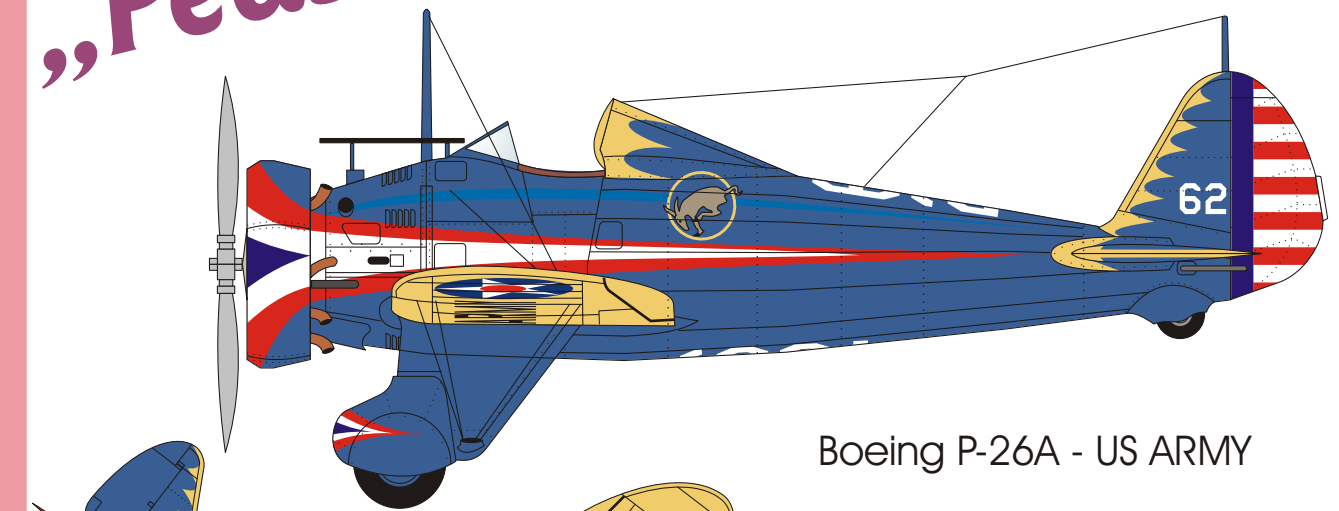


CARDBOARD MODEL

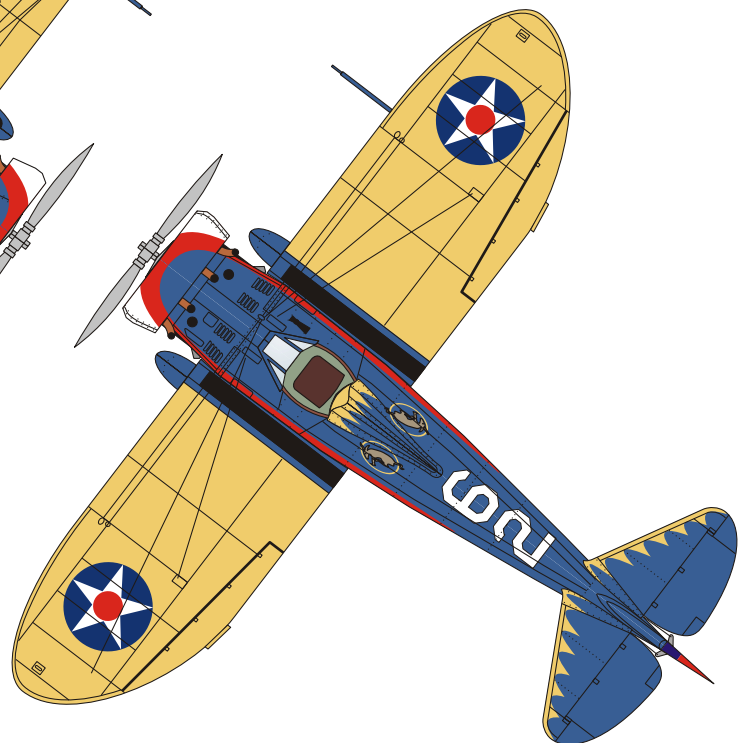
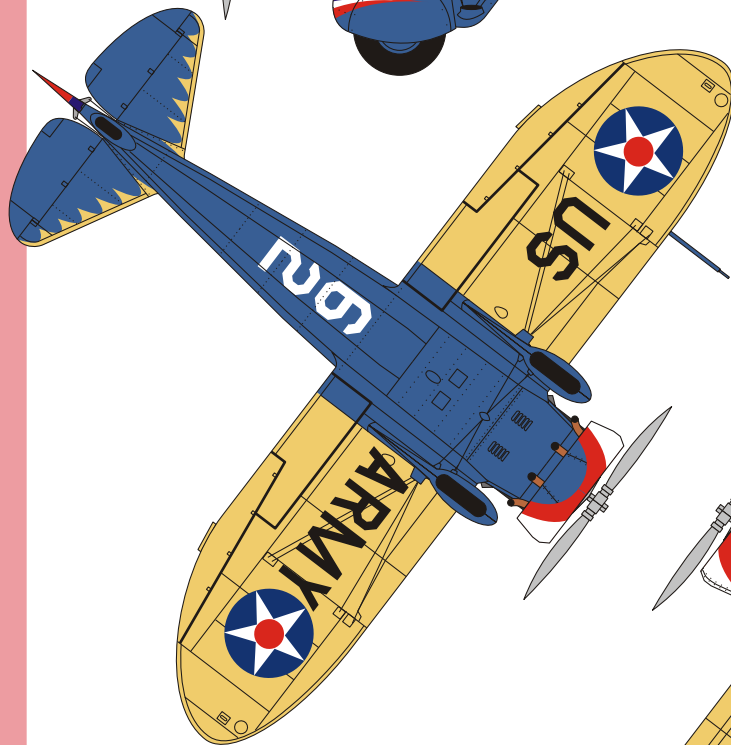
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MODELS BY MAREK

Boeing P-26 „Peashooter”



Boeing P-26A - US ARMY



4

Boeing Model 266 (P-26A) „Peashooter“

Although Boeing's diminutive P-26 fighter ('The Peashooter') had been retired from front-line service by the time the United States entered World War II, P-26s were among the aircraft ranged against the Japanese at Pearl Harbor, and machines of the Philippine Army Air Force's 6th Pursuit Squadron were in action as Japanese forces fought their way through the archipelago.

Work on the company-funded Boeing Model 248 began in September 1931, although the US Army Air Corps contracted to supply engines and instruments for three trials aircraft which were designated XP-636. Destined to become the first all-metal production fighter and the first monoplane to serve with the USAAC in the pursuit role, the design retained an open cockpit and, despite Boeing's experience with retractable landing gear and cantilever wings, fixed landing gear and externally-braced wings. All of these deficiencies were remedied in the Boeing 264 or YP-29, which was flown in 1934 but not put into production.

The first XP-636 was flown on 20 March 1932, and later completed an evaluation programme at Wright Field, where the second airframe had been delivered for static tests. On 25 April the third was sent to Selfridge Field, Michigan for tests with operational squadrons. Boeing subsequently received a production order for 111 P-26As' later increased to 136, which were to incorporate some improvements, including revised wing structure, the addition of flotation gear and radio; later aircraft also had higher headrests to protect the pilot in a roll-over crash. The first production P-26A made its maiden flight on 10 January 1934; the last of the 111 was delivered at the end of June 1934.

The need to reduce the landing speed of the P-26 resulted in the development of trailing-edge flaps which were fitted retrospectively to aircraft already in service, and to those still on the production line. These included the additional order for 25, completed as two P-26Bs with fuel injection-equipped Pratt & Whitney Wasp R-1340-33 engines, and 23 P-26Cs which had minor changes to the fuel system and carburation. Many were later converted to P-26B standard.

Production was completed by 12 export Boeing Model 281s, comprising 11 from China and one for Spain; users of US surplus P-26s included Guatemala and Panama.

The first P-26A made its maiden flight on January 10, 1934, and the last aircraft of the initial order for 111 aircraft was delivered on June 30, 1934. The factory designation of the P-26A was Model 266. The powerplant of the P-26A was a single Pratt & Whitney R-1340-27 Wasp 9-cylinder supercharged radial engine rated at 500 hp at 7500 feet. It drove a Hamilton-Standard two-blade, adjustable-pitch propeller. The armament was the same as that of the prototypes, namely a pair of 7.62 mm (0.30 in) machine guns, or one 7.62 mm (0.30 in) and one 12.7 mm (0.50 in) machine guns, mounted in the fuselage sides and firing through the spaces between the cylinder heads of the radial engine. Outwardly, the P-26A differed from the prototypes only in that the wheel trousers did not project aft of the undercarriage strut fairings. In addition, the wingtips were elliptically shaped which gave the wings slightly larger wingspan but slightly less wing area. Inwardly, the P-26A wing structure was considerably revised and a radio was added. The addition of the radio was reflected in the fitting of an antenna mast on the starboard fuselage just ahead of the cockpit and a mast on top of the vertical tail.

Originally, the P-26As had the low streamline headrests of the prototypes but on 22 February 1934, Lt. Frederick I. Patrick of the 20th Pursuit Group at Barksdale Field, Louisiana made a forced landing during a routine flight and his aircraft (33-46) flipped over on its back. Although the mishap inflicted only minimal damage to the aircraft, Lt. Patrick's neck was broken and he was killed. In order to prevent any more fatalities in the future, the headrest was increased eight inches in height. Delivery of later production machines were delayed until this modification was completed. The first aircraft on the production line to receive the new headrest was 33-56, and those already flying were retrofitted with the new headrest in the field.

While the P-26A was coming off the production line, the Army decided that it wanted emergency flotation gear fitted. A single P-26A (Serial 33-51) became a test bed with two manually-activated flotation bags installed in a streamlined fairing above each wing stub. The system was installed on

aircraft from P-26A (serials 33-53) onward, but was not retrofitted to earlier produced aircraft. There is no documented evidence that suggests this device was ever used operational, but at least one incident was documented when one of these flotation bags accidentally inflated during flight.

The P-26As were only in service for a short time when the Army became dissatisfied with the relatively high landing speed of 82.5 mph (132 km). Wing flaps were developed and tested by the Army on a P-26A and by Boeing on the Model 281, the export version of the P-26A. These brought the landing speed down to 73 mph (116 km). Boeing then retrofitted these flaps to all P-26As then in service and standardized them onto all future production aircraft.

The Model 281 was the export version of the P-26A. It differed only in the details of military equipment. The first flight of the Model 281 (carrying civilian registration X12271) took place on August 2, 1934, and early tests indicated that the landing speed was too high for the small grass strips from which the fighter would be expected to operate. Split-type wing flaps were developed and installed, and were tested by the Army for comparison with experimental flaps that the Army had installed on a standard P-26A. As a result of these tests, all P-26As were returned to the factory for installation of the new flaps, as previously described. The Model 281 had the high headrest, wing flaps and carburetor-equipped R-1830-27 engine of the P-26C model, but actually preceded the P-26C on the production line. The aircraft incorporated low-pressure Goodyear tires for operation from unpaved airfields.

The Boeing company carried out a vigorous sales effort, but only China granted a contract. Eleven Model 281s were shipped to China. The first was shipped on September 15, 1934. The last was shipped on January 16, 1936. The engine was the Pratt & Whitney R-1340-33. Maximum speed at 6000 feet was 235 mph. Initial climb rate was 2,210 feet per minute.

The Chinese Model 281s were on duty at Nanking when the Japanese attacked that city. One Chinese squadron operating the Model 281 saw continuous action against the Japanese invaders, and a considerable number of kills were registered. On August 20, 1937, eight of these fighters engaged six Mitsubishi G3M2 bombers during a raid on Nanking and destroyed all of them without lost to themselves. However, the Model 281 fighters were eventually forced out of service due to lack of spares. By the time of the fall of Nanking on December 13, 1937, the Model 281s were no longer operational.

The second Model 281 demonstrator (civilian registration X12275) was shipped to Spain in search of more customers. Test pilot Les Tower demonstrated the aircraft for the Spanish government at Barajas airfield near Madrid in April of 1935. However, the Spanish government opted not to order the aircraft, but it did buy the unarmed Model 281 demonstrator and equipped it with a pair of 7.7 mm (0.303 in) Vickers machine guns in underwing pods. The aircraft saw service on the Republican side in the Spanish Civil War. It was shot down on October 21, 1938.

Powerplant: One 600 hp (447 kW) (rated at take-off) Pratt & Whitney R-1340-27 Wasp 9-cylinder supercharged radial engine. Rated at 500 hp (373 kW) at 7,500 ft (2286 m). (P-26B) One 600 hp (447 kW) Pratt & Whitney SR-1340-33 Wasp fuel injected engine.

Performance: Maximum speed 234 mph (374 km/h) at 7,500 ft (2286 m); cruising speed 199 mph (320 km/h); initial climb rate 2360 ft (719 m) per minute; service ceiling 27,400 ft (8352 m) with an absolute ceiling 28,300 ft (8626 m).

Range: (normal) 360 miles (579 km) on internal fuel; (extended) 635 miles (1022 km).

Weight: Empty 2,197 lbs (977 kg) with a maximum take-off weight of 2,955 lbs (1340 kg).

Dimensions: Span 27 ft 11 1/2 in (8.52 m); length 23 ft 7 1/4 in (7.19 m); height 10 ft 0 1/2 in (3.06 m); wing area 149.5 sq ft (13.89 sq m).

Armament: One 12.7 mm (0.50 in) machine gun and one 7.62 mm (0.30 in) machine gun, or two 7.62 mm (0.30 in) machine guns mounted in the fuselage sides firing through the engine cylinder banks. Racks were provided under the fuselage for five 30 lbs (14 kg) bombs or two 100 lbs (45 kg) bombs.

Variants: Model 248 (XP-936), XP-26 (briefly Y1P-26), P-26, P-26A, P-26B, P-26C, P-26 Export.

Avionics: A C-3 tubular gunsight was mounted ahead of the windshield, and a G-4 camera gun could be mounted externally above the right-side wing root.

History: First flight (XP-936) 20 March 1932; first flight (P-26A) 10 January 1934; first flight (P-26B) 10 January 1935; first delivery (P-26B) 20 June 1935; (P-26C) first delivery 10 February 1936 with the last delivery 7 March 1937.

Operators: USAAC, China (11), Spain (1), Surplus aircraft being sold to Guatemala, Panama and Philippines.

