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Air-Pre 1941

AIR OPERATIONS, WWI

A Working Bibliography of MHI Sources

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During WWI, before entry of U.S. in Apr 1917, individual Americans had volunteered as pilots in the air forces of Britain and France. Canada did not create a separate air branch or put distinctive air squadrons into combat; instead, more than 4,000 Canadians served individually as pilots in the British Royal Air Force. In addition to Canadians, the RAF also recruited U.S. citizens--unofficially, of course. After America's entry, an RAF recruiting office opened in New York City.

A search did not pinpoint the exact number of American pilots who served in the Royal Air Force. The Final Report of Chief of Air Service states that 216 U.S. Army pilots were sent to the RAF after Apr 1917. Some served in various British squadrons and the rest formed two exclusively American units within the RAF: the 17th and the 148th Aero Squadrons. Cooke (cited below) lists 18 American aces with the RAF. Incidentally, 82 US pilots trained and served with the Italian air force.

Nearly 200 Americans flew combatively for France during the war, but only about one-quarter of them in the famed Lafayette Escadrille. The rest were integrated into other French units. When the American Expeditionary Forces reached France, many of the American pilot volunteers already in the French and British air forces were accepted into the U.S. Air Service and the Naval Air Service, but some chose to remain with the foreign air forces. Many former members of the Lafayette Escadrille formed the nucleus of the U.S. 103rd Pursuit Squadron. U.S. Army personnel officially assigned to the British RAF were eventually transferred to the AEF. See:

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Research Note: Origins of Formation Flying

Although heavier-than-air flight is an American invention, the European nations were much quicker to grasp the military applications of the airplane. By the outbreak of the Great War, Germany organized more than 200 serviceable military aircraft into 41 detachments of 5-6 machines each, while the US had only a single squadron of 8 aircraft.

German aviators had advocated formation flying as early as 1913. Major Wilhelm Seigert, one of the principal German air power advocates, led detachments of aircraft on several cross-country flights. John R. Cuneo notes on page 108 in his book Winged Mars: The German Air Weapon, 1870-1914 (Harrisburg, PA: Military Service, 1942; UH15.C8v.1) that Major Seigert "lent" medals to the aviators who completed these flights.

Formation flying was unknown during the first months of war because of aircraft shortages and a prevailing spirit of independence among the pilots (Cuneo, Vol 2, p. 227). The first encounter with a large German formation (coordinated or happenstance?) made an impression on the British and is recorded on p. 136 of the official history War in the Air by H.A. Jones (Oxford: Clarendon, 1928; D602.R25v2).

German fliers Oswald Boelcke and Max Immelmann are generally considered to have been the originators of the first aircraft formation doctrine. Boelcke felt that he could not successfully concentrate on an attack and at the same time worry about being surprised by another enemy aircraft. Boelcke and Immelmann worked as a team, or "Kommando", to destroy Allied observation aircraft. They passed on their new-found tactics to other pilots in their squadron. Ref: Edward H. Sims, Fighter Tactics and Strategy, 1914-1970 (NY: Harper, 1972; UH200.S5), pp. 17-18.

The British responded by developing formations of their own. See the pertinent order from Jones (War in the Air, p. 156), which describes the formations to be used to combat the "Fokker Era." The contest for control of the air was to continue for the remainder of the war, with each side trying to develop superior tactics and machinery.