

American aviation during wwi

[Engineering](#), [Aviation](#)



U. S. Aviation during World War I American aviation was in its infancy when the United States entered WWI in 1917. Most U. S. pilots were untrained in air combat and using aircraft that were less sophisticated than their enemies. When the U. S. joined the allied forces in April of 1917, it had 56 pilots and less than 250 aircraft, which were all obsolete. In July of 1917, congress appropriated \$640 million to form 354 combat squadrons. There were no industries in the U. S. at this time manufacturing aircraft.

With a few trial and errors supported by the government, the Bureau of Aircraft Production and a separate Division of Military Aeronautics were established. The new industry produced 11, 754 aircraft and the Army set up 27 primary flying schools in the United States. American pilots would not be able to utilize these resources until the end of the war. Many of the sorties flown by U. S. aviators were in foreign aircraft. Some of the airframes used were the Salmson observation airplanes, Spad XIII pursuits, Havilland DH-4's, Breguet 14's, and some French balloons.

Although many of these airframes helped win decisive air battles, they were no comparison to the German Fokker. Fokker was a Dutch aircraft manufacturer that began producing planes in Germany. The “ Fokker Scourge” had revolutionary armament and was the most feared airframe during WWI. An American pilot by the name of Eddie Rickenbacker recalls in his book “ Fighting The Flying Circus” an opportunity to trade a German pilot his life for his Fokker aircraft.

Although the United States aviation units lacked training and sufficient aircraft, they were still able to make a difference in WWI and go on to have

air superiority almost one hundred years later. This could be accredited to winning decisive battles and the U. S. being a “ learning organization. ” With the employment of balloons and fixed wing aircraft for trench warfare {text: soft-page-break} reconnaissance, the U. S. was able to save thousands of soldiers while delivering bombs and bullets from the sky. American military leadership saw the importance of this resource and has budgeted in reconnaissance aircraft ever since.

With trench warfare, a stalemate would often develop with both sides having neither an advantage nor a disadvantage. Having air reconnaissance would prove to be valuable in collecting intelligence on enemy positions. These same aircraft would be fitted with bombs to clear forward enemy trench lines and to destroy their rear supply. Air recon planes were outfitted with an observer who would map out enemy strongholds while documenting the size and weapons of the enemy. Aerial reconnaissance later on becomes one the main focuses of the U. S. military.

Reconnaissance aircraft during WWI were large, bulky, and slow. This made it easier for enemy ground troops to shoot down and smaller, faster aircraft to destroy. The Allied and Axis powers both began to send out fighter aircraft to protect these recon planes and to destroy any enemies they came in contact with. This use of smaller, faster, well armed aircraft helped usher in the age of supersonic fighters in modern day warfare. WWI demonstrated the importance of fighters and the U. S. has invested a lot of resources and research into their improvement.

The United States was involved in various amounts of strategic battles during the last two years of the war. Some of these battles would mark the beginning of America's race for air superiority and the need for heavily-armed aircraft. At the Battle of St. Mihiel, Billy Mitchell was given control of 1, 4821 aircraft, only 40% being American. “ It was the largest air force ever assembled for a single operation, consisting of 366 observation airplanes, 323 day bombers, 91 night bombers, and 701 pursuits. ” Pilots reported the destruction of roads and balloons and {text: soft-page-break} aircraft shot down.

The American Air Service being inexperienced in air warfare were undertaking an ambitious air campaign that was unheard of at that time. Although St. Mihiel was not a complete success, Col. Mitchell helped create an independent American Air Force that believes that whatever the opposition is, no mission would ever be turned back. Billy Mitchell took intensive courses on aeronautics taught by allied pilots. “ What they had to say and even more, what they were doing, converted him to a theory of air power still unappreciated in the United States. Billy Mitchell understood the importance of air power and how vital it would be to win future wars. He believed this so much that in 1925, he accused Army and Navy leaders of an almost “ treasonable act of national security” when he did not receive the funds asked for. Mitchell was court-martialed and retired shortly afterwards. He has been considered the father of the U. S. Air Force and B-25 Mitchell was named in his honor. During WWI, Germany had established air superiority with its flying command “ The Flying Circus” led by the German Ace, Baron Manfred von Richtofen. The “ Red Baron”, hich he was commonly

known, had eighty aerial victories. The Baron and his fleet of Fokker's would be America's biggest challenge in getting the upper hand in aerial warfare. Captain Edward Rickenbacker, of the American 94th Aero Pursuit Squadron, was just the man to take on such a powerful foe and make a difference. “Eddie” Rickenbacker was America's “Ace of Aces” who accounted for twenty-six aircraft shot down. Twenty-two of airframes were airplanes and four of them were balloons. On September 25th, 1918, Rickenbacker downed two planes on his lone attack on seven German planes.

Rickenbacker received the Congressional Medal of Honor for this in 1931. {text: soft-page-break} Captain Rickenbacker was not only an exceptional pilot, but he understood the importance of having a great airframe in the U. S. Army's arsenal. Rickenbacker, and many other U. S. pilots, only had access to substandard aircraft and in many cases, had to borrow from other countries. During a raid in September of 1918, Captain Rickenbacker and Lt. Coolidge (son of Calvin Coolidge) encountered several German enemies over Grand Pre. Lt. Coolidge, one of the best pilots in the 94th Aero Pursuit Squadron, was shot down.

Rickenbacker went on to shoot down several German planes before heading back to Allied territory. Rickenbacker noticed a German Fokker on his way back who's engine had apparently stalled. Rickenbacker found himself in a curious position and decided that instead of shooting him down, he would bring his “prize” back intact. As the German Fokker began to sail down in the direction Rickenbacker had guided him, another aircraft (Rickenbacker was not sure if it was French or American) came out of nowhere and

destroyed the plane. “ So nearly had I succeeded in capturing intact a most valuable Fokker from Germany's most famous Squadron! Captain Rickenbacker and many other American pilots understood the importance of having the upper hand in air warfare. They understood that wars can be won from the sky and great aircraft were needed for this to happen. More pilots lives were lost due to aircraft malfunction than to enemy artillery. Life was short during World War I and American pilots lived it valiantly. This brought the need for safer, reliable aircraft in the U. S. military. With the military's purchase of 11, 754 aircraft near the end of the war, the U. S. was on its way to air superiority.

Some of these planes were cut from the budget after WWI, but soon became a focus during World War II. {text: soft-page-break} Aeronautical achievement by the end of World War I, had won favor not only by the American military, but with the American public. H. G. Wells writes “ Every aviator who goes up to fight, will fight all the more gladly with two kindred alternatives in his mind, a knighthood or the prompt payment of a generous life assurance policy to his people. Every man who goes up and destroys either an aeroplane or a Zeppelin in the air should, I hold, have a knighthood if he gets down alive. World War I battles involving aviation helped spark America's race for air superiority. Military leadership recognized the role aviation would play in future wars and protecting our homeland. More funds and resources were generated to acquire the best aircraft and the best pilots. Without American involvement in such battles as the “ Battle of St. Mihiel”, America might have joined the aerospace race even later and met with defeat. Billy Mitchell and Eddie Rickenbacker were also very important

players to bring about the new dawn of American aviation, Aerospace Expeditionary Forces.