

The Birth of American Airpower

WORLD War I began a hundred years ago this summer, barely a decade after the Wright brothers' first flight in December 1903. Despite the head start and advantages that came from being the pioneer of heavier-than-air powered flight, the United States lacked any semblance of airpower when it eventually entered World War I in 1917.

The royalties the Wrights attempted to extract from other US inventors deterred other Americans from entering the field, stunting the growth of aviation. As a result, Europe raced ahead of the United States in the air prior to World War I. Not surprisingly, the Europeans raced further ahead during the war.

In 1914, the Aviation Section, US Signal Corps, had roughly 50 airplanes. Many were not fit to fly. None were fit to fight.

American volunteers headed to France to join the Lafayette Escadrille and the Lafayette Flying Corps, where they served with distinction before the US officially entered the war. (Much more about the Lafayette Escadrille can be found beginning on p. 52.)

By 1917, airpower's importance had been clearly demonstrated as the war raged "over there." In three years, specialized European fighters, bombers, and reconnaissance aircraft were developed, engaged in daily battles, and in many cases quickly became obsolete. Incredibly, more than 200,000 aircraft were built for use in World War I. Of these, it is estimated that more than 150,000 were shot down or crashed.

In sorry contrast, the US Aviation Section began the war with fewer than 250 aircraft, none of them state-of-the-art.

In the US, long-standing patent battles only ended when Franklin Roosevelt stepped in. Roosevelt, then the assistant Navy secretary, convinced the primary US manufacturers to enter the Manufacturers' Aircraft Association in 1917. This patent pool lowered royalty payments and allowed the manufacturers to share patents and technology and thereby increase production.

American commitment to airpower changed rapidly when the US entered the war in April 1917. On May 24, the French government called on the United States to build 16,500 airplanes "of the latest type" by 1918.

Congress went even further and appropriated \$640 million for 22,625 aircraft and 45,200 engines to be delivered by the end of 1918—all of unspecified types. Given that in the preceding years, American industry had built only about 200 aircraft, it was an impossible dream. The appropriation wasn't too little, but it was too late.

After years of neglecting the airpower mission the money was now rolling in, unrealistic targets needed to be met, and many decisions were made in haste. In June 1917, Maj. Raynal

US air forces lagged the Europeans in both numbers and capability.

Bolling took a team to Europe to select which types of aircraft to manufacture.

For the rest of the war, American aerospace efforts were perpetually playing catch-up. The technology was advancing rapidly, and various European designs consistently outclassed US-built offerings.

The de Havilland D.H.4 (called the DH-4 in the United States) was the most successful European transplant to US production, but it was already obsolete by the time domestic manufacture began.

The frantic, if sometimes misdirected, efforts paid off—but not always the ways people anticipated in 1914. The Air Service sent almost 80,000 personnel overseas and had 740 combat aircraft at the front on Armistice Day. Only 196 of them were of American manufacture.

US aviators shot down 765 German aircraft, 76 German balloons, and flew more than 35,000 hours over the front lines. The top seven American aces of the war (Eddie Rickenbacker, Frank Luke, George Vaughn, Field Kindley, Elliott Springs, Reed Landis, and Jacques Swaab) combined for 101 official kills.

Erwin Bleckley, Harold Goettler, Luke, and Rickenbacker all earned Medals of Honor for their heroism in the skies over France—but of the four, only Rickenbacker survived the war.

Roughly 170 American aviators died in combat—but 681 perished near the

front lines overall. In a testament to how dangerous flight still was at this time, more than 500 US airmen died in accidents.

Ultimately, it was America's entry into the war that sealed victory for the Allied powers. The US forces were late to the scene, but they were fresh, skilled, brave—and were not worn down by three years of the meat grinder on the continent.

On Nov. 11, 1918, World War I mercifully came to an end. Almost immediately, an early example emerged of what would become a common theme in later decades.

Congress and the American public let airpower atrophy, deciding that its benefits no longer justified the expense. The US was forced to again quickly build up from low levels for World War II.

Other drawdowns took place after the Korean War, Vietnam War, and Cold War. Each time the nation was later forced to rapidly rearm when the world proved less peaceful than hoped.

Airpower made amazing strides in the 15 years between 1903 and 1918. The Air Force's advances over the past 15 years have also been impressive—especially in the areas of command and control, intelligence, surveillance, and reconnaissance, and precision attack.

Still, there are fundamental differences between then and now. In 1914, the US did not have the best equipment or the best-prepared forces in the air. Today, generally speaking, it does.

A century ago, the US rapidly built up its air forces when it entered World War I. In recent years, USAF has gotten significantly smaller while still at war.

Hopefully the nation will not repeat the mistake of allowing airpower to needlessly wither away in the coming years. World War I shows how today's dominance in the air is not a birthright and cannot be taken for granted. Air dominance is perishable and can be quickly lost if not reinforced.

Today's Air Force is uniquely able to exert American influence, deter enemies, and win battles. No one knows when the US will be forced to fight again, but we can be sure that it will. ■