

P-40 WARHAWK TURNS 80

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IMAGINE THE ENEMY MAY HAVE BEEN MORE THAN A BIT INTIMIDATED IF HE LOOKED BACK AND SAW THIS ANGRY SHARK-MOUTHED P-40 ON HIS SIX. (ARMCHAIRAVIATOR.COM)



THE CURTISS P-40 Warhawk, was one of America's most important fighter aircraft of World War II. The P-40's first flight was on October 14, 1938, as the XP 40, a derivative of the mid-1930s Curtiss P-36 Hawk.

It had a Pratt & Whitney R1830 Twin Wasp 14-cylinder, air cooled radial engine design. Unlike the Hawk, however, the P-40 had a liquid-cooled Allison V-1710-33 in-line engine, which reduced frontal area and increased performance.

The P-40B Warhawk had two .50-caliber synchronized machine guns in the nose, and two small .30-caliber machine guns in each wing. It was used by most Allied powers during World War II, and remained in frontline service until the end of the war. It was the third most-produced American fighter, after the P-51 Mustang, and P-47 Thunderbolt.

The more powerful P-40E was just coming into service at the beginning of the war. (Tests in December 1939 proved the fighter could reach 366 mph). These aircraft had three 50-caliber machine guns in each wing. MacArthur had P-40Es in the Philippines, although these were quickly destroyed by enemy action.

In addition to its use by the United States, the P-40 was used by 28 allied nations, and played critical roles with the British in North Africa, the Australians in the South Pacific, and the Russians on the Eastern front.

The P-40 first saw combat in the deserts of North Africa in June 1941, where the "shark mouth" first appeared.

The earliest version lacked armour plate or self-sealing tanks. Later variants had armour around the engine and cockpit, and exchanged

the .30 calibre guns for .50 calibre Browning machine guns. Nothing, however, could fix the poor ground visibility, or narrow landing gear track which caused additional losses on the ground.

The British Commonwealth and Soviet air forces used the name Tomahawk for models equivalent to the P-40B and P-40C, and the name Kittyhawk for models equivalent to the P-40D and all later (as many as 14) variants.

Although the P-40 was sturdy, with good diving characteristics and an attractive, sleek looking design, it showed average performance compared to most of the fighters of the day. By the start of the war, the P-40 was virtually obsolete. Still, it continued in production since it had low production costs, and was one of the few fighters already in full production and available from war's beginning.

The single-stage, single-speed supercharger on the Allison engine left the P-40 a poor high-altitude fighter. Its lack of a two-speed supercharger made it mediocre to the Messerschmitt Bf 109 and the Focke-Wulf Fw 190 in high-altitude combat.

The P-40s chief claim to fame was that it was used by General Claire Chennault's American Volunteer Group (AVG) immortalized as the Flying Tigers. The AVG operated in China under the control of General Chiang Kai-shek in the early months of World War II. With a colourful, but intimidating shark's mouth painted on the nose, the P-40, flown by the flamboyant and highly capable pilots of the AVG, was extremely successful in intercepting and destroying invading Japanese aircraft. Although constantly outnumbered, AVG pilots registered a kill ratio of 25 Japanese aircraft to every P-40 lost an aerial combat.

PEARL HARBOUR

The P-40 saw extensive service beginning with the attack on Pearl Harbour. On the day of the Pearl Harbour attack, there were 18 P-40s stationed at Wheeler Field. On the morning of December 7, 1941, two young pilots, Lts. Ken Taylor, and George Welch, managed to get two P-40s airborne while under fire during the Japanese attack. Collectively they accounted for six confirmed kills and several more probable. Fifteen P-40s on the ground were destroyed and one, in a hangar for repairs, survived the attack, only to be lost later on a routine training mission.

Pearl Harbour was just the beginning. The first good news that the United States experienced after the attack at Pearl Harbour was the excellent performance of Claire L Chennault's American Volunteer Group. The Flying Tigers defeated the Japanese with a series of stunning blows using special tactics Chennault had devised. Chennault warned against prolonged or high altitude dog-fighting with the Japanese fighters due to the superior performance of the Japanese Zero.

On December 20, 1941, ten KI-43 Japanese bombers targeted Kunming, China. With all eastern seaports closed, China could only get supplies through the Burma Road. Kunming was the road's terminus in China, and incoming supplies were being devastated by Japanese air raids.

The P-40s dove into the Japanese bomber formation and quickly shot down four bombers. The surviving crews dropped their bombs short of the target and turned for home. More crashed from airframe damage on the way back to their base. Chennault, who commanded the P-40s, had assured his pilots that

if they could shoot down a quarter of the bombers in a raid, the Japanese would not come back to Kunming. He was right.

In their first combat, Chennault's AVG had made its bones. The AVG continued to score victories until July 6, 1942, when it was absorbed into the United States Army Air Force. During that time, AVG lost 14 aircraft in aerial combat but is credited with downing 296 enemy aircraft.

America needed "good" war news. Time Magazine latched on to this initial, but small victory. In an article "Blood for the Tigers," Time praised this victory and introduced the name Flying Tigers. Disney soon produced a logo for the AVG. It was a pouncing tiger jumping out of a V for victory. Of course, the logo had nothing to do the iconic shark's mouth design on the Flying Tigers P-40.

Because of its effectiveness, as well as the popular cause the AVG supported, the P-40 became one of the most recognized aircraft of WWII.

As late as 1943, the P-40, in combination with the Bell P-39 Airacobra, represented over half of the total fighter strength in the US Armed Forces.

The rugged P-40 played a significant role in winning the war because it was available at the time when other World War II fighters were still on the drawing board.

Even though a total of 13 738 P-40s came off the assembly line between May 1940, and 1944, only one of these historic aircraft is flying today, rebuilt from the Pearl Harbour aircraft that was lost on a training mission (there are close to 100 in museums world-wide). After the war, Gen. Henry "Hap" Arnold said: "But for the P-40, the Japanese would have come all the way to Australia."→