

complete with machine shop, reserve fuel, extra equipment and parts, and even a tent-type hangar, was developed.

On June 1915, the Aviation Section had a strength of 31 officers and 177 enlisted men.

On March 15, 1916, the first Aero Squadron, consisting of 11 officers, 82 enlisted men, and one civilian mechanic began operations at Columbus, New Mexico, under the command of Captain Benjamin D Foulois, as part of the expedition to the Mexican border. Its equipment consisted of 8 of the 13 airplanes then in commission all of which were in poor shape.

America's first air operation was a dismal failure. The 8 plane squadron was ordered, on its initial mission, to the Mexican city of Casas Grandes, for immediate operations. One plane turned back to Columbus with a defective engine. Three more became lost and were forced to land near different Mexican towns; one of the three crashed on landing and the pilot walked to Casas Grandes. The other four were forced down by darkness. A reconnoiter on the following day encountered further difficulty. One plane was unable to attain sufficient altitude to cross the Sierra Madre mountain range; another got caught in wind gusts, cracked up while landing. The Aviation Section's first venture into tactical operations had not met expectations.

The First Aero Squadron remained at the border for a month, carrying mail and dispatches between Columbus and Colonia Dublan, and scouting for friendly and enemy troops. Finally on April 22, the entire squadron returned to Columbus, its first war service over, 6 of the 8 airplanes had been abandoned or destroyed; the other two had to be condemned.

The border incident proved the need for higher powered aircraft, and with a new appropriation of \$500,000, the largest ever received up to that time, the Aviation Section was able to purchase 12 planes of considerably more horsepower than had been in service.

On May 20, 1916 Lieutenant Colonel George O Squier assumed command of the Aviation Section. A field officers' course in aeronautics was established at San Diego. A new flying school was opened at Hazelhurst Field, Mineola, New York, and others at Chicago and Memphis. Certain civilian flying schools then in operation were also given contracts to train Army flyers.

On June 3, 1916, the National Defense Act was passed. One of its provisions strengthened the Aviation Section to 148 officers, the enlisted figure to be set by the President over a period of five years. At the end of June, the Aviation Section had 61 of its allotted 148 officers and 248 enlisted men.

The year 1917 was one of expansion for the Aviation Section, occasioned by World War 1. It was also a year of problems, for there were numerous obstacles in the way of aeronautical growth. Aeronautics had progressed in America very little from the first Wright flying machine up to the end of 1916, largely due to lack of government support and public apathy. There was little in the way of an aviation industry; in the 8 years which passed since the Army's acceptance of the first plane,

the industry had delivered only 142 planes to the Aviation Section. None of the Army's few flyers had enough flying experience for combat flying, and the Army's 55 planes were totally unsuited for battle. No officer was sufficiently familiar with aircraft guns or bombing mechanisms. But mothered by the necessity of war, ways and means were invented to surmount all of these obstacles.

At the outbreak of War in April, the Aviation Section consisted of 131 officers, only 78 were flyers, and slightly more than 1000 enlisted men, divided into seven squadrons. Two of these squadrons had not been completely organized.

On May 23, 1917, the French government requested that the United States reinforce air power on the Western Front by providing 5000 pilots, 50,000 ground personnel and 45,000 airplanes by early 1918. It was a staggering request. It meant turning out 12,000 service planes, as well as 9900 training craft, a stupendous total of 21,900, which would require 43,800 engines. Even these totals were shortly increased. This was truly a tremendous program, but after careful deliberation, it was decided that its accomplishment was possible. The request was approved on June 27, 1917, and on July 25 Congress promptly appropriated \$672,000,000 and America's air potential went to work. The same act authorized an increase in personnel, modified flying ratings and pay, and provided for the officer and enlisted reserves.

American Flying units began arriving in France in the fall of 1917. The First Aero Squadron, now commanded by Major Ralph Royce, arrived on September 3, and was followed shortly thereafter by 8 other squadrons, and balloon companies. These squadrons took combat training under the tutelage of the experienced French pilots, Amanty, and Epiez. They flew in French aircraft while awaiting the delivery of the latest combat planes.

The Aviation Section's first combat action came on April 12, 1918, when the First Aero Squadron was attacked by enemy planes while on a reconnaissance mission. Two days later, Americans won their first victory, when Lieutenant Alan F Winslow and Lieutenant Douglas Campbell shot down two German planes over the Toul airdrome. On June 12 the 96th Squadron entered action with a bombing mission against the railroad yards at Dommary-Baroncourt, near Metz, the results of which were highly successful. The 96th Squadron continued its daylight bombing activity until July 10th when the squadron was reduced to only one plane after an unfortunate landing of a flight at Coblenz. However, a supply of new French Brequet planes was obtained on August 1 and the 96th resumed operations. On September 10, the 1st Day bombardment group was formed, with the 11th, 20th, and 166th Squadrons joining the 96th. The new squadrons used De Havilland 4 type aircraft, powered by Liberty engines.

In addition to the French aerial offensive, a number of flying officers were sent to Italy, and after undergoing training in the Italian Caproni machines, 96 American pilots saw service with the Italian squadrons. From June 20, 1918, until November 2 of that year, these pilots flew a total of 587 hours over enemy lines and participated in 65 bombardment missions.