## The little airplane that could

Nieuport 28s provided early aviators victory in the skies

Called by some the most elegant looking airplane of World War I, the Nieuport 28 was the first aircraft pilots of the 1st Pursuit Group flew in the war to end all wars. In the front yard of the 94th Fighter Squadron sets a replica of this early fighter, a fitting tribute to the unit's heritage.

Not all pilots of the 1st Pursuit Group were enamored with the Nieuport. By the time the group started using the French-built aircraft, other types were technologically superior. When the U. S. Air Service ordered 297 Nieuport 28C-1s for its flying squadrons, Col. Billy Mitchell viewed the purchase as a temporary measure until another French plane could be bought, the Spad XIII.

Although sleek, highly maneuverable and with a good rate of climb, one of the main complaints about the Nieuport was its rotary engine. It was light weight and air-cooled with a good power-to-weight ratio. That's where the plus side of the tally sheet ends.

The aircraft had no carburetor, so the pilot had to finesse the correct amount of fuel and air with a two-function throttle. Most fliers found the best setting was essentially at full throttle. Since the propeller was bolted directly to the crankshaft, the gyroscopic effect was another factor the pilot had to constantly compensate for with the light weight of the airplane.

And a technical defect with the design of the fuel system was deadly. The ridged fuel lines from the tank to the engine were highly susceptible to vibration and in turn rupture. The Nieuport 28's reserve tank was located right next to the cockpit.

On May 19, 1918, Major Raoul Lufbery, assigned as a staff officer for the 1st Pursuit Group, but flying with the 94th Aero Squadron, engaged a German two-seat Albatros. An incendiary round ripped through the vulnerable tank, the cockpit was engulfed in flames. His flying suit flaming, he walked out onto the wing and spotted a stream 2,000 feet below.

With no parachute, he jumped. He missed the stream, and according to French villagers, struck a fence, stood up walked a few steps and fell dead.

Lufbery was a triple ace with the Lafayette Escadrille, the French flying unit formed before the U. S. formerly entered the war. He helped train the novice American flyers, primarily in the Nieuport, and they deeply respected his courage and ability.

Innovative airplane mechanics surprised the French manufacturers of the Nieuport when they heard the rotary engines were getting 30 hours between overhauls. By drilling holes in the engine cylinders, the circulation of the fuel and castor oil mix improved, and the engines lasted longer.

But if the engine wasn't enough of a challenge, the early aviators also had to deal with another annoying trait of the nimble little plane. In a steep dive the fabric on the top wing would peel off, significantly reducing airworthiness. Maj. Harold Hartney, commander of the 27th Aero Squadron, and later the group's commander, adamantly stressed this flaw often, and had to send one pilot who refused to heed his warning to a ground unit.

Capt. Eddie Rickenbacker called the Spad XIII "The best ship I ever flew." Although heavier, and derided as a "brick" by some pilots, when compared to the Nieuport, the Spad was a superior aircraft.

Today members of the 94th Fighter Squadron are called "Spads" but the aircraft out front of their squadron served well as the group's first journey into the realm of air superiority.