

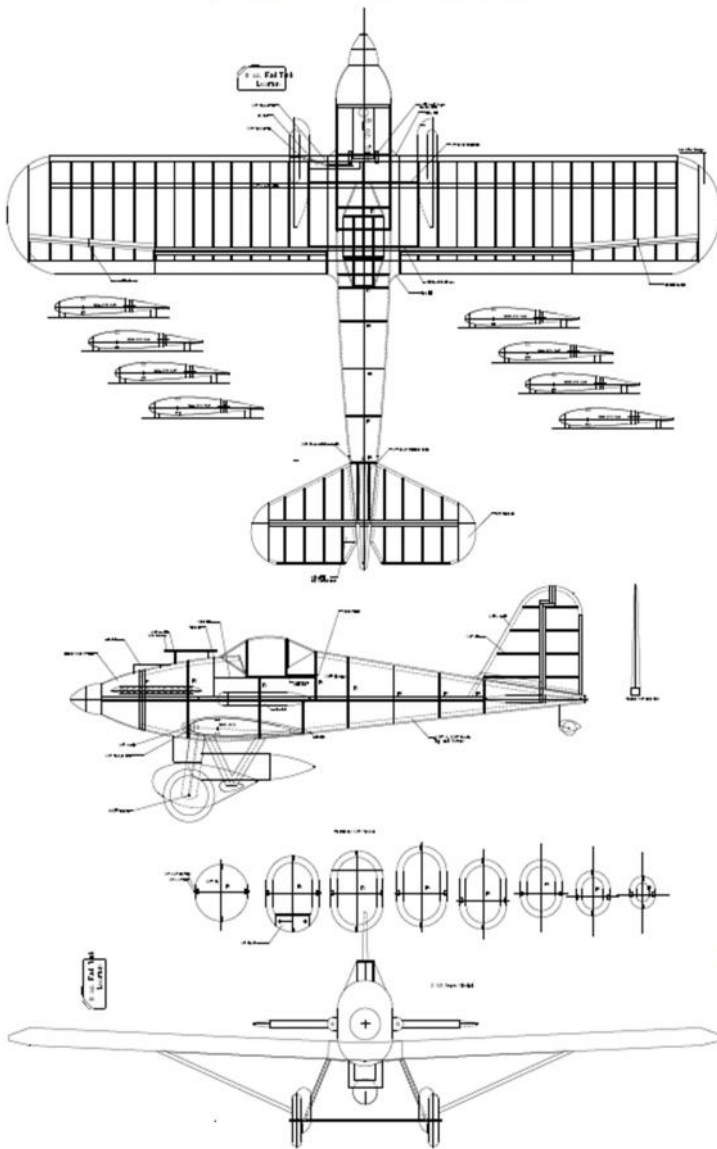
Curtiss XP-31 Swift 47.8" or 57" Wing Span Plan

The **Curtiss XP-31 Swift** (company model **XP-934**) was a 1930s [American experimental monoplane fighter](#) built by [Curtiss](#) for the [United States Army Air Corps](#).

Although the XP-31 featured the first enclosed cockpit on a U.S. pursuit aircraft, it was also the last pursuit aircraft to have fixed landing gear and externally braced wings. Despite its innovations, the XP-31 did not offer any advantages compared to its rival the [Boeing P-26 Peashooter](#) and was not ordered into series production.

BALSA PLAN FOR SCRATCH BUILDERS

Curtiss XP-31 Swift	
47.8" Wing Span	50 Engine
Rev. 1.0	RC Gujarro



Design and development

Curtiss offered the XP-31 (given the Wright Field Project Number XP-934) in a 1932 competition with the P-26. It was a low-wing monoplane with fixed, strut-braced landing gear, first flown in July. It was the AAC's first single-seat closed-cockpit fighter, and the last with fixed gear and wing struts. Despite its quite small size, it was badly overweight, and carried 125 gal (104 Imp gal, 474 l) fuel. Although Curtiss considered the design significant in that it introduced various new technologies, compared to its contemporaries, the XP-31 was already outmoded, and, more importantly, testing showed that it fell below performance expectations.^[2]



Testing and evaluation

Powered by a 700 hp (520 kW) [R-1750 Cyclone](#) radial, its performance was dismal, despite retractable leading-edge [slots](#) and large trailing-edge [flaps](#), so a 600 hp (450 kW) [Curtiss V-1570 Conqueror](#) was substituted. In this form, the Curtiss XP-31 Swift (s/n 33-178) was delivered on 1 March 1933, having already lost to the P-26. The sole example was scrapped in 1935.^[2]

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Specifications

Data from *U.S. Fighters: Army-Air Force 1925 to 1980s*^[3] and *Fighters of the United States Air Force*^[2]

General characteristics

- **Crew:** 1 pilot
- **Length:** 26 ft 3 in (8 m)
- **Wingspan:** 36 ft in (11 m)
- **Height:** 7 ft 9 in (2.4 m)
- **Wing area:** 203 ft² (18.86 m²)
- **Empty weight:** 3,334 lb (1,512 kg)
- **Gross weight:** 4,143 lb (1879 kg)
- **Powerplant:** 1 × [Curtiss V-1570](#) Conqueror water-cooled 12-cylinder vee engine, 600 hp (450 kW)

Performance

- **Maximum speed:** 208 mph (335 km/h)
- **Range:** 370 miles (595 km)
- **Service ceiling:** 24,400 ft (7,437 m)

Armament

- 2 × fixed, forward-firing .30 in (7.62 mm) [M1919 Browning machine guns](#) in cowl
- 2 × fixed, forward-firing .30 in (7.62 mm) M1919 Browning machine guns in cheeks