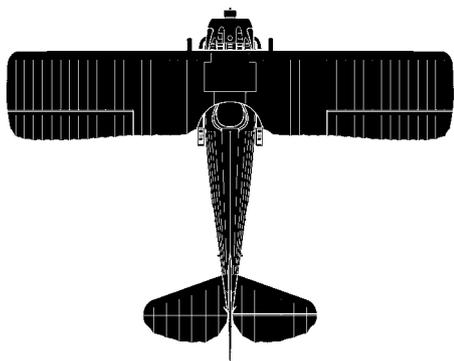


# Airpower Classics

Artwork by Zaur Eylanbekov

## SPAD XIII



Nine decades on, France's SPAD XIII stands out as the definitive World War I fighter of two aviation forces—France's *Aéronautique Militaire* and America's US Army Air Service. The French firm SPAD developed the potent biplane in response to the appearance of advanced German aircraft on the Western Front in 1916. The US military, for its part, had gone to war without a fighter of its own, and so it simply adopted the XIII as its primary air weapon—the first great fighter in its long and storied history.

The XIII was a bigger, stronger, more powerful, and more heavily armed successor to the SPAD VII. A pure fighting machine, its pugnacious look well-suited the aggressive young Air Service pilots trying to make their mark in France. SPAD chief designer Louis Bechereau built his airplane around an advanced Hispano-Suiza eight-cylinder engine, which had a good power-to-weight

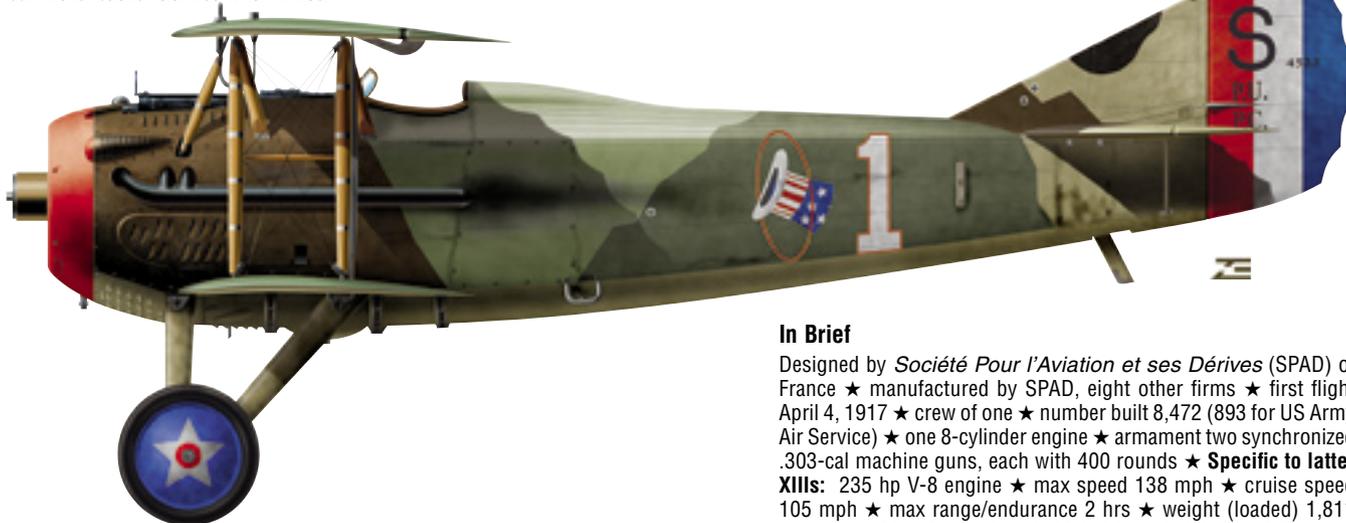
ratio, but it was temperamental. What's more, the aircraft was not overly maneuverable.

For all that, though, the XIII was a stable firing platform and could take great punishment and keep flying. It was faster than the Sopwith Camel and Fokker D.VII, with a good climb rate, and so rugged that it could dive at 200 mph and go immediately into a steep ascent without failure of its cloth-covered wings or wooden fuselage.

The top US ace of World War I, Capt. Eddie Rickenbacker, greatly preferred the XIII to any other fighter. It was perfect for his dive-and-kill tactics. Many viewed it as the best dogfighter of the war. That capability, perhaps, is the reason that the XIII wound up equipping not only French pursuit units but 15 of the 16 American Expeditionary Force fighter squadrons. The SPAD also was flown in significant numbers by Britain, Italy, Russia, and Belgium.

—By Walter J. Boyne

**This aircraft:** US Army Air Service SPAD XIII #S4523—No. 1—as it looked in fall 1918 when flown by Capt. Eddie Rickenbacker, 94th Pursuit (“Hat in the Ring”) Squadron at Rembercourt near St. Mihiel, France. No. 1 was intended for the squadron commander, but Rickenbacker claimed it for himself.



Eddie Rickenbacker was the “Ace of Aces.”

### In Brief

Designed by *Société Pour l'Aviation et ses Dérives* (SPAD) of France ★ manufactured by SPAD, eight other firms ★ first flight April 4, 1917 ★ crew of one ★ number built 8,472 (893 for US Army Air Service) ★ one 8-cylinder engine ★ armament two synchronized .303-cal machine guns, each with 400 rounds ★ **Specific to latter XIII's:** 235 hp V-8 engine ★ max speed 138 mph ★ cruise speed 105 mph ★ max range/endurance 2 hrs ★ weight (loaded) 1,811 lb ★ span 26 ft 6 in ★ length 20 ft 6 in ★ height 8 ft 6.5 in.

### Famous Fliers

UNITED STATES: Capt. Edward Rickenbacker, top US ace of WWI, Medal of Honor ★ 1st Lt. Frank Luke, No. 2 US ace of WWI, Medal of Honor ★ 1st Lt. Carl Spaatz (became first USAF Chief of Staff) ★ FRANCE: Capt. René Fonck, top French ace of WWI ★ ITALY: Maj. Francesco Baracca, top Italian ace of WWI.

### Interesting Facts

Pilots covered bullet holes with Iron Cross patches ★ flown by top aces of three countries (US, France, Italy) ★ built at rate of 11 per day in 1918 ★ *Smith IV*, a SPAD XIII used by Lt. A. Raymond Brooks, is on display at National Air and Space Museum in Washington, D.C. ★ used by air forces of 16 nations ★ first flight was executed by an ace (Lt. René Dorme of France) ★ US tail colors were red, white, and blue (front to back); France's were blue, white, red.