

B-26

MMA



Only 17 per cent of B-26s were lost in battle, the lowest ratio of any Allied plane during the war

MARTIN B-26G 'MARAUDER'

ROLE: HIGH-PERFORMANCE TWIN-ENGINE MEDIUM BOMBER
NATIONS SERVED: USA, UK, SOUTH AFRICA, FRANCE
LENGTH: 17.7M (58.3FT)
WINGSPAN: 21M (71FT)
MAXIMUM SPEED: 458KM/H (285MPH)
MAXIMUM ALTITUDE: 6,035M (19,800FT)
RANGE: 1,770KM (1,100 MILES)
CREW: 6/7 MEN
ENGINES: 2 x 1,930HP PRATT AND WHITNEY R-2800-43
ARMAMENT: 11 x .50-CALIBRE BROWNING MACHINE GUNS
BOMB LOAD: 1,814KG (4,000LB)

"AFTER SOME MODIFICATIONS AND EXTRA PILOT TRAINING, THE B-26 BEGAN TO REALISE ITS POTENTIAL AS A BOMBER THAT COULD TURN THE TIDE OF THE WAR"

MARAUDER

WORDS JACK GRIFFITHS

B-26 bomber nicknamed 'A Kay Pea's Dream', which was later hit by flak during a raid over France

Nicknamed the 'Flying Torpedo', this US Army Air Force war bird helped crush the Axis from the skies

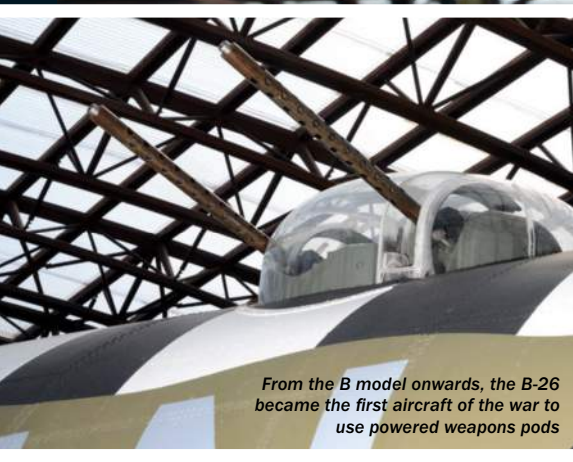
Coming in almost 20 variants, the B-26 was the workhorse of the United States Army Air Force (USAAF) bombing operations of World War II. First introduced in 1941, 201 Marauders were ordered straight off the drawing board with no time to build and test a prototype.

Part of President Roosevelt's 50,000 aircraft for US defence programme, it went on to serve in both the European and Pacific Theatres of the war, flying out with the 22nd Bombardment Group the day after the attack on Pearl Harbor.

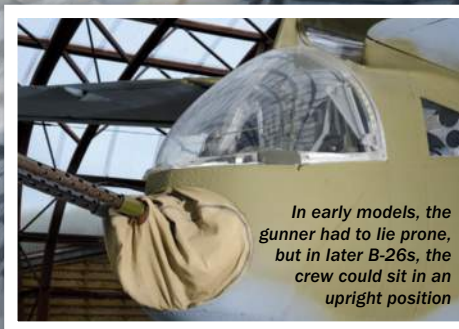
An innovative cantilever shoulder wing monoplane design, the aircraft began unimpressively as it recorded a number of training accidents with 15 crashing in 30 days, earning it the nicknames 'Widow Maker' and 'Martin Murderer'.

The design put cruise efficiency ahead of handling at low speeds, so many crews initially stayed well away from the aircraft. However, after some modifications and extra pilot training, the B-26 began to realise its potential as a bomber that could turn the tide of the war.

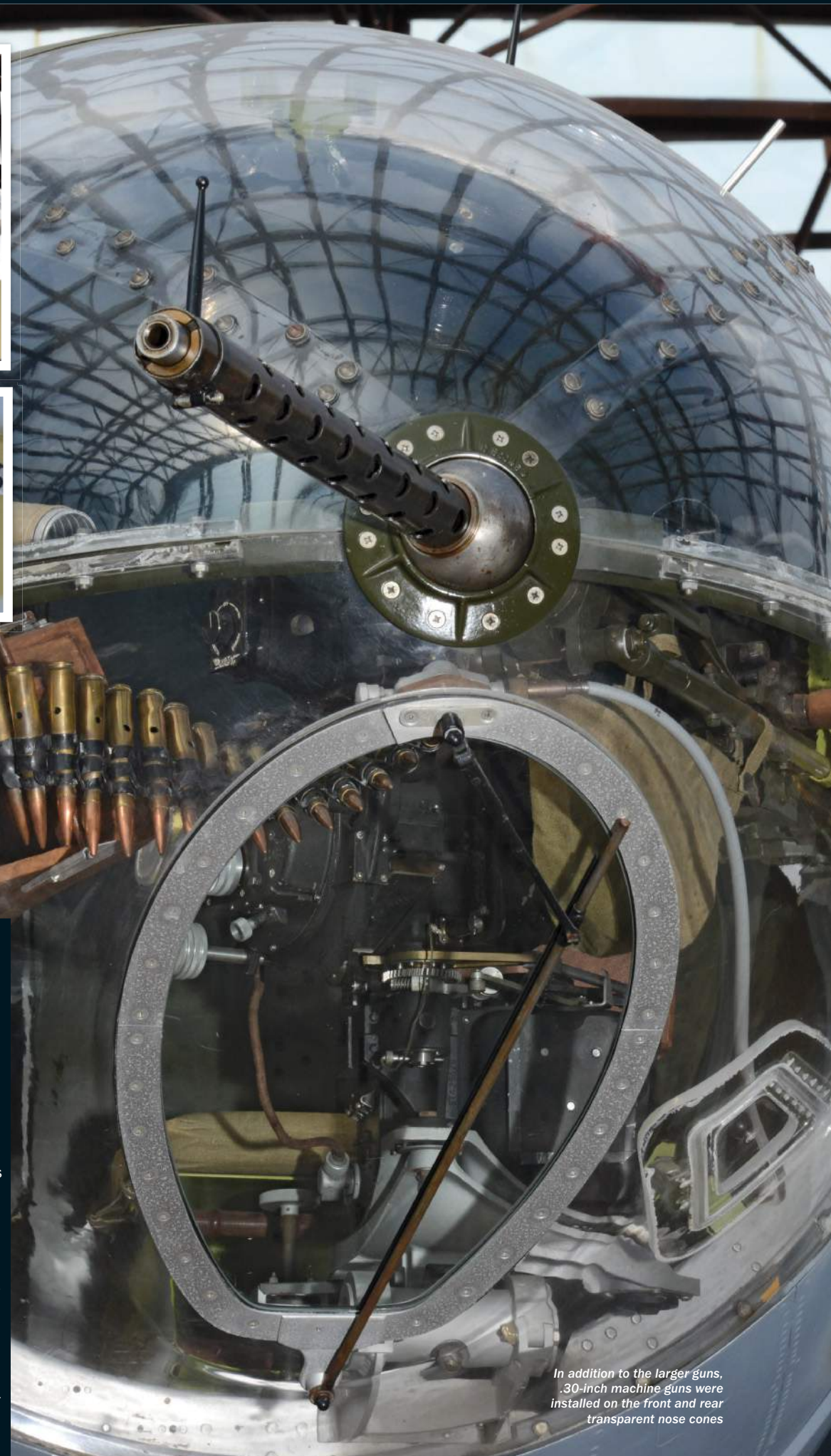
Used for tactical air support, 5,157 B-26s were constructed, with the RAF also purchasing 522. It was most effective in the European Theatre, operating in medium-altitude attacks in Normandy and the invasion of Italy. B-26s also saw service in the Battle of Midway in the Pacific Theatre. As the war ended, the role of the Marauder was fast diminishing. The majority were retired from service by 1947, and only a handful remain in existence today as relics of the mass World War II bombing operations.



From the B model onwards, the B-26 became the first aircraft of the war to use powered weapons pods



In early models, the gunner had to lie prone, but in later B-26s, the crew could sit in an upright position



In addition to the larger guns, .30-inch machine guns were installed on the front and rear transparent nose cones

ARMAMENT

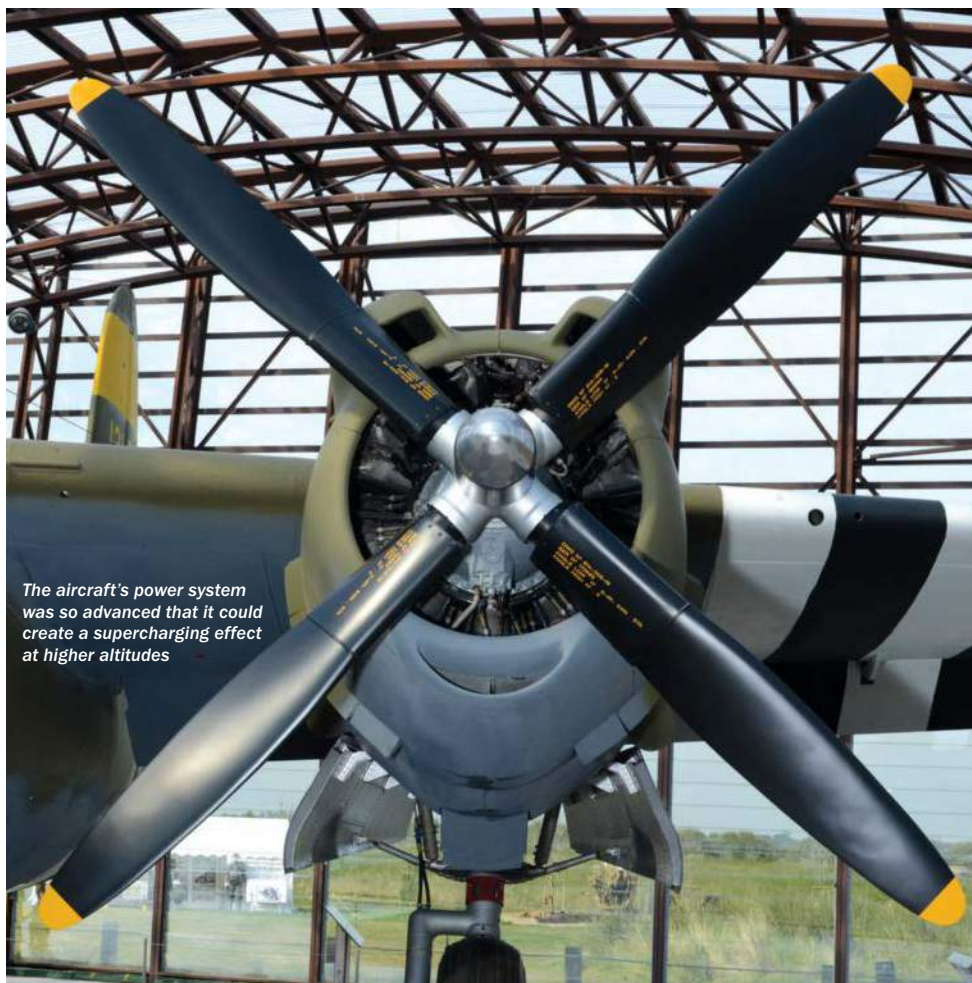
The B-26 boasted some serious weaponry. 11 .50-inch machine guns provided an immense amount of firepower with four guns on the fuselage sides, one in the nose, two in the dorsal and tail area and two in ventral positions. These turrets were the first of their kind and rotated on large ball bearings. Experienced gunners could turn 360 degrees and create a diagonal swathe of fire to shoot Axis fighters out of the sky.

As well as the main armament, some B-26s included several smaller .30-inch machine guns, which were dotted around the fuselage. These guns acted in a defensive capacity and would protect the aircraft from enemy fighters and anti-aircraft positions when on bombing runs. The rear gun was invaluable as it helped take down Messerschmitts, Zeros and any other Axis planes on the bomber's tail. However, the B-26's main feature was its bombs. It had two bomb bays, one in the fore and one in the aft. Up to 1,814 kilograms (4,000 pounds) could be carried for devastating strike sorties.

PROPULSION

To carry the weighty payload, the B-26 used two four-bladed propellers. It was the first Allied aircraft built in World War II to use four blades in its propulsion system and could generate up to 1,930 horsepower. The Pratt and Whitney R-2800-43 wasn't limited to the Marauder, and was also used on other US aircraft such as the F4U Corsair, F6F Hellcat and P47 Thunderbolt fighters. The 18-cylinder engine was incredibly versatile and was used in planes in the Korean War as well as World War II.

The undercarriage of the B-26 was unique in its design. Using a tricycle shape, it incorporated a nose wheel rather than the traditional tail wheel. It had a landing speed of 209 kilometres per hour (130 miles per hour), unusually high for a plane of the era, and remained an effective, if unorthodox, control system for a medium bomber. The design of the B-26 was altered in development and it originally featured a twin tail, but this was dropped in favour of a single fin to give the tail gunner a better view of oncoming targets.



The aircraft's power system was so advanced that it could create a supercharging effect at higher altitudes



The bombs painted under the cockpit indicate how many missions the plane had flown

THE B-26 OF THE UTAH BEACH MUSEUM

HAVING BEEN AT THE MUSEUM SINCE 2011, THE MARAUDER IS A POPULAR EXHIBITION AND ONE OF ONLY SIX LEFT IN EXISTENCE

The Marauder on display at the Utah Beach Museum in Normandy arrived in France on 20 May 1945. It was put into service too late to fly in any combat missions and it resided in the French base at Mont-de-Marsan, just south of Bordeaux. After the war, it was painted in French Army colours and given to Air France, who used the aircraft to train future mechanics. It was later donated to the French Air and Space Museum in 1967 and locked away in storage for 25 years. However, in 1993, it resurfaced as technicians tasked with refurbishing the plane found that numerous pieces of original equipment were missing. A restoration team managed to locate the missing parts as the B-26 neared its original condition. In 2011, the plane was moved to the Utah Beach Museum and repainted in the colours of the 386th Bomb Group, who served with distinction on D-Day. For more information on the museum and its work, please visit: www.utah-beach.com.



During D-Day, the US 9th Air Force attacked German defences on Utah Beach, where this B-26 is currently housed

"THE REAR GUN WAS INVALUABLE AS IT HELPED TAKE DOWN MESSERSCHMITTS, ZEROS AND ANY OTHER AXIS PLANES THAT WERE ON THE BOMBER'S TAIL"



Above: Based on practicality rather than comfort, the cockpit wasn't big on crew luxuries

COCKPIT

The armour-plated cockpit of the B-26 was operated by a pilot and a co-pilot. A centre console stood at the front, which included the throttle as well as propeller and mixture controls. The controls for the landing gear and flaps were at the back of the console. Notoriously tricky to handle for many pilots, many had no experience of twin-engine aircraft prior to the B-26. The weight of the Marauder also made the stalling speed and landing speeds higher than the majority of other planes in the US Military. The early issues with the B-26 were down to its rushed production, as it was overloaded with equipment and put into low-level attack missions, something it was completely ill-equipped to undertake.



The crew of a Marauder comprised a pilot, co-pilot, bombardier, radio operator, navigator, dorsal gunner and tail gunner

BOMBERS OF THE USAAF THE OTHER AIRCRAFT THAT THE USA USED TO BOMB GERMANY AND JAPAN INTO SUBMISSION

B-25 MITCHELL

The Mitchell was once the most heavily armed plane in the world. It participated in the 1942 Tokyo Raid, the first Allied attack to strike the Japanese home islands.



B-24 LIBERATOR

The most produced US aircraft of the war, an astonishing 18,400 were made. The Liberator served all over the world utilising its range of more than 2,000 miles.



DOUGLAS A-26 INVADER

Also sometimes called a B-26 but not to be confused with the Marauder, the A-26 was a versatile and long-serving aircraft. It served in the Korean and Vietnam wars.



B-17 FLYING FORTRESS

As the name suggests, the B-17 was a giant of the sky. Many were based in the UK and deployed to Germany to take part in relentless daylight bombing raids.



CONSTRUCTION

It may have been rushed off the production line, but the B-26 was a sophisticated war machine. Entering, and subsequently winning, a competition for a new US medium bomber in 1939, one of the major differences between it and its predecessors was the use of plastic. Before the Marauder, military aircraft were made mostly out of metal, but the B-26 changed this by using cheap and readily available plastic. It also used butted seams

rather than lapped seams in its covering, making the fuselage more streamlined, earning it the 'torpedo' nickname.

The Marauder carried so much equipment that it couldn't sustain much flak before getting in trouble. This made it ineffective at low-level attack missions, meaning it was soon changed to a medium-level bomber to make it more durable in combat. The original models also suffered from problems with the landing gear, but these were corrected by a heat-treatment process that improved the hydraulic system.

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The design was put forward by Peyton M Magruder of the Glenn L Martin Company, but was a work in progress for the first few years of its life



A shoulder-mounted monoplane design, the engines had a forward placement in the wings so the cockpit could keep a closer eye on their condition



A small wing area helped give the B-26 a formidable top speed of 458km/h (285mph)

THE AMERIKA BOMBER PROJECT

During the latter stages of the war, a long-range bomber was sought after by the Axis powers. With the added resources and manpower from the USA bolstering Britain and the USSR, attacks on the American mainland could stunt Allied wartime production significantly. The 'Amerika Bomber' and 'Project Z' programmes were put forward by Nazi Germany and Imperial Japan respectively. The Germans prototyped the Messerschmitt Me 264 for strikes on New York from continental Europe in December 1942. Heavily armoured and fitted with a turbocharged

engine, it would have been very similar to the USAAF B-29 Superfortress. The proposal could have feasibly worked, but constant Allied bombing and a lack of raw materials in the Third Reich dashed hopes of a transatlantic attack. As for Project Z, the Japanese simply did not have the engine power to make a realistic effort at attacking the USA. The Ha-44 engine was the most powerful available at the time, but it would have suffered cooling problems trying to lift a bomber capable of sustained attacks on American soil.

Only three ME 264s were built before the German project was abandoned

