

How They Trained

Years ago, an aviation enthusiast in England sent me a letter asking if I knew of any World War I aviation documentary films in the United States. He said he'd already contacted the Pentagon and the U.S. Embassy in London, and was told that none existed. He found that hard to believe, as did I.

So began what has turned into a two-decade-long, on-again, off-again search for historic documentary footage related to WWI aviation.

Even though the film cameras of the day—heavy wooden boxes with crude, brass-encased glass lenses, metal hand cranks, and ungainly tripods—were cumbersome, they did manage to record many key events of the Great War. In fact, from 1914 to 1919, the major combatants exposed millions of feet of 35-millimeter film. Unfortunately, due to film decay and disposal practices, only a small percentage of the footage can be found today.

American WWI films were shot in Europe, as history happened, by courageous soldier-cameramen with the U.S. Army Signal Corps. The films that found their way to the States after the war were moved to the National Archives in the late 1930s. Today they are considered official records of the U.S. government and are preserved at the Archives as part of the world's largest film collection, with holdings of over 360,000 reels, most of which reside in College Park, Maryland, just outside Washington, D.C.

Unfortunately, very few of the motion pictures show airplanes in action. Of the thousands of WWI-related reels in the Archives, I discovered only 71 titles that document any aviation activities. And half of those consist of only a few scenes.

Still, there are a few gems. *Aviation Training in the United States*, which runs about 11 minutes, includes the only known footage of U.S. Army pilots training “over here.” Army cadets are shown undergoing flight instruction, and there is extensive footage of a Curtiss “Jenny” airplane in flight. The film was shot primarily at the recently reopened Kelly Field in San Antonio, Texas, in 1917 and 1918, and was loosely re-edited by the Army in 1936.

Not only is the film in superb shape after 90 years, it includes a number of rare scenes. It's the only film I've found that shows the Artillery Spotting Classroom in use. Cadets in the specially designed classroom would sit high above a large battlefield diorama and survey simulated artillery hits on “enemy” targets. The cadets would then check their maps, identify the location of the hits, and practice sending correction reports to the battery command post via Morse code.

Another sequence shows a cadet's first solo flight, starting with a complete preflight check of a JN-4 Jenny. The student is then seen in the Jenny's rear cockpit as the instructor on the ground waves goodbye, the engine is gunned, and the airplane begins to roll. Then, as the Jenny lifts off and climbs, we see an exceptional view of the cadet (shot from a camera in the front cockpit). (I doubt the person doing the flying was a cadet—this one looks way too calm to be on his first solo. More likely, for safety's sake, an instructor posed as the student.)

The last noteworthy sequence features aerial views of a Jenny as it taxis and takes off. Two Jennies are seen in mock combat, and one of them does a loop. As the cadets watch from the ground, the Jenny completes three loops and a single flat spin. An instructor grades the aerial demonstration as the Jenny flies upside down. Next is an aerial view from a Jenny as it follows another Jenny low over some hangars and lands on the field. This is the only known WWI-era footage showing both aerial and ground perspectives of the Jenny doing aerobatics.

We're lucky to have it, along with other holdings in the Archives collection, such as *Warriors of the Air*, *Scenes of the French Army Air Service*, and *Activities of Balloon Companies in the AEF, 1918*. Because of films like these, I can say to that enthusiast in England whose letter started me on my hunt years ago: "Have you ever seen a squadron of DH-4 'Liberty' bombers taking off on a mission over the trenches? You can now, in glorious black and white!"

*A retired U.S. Air Force officer, [Phil Stewart](#) has been a historical film consultant, TV producer/director, multimedia manager, and author for more than 30 years. His new book, *War Wings: Films of the First Air War*, describes in detail the 71 WWI aviation films in the National Archives.*