

Profile provided by Warbird Alley, with permission of Buck Wyndham

PROFILE: Curtiss P-40 Warhawk

(Variants/Other Names: Model 81; Tomahawk; Kittyhawk)

HISTORY:

The P-40 fighter/bomber was the last of the famous "Hawk" line produced by Curtiss Aircraft in the 1930s and 1940s, and it shared certain design elements with its predecessors, the Hawk and Sparrowhawk. It was the third-most numerous US fighter of World War II. An early prototype version of the P-40 was the first American fighter capable of speeds greater than 300 mph. Design work on the aircraft began in 1937, but numerous experimental versions were tested and refined before the first production version of the P-40, the **Model 81**, appeared in May 1940. By September of that year, over 200 had been delivered to the Army Air Corps. 185 more were delivered to the United Kingdom in the fall of 1940, where they were designated the **Tomahawk Mk I**.

Early combat operations pointed to the need for more armor and self-sealing fuel tanks, which were included in the **P-40B** (called the **Tomahawk Mk IIA** in the UK). These improvements came at price: a significant loss of performance due to the extra weight. Further armor additions and fuel tank improvements added even more weight in the **P-40C (Tomahawk Mk IIB)**. Curtiss addressed the airplane's mounting performance problems with the introduction of the **P-40D (Kittyhawk Mk I)**, which was powered by a more powerful version of the Allison V-1710 engine, and had two additional wing-mounted guns. The engine change resulted in a slightly different external appearance, which was the reason the RAF renamed it from the Tomahawk to the Kittyhawk. Later, two more guns were added in the **P-40E (Kittyhawk Mk IA)**, and this version was used with great success (along with their mainstays, the earlier B-models) by General Claire Chenault's American Volunteer Group (The Flying Tigers) in China.

Some additional models, each with slight improvements in engine power and armament, were the **P-40F** (with a 1300 hp Rolls-Royce Merlin engine), the **P-40G**, **P-40K (Kittyhawk Mk III)**, **P-40L**, **P-40M** and finally, the **P-40N**, of which 5200 were built (more than any other version.) While it was put to good use and was certainly numerous in most theaters of action in WWII, the P-40's performance was quickly eclipsed by the newer aircraft of the time, and it was not considered one of the "great fighters" of the war.

NICKNAMES:

Gipsy Rose Lee (UK nickname for the P-40L)

SPECIFICATIONS: (P-40N):

Engine: 1360hp Allison V-1710-81 inline piston engine

Weight: Empty 6,000 lbs., Max Takeoff 11,400 lbs

Wing Span: 37ft. 4in.

Length: 33ft. 4in.

Height: 12ft. 4in.

Performance:

Maximum Speed at 10,000ft: 378mph

Ceiling: 38,000ft

Range: 840 miles (with no external tanks)

Armament:

Six 12.7mm (0.5-inch) wing-mounted machine guns

Up to 1,500lbs of bombs on three wing hard-points

NUMBER BUILT: Approximately 15,000

NUMBER STILL AIRWORTHY: 29