Airpower Classics

Artwork by Zaur Eylanbekov

P-61 Black Widow



The first aircraft designed specifically as a radarequipped night fighter, the Army Air Forces P-61 Black Widow had a brief but distinguished World War II career. The Northrop aircraft was slow getting into combat, delayed by an overly ambitious design and John Northrop's preoccupation with his flying wing projects. The first P-61s did not enter service until mid-1944. They served well, but, by then, targets in all theaters were hard to find.

In November 1940, Northrop proposed a very large, two-engine fighter with a twin boom layout, sufficient to carry a required heavy early radar, powerful armament, and fuel for extended loitering time. The design was preferred to Douglas' offer of a modified A-26 Invader, and two prototypes were ordered in January 1941. Testing of the initial

production run revealed that the top turret caused such violent buffeting that it had to be removed after the 37th P-61A. Eventually, however, the program smoothed out. The key to the P-61's success was the Western Electric SCR-720 airborne intercept radar.

The P-61 was the largest and heaviest USAAF fighter in World War II, but it was reliable and actually pleasant to fly. Its purpose also changed. Originally intended to shoot down night bombers, the Black Widow was soon employed as a night intruder, ranging far behind enemy lines. Other missions included reconnaissance, night ground attack, and test work on ramjet missiles and ejection seats. Eventually, it was used to equip all USAAF night fighter units.

-Walter J. Boyne



In Brief

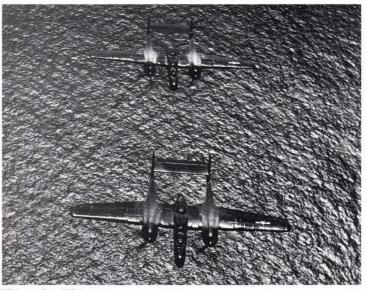
Designed, built by Northrop \star first flight May 26, 1942 \star crew of three—pilot, radar operator, gunner \star two Pratt & Whitney R-2800-65 radial engines \star number built 742 \star Specific to P-61B: max speed 366 mph \star cruise speed 275 mph \star max range 1,200 mi \star armament, four 20 mm cannon, four .50 cal guns in top turret \star bomb load, four 1,600-lb bombs \star weight (max) 29,700 lb \star span 66 ft \star length 49 ft 7 in \star height 14 ft 8 in.

Famous Fliers

Aces: Crews of Carroll Smith (pilot) and Philip Porter (radar operator); Paul Smith (p) and Robert Tierney (r/o); Herman Ernst (p) and Edward Kopsel (r/o); Eugene Axtell (p); Robert Graham (r/o). Notables: Charles Lindbergh, Oris B. Johnson, Leonard Hall.

Interesting Facts

Shot down 18 V-1 "buzz bombs" in Europe ★ rejected by British in favor of de Havilland Mosquito ★ directed by ground-based radar ★ introduced night vision binoculars ★ featured cannon fired by pilot ★ modified to become F-15 Reporter ★ one civilian P-61 and one F-15 Reporter were modified as air tankers; both crashed. ★ used in thunderstorm research ★ chosen as featured aircraft in a planned, but canceled, Howard Hughes film ★ used by Marine Corps as trainer aircraft.



Widow after Widow.