9	Bomb Bay	9	Bomb Bay
10	Superficial Damage	1	0	Superficial Damage	10	Superficial Damage
11	Tail	1	1	Tail	11	Tail
12	Walking Hits/	1	2	Walking Hits/ Wings	12	Walking Hits/
	Fuselage (a)			(b)		Fuselage (c)

- **a)** 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.
- **b)** 2 shell hits on each Wing
- c) 1 shell hit in each of the following sections: Nose, Wings -attacking side. (12 O'clock roll 1d6; 1-3, Left Wing. 4-6, Right Wing), Waist, Tail

Table 5-12 B-17 F & G Models

Roll 2D6:	Attack from	9 / 3 O'clock

	HIGH		LEVEL		LOW
ROLL	AREA HIT	ROLL	AREA HIT	ROLL	AREA HIT
2	Instruments	2	Instruments	2	Instruments
3	Radio Room	3	Radio Room	3	Radio Room
4	Waist	4	Nose	4	Waist
5	Pilot Compartment	5	waist	5	Pilot Compartment
6	Wing: Roll 1D6:	6	Wing: Roll 1D6:	6	Wing: Roll 1D6:
	1-3, Left		1-3 , Left		1-3, Left
	4-6 , Right		4-6 , Right		4-6 , Right
7	Superficial Damage	7	Superficial Damage	7	Superficial Damage
8	Nose	8	Bomb Bay	8	Nose
9	Bomb Bay	9	Pilot Compartment	9	Bomb Bay
10	Superficial Damage	10	Superficial Damage	10	Superficial Damage
11	Tail	11	Tail	11	Tail
12	Walking Hits/	12	Walking Hits/ Wings	12	Walking Hits/
	Fuselage (a)		(b)		Fuselage (c)

Table Notes: A "walking hits" result negates all further shell hits by this fighter for this attack.

- a) 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.
- **b)** 2 shell hits on each Wing
- c) 1 shell hit in each of the following sections: Nose, Wings -attacking side. (12 O'clock roll 1d6; 1-3, Left Wing. 4-6, Right Wing), Waist, Tail

Table 5-12 B-17 F & G Models **Roll 2D6:** Attack From: 6 O'clock

HIGH LEVEL LOW AREA HIT AREA HIT AREA HIT **ROLL** ROLL **ROLL** Instruments 2 Instruments 2 Instruments 2 3 3 Pilot Compartment Pilot Compartment Radio Room 4 Radio Room 4 Radio Room 4 Waist Pilot Compartment 5 Waist 5 Waist 5 Wing: Roll 1D6: Wing: Roll 1D6: 6 Wing: Roll 1D6: 6 6 1-3, Left **1-3,** Left **1-3**, Left **4-6,** Right **4-6**, Right **4-6,** Right 7 7 7 Superficial Damage Superficial Damage Superficial Damage 8 Tail 8 Tail 8 Tail 9 9 9 Bomb Bay Bomb Bay Bomb Bay 10 Superficial Damage 10 Superficial Damage 10 Superficial Damage 11 Nose 11 Nose 11 Nose 12 Walking Hits/ 12 Walking Hits/ Wings 12 Walking Hits/ Fuselage (a) Fuselage (c)

- a) 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.
- **b)** 2 shell hits on each Wing
- c) 1 shell hit in each of the following sections: Nose, Wings -attacking side. (12 O'clock roll 1d6; 1-3, Left Wing. 4-6, Right Wing), Waist, Tail

Table 5-12 B-17 F & G Models Roll 2D6 Vertical Dive and Climb Attacks

	VERTICAL DIVE		VERTICAL CLIMB
ROLL	AREA HIT	ROLL	AREA HIT
2	Instruments	2	Instruments
3	Radio Room	3	Radio Room
4	Waist	4	Waist
5	Pilot Compartment	5	Pilot Compartment
6	Wing: Roll 1D6:	6	Wing: Roll 1D6:
	1-3 , Left		1-3, Left
	4-6 , Right		4-6 , Right
7	Superficial Damage	7	Superficial Damage
8	Nose	8	Nose
9	Bomb Bay	9	Bomb Bay
10	Superficial Damage	10	Superficial Damage
11	Tail	11	Tail
12	Walking Hits/ Fuselage (a)	12	Walking Hits/ Fuselage (a)

Table Notes: A "walking hits" result negates all further shell hits by this fighter for this attack.

a) 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.

Table 5-13 A-1 NOSE (B-17 F & G Models) Roll 2D6

ROLL	ADEA HIT	EFFECT
	AREA HIT	
2	Norden Bombsight	Bomb run automatically Off Target. (May abort mission)
3	Armament	<u>B-17F:</u> Roll 1D6: 1-2 , Nose gun inoperable; 3-4 , Left
		cheek gun inoperable; 5-6 , Right cheek gun inoperable
		<u>B-17G:</u> Roll 1D6: 1-2 , Chin turret inoperable (a); 3-4 ,
		Left cheek gun inoperable; 5-6 , Right cheek gun
		inoperable
4	Bombardier and	Roll wound for each separately on Table 5-17 (b)
	Navigator	
5	Navigator	Roll for wound on Table 5-17
6	Bombardier	Roll for wound on Table 5-17
7-9	Superficial Damage	No effect.
10	Nose Compartment	Roll 1D6: 1-3, Navigator's equipment inoperable (c); 4-
	Equipment	6, Bomb controls inoperable (d).
11	Compartment Heat	Roll 1D6: 1-2, Bombardier; 3-4, Navigator; 5-6, both
		heat out (e).
12	Oxygen Supply	Roll 1D6: 1-2, Bombardier; 3-4, Navigator; 5, both hit;
		6, Fire and all nose oxygen out (f). Roll to extinguish fire
		on Table 5-19

Table Notes: a) Treat as No Effect if hit from attacking fighter at 12 O'clock High

- b) If Bombardier is KIA or seriously wounded, Bomb Run is automatically Off Target
- c) If presently or subsequently out of formation, B-17 must spend 2 turns in each future odd-numbered zone entered (Roll twice for fighter waves).
- **d**) Bombs must be dropped manually -Bomb Run roll on Table 6-3 is -3.
- e) See rules section 5.12 Heat Out/Frostbite
- f) See rules section 5.14 Oxygen Out.

Table 5-13 A-2 PILOT COMPARTMENT (B-17 F & G Models) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Compartment Heat	Pilot Compartment heat out (a).
3	Pilot and Co-Pilot	Roll wound for each separately on Table 5-17
4	Pilot	Roll for wound on Table 5-17
5	Co-Pilot	Roll for wound on Table 5-17
6-7	Superficial Damage	No effect.
8	Top Turret	Roll 1D6: 1-2 , guns inoperable; 3-5 , Engineer rolls for wound
		on Table 5-17; 6 , guns inoperable and Engineer rolls for
		wound
9	Instruments	Roll for damage on Table 5-13 A-8
10	Oxygen Supply	Roll 1D6: 1, Pilot and Co-Pilot; 2, Pilot; 3, Co-Pilot; 4,
		Engineer; 5 , Fire and all Pilot Compartment oxygen out (b).
		Roll to extinguish fire on Table 5-19; 6, Oxygen System out
		(c).
11	Window	1^{st} window hit = no effect; 2^{nd} window hit = landing roll on
		Table 7-1 or 7-2 is -1 ; Heat is out for compartment (a).
		Additional hits = no effect
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No Evasive
		Action allowed, landing roll on Table 7-1 or 7-2 is –1, and
		Bomb Run is automatically Off Target.

c) Roll 1D6: # rolled is the number of zones until oxygen runs out for entire plane. If more than one hit, take the lower of number rolled or remaining zones from prior system hit.

Table 5-13 A-3 BOMB BAY (B-17 F & G Models) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Bomb Release	Drop bombs manually. Bomb Run on Table 6-6 is –3.
	Mechanism	
3	Bombs	If bombs already dropped—no effect. Otherwise roll 1D6: 1-4 ,
		no effect; 5-6 , bombs detonate—B-17 destroyed and entire
		crew KIA
4	Rubber Rafts	If plane lands in water, die roll modifier on Table 7-2 is –2.
	Destroyed	
5	Bomb Bay Doors	Roll 1D6: 1-2, inoperable (a); 3-6, superficial damage—no
		effect.
6-8	Superficial Damage	No effect.
9	Bombs	If bombs already dropped—no effect. Otherwise roll 1D6: 1-4 ,
		no effect; 5-6 , bombs detonate—Bomber destroyed and entire
		crew KIA
10	Fuel Transfer Pump	Roll 1D6: 1-2 , inoperable (b); 3-6 , superficial damage—no
		effect.
11	Bombs	If bombs already dropped—no effect. Otherwise roll 1D6: 1-4 ,
		no effect; 5-6 , bombs detonate—B-17 destroyed and entire
		crew KIA
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No Evasive
		Action allowed, landing roll on Table 7-1 or 7-2 is –1, and
		Bomb Run is automatically Off Target.

Table 5-13 A-3 Bomb Bay Notes: a) If hit during bomb run, doors jam open, bombs may be dropped normally, due to drag must spend two turns per zone beginning immediately. If not during bomb run, doors jam shut cannot drop bombs

b) Cannot transfer fuel between wing tanks. (Roll 1D10 to determine the remaining fuel available: 1-4, four zones beginning with the next zone, 5-8, three zones remaining, 9-10, two zones remaining). Upon exhaustion of remaining fuel, the plane must either be landed (Tables 7-1 or 7-2), or crew bails out (Table 7-3).

b) See rules section 5.14 - Oxygen Out.

Table 5-13 A-4 RADIO ROOM (B-17 F & G Models) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Compartment Heat	Compartment heat out. (a)
3	Intercom System	Mission may be aborted (b).
4-5	Radio	No Mayday. If out of formation when forced to land in
		water, roll on Table 7-2 is -6 (c).
6	Radio Operator	Roll for wound on Table 5-17.
7-10	Superficial Damage	No effect.
11	Oxygen Supply	Roll 1D6: 1-5 , oxygen out for Radio Room; 6 , fire, and
		Radio Room oxygen system out. Roll to extinguish the
		fire on Table 5-19. (d)
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No
		Evasive Action allowed, landing roll on Table 7-1 or 7-2
		is –1, and Bomb Run is automatically Off Target.

- **b**) See rules section 4.6 Aborting Missions. All gunners now modify defensive fire -2 on Table 5-6, except Tail gunners modify -1.
- c) Radio equipment and the intercom system are separate. The intercom must be hit to become inoperable.
- **d**) See rules section 5.14 -Oxygen Out

(**Design Note:** A question came up on the consequences of a missed radio call recalling your bomber formation and the formation status of your bomber should that happen:

Question: If the Radio Operator is moved to another compartment per the Crew Movement Rule (R/B 5.11.2 Pg. 20), the radio equipment is considered to be unmonitored. If the mission is recalled per Table 4.2 while the radio equipment is unmonitored is there a chance the pilots will miss the formation's recall turn and If the formation's recall turn is missed then is the bomber Out of Formation (R/B 4.7 Pg. 13) and must the bomber roll to Rejoin the Formation per Table 4.8 when entering the next zone, and if not successful, in each subsequent zone.

Answer: There is nothing in the game rules that says this. In real life, even if a radio recall was missed by the radio operator when the pilot sees the bomber formation beginning a turn, he will turn too to stay in the formation. Missing a Radio Recall (From Table 4-2) would only apply to Radio Messages from HQ recalling the whole group. If your bomber did not pick up the recall message from HQ others in the group would and the Group Leader would initiate the recall turn. Your bomber pilot would just follow along when the other bombers in the group turned so no roll on Table 4-8 is necessary.

Clarification: There are a number of different radio sets in the bombers. The Radio Operator only controls the long range radio sets. The pilots can talk short range within the bomber formations with no problems. This is the frequency he would be monitoring. The pilots can bring up the long range voice channels also but he would have to switch frequencies to get that and since he is not monitoring the long range channels (He's on the intra-plane group Frequency), he might not hear a voice recall on the long range channel. The radio Operator handles the Morse code radio and would get a group recall on that if he was at his station.

Table 5-13 A-5 WAIST (B-17 F & G Models) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Oxygen Supply	Roll 1D6: 1-2, Left Waist Gunner; 3-4, Right Waist
		Gunner; 5, Ball Turret Gunner; 6, Fire. Waist
		compartment oxygen out. Roll to extinguish fire on Table
		5-19 (a).
3	Armament	Roll 1D6: 1-3 , Left waist gun inoperable; 4-6 , Right
		waist gun inoperable.
4-5	Superficial Damage	No effect
6	Left Waist Gunner	Roll for wound on Table 5-17.
7	Superficial Damage	No effect.
8	Right Waist Gunner	Roll for wound on Table 5-17.
9	Ball Turret	Roll 1D6: 1-2 , roll for wound on Table 5-17; 3 , gunner's
		heat out (b); 4-5, guns inoperable; 6, turret mechanism
		inoperable (c).
10	Waist Gunners	Roll for wound for each on Table 5-17
11	Suit Heaters	Roll 1D6: 1-3 , Left Waist Gunner heat out; 4-6 , Right
		Waist Gunner heat out (b).
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No
		Evasive Action allowed, landing roll on Table 7-1 or 7-2
		is –1, and Bomb Run is automatically Off Target.

Table 5-13 A-5 Waist Notes: a) See rules section 5.14 - Oxygen Out

b) See rules section 5.12 - Heat Out/Frostbite

c) Gunner is trapped in turret, may not fire guns, and may not bail out. If landing gear is inoperable, gunner is automatically KIA on landing.

Table 5-13 A-6 TAIL SECTION (B-17 F & G Models) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Suit Heater	Tail Gunner's heat out (a).
3	Tail wheel or	Roll 1D6: 1-3 , Tail wheel damaged, landing roll on Table 7-1
	Autopilot Mechanism	is –1; 4-6, Autopilot mechanism inoperable, Bomb Run on
		Table 6-6 is –2.
4	Tail Turret	Tail guns inoperable.
5	Tail Gunner	Roll for wound on Table 5-17.
6	Superficial Damage	No effect.
7	Rudder	Rudder takes 1 hit. With 3 hits rudder is inoperable, landing
		roll on Table 7-1 or 7-2 is -1 .
8	Superficial Damage	No effect
9-10	Tail plane	Roll 1D6: 1-2, No effect; 3, Left elevator inoperable (b); 4,
		Right elevator inoperable (b); 5, Left tail plane root hit (c); 6,
		Right tail plane root hit (c).
11	Oxygen Supply	Roll 1D6: 1-5 , Tail oxygen out; 6 , Fire, and Tail Section
		oxygen out (d). Roll to extinguish fire on Table 5-19.
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No Evasive
		Action allowed, landing roll on Table 7-1 or 7-2 is -1, and
		Bomb Run is automatically Off Target.

- **b)** If both elevators are inoperable, landing rolls on Tables 7-1 and 7.2 are -1.
- c) If tail plane root accumulates 3 hits during mission, tail plane rips off. If 1 tail plane is off, landing rolls on Tables 7-1 and 7.2 are -1; if both tail planes come off, bailout immediately on Table 7-4.
- d) See rules section 5.14 Oxygen Out

Table 5-13 A-7 WINGS (B-17 F & G Models) Roll 2D6

ROLL	AREA HIT	EFFECT
2-3	Wing Root	1 wing root hit. (a)
4	Wing Flap	Roll 1D6: 1-3, Flap inoperable (b); 4-6, No effect
5	Aileron	Roll 1D6: 1-3, Aileron inoperable (b); 4-6, No effect
6-8	Superficial Damage	No effect.
9	Engines	Roll 1D6: If Left wing— 1-3 , #1 engine; 4-6 , #2 engine. If
		Right wing— 1-3 , #3 engine; 4-6 , #4 engine.
		Roll 1D6 again: 1-2, Superficial Damage; 3-5, Engine out (c);
		6, Runaway engine (d).
10	Fuel Tank	Roll 1D6: 1-3, Outboard tank; 4-6, Inboard tank.
		Roll 1D6 again; 1-2, Leakage (e); 3-6, Self-seal, no effect. e)
11	Wing Root	1 wing root hit (a).
12	Landing Gear	Roll 1D6: 1-3, Brakes out (g); 4-6, Landing gear inoperable (f).

Table 5-15 A-7 Notes: a) When a wing root hit has accumulated 5 hits over the course of a mission, the wing rips off and the crew must immediately bail out according to Table 7-4

- b) If both the Left and Right wing flaps or left and right ailerons are inoperable, the landing roll on Table 7-1or 7-2 is -1.
- c) Engine catches fire, roll 1D6 to extinguish; **1-5**, Fire Out; **6**, and roll 1D6 again. **1-5**, Fire Out; **6** Fire spreads to the wing. (The bomber is lost Roll for bail out on Table 7-3), If the fire is extinguished the engine is out for the remainder of the mission. Pilot may abort mission for any engine out. (This failure may be rolled again for any operating engine; there is *no effect* if a previously failed engine is rolled for.)
- **d**) Runaway Engine: Roll 1D6: **1-5**, Prop feathered and engine out; **6**, Prop not feathered, engine out of control—crew must immediately bail out according to Table 7-3.
- e) Fuel Tank Leaking: Roll 1D6: (B-17 may travel the following number of turns, and then bail out, Table 7-3, or crash land. Table 7-1 or 7-2). **1-2**, **4** turns; **3-4**, **5** turns; **5-6**, **6** turns. If this is the third separate fuel tank hit, B-17 may only go 1 more turn. If a fuel tank which is already leaking is hit again, roll for fire. Roll 1D6: **1-3**, No Fire; **4-5**, **fire** bail out, Table 7-3; **6**, Explosion, bailout, Table 7-4

f) If the landing gear on either or both sides in inoperable, landing roll on Table 7-1 is -3. g) Landing roll on Table 7-1 is -1.

Table 5-13 A-8 INSTRUMENTS (B-17 F & G Models) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Auto Pilot	Bomb Run roll on Table 6-6 is –2 (a).
3	Landing Gear	Landing roll on Table 7-1 is –3.
4	Intercom System	Mission may be aborted (b).
5	Oxygen System	Drop out of formation to 10,000 feet in next zone
		(c).
6	Flaps	Landing roll on Table 7-1 or 7-2 is -1 (d).
7	Ailerons	Landing roll on Table 7-1 or 7-2 is -1 (d).
8	Elevators	Landing roll on Table 7-1 or 7-2 is -1 (d).
9	Rudder	Landing roll on Table 7-1 or 7-2 is -1 (d).
10	Oxygen System	Drop out of formation to 10,000 feet in next zone
		(c).
11	Engine Fire	Engine fire extinguishers inoperable. Crew must
	Extinguishers	immediately bailout Table 7-3 if engine fire occurs.
12	Electrical Systems	Crew must immediately bail out Table 7-3.

Table Notes:

- a) If Intercom system also out, Bomb Run is automatically off target.
- **b**) See rules Section 4.6, Aborting Missions.
- c) See rules section 5.14 Oxygen Out and section 4.7 Out of Formation.
- **d**) Disregard the landing roll modifications for lost controls of the flaps, ailerons, and elevators if both the Left and Right parts of these systems are already inoperable. If the rudder is already inoperable, ignore the landing roll modifications for loss of the rudder's controls.

CHAPTER 2 (Optional Rule) YB-40 B-17 Armed Escort Model

The YB-40 Armed Escort Model carries 16 machine guns. Two each in a powered chin turret, a forward top turret, a ball turret, and an added top turret that replaced the radio room single gun. There were also double gun mounts in the tail and in power-assisted waist positions. Additional armor was added for crew and around the engines and extra ammunition was carried, nearly tripling the amount available as the regular B-17F. (See Rules Section 10.5.1 for rules covering the use of the YB-40 bomber.)

The Ammunition Stocker

- 1. An 11th crewman was added as an "ammunition stocker." While his assigned position at take-off is in the radio room he "floated" between compartments transferring ammunition as needed from the extra stored in the bomb bay to any gun position that needed replenishment.
- 2. As long as the Ammunition Stocker is functioning, the transfer of ammunition among guns or reserve stocks may be carried out by the player at anytime—even during a wave attack—at no detriment to the YB-40's ability to fire.
- 3. The player places the Ammunition Stocker in any position on the plane, simply putting his crew counter in that compartment. It may be moved freely about—even between waves.
- 4. In cases where a wound roll is required for a compartment/position that contains the Ammunition Stocker, roll 1D6: **1-4**, crewman called for on the chart rolls for wounds; **5-6**, the Ammunition Stocker rolls for wounds. Wonds to the Ammunition Stocker are covered on Table 10-5.1 in the TFT! Rule Book.
- 5. If a player desires, if another crewman manning a gun position is Seriously Wounded or KIA, the Ammunition Stocker may assume his duties. There is a –1 Modifier on Table 5-6 Bomber Defensive fire Resolution for the Ammunition Stocker.
- 6. If the Ammunition Stocker assumes the duties as a gunner then he is assumed to be that gunner and no longer is able to freely move within the plane or transfer ammunition.
- 7. The Ammunition Stocker can move 20 boxes of ammunition between the bomb bay and gun positions that need it or between other gun positions that have extra ammunition and gun positions that need it per zone.

Other Crew/ Plane Changes

- 1. There is no Bombardier. This position is now filled by a Chin Turret Gunner.
- 2. The Radio Operator now serves as Aft Top Turret Gunner.
- 3. No bombs are carried.
- 4. Extra ammunition is optionally carried in the Bomb Bay.

Armament Modifications

- 1. Chin turret has field of fire: 12 o'clock Level and Low; 10:30 and 1:30 Level and Low.
- 2. Front top turret field of fire is unchanged.
- 3. Rear top turret field of fire: 12, 1:30, 3, 6, 9 and 10:30 o'clock High; 3 and 9 o'clock Level; and Vertical Dive.
- 4. Ammunition boxes: Chin Turret = 16; Left Cheek = 10; Right Cheek = 10; Forward Top Turret = 16; Aft Top Turret = 16; Ball Turret = 20; Left Waist Turret = 20; Right Waist = 20; Tail Guns = 24; Bomb Bay (Extra Ammo) = 168
- 5. Available in the Bomb Bay are 168 boxes of double-gun ammunition. If the Ammunition Stocker is not serving as a gunner, these rounds can be transferred to any gun position at any time.
- 6. Each double-gun ammo box counts as two boxes for each cheek gun.
- 7. Waist Guns receive +1 modifier on Table 5-6 Bomber Defensive fire Resolution.

8. Waist Guns receive twin-gun modifiers on Table 5-7 Hit Damage against German Fighter (modifiers "a" to "d").

Aircraft Modifications

- 1. Except in the Target Zone, the YB-40 is normally deployed in the High Cell or Low Cell's Tail End Charlie position. (Bomber 11 or Bomber 18, respectively). However, the player can deploy the YB-40 in any Cell bomber position that he chooses.
- 2. Because of the extra weight of the armor, guns and ammunition the YB-40 was slower than the B-17 F and G models after they had dropped their bomb loads. Therefore, on the return to base leg of the mission, the YB-40 becomes "Out of Formation" beginning in the first zone after leaving the target zone. Apply all modifiers for a bomber that is out of formation.
- 3. Due to additional armor, rolls for all crew members in the Pilot Compartment, Radio Room, Waist, and Tail on Table 5-17 Crew Wounds have a -1 modifier for attacks from the 10:30, 12:00 and 1:30 clock positions.
- 4. Due to additional armor, rolls for all crew members on Table 5-17 Crew Wounds have a −1 modifier for attacks from the 3:00 and 9:00 clock positions.
- 5. If losing one engine, the YB-40 will immediately drop "Out of Formation" unless all ammunition is jettisoned.

Table 5-12A B-17 YB-40 (B-17 variant) Roll 2D6: Attack from 10:30 / 12 / 1:30 O'clock

	HIGH		LEVEL		LOW
ROLL	AREA HIT	ROLL	AREA HIT	ROLL	AREA HIT
2	Instruments	2	Instruments	2	Instruments
3	Radio Room	3	Radio Room	3	Radio Room
4	Waist	4	Waist	4	Waist
5	Pilot Compartment	5	Nose	5	Pilot Compartment
6	Wing: Roll 1D6:	6	Wing: Roll 1D6:	6	Wing: Roll 1D6:
	1-3, Left		1-3 , Left		1-3, Left
	4-6 , Right		4-6 , Right		4-6 , Right
7	Superficial Damage	7	Superficial Damage	7	Superficial Damage
8	Nose	8	Pilot Compartment	8	Nose
9	Bomb Bay	9	Bomb Bay	9	Bomb Bay
10	Superficial Damage	10	Superficial Damage	10	Superficial Damage
11	Tail	11	Tail	11	Tail
12	Walking Hits/	12	Walking Hits/ Wings	12	Walking Hits/
	Fuselage (a)		(b)		Fuselage (c)

- a) 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.
- **b)** 2 shell hits on each Wing
- c) 1 shell hit in each of the following sections: Nose, Wings -attacking side. (12 O'clock roll 1d6; 1-3, Left Wing. 4-6, Right Wing), Waist, Tail

Table 5-12A YB-40 (B-17 variant) Roll 2D6: Attack from 9 / 3 O'clock

	HIGH		LEVEL		LOW
ROLL	AREA HIT	ROLL	AREA HIT	ROLL	AREA HIT
2	Instruments	2	Instruments	2	Instruments
3	Radio Room	3	Radio Room	3	Radio Room
4	Waist	4	Nose	4	Waist
5	Pilot Compartment	5	waist	5	Pilot Compartment
6	Wing: Roll 1D6:	6	Wing: Roll 1D6:	6	Wing: Roll 1D6:
	1-3 , Left		1-3 , Left		1-3, Left
	4-6 , Right		4-6 , Right		4-6, Right
7	Superficial Damage	7	Superficial Damage	7	Superficial Damage
8	Nose	8	Bomb Bay	8	Nose
9	Bomb Bay	9	Pilot Compartment	9	Bomb Bay
10	Superficial Damage	10	Superficial Damage	10	Superficial Damage
11	Tail	11	Tail	11	Tail
12	Walking Hits/	12	Walking Hits/ Wings	12	Walking Hits/
	Fuselage (a)		(b)		Fuselage (c)

Table Notes: A "walking hits" result negates all further shell hits by this fighter for this attack.

- **a)** 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.
- **b)** 2 shell hits on each Wing
- c) 1 shell hit in each of the following sections: Nose, Wings -attacking side. (12 O'clock roll 1d6; 1-3, Left Wing. 4-6, Right Wing), Waist, Tail

Table 5-12A YB-40 (B-17 variant)
Roll 2D6: Attack From: 6 O'clock

	HIGH		LEVEL		LOW
ROLL	AREA HIT	ROLL	AREA HIT	ROLL	AREA HIT
2	Instruments	2	Instruments	2	Instruments
3	Pilot Compartment	3	Pilot Compartment	3	Radio Room
4	Radio Room	4	Radio Room	4	Waist
5	Waist	5	Waist	5	Pilot Compartment
6	Wing: Roll 1D6:	6	Wing: Roll 1D6:	6	Wing: Roll 1D6:
	1-3, Left		1-3 , Left		1-3, Left
	4-6 , Right		4-6 , Right		4-6 , Right
7	Superficial Damage	7	Superficial Damage	7	Superficial Damage
8	Tail	8	Tail	8	Tail
9	Bomb Bay	9	Bomb Bay	9	Bomb Bay
10	Superficial Damage	10	Superficial Damage	10	Superficial Damage
11	Nose	11	Nose	11	Nose
12	Walking Hits/	12	Walking Hits/ Wings	12	Walking Hits/
	Fuselage (a)		(b)	1 0	Fuselage (c)

- **a)** 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.
- **b)** 2 shell hits on each Wing
- c) 1 shell hit in each of the following sections: Nose, Wings -attacking side. (12 O'clock roll 1d6; **1-3**, Left Wing. **4-6**, Right Wing), Waist, Tail

Table 5-12A YB-40 (B-17 variant)

Roll 2D6 Vertical Dive and Climb Attacks

	VERTICAL DIVE		VERTICAL CLIMB
ROLL	AREA HIT	ROLL	AREA HIT
2	Instruments	2	Instruments
3	Radio Room	3	Radio Room
4	Waist	4	Waist
5	Pilot Compartment	5	Pilot Compartment
6	Wing: Roll 1D6:	6	Wing: Roll 1D6:
	1-3 , Left		1-3, Left
	4-6 , Right		4-6 , Right
7	Superficial Damage	7	Superficial Damage
8	Nose	8	Nose
9	Bomb Bay	9	Bomb Bay
10	Superficial Damage	10	Superficial Damage
11	Tail	11	Tail
12	Walking Hits/ Fuselage (a)	12	Walking Hits/ Fuselage (a)

Table Notes: A "walking hits" result negates all further shell hits by this fighter for this attack.

a) 1 shell hit in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.

Table 5-13A A-1 NOSE YB-40 (B-17 variant) Roll 2D6

Kull 2D0		
ROLL	AREA HIT	EFFECT
2-3	Armament	Roll 1D6: 1-2, Chin turret inoperable (a); 3-4, Left
		cheek gun inoperable; 5-6 , Right cheek gun inoperable
4	Chin Turret Gunner	Roll wound for each separately on Table 5-17
	and Navigator	
5	Navigator	Roll for wound on Table 5-17
6	Chin Turret Gunner	Roll for wound on Table 5-17
7-9	Superficial Damage	No effect.
10	Nose Compartment	Navigator's equipment inoperable (b)
	Equipment	
11	Compartment Heat	Roll 1D6: 1-2, Chin Turret Gunner; 3-4, Navigator; 5-6,
		both heat out (c).
12	Oxygen Supply	Roll 1D6: 1-2, Chin Turret Gunner; 3-4, Navigator; 5,
		both hit; 6, Fire and all nose oxygen out (d). Roll to
		extinguish fire on Table 5-19

Table Notes: a) Treat as No Effect if hit from attacking fighter 12 O'clock High

- **b**) If presently or subsequently out of formation, B-17 must spend 2 turns in each future odd-numbered zone entered.
- c) See rules section 5.12 Heat Out/Frostbite
- **d**) See rules section 5.14 Oxygen Out.

Table 5-13A A-2 PILOT COMPARTMENT YB-40 (B-17 variant) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Compartment Heat	Pilot Compartment heat out (a).
3	Pilot and Co-Pilot	Roll wound for each separately on Table 5-17
4	Pilot	Roll for wound on Table 5-17
5	Co-Pilot	Roll for wound on Table 5-17
6-7	Superficial Damage	No effect.
8	Top Turret	Roll 1D6: 1-2 , guns inoperable; 3-5 , Engineer rolls for
		wound on Table 5-17; 6 , guns inoperable and Engineer
		rolls for wound
9	Instruments	Roll for damage on Table 5-13 A-8
10	Oxygen Supply	Roll 1D6: 1, Pilot and Co-Pilot; 2, Pilot; 3, Co-Pilot; 4,
		Engineer; 5, Fire and all Pilot Compartment oxygen out
		(b). Roll to extinguish fire on Table 5-19; 6, Oxygen
		System out (c).
11	Window	1^{st} window hit = no effect; 2^{nd} window hit = landing roll
		on Table 7-1 or 7-2 is –1; Heat is out for compartment
		(a). Additional hits = no effect
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No
		Evasive Action allowed, landing roll on Table 7-1 or 7-2
		is –1, and Bomb Run is automatically Off Target.

c) Roll 1D6: Number rolled is the number of zones until oxygen runs out for entire plane. If more than one hit, take the lower of number rolled or remaining zones from prior system hit.

Table 5-13A A-3 BOMB BAY YB-40 (B-17 variant) Roll 2D6

DOLL	1221 111	THE COM
ROLL	AREA HIT	EFFECT
2- 3	Ammunition	If no additional ammunition carried—no effect.
	Stocks/Bomb Bay	Otherwise roll 1D6: 1-4 , no effect; 5-6 , ammunition/fuel
	Fuel Tank	tank detonates—YB-40 destroyed and entire crew KIA
4	Rubber Rafts	If plane lands in water, die roll modifier on Table 7-2 is –
	Destroyed	2.
5-8	Superficial Damage	No effect.
9	Ammunition	If no additional ammunition carried—no effect.
	Stocks/Bomb Bay	Otherwise roll 1D6: 1-4 , no effect; 5-6 , ammunition/fuel
	Fuel Tank	tank detonates—YB-40 destroyed and entire crew KIA
10	Fuel Transfer Pump	Roll 1D6: 1-2 , inoperable (a); 3-6 , superficial damage—
		no effect.
11	Ammunition	If no additional ammunition carried—no effect.
	Stocks/Bomb Bay	Otherwise roll 1D6: 1-4 , no effect; 5-6 , ammunition/fuel
	Fuel Tank	tank detonates—YB-40 destroyed and entire crew KIA
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in YB-40) = No
		Evasive Action allowed, landing roll on Table 7-1 or 7-2
		is -1.

Table 5-13A A-3 Bomb Bay Notes:

a) Cannot transfer fuel between wing tanks. (Roll 1D10 to determine the remaining fuel available: **1-4**, four zones beginning with the next zone; **5-8**, three zones; 9-**10**, two zones). Upon exhaustion of remaining fuel, the plane must either be landed (Tables 7-1 or 7-2), or crew bails out (Table 7-3).

b) See rules section 5.14 - Oxygen Out.

Table 5-13A A-4 RADIO ROOM YB-40 (B-17 variant) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Compartment Heat	Compartment heat out. (a)
3	Intercom System	Mission may be aborted (b).
4- 5	Radio	No Mayday. If out of formation when forced to land in
		water, roll on Table 7-2 is -6 (c).
6-8	Superficial Damage	No effect.
9- 10	Aft Top Turret	Roll 1D6: 1-2 , guns inoperable; 3-5 , Radio Operator/Aft
		Top Turret Gunner rolls for wound on Table 5-17; 6,
		guns inoperable and Radio Operator/Aft Top Turret
		Gunner rolls for wound
11	Oxygen Supply	Roll 1D6: 1-5 , oxygen out for Radio Room; 6 , fire, and
		Radio Room oxygen system out. Roll to extinguish the
		fire on Table 5-19 (d).
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in YB-40) = No
		Evasive Action allowed, landing roll on Table 7-1 or 7-2
		is -1

Table Notes:

- a) See rules section 5.12 Heat Out/Frostbite
- **b**) See rules Section 4.6 Aborting Missions. All gunners now modify defensive fire -2 on Table 5-6, except Tail gunners modify -1.
- c) Radio equipment and the intercom system are separate. The intercom must be hit to become inoperable.
- d) See rules section 5.14 Oxygen Out

(**Design Note:** A question came up on the consequences of a missed radio call recalling your bomber formation and the formation status of your bomber should that happen:

Question: If the Radio Operator is moved to another compartment per the Crew Movement Rule (R/B 5.11.2 Pg. 20), the radio equipment is considered to be unmonitored. If the mission is recalled per Table 4.2 while the radio equipment is unmonitored is there a chance the pilots will miss the formation's recall turn and If the formation's recall turn is missed then is the bomber Out of Formation (R/B 4.7 Pg. 13) and must the bomber roll to Rejoin the Formation per Table 4.8 when entering the next zone, and if not successful, in each subsequent zone.

Answer: There is nothing in the game rules that says this. In real life, even if a radio recall was missed by the radio operator when the pilot sees the bomber formation beginning a turn, he will turn too to stay in the formation. Missing a Radio Recall (From Table 4-2) would only apply to Radio Messages from HQ recalling the whole group. If your bomber did not pick up the recall message from HQ others in the group would and the Group Leader would initiate the recall turn. Your bomber pilot would just follow along when the other bombers in the group turned so no roll on Table 4-8 is necessary.

Clarification: There are a number of different radio sets in the bombers. The Radio Operator only controls the long range radio sets. The pilots can talk short range within the bomber formations with no problems. This is the frequency he would be monitoring. The pilots can bring up the long range voice channels also but he would have to switch frequencies to get that and since he is not monitoring the long range channels (He's on the intra-plane group Frequency), he might not hear a voice recall on the long range channel. The radio Operator handles the Morse code radio and would get a group recall on that if he was at his station.

Table 5-13A A-5 WAIST YB-40 (B-17 variant) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Oxygen Supply	Roll 1D6: 1-2, Left Waist Gunner; 3-4, Right Waist
		Gunner; 5, Ball Turret Gunner; 6, Fire. Waist
		compartment oxygen out. Roll to extinguish fire on Table
		5-19 (a).
3	Armament	Roll 1D6: 1-3 , Left waist gun inoperable; 4-6 , Right
		waist gun inoperable.
4-5	Superficial Damage	No effect
6	Left Waist Gunner	Roll for wound on Table 5-17.
7	Superficial Damage	No effect.
8	Right Waist Gunner	Roll for wound on Table 5-17.
9	Ball Turret	Roll 1D6: 1-2 , roll for wound on Table 5-17; 3 ,
		gunner's heat out (b); 4-5, guns inoperable; 6, turret
		mechanism inoperable (c).
10	Waist Gunners	Roll for wound for each on Table 5-17
11	Suit Heaters	Roll 1D6: 1-3 , Left Waist Gunner heat out; 4-6 , Right
		Waist Gunner heat out (b).
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No
		Evasive Action allowed, landing roll on Table 7-1 or 7-2
		is –1, and Bomb Run is automatically Off Target.

Table Notes: a) See rules section 5.14 - Oxygen Out

b) See rules section 5.12 - Heat Out/Frostbite

c) Gunner is trapped in turret, may not fire guns, and may not bail out. If landing gear is inoperable, gunner is automatically KIA on landing.

Table 5-13A A-6 TAIL SECTION YB-40 (B-17 variant) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Suit Heater	Tail Gunner's heat out (a).
3	Tail wheel or	Roll 1D6: 1-3 , Tail wheel damaged, landing roll on Table 7-1
	Autopilot Mechanism	is –1; 4-6 , Autopilot mechanism inoperable, no effect on bomb
		run.
4	Tail Turret	Tail guns inoperable.
5	Tail Gunner	Roll for wound on Table 5-17.
6	Superficial Damage	No effect.
7	Rudder	Rudder takes 1 hit. With 3 hits rudder is inoperable, landing
		roll on Table 7-1 or 7-2 is -1 .
8	Superficial Damage	No effect
9-10	Tail plane	Roll 1D6: 1-2, No effect; 3, Left elevator inoperable (b); 4,
		Right elevator inoperable (b); 5, Left tail plane root hit (c); 6,
		Right tail plane root hit (c).
11	Oxygen Supply	Roll 1D6: 1-5 , Tail oxygen out; 6 , Fire, and Tail Section
		oxygen out (d). Roll to extinguish fire on Table 5-19.
12	Control Cables	1^{st} hit = no effect. 2^{nd} hit (anywhere in B-17) = No Evasive
		Action allowed, landing roll on Table 7-1 or 7-2 is -1, and
		Bomb Run is automatically Off Target.

- **b)** If both elevators are inoperable, landing rolls on Tables 7-1 and 7.2 are -1.
- c) If tail plane root accumulates 3 hits during mission, tail plane rips off. If 1 tail plane is off, landing rolls on Tables 7-1 and 7.2 are -1; if both tail planes come off, bailout immediately on Table 7-4.
- d) See rules section 5.14 Oxygen Out

Table 5-13A A-7 WINGS YB-40 (B-17 variant) Roll 2D6

ROLL	AREA HIT	EFFECT
2-3	Wing Root	1 wing root hit. (a)
4	Wing Flap	Roll 1D6: 1-3, Flap inoperable (b); 4-6, No effect
5	Aileron	Roll 1D6: 1-3, Aileron inoperable (b); 4-6, No effect
6-8	Superficial Damage	No effect.
9	Engines	Roll 1D6: If Left wing— 1-3 , #1 engine; 4-6 , #2 engine. If
		Right wing— 1-3 , #3 engine; 4-6 , #4 engine.
		Roll 1D6 again: 1-3, Superficial Damage; 4-5, Engine out (c);
		6 , Runaway engine (d).
10	Fuel Tank	Roll 1D6: 1-3 , Outboard tank; 4-6 , Inboard tank.
		Roll 1D6 again; 1-2, Leakage (e); 3-6, Self-seal, no effect. e)
11	Wing Root	1 wing root hit (a).
12	Landing Gear	Roll 1D6: 1-3, Brakes out (h); 4-6, Landing gear inoperable
		(f).

Notes: a) When a wing root hit has accumulated 5 hits over the course of a mission, the wing rips off and the crew must immediately bail out according to Table 7-4

- b) If both the Left and Right wing flaps or ailerons are inoperable, the landing roll on Table 7-1 or 7-2 is -1.
- c) Engine catches fire, roll 1D6 to extinguish; 1-5, Fire Out; 6, and roll 1D6 again. 1-5, Fire Out; 6, Fire spreads to the wing. (The bomber is lost Roll for bail out on Table 7-3), If the fire is (Continued Next Page)
- extinguished the engine is out for the remainder of the mission. Pilot may abort mission for any engine out. (This failure may be rolled again for any operating engine; there is *no effect* if a previously failed engine is rolled for.)
- **d**) Runaway Engine: Roll 1D6: **1-5**, Prop feathered and engine out; **6**, Prop not feathered, engine out of control—crew must immediately bail out according to Table 7-3.
- e) Fuel Tank Leaking: Roll 1D6: (B-17 may travel the following number of turns, and then bail out, Table 7-3, or crash land. Table 7-1 or 7-2). **1-2**, 4 turns; **3-4**, 5 turns; **5-6**, 6 turns. If this is the third separate fuel tank hit, B-17 may only go 1 more turn. If a fuel tank which is already leaking is hit again, roll for fire. Roll 1D6: **1-3**, No Fire; **4-5**, Fire- bail out, Table 7-3; **6**, Explosion, bailout, Table 7-4.

f) If the landing gear on either or both sides in inoperable, landing roll on Table 7-1 is -3.

Table 5-13A A-8 INSTRUMENTS YB-40 (B-17 variant) Roll 2D6

ROLL	AREA HIT	EFFECT
2	Auto Pilot	Bomb Run roll on Table 6-6 is –2 (a).
3	Landing Gear	Landing roll on Table 7-1 is –3.
4	Intercom System	Mission may be aborted (b).
5	Oxygen System	Drop out of formation to 10,000 feet in next zone (c).
6	Flaps	Landing roll on Table 7-1 or 7-2 is -1 (d).
7	Ailerons	Landing roll on Table 7-1 or 7-2 is -1 (d).
8	Elevators	Landing roll on Table 7-1 or 7-2 is -1 (d).
9	Rudder	Landing roll on Table 7-1 or 7-2 is -1 (d).
10	Oxygen System	Drop out of formation to 10,000 feet in next zone (c).
11	Engine Fire	Engine fire extinguishers inoperable. Crew must
	Extinguishers	immediately bailout Table 7-3 if engine fire occurs.
12	Electrical Systems	Crew must immediately bail out Table 7-3.

Table Notes: a) If Intercom system also out, Bomb Run is automatically off target.

- **b)** See rules section 4.6 Aborting Missions.
- c) See rules sections 5.14 Oxygen Out and section 4.7 Out of Formation.
- **d**) Disregard the landing roll modifications for lost controls of the flaps, ailerons, and elevators if both the Left and starboard parts of these systems are already inoperable. If the rudder is already inoperable, ignore the landing roll modifications for loss of the rudder's controls.