Curtiss XF15C-1 “Stingeree”

The Hickory Aviation Museum’s XF15C-1 Stingeree, Bureau Number 01215 is on loan from the National Museum of Naval Aviation. Coordinated by Kregg Kirby.

Role	Fighter, Aircraft Carrier Based
National origin	United States of America
Manufacturer	Curtiss Aeroplane and Motor Company
First flight	27 February 1945
Status	Never Advanced Beyond Prototype
Primary users	United States Navy
Produced	1944-1945
Number built	3
Propulsion	1 x Pratt & Whitney R-2800-34W Double Wasp 18 Cylinder Air-Cooled Radial Piston Engine and 1 x Allis Chalmers J36 Centrifugal Flow Turbojet

General characteristics	**Performance**
Crew: 1 Pilot **Length:** 43 ft 8 in (13.32 m) **Wingspan:** 48 ft (15 m) **Width:** 20 ft 5 in (6.22 m) wings folded **Height:** 15 ft 3 in (4.65 m) wings spread; 17 ft (5.2 m) wings folded **Wing area:** 400 ft² (37 m²) **Empty weight:** 12,648 lb (5,737 kg) **Loaded weight:** 16,630 lb (7,543 kg) **Max. takeoff weight:** 18,698 lb (8,841 kg) **Power plants:** 1 × Pratt & Whitney R-2800-34W Double Wasp 18 cylinder air cooled radial engine, 2,100 hp (1,567kW). 1 x Allis Chalmers J36 centrifugal flow turbojet, 2,700 lbf (12kN) thrust **Propeller:** 4 bladed Hamilton Standard constant-speed fully feathering propeller, 13 ft 1 in (3.99 m) diameter	**Maximum speed:** 469 mph (755 km/h; 4 kn) both engines at 25,300 ft (7,700 m) **Combat radius:** 325 mi (523 km) **Ferry range:** 1,385 mi (2,229 km) **Service ceiling:** 41,800 ft (12,700 km) **Rate of climb:** 5,020 ft/min (25.5 m/s) **Armament** **Guns:** 4× 20 mm (0.787 in) wing mounted cannons with 800 rounds. **Rockets:** 8 x 5 inch rockets **Bombs:** 2 x 1000 pound bombs

History:

The Curtiss XF15C-1 Stingeree was to be a carrier based fighter combining a traditional piston engine with the then new technology jet engine. The piston driven propeller provided the plane with a reasonable cruising speed and useful range, while the jet engine provided added thrust for take-offs and full combat power. The jet engine could be started in flight

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via a complicated acetylene powered system. The jet engine is located just behind and below the cockpit with the exhaust exiting just aft of the wing.

The XF15C-1 is an all metal aircraft with a cantilevered low wing that folds for storage aboard an aircraft carrier. It is equipped with a tricycle undercarriage. The canopy is a bubble type. The original tail was located low. The Hickory Aviation Museum Stingeree first flew with the conventional low tail but soon thereafter was changed to a “T-tail” arrangement. The change to a T-tail increased stability while decreasing the plane’s footprint onboard a carrier. Twenty planes could be stored on a CV-9 carrier.

The US Navy ordered three prototypes on April 7, 1944, with the first on taking to the air (minus the jet engine) on February 27, 1945. The jet engine from England was installed in April 1945. On May 8, 1945, (VE Day), the piston engine quit on final approach due to fuel starvation, and test pilot Charles Cox was killed. Faulty fuel gauges were the official cause of the mishap. Testing resumed again in July 1945 with the new T-tail.

The US Navy took delivery of the remaining two XF15C-1s which were used for various tests at the Naval Aircraft Testing Center (NATC), Patuxent River, MD. By October 1946, the US Navy had no further use for a mixed propulsion fighter as it was already developing jet combat planes and the program was terminated.

This aircraft, the third and final prototype, has the distinction of being the very last aircraft manufactured for the US Navy by Curtiss. The plane last flew in May, 1947 and logged a total flight time of only 56 hours.