

# Martin B-26B Marauder

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The B-26B was the version of the Marauder that was built in the greatest quantity. It first appeared in May of 1942.

The B-26B differed from earlier Marauder versions in having two 0.50-inch machine guns with 1500 rpg installed in a stepped-down tail position, replacing the single hand-held gun of the earlier B-26 and B-26A. The guns were operated manually by the gunner by means of a ring and bead sight. The gunner had no seat, and usually knelt to track his targets and fire his weapons. Ammunition was fed from cartridge belts held upright on a pair of roller tracks in the aft bomb bay. Each gun was equipped with 800 rounds. The new tail position increased the overall length to 58 feet 3 inches.

The B version introduced self-sealing fuel lines and a rearrangement of various internal equipment items. The engines were switched back to R-2800-5s. The large propeller spinners were deleted. The oil cooler air scoop under the engine cowling was enlarged. Torpedo racks underneath the fuselage were fitted as factory-installed equipment. Fuel supply included two 350-gallon main fuel tanks in the wings, two 121-gallon auxiliary tanks, and up to four 250-gallon bomb bay ferry tanks, for a total capacity of 1962 gallons. Normal bomb load consisted of two 2000 lb or 1600 lb bombs, eight 500-pound, sixteen 250 lb, or thirty 100-lb bombs. Maximum short-range bombload was 5200 pounds, which was seldom carried. This could be two 1600-lb bombs plus a 2000-pound torpedo on the external rack.

Provisions were made for up to seven crew members. The bombardier sat in the transparent nose cone and operated a flexible 0.50-inch machine gun with 270 rounds. The pilot and copilot sat side by side in armored seats behind an armored front bulkhead. The navigator/radio operator sat in a compartment behind the pilots. In an emergency, these four crewmen could escape through the forward bomb bay, although the pilot and copilot had escape hatches in the upper cockpit that could be opened outward. The beam gunner manned a single gun that fired through a hatch cut into the floor of the rear fuselage. A Martin 250CE dorsal power turret was mounted on the top of the fuselage behind the bomb bay. It was equipped with two guns and 400 rpg. The turret could turn through a full 360 degrees and the elevation could be as much as 70 degrees. The tail gunner operated two 0.50-inch guns. The main entrance to the fuselage was through the nose wheel well, but pilot's escape hatches were available in the roof of the canopy.

The B-26B was powered by a pair of R-2800-5 engines on the first 307 aircraft.

Starting in July of 1942, 207 factory-fresh B-26Bs (41-17645/17851) were sent to Martin's Omaha Modification Center for modifications to make them more combat-suitable. The nose Plexiglas was modified to carry a centerline-mounted flexible 0.50-inch machine gun. A fixed forward-firing 0.50-inch machine gun was installed in the lower right-hand side of the nose. The two 0.30-inch waist guns and the 0.30-inch tunnel gun were replaced by 0.50-inch guns. Provisions were made for two more 250-gallon ferry tanks in the rear bomb bay, increasing total fuel capacity to 1962 gallons and raising the ferry range to 2850 miles. The pair of air intakes located above the engine cowling were increased in size so that they could accommodate sand filters for operation in desert conditions when required. The windows on both side of the fuselage next to the radio operator were replaced by bulged windows to improve the downward view.

In August, the production block system was introduced with the advent of the B-26B-2. Unlike most other aircraft, the production block numbers on the B-26B Marauder were initially not in multiples of five. This model had the more powerful R-2800-41 engine, yielding 2000 hp for takeoff and 1600 hp at 13,500 feet. Maximum speed was up from 311 mph to 317 mph at 14,500 feet. However, weight was increased to 22,380 pounds empty, 34,000 pounds gross. A "whip" antenna for the new VHF radio was fitted on the underside of the fuselage. This antenna was fitted on all subsequent Marauder models.

The B-26B-3 introduced the R-2800-43 engine of similar power. This engine was retained throughout the remainder of the Marauder production run. This model also introduced as standard factory-installed equipment the enlarged air intakes mounted on top of the engine cowling so that sand filters could be fitted when required in desert conditions. These intakes were retrofitted to many earlier Marauders, so the presence of engine cowling intakes could not always be used as a reliable indicator of a B-26B-3.

The B-26B-4 which appeared in October 1942 had a longer nosewheel strut to increase the wing incidence and lift during takeoff. This gave the plane a distinct "nose-up" attitude when on the ground. Minor equipment changes such as a new starter, new navigation instruments and winterization gear were introduced. The last 141 of the 211 B-4s built had the light tunnel gun replaced by a pair of 0.50-inch machine guns, one firing through each of two side hatches on the bottom of the rear fuselage. This arrangement had previously been used on modified aircraft in the field, and was found suitable for introduction on the production line. These guns were mounted on extending arms swiveling from positions on the fuselage floor and fired rearwards and downwards. Each gun had 240 rounds of ammunition. In addition, many of the B-4s were fitted at the Martin Omaha center with four forward-firing 0.50-inch machine guns in blisters mounted on each side of the fuselage. The B-4 also introduced slotted flaps and mechanically-operated main undercarriage doors.

In order to reduce the alarming rate of Stateside training accidents, a decision was made to increase the wing area in order to lower the wing loading, reducing the takeoff and landing speeds. The new wing was first introduced on the B-26C production block at Omaha, and did not appear on the B-26B line at Baltimore until the introduction of the B-26B-10-MA production block, which first appeared in January of 1943. The wing span increased from 65 to 71 feet and area increased from 602 to 658 square feet. A taller fin and rudder was introduced to maintain stability with the larger wing, increasing overall height from 19 feet 10 inches to 21 feet 6 inches.

However, the advantages of the reduced wing loading were partially offset by an increase in gross weight to 38,200 pounds as the result of the fitting of additional armament. A total of twelve 0.50-inch machine guns were now carried. These comprised a flexible 0.50-inch nose gun with 270 rounds, a single fixed gun on the starboard side of the nose with 200 rounds, two "package" guns on each side of the fuselage below the cockpit with 200-250 rpg, two 0.50-inch guns in the rear dorsal turret, two 0.50-inch guns in the beam, and two 0.50 inch guns in the tail. Nevertheless, at a takeoff weight of 36,000 pounds, the takeoff run was reduced from 3150 to 2850 feet. However, the larger wing area resulted in a decrease in maximum speed from 289 to 282 mph.

The B-26B-15-MA differed only in having the fixed oxygen system Type A-9 regulator deleted. Improved IFF equipment (SCR-595A) was also fitted.

On the B-26B-20-MA and later blocks, the hand-held twin tail guns were replaced by a power-operated Martin-Bell M6 turret, also with two 0.50-inch guns with 400 rpg. The guns were positioned below the gunner and afforded a wider field of fire. The blunt tail cone of this installation markedly altered the contours of the rear fuselage. The guns were operated by a remotely-controlled linkage, but gunners usually preferred to swing the guns manually. Provisions were made for two more 250-US gallon tanks in the aft bomb bay, bringing total fuel capacity to 1964 US gallons. Another noticeable external change was the use of a shorter-chord rudder.

Early models of the B-26 had two separate bomb bays, but the rear one was only used infrequently for light loads in the South Pacific. Eventually, the rear bomb bay racks were discontinued altogether, followed by the deletion of the rear bomb bay doors and actuating mechanisms as well. The space and weight factors had become too critical, and the space was more valuable as a gunner's station after two flexible 0.50-inch machine guns were installed in the waist window area and ammunition storage boxes were installed for the tail and waist guns. Provisions for the two rear bay tanks were deleted from the B-26B-25-MA and later blocks.

An external curved armor plate was introduced on the B-26B-30-MA, along with additional armor in certain critical locations.

The carburetor alcohol de-icing system was deleted on the B-26B-35-MA.

The B-26B-40-MA introduced a torpedo-firing switch on the pilot's control column. Shark-nosed ailerons were fitted in 42-43310 onward.

B-26B-45-MA introduced a ring-and-bead sight for the package guns IFF SCR-695 was provided and the new SCR-522 VHF command radio set was added. The engine fire extinguisher was reinstated. The aft bomb bay was sealed shut from this variant onward, the extra space being used for additional ammunition. The fixed forward-firing 0.50-inch gun was deleted in the middle of the production run (from 42-95979).

The B-26B-50-MA was equipped with an emergency mechanical bomb bay closing arrangement. IFF gear was revised. Lycoming propeller blades began to be fitted from 42-95942 onward.

The B-26B-55-MA replaced the D-8 bombsight with the M-series. Changes to the Martin CE 250 dorsal turret were incorporated from 42-96079 onward. The camouflage paint was discontinued from 42-96219 onward.

The last of 1883 B-26Bs was delivered at Baltimore in February of 1944. In addition, 208 B-26Bs were converted to AT-23A target tugs for the USAAF.

### **Serials of Martin B-26B Marauder:**

**41-17544/17624 Martin B-26B Marauder**  
**41-17625 Martin B-26B-3-MA Marauder**  
**41-17626/17851 Martin B-26B Marauder**  
**41-17852/17946 Martin B-26B-2-MA Marauder**  
**41-17947/17973 Martin B-26B-3-MA Marauder**  
**41-17974/18184 Martin B-26B-4-MA Marauder**  
**41-18185/18334 Martin B-26B-10-MA Marauder**  
**41-31573/31672 Martin B-26B-15-MA Marauder**  
**41-31673/31772 Martin B-26B-20-MA Marauder**  
**41-31773/31872 Martin B-26B-25-MA Marauder**  
**31773 was \*Flak Bait\*, the first Allied bomber in the ETO to complete 200 sorties.**  
**Nose section is on display at NASM.**  
**41-31873/31972 Martin B-26B-30-MA Marauder**  
**41-31973/32072 Martin B-26B-35-MA Marauder**  
**42-43260/43357 Martin B-26B-40-MA Marauder**  
**42-43358/43359 Martin AT-23A**  
**B-26B modified as unarmed target tug**  
**42-43360/43361 Martin B-26B-40-MA Marauder**  
**42-43362/43458 Martin AT-23A**  
**B-26B modified as unarmed target tug**  
**42-43459 Martin B-26B-40-MA Marauder**  
**42-95629/95737 Martin AT-23A**  
**B-26B modified as unarmed target tug**  
**42-95738/95828 Martin B-26B-45-MA Marauder**  
**42-95829/96028 Martin B-26B-50-MA Marauder**  
**42-96029/96228 Martin B-26B-55-MA Marauder**

### **Specification of Martin B-26B Marauder (B-10 to B-55):**

Engines: Two Pratt & Whitney R-2800-43 eighteen-cylinder air-cooled radial engines with two-speed superchargers, each rated at 1920 hp for takeoff and 1490 hp at 14,300 feet. Driving Curtiss 13 foot 6 inch four-bladed propellers. Performance (at 37,000 pounds weight): Maximum speed 270 mph at sea level, 282 mph at 15,000 feet. Initial climb rate 1200 feet per minute. Service ceiling 21,700 feet. Range 1150 miles at 214 mph with 3000 lbs of bombs and 962 gallons of fuel. Ferry range 2000 miles at 195 mph with 1462 gallons or (early blocks only) 2850 miles with 1962 gallons. Take off distance to 50 feet, 3500 feet. Landing distance from 50 feet, 2900 feet. Weights: 24,000 pounds empty, 37,000 pounds combat. Fuel: The main fuel tanks are carried in the wings. Three main self-sealing tanks are installed in the wing inboard of the nacelles. Two auxiliary tanks are installed in the wings outboard of the nacelles. Long-range ferry tanks can be carried in the bomb bay. Dimensions: Wingspan 71 feet 0 inches, length 58 feet 3 inches, height 21 feet 6 inches, wing area 658 square feet. Armament: Eleven 0.50-inch Colt-Browning machine guns. One in flexible nose position, four in blister packs on sides of fuselage, two in dorsal turret, two in tail turret, two in waist positions (one on each side of the fuselage aft of the turret). The internal bomb bay had maximum accommodation for two 2000-pound bombs or four 2000-pound bombs, the latter being carried in pairs one above each other on each side of the central catwalk.

### **Sources:**

1. Famous Bombers of the Second World War, William Green, Doubleday, 1959.
2. The Martin Marauder B-26, Victor C. Tannehill, Boomerang Publishers, 1997.
3. The Martin B-26 Marauder, J. K. Havener, TAB Aero, 1988.

4. Me & My Gal--The Stormy Combat Romance Between a WW II Bomber Pilot and His Martin B-26, Charles O'Mahony, Wings, December 1994.
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6. Jane's American Fighting Aircraft of the 20th Century, Michael J.H. Taylor, Mallard Press.
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