

America's greatest aerial offensive did not get underway until the closing months of World War I. Under the American 1st Army, the greatest aggregation of the air forces ever assembled during the war was massed for the September, 1918 drive against St. Michel. A fleet of 1481 planes, American, British, and French, under the command of Colonel Billy Mitchell commenced a series of strategic attacks on the German railway centers, communications and troop concentrations. The Air Service also participated in the tactical operations, observing, photographing, directing artillery fire and ground strafing against enemy troops and supplies. These attacks were highly effective.

On October 9 more than 200 American bombers, accompanied by about 100 pursuit craft and 53 three-place planes, smashed a German counter attack by dropping 22 tons of bombs and knocking out a dozen enemy fighters. The bombs in this instance, were released electrically from mounts underneath the fuselage, a decided improvement over the earlier bombing methods, when bombardiers carried their bombs in a bucket in the cockpit and tossed them over the side by guesswork aiming.

When the war ended on November 11, 1918 there were 45 squadrons with 767 pilots, 1481 observers, 23 gunners, and 740 airplanes assigned to the various armies. American aviators flew more than 35,000 hours over enemy lines, approximately 3,600,000 miles. In all, American airmen made almost 13,000 pursuit flights, more than 6,600 observation flights, and over 1100 bombing missions, dropping 255,000 pounds of explosives. The American aircraft loss was less than half that of the confirmed enemy loss. The Air Service had proved the French theory that our support could be most effective by strongly reinforcing allied air power on the western front.

World War I gave the United States several war heroes, "aces" they were called. Among the greatest of them was "balloon buster" Lieutenant Frank J Luke. Lt. Luke ran up a phenomenal total of 18 air victories, (14 of them balloons) in two weeks during September 1918, finally meeting his death on the 29th of the month. The Air Force's Luke Field located in Lt Luke's home town, Phoenix, Arizona, still bears his name. There was Major Raoul Lufberry of Wallingford, Connecticut, who scored 17 "kills" while with the French before joining the AEF; Major George A Vaughn of Brooklyn, New York, who had 13 victories; Captain Elliott White Springs of Lancaster, South Carolina 12 victories; and finally, the greatest of them all Captain Eddie Rickenbacker, former auto racer, who went to France as General Pershing's chauffeur and became the Air Services top flyer, despite three months of illness which grounded him. Rickenbacker recorded 25 aerial victories.

The war had proved that the Air Service definitely had a place in the Army, and, in 1919, the Air Service began to look for peacetime applications for its services and found one in flying aerial patrols for the prevention of forest fires. This service was inaugurated in June of that year at the request of the District Forester of California. The forest ranger, mounted or afoot, could not cover sufficient territory on his patrol, nor report fires quickly enough to maintain an efficient check on forest fires. Furthermore, an airplane could spot fires from

altitudes that were invisible to ground lookouts.

Aerial forest patrols were operated under the direction of Major H H Arnold, and impressive results were achieved. De Havilland planes, powered by the popular Liberty engines, were employed by the aerial rangers of the Air Service. To adapt the planes to better observation work, they were throttled down to a bare 100 miles per hour. At first fires were reported by carrier pigeon or parachute drop, but later radio communication systems were installed. During the 4 years of its existence, the patrol reported 4,000 fires, saving millions of dollars in timber.

On June 4, 1920, Congress passed an Army reorganization act which gave Army Aeronautics a new, definite status. The new Army Air Service, with an authorized strength of 1,516 officers and 16,000 enlisted men, was established as a "separate and coordinate branch of the line of the Army." Ninety percent of the officers had to be pilots or observers, and flying units had to be commanded by flying officers. At the passage of the new act there were 155 regular and 1,013 temporary officers and about 7,800 enlisted men in the Air Service.

Two wing headquarters were activated, one at Langley Field, Virginia, and the other at Kelly Field, Texas. These two wings embraced 7 groups, 4 within the continental limits and 3 outside. The groups located in this country were the 1st Day Bombardment Group, equipped with De Havilland 4B type aircraft, and the 1st Pursuit Group, flying SE-5A's, both located at Kelly Field; the 1st Surveillance Group, flying De Havillands, at Fort Bliss, El Paso, Texas and the First Army Observation Corps, also flying De Havillands, at Langley Field. The extra-continental groups were the 1st Observation Group at Manila; the 2nd Observation Group at Honolulu; and 3rd Observation Group in the Canal Zone. These latter groups were equipped with De Havillands, as well as war-time leftover Curtiss, "Jennies".

The De Havilland 4 was to remain the mainstay of the Air Services for a good many years to come, insofar as combat type planes were concerned, while the ancient "Jennies" were to be standard trainers. Although many new planes had been contracted for during the war, economy measures forced contract cutbacks at the cessation of hostilities.

Meanwhile, the Air Service was exploring the use of lighter-than-air ships. By top level agreement, development work on the rigid type of airship was left to the Navy, while the Air Service procured only non-rigid types, with the exception of two semirigid type craft.

One of the first non-rigids was the Zodiac, a former French craft turned over to the Air Service early in 1920. Then the largest airship in service, the Zodiac was 260 feet long and had a gas capacity of 328,000 cubic feet. The Zodiac was rechristened the DZ-1 by the Air Service and used chiefly for experimental work in bombing, radio and aerial photography.

Later in 1920, at the request of General William "Billy" Mitchell, the Air Service purchased from Italy what was at that time the largest semi-rigid airship, the Roma. The Roma over 400