

LIKE A THUNDERBOLT

The Lafayette Escadrille and the Advent of American Pursuit in World War I

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Roger G. Miller

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Air Force History and Museums Program Washington, D.C. 2007

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The maps are from *Hat in the Ring: The Birth of American Air Power in the Great War* (Washington, D.C.: Smithsonian Institution Press, 2003), with special permission from the author, Bert Frandsen, Command & General Staff College, Maxwell AFB, Alabama.

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The Eagle

He clasps the crag with crooked hands; Close to the sun in lonely lands, Ring'd with the azure world, he stands.

The wrinkled sea beneath him crawls; He watches from his mountain walls, And like a thunderbolt he falls.

Alfred, Lord Tennyson

Acknowledgments

As usual, numerous individuals provided exceptional support. Friend and colleague, Daniel Harrington, Air Combat Command History Office, Langley AFB, Virginia, reviewed the manuscript based on his knowledge of the Lafayette Escadrille, the Lafayette Flying Corps, and French spelling. Douglas Lantry, National Museum of the U.S. Air Force, Dayton, Ohio, collected documents on the 103rd Aero Squadron and photographs of the Escadrille. Bert Frandsen, Command & General Staff College, Maxwell AFB, Alabama, an authority on the 1st Pursuit Group, gave me the benefit of his extensive knowledge. In the Air Force Historical Studies Office, our historical research staff, Yvonne Kinkaid and Terry Kiss, provide abundant support; George Watson, Pati Wilson, and John C. Sullivan reviewed the manuscript while David Chenoweth waved his magic editorial wand. Mary Lee Jefferson found the title in the poem at left.

The errors that remain are mine.

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Gervais Raoul Lufbery (USAF Photo)

On the morning of May 18, 1916, a German LVG appeared in the sky over Thann in the Vosges region, near the ancient French city of Nancy. The LVG was a well-armed, two-seat observation airplane and the Vosges a quiet sector of the Western Front, in stark contrast to the merciless slaughter taking place to the north at Verdun. Normally the two airmen could expect to do their reconnaissance with little interruption, but on this day they had left luck behind. A speck appeared in the sky to the west and rapidly grew into an enemy pursuit aircraft, an avion de chasse, an agile, single-seat Nieuport. The Germans, busy at their trade, failed to see the enemy draw near. A veteran hunter or more cautious pilot might have seized the opportunity to surprise the LVG and launch an attack out of the sun or from behind a cloud, but this one approached directly, without guile. Suddenly aware of the danger, the observer seized his machine gun and began firing while the pilot turned the airplane toward the safety of the German lines. The chasse pilot closed to point blank range and, just as a collision appeared imminent, fired a quick burst, then swerved away. The encounter was over that quickly. Both the observer and pilot collapsed; the LVG rolled and plunged to earth; the Nieuport banked away leaving a plume of smoke to mark the scene of combat.

French troops witnessed the brief fight and by the time the Nieuport reached its field at Luxeuil-les-Bains had confirmed the kill. It was an auspicious event. Everything about the victorious aircraft said "France" except the pilot's name. Kiffen Yates Rockwell was an American citizen assigned to Escadrille N 124, known unofficially as *l'Escadrille Americaine*, and his victory was the unit's first. It was quick and impressive by contemporary standards of air combat. Rockwell had engaged at incredibly close range, almost sticking his gun into the enemy cockpit, but his daring attack allowed the LVG's observer to put a hole in the Nieuport's top wing main spar. Rockwell, in turn, killed the two men with only four bullets, a marvelous feat of marksmanship. Cheering comrades lifted him from the cockpit and began a wild celebration. A tradition began with N 124's first victory. Rockwell's brother Paul, serving elsewhere in the French Army, provided a bottle of eighty-year-old bourbon. Kiffen Rockwell took the first drink, but the Escadrille set aside the rest. From then on, credit for downing an enemy aircraft earned the victorious pilot a shot from "The Bottle of Death."

Introduction

The advent of an American squadron, or "escadrille," within the French air force, the *Service Aéronautique*, had been far from a simple process. French leaders initially held the belief, common at the time, that the war begun in 1914 would be a short one. The potential value of American volunteers fighting for France both

for propaganda purposes and for helping bring the power of the New World into the war on the side of the Allies was thus irrelevant at first. By early 1915, however, the French began to accept American volunteers and assign them to escadrilles. In early 1916, the *Service Aéronautique* united several of these men in an elite *chasse* unit, which quickly earned an enviable reputation for audacity, bravery, and élan.

Success of this unit, the Lafayette Escadrille, had three consequences. First, its existence encouraged a large number of Americans, far more than needed in one escadrille, to volunteer for French aviation. These individuals, identified unofficially as members of a "Lafayette Flying Corps," served in numerous French air units. Second, the publicity surrounding the Lafayette Escadrille contributed favorable press for the Allied cause, strengthened ties between France and the U.S., and ultimately helped prepare the U.S. to participate on the Allied side of the conflict. Third, the existence of a large body of experienced American pilots provided combat veterans for the Air Service of the American Expeditionary Forces (AEF) in France when the U.S. ultimately entered the war. These veterans helped instill in the U.S. Air Service the attitudes and practices of the Service Aéronautique, an infusion especially reflected in two U.S. pursuit squadrons, the 103rd Aero Squadron, made up of Lafayette Escadrille pilots, and the 94th Aero Squadron, the most famous American combat squadron of the war. Further, this body of veterans influenced all U.S. pursuit units as Lafayette personnel spread throughout the Air Service.

This was not the whole story, though. In early 1918, two pursuit units, the 27th and 147th Aero Squadrons, joined with the 94th and 95th Aero Squadrons to form the 1st Pursuit Group, the U.S. Air Service's first and most famous combat group and forerunner of the U.S. Air Force's present-day wings. These, however, were British-trained squadrons commanded by Royal Flying Corps (RFC) veterans, and they contributed a British ethos to the American pursuit force, an ethos characterized by emphasis on the offensive at all hazards. Finally, and perhaps most important, the U.S. Army officers who created and commanded the U.S. Air Service had their own shared identity and sense of professionalism, that of the regular U.S. Army and of the Military Academy at West Point.

By late 1918, the Air Service in France had begun to develop its own leaders who, whether imbued with the attributes of the French, British, or American systems, or a combination thereof, brought their own standards and practices to American pursuit. Perhaps no one epitomized this contribution more than the eventual U.S. ace-of aces, Edward V. "Eddie" Rickenbacker. The final result in the early 1920s was a distinctly American fighter force with a special sense of identity.

The Air War

The First World War began in the late summer of 1914. Ancient hatreds, imperial rivalries, entangling alliances, and rampant militarism provided tinder. A Serbian nationalist lit the spark, which burst into flames on August 6, and the resulting inferno quickly engulfed most developed nations. In western Europe, the war began with a powerful German onslaught that enveloped Belgium and seized much of northern France only to grind to a halt because of logistic problems and a desperate stand by French and British forces at the Marne River. Following that inconclusive battle, the opposing armies raced to the North Sea, building a wall of trenches in a vain attempt to flank the defensive lines each side established. Once the armies reached the sea and Italy entered the conflict in 1915, the Allies and the Central Powers faced each other across a fixed system of trenches that sundered Europe from the Atlantic Ocean to the Adriatic Sea, interrupted only by the neutrality of Switzerland. Subsequently, gripped by a military problem beyond their experience and pressured by political leaders and citizenry demanding victory, conventional-thinking generals resorted to a series of massive head-on assaults that accomplished little more than bleed their nations white. Commonplace names like Verdun, Somme, Passchendaele, Caporetto, and others codified the deaths of hundreds of thousands of men.

The fragile airplane was a significant contributor to this devastation. Ultimately, many air leaders would determine that the future of air power lay in bombardment, while air-to-air combat—"dogfighting"—would capture public imagination. In reality, however, it was the airplane in its reconnaissance role that had the most effect on the Western Front. Artillery was the great killer in World War I, and aerial reconnaissance vastly increased artillery's effectiveness. Aircraft crews photographed and mapped the trenches and military infrastructure, providing accurate targets for indirect fire and for the great bombardments that preceded the massive attacks. Crews from aircraft and tethered balloons reported transitory targets such as troop movements and provided direct target control for artillery batteries, enabling them to correct their fire. Most significantly, photographs and reports from aircraft, combined with other forms of intelligence, enabled commanders to build a picture of their opponent's intentions and organize their forces to best advantage.

The machines that evolved to accomplish aerial reconnaissance were generally single-engine, two-seat—pilot and observer—aircraft with a relatively large fuel capacity that extended range and endurance. A good rate of climb and the ability to operate at high altitude were other desirable attributes. In addition to his reconnaissance responsibilities, the observer provided defense against enemy airplanes, and after 1915, most observation aircraft were armed with at least one fixed machine gun firing forward and one or two flexible machine guns firing to the rear.

As airplanes became more critical players over the battlefield, air-to-air combat evolved. Air combat, however, was not an end in itself. The mission of pursuit aviation was to seize control of the sky—in more modern terms, to gain air superiority—enabling one's own aircraft to do their jobs and preventing the enemy's aircraft from doing theirs. Pursuit or *chasse* aircraft evolved into small, fast, maneuverable single-seat machines armed with one or two machine guns synchronized to fire through the propeller, with the pilot aiming the airplane rather than the guns. Pursuit pilots quickly became popular celebrities, romantic heros who provided a aura of glamor to the brutal conflict and an antidote to the anonymity of mass death in the trenches. The public idolized these individuals as chivalrous knights of the air and feted them handsomely. And not only the public. "Every flight is a romance, every record an epic," Prime Minister David Lloyd George, of Great Britain proclaimed. "They are the knighthood of this war, without fear and without reproach; and they recall the legendary days of chivalry, not merely by the daring of their exploits, but by the nobility of their spirit."¹

Origin of the Lafayette Escadrille

The United States immediately assumed the mantle of neutrality when the war broke out. President Woodrow Wilson decreed that the nation "must be neutral in fact as well as in name,"² and he would be re-elected in 1916 using the slogan, "He kept us out of war." Further, 1907 legislation encouraged noninvolvement by specifying that anyone who swore an oath of allegiance to a foreign nation lost his citizenship. Despite these attitudes and hurdles, some Americans sought to participate either through humanitarian efforts or through more direct involvement as combatants.

France proved especially attractive for volunteers. Some recalled French aid during the Revolutionary War and the ideals the two nations shared over the next century. "France and the United States," one commented, "were traditional friends, united for more than a hundred years by the bond of common idealism."³ Others knew France as the center of art, literature, culture, philosophy, and all that was good of the age. Many wealthy, influential Americans resided in France and considered themselves part of that nation's fabric. In August 1914, a group of these issued an appeal for U.S. volunteers to join the French cause. In response, at least ninety Americans enlisted in *le Légion Éntrangere*, the Foreign Legion, while others signed on with the Red Cross, or one of several volunteer ambulance services. Joining the French Foreign Legion was a way around the 1907 legislation, because volunteers pledged allegiance to the Legion, not to France. A few Americans sought to enter aviation directly, but French officials initially refused.

By early 1915, a need for qualified fliers began to be felt. Two U.S. citizens, Gervais Raoul Lufbery and Didier Masson, more French than American, opened a path. Lufbery was the friend and mechanic of French prewar flyer Marc Pourp. When Pourp joined the *Service Aéronautique*, Lufbery signed on as his mechanic, and when Pourp died in an accident in December 1914, Lufbery entered flight training. Masson, a prewar airman and adventurer, had flown during the Mexican Revolution and, among other exploits, dropped home-made bombs on an enemy gunboat. When the war began, Masson enlisted in the French infantry, then transferred to the *Service Aéronautique*, receiving his pilot's brevet in May 1915. They were joined in early 1915, by *Legionnaires* Weston "Bert" Hall, James Bach, and William Thaw II, and volunteers Elliott Cowdin and Norman Prince.

Serving with different escadrilles, flying a variety of aircraft and executing diverse missions, these Americans performed honorably, even heroically, creating confidence in volunteers from the U.S. Lufbery, Masson, and Hall proved reliable airmen. French leaders applauded Bach's effort to land spies behind German lines, though he was captured in the process. Cowdin and Prince received accolades for



William Thaw II and Whiskey, mascot of the Lafayette Escadrille. Paul Pavelka in the background.

their performance with a Voison bomber unit. And Thaw was in a class of his own, earning three citations and promotion to sergeant, all in one month. By December 1915, he had been promoted to *sous-lieutenant*, the first American to become an officer in the *Service Aéronautique*. The success of these men in combat could be cited as justification by those advocating an all-American escadrille.

Credit for the idea of an American escadrille probably belongs to Thaw, the scion of a wealthy Pittsburgh family. Educated in private schools and at Yale, he became interested in aviation in 1913, left college, and learned to fly. When the war broke out, he enlisted in the Foreign Legion. Sometime in late October 1914, watching an airplane circle above the lines, Thaw announced that someday a squadron of American volunteers would fly for France, an idea that he broached from time to time to whatever French officials were handy. In the meantime, Prince, a Harvard graduate and attorney from a wealthy Massachusetts family with estates in France, conceived the idea of an American squadron while learning to fly at the Burgess Flying School at Marblehead, Massachusetts. In Paris in January 1915, Prince began soliciting support from prominent Americans and meeting



Dr. Edmund L. Gros

French officials. Also, a distinguished, San Francisco-born resident of Paris, Dr. Edmund L. Gros, concluded that the energetic, enthusiastic young ambulance drivers who had volunteered to serve France would fit perfectly in aviation. He, too, began lobbying for an American squadron.

Dr. Gros's position in the American community and connections with French authorities proved indispensable. In June 1951, he and M. Jarousse de Sillac, an undersecretary in the Ministry of Foreign Affairs, established the Franco-American Committee, which provided a voice for those who advocated an American squadron. On July 8, they sponsored a luncheon with influential French and American supporters for Gen. Auguste Hirshauer, the Director of the *Aéronautique militaire française*. During the gathering, they convinced the general that an American squadron offered substantive benefits for the French army and for Allied victory. General Hirschauer promised to establish an air squadron to be called *l'Escadrille Americaine*.

On August 21, 1915, the general announced that the Americans then serving would be grouped into a single squadron. For future volunteers, enlistment would be on an individual basis and all applicants would require proof of moral integri-

ty. They would enlist in the Foreign Legion with provision for transfer to aviation, would train in the same schools as French students, and would be subject to the rules and regulations of the French army. The Franco-American Committee recommended that medical fitness for flying be settled by examination in Paris; that if after enlisting, the candidate failed to demonstrate an aptitude for flying, he be released from the service rather than dumped into the infantry; and that volunteers be treated "with courtesy inspired by their generosity in offering their lives in the service of France." French officials had little problem offering Americans, now viewed as a national asset, special treatment. Whether they realized it or not, they had created an elite unit.

A period of waiting now set in as the French army settled details of organization, equipment, and training. Finally, on February 14, 1916, Col. Henri Regnier, the new Director of the *Aéronautique militaire française*, wrote the Franco-American Committee that a squadron would be formed with nine Americans already serving in front line air units. The battle of Verdun, then raging, caused further delay, but one month later, on April 16, 1916, the French activated Escadrille N 124.

An escadrille, was identified by the initial of the type of aircraft it flew and the number of the unit. Initially, N 124 flew Nieuport aircraft built by the *Société Anonyme des Etablissements Nieuport*, but, as will be seen, when Spad VIIs replaced the Nieuports in 1917, it became SPA 124. Spad, more properly SPAD, was the abbreviation for *Société Pour l'Aviation et ses Dérivés*.

While military considerations justified the new unit, the paramount reason for N 124's creation was political. French military and civilian leaders recognized that a unit of American volunteers fighting in French service at the front was powerful propaganda. It symbolically united the destinies of the two nations and, neutrality or no, served as a symbol of American commitment.

This recognition played a critical role in the type of unit established, as did the timing of its creation. Had the unit been sanctioned in early 1915, it might have been organized as a work-a-day observation or bombardment unit. An American escadrille would have served effectively in either role, but it would not have had the propaganda value of a glamorous pursuit unit. By early 1916, pursuit aircraft had become ascendant in the public mind. Pursuit was where individual airmen demonstrated heroism, where they earned personal glory and died heroic deaths. The names of individual pilots and the units they flew with were already achieving legendary status, and N 124 and its pilots would have the opportunity to join these. The American unit was established as an *escadrille de chasse*. N 124 would be a squadron of hunters.

Moreover, France had just fielded the Nieuport 11, its first true *chasse*, a fast, highly maneuverable machine capable of matching the Fokker Eindecker and its synchronized machine gun, which dominated air combat by the end of 1915. The Nieuport, known as the *Bébé* because of its diminutive size, was powered by an 80 h.p. air-cooled Le Rhône rotary engine. For armament, the Nieuport mounted a drum-fed Lewis light machine gun on the top wing to fire over the propellor arc. In early 1916, French industry was unable to produce enough Nieuports to meet demand, so elite squadrons received them first. It was a significant measure of the

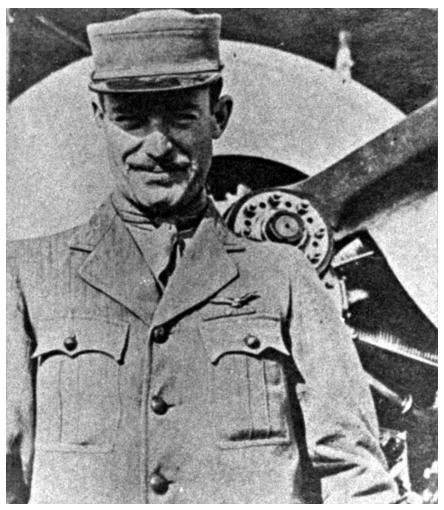


Luxeuil-les-Bains, May 1916. (L. to R.) Bert Hall, Bill Thaw, Georges Thénault, Alfred de Laage, Kiffen Rockwell, Elliot Cowdin, James McConnell, Norman Prince.

importance accorded *l'Escadrille Americaine* that N 124 flew the highly prized *Bébé*.

Along with its Nieuports, N 124 had an additional advantage. It was composed of experienced airmen. The French commander was Capt. George Thénault, a career officer who had been associated with aviation since the beginning of the war, including a stint as commander of Escadrille Caudron (C) 42. Thénault was a skilled pilot and exceptional leader who set an example by flying combat patrols with his men. Lt. Alfred de Laage de Meux, Thenault's second in command, was a pre-war gentleman farmer known for his flying ability. The initial American members were William Thaw, Kiffen Rockwell, Victor Chapman, James R. McConnell, Victor Prince, Bert Hall, and Elliott Cowdin. Most came from prominent, wealthy families, and all except Hall were well educated in elite schools.

N 124 formed at a field near Luxeuil-les-Bains, a resort in the quiet Vosges sector. Captain Thénault assembled ground personnel, transportation, and support equipment, and by April 19 four pilots were on hand. The outfit went first class. The pilots took rooms at a villa next to the famous hot baths of Luxeuil, while Thénault and de Laage put up at the finest hotel. "Everything was brand-new, from the fifteen Fiat trucks to the office *magasin*, and rest tents," McConnell wrote. "And the men attached to the *escadrille*! . . . [M]echanicians, chauffeurs, armorers, motor-cyclists, telephonists, wireless operators, Red-Cross, stretcher bearers, clerks! Afterward I learned they totaled seventy-odd, and that all of them were glad to be connected with the American *Escadrille*."⁴ N 124 was officially activated on April 20, 1916, before its airplanes arrived.



Kiffen Rockwell

N 124 Goes to War

Crates containing six Nieuport 11s appeared during the first week of May, and the Escadrille flew its first mission on May 13, a five-aircraft "V" or wedge formation led by Rockwell with Chapman and McConnell behind him, while the more experienced Thenault and Shaw flew the vulnerable flank positions in the rear. Although the patrol flew deep into German-controlled territory, the enemy failed to appear. Five days later, however, Kiffen Rockwell earned N 124's first victory, as already described, using the tactics that would characterize him during his short life. Totally disdaining surprise and oblivious to return fire, he approached to point blank range before pressing the trigger. N. 124 was unable to celebrate Rockwell's victory or enjoy the luxury of Luxeuil long. On May 19, Thénault suddenly received orders to move the Escadrille to a field at Behonne near Bar-le-Duc in the Verdun sector. Verdun was perhaps the most brutal battle of that horrific war. Following a devastating artillery bombardment, a massive German force had attacked on the morning of February 21, 1916, and seized an extensive portion of the front lines, a position so critical that the French had to recapture it or possibly lose the war. The German strategy was for the French army to literally destroy itself through attrition. Unfortunately for German planners, however, attrition flowed both ways and the French army proved able to endure the losses that retaking the lines entailed. The battle dragged on for ten months at a terrible cost, ending finally on December 11. The combatants lost over a quarter of a million men dead and another half million wounded. The French Army stabilized the Western Front, but paid a terrible price. To French troops, Verdun was known simply as the "Meat Grinder."

The air forces of both sides played a major role in the inferno. German observation aircraft had mapped and photographed the French trenches, supply routes, and infrastructure before the attack. The Germans assembled twenty-one of the vaunted Fokker Eindeckers, concentrating its pursuit force for the first time. This force achieved local control of the air and the German attack was a surprise. Once the battle was engaged, observation and bombing aircraft from both sides actively supported the ground forces. The French countered with the Nieuports and also by concentrating its *chasse*, combining escadrilles to form groups. Additionally, the French assumed the strategic offensive. The *Service Aéronautique* went after the German air force wherever it could be found, often far behind the lines. Instead of initiating its own air offensive, the German response was to take observation and bombing aircraft off their duties and add them to the defensive "aerial umbrella," a tactic that met with little success. The French were ascendant over Verdun.

N 124 transferred from Luxheuil to Behomme on May 20. Already based at Behonne was *Groupe de Combat 12*, known as *Les Cigognes* (the Storks), four veteran squadrons that featured already legendary aces, such as Alfred Heurteaux, René Dorme, and Georges Guynemer. Also on hand was N 65, with the fearsome Charles Nungesser. The Escadrille spent a day setting up equipment and establishing quarters in a comfortable villa at nearby Bar-le-Duc. As the Americans arrived, however, French tactics changed for the worse. Pressured by ground commanders, French air leaders established a system of sectors patrolled by small units at designated times. The system was defensive in nature, and the *chasse* pilots would pay a heavy price before they were allowed to resume the offensive. N 124 flew its first patrol on May 22, at 1,000 feet, low enough to see the brutal fighting and be threatened by errant artillery shells.

N 124 quickly settled into a standard routine. Normally, a French escadrille of twelve to fifteen planes divided into three flights. The first patrolled the front; the second stood alert on the flying field with the pilots dressed and engines warm; and the third slept or rested. This routine was only interrupted by special assignments, emergencies, or poor weather that grounded the airmen. An escadrille flew either

offensive or defensive patrols. The former were flown over German-held territory to protect observation or bombing planes, to find and destroy enemy aircraft, to spot troop movements, or to strafe enemy positions. The latter protected Allied balloons, aircraft, or ground positions, and dealt with enemy aircraft that entered French territory. Under this system, combined with the stress of combat flying, the pilots were perpetually tired, and rainy or foggy days provided a cherished opportunity to catch up on much-needed sleep.

French escadrilles flew defensive patrols at three different altitudes. The "low patrol" at 3,000 feet operated just in front of the Allied balloon line. The "intermediate patrol" flew at between 10,000 and 12,000 feet protecting the low patrol. The "high patrol" flew as high as the aircraft could operate, around 15,000 feet and occasionally higher, and protected the intermediate patrol. The high patrol was exhausting even for the toughest pilots, since they flew without oxygen and in intense cold.

A patrol usually lasted two hours, the Nieuport's fuel limit, and normally flew in "V" formation with the gaily-marked patrol leader at the point and the most experienced veterans in the vulnerable positions at the rear. The patrol flew an irregular pattern rather than a straight line to prevent surprise from enemy aircraft and throw off the aim of anti-aircraft guns. If a patrol spotted the enemy, it automatically sought higher altitude and a position in the sun from which to launch an attack. The patrol leader also ensured that the target was not bait for enemy hunters and that his unit was in sufficient strength to make a successful attack. Beyond the regular patrols, experienced veterans could also hunt solo, a dangerous practice, but one followed by many of the best French pilots.

In the Verdun sector, the Escadrille began several weeks of patrols that often led to wild, intense melees. N 124 handled itself well, although it did little damage to the enemy during the period. Bert Hall brought down an enemy airplane on May 22, while Thaw surprised an Eindecker two days later: "I just murdered him," the laconic Thaw told his comrades. "He never saw me."⁵

Despite Captain Thénault's leadership and example, at least one member of the Escadrille displayed the rashness of poor air discipline. On May 24, Thénault took the Escadrille on a "grand scouting expedition." He spotted a dozen enemy two-seaters near Etain, but they were too numerous, too low, and too far across the lines to attack. Suddenly, however, a Nieuport broke formation and went after the Germans. The rest followed, unwilling to abandon a comrade. Rockwell, Chapman, and Thaw earned citations for bravery during the ensuing fight, but Thaw took a bullet in the elbow that put him out of action for weeks. It was a costly breach of air discipline, and Thaw paid the bill.

A similar incident on June 17 suggests that the undisciplined airman was Victor Chapman. On that date, he was part of a formation patrolling the Meuse River when enemy aircraft appeared. Chapman went for them immediately, although they were far across the Meuse. The other pilots had no choice but to follow. In the swirling maelstrom that followed, no one did much damage. Later that day, Chapman, on solo patrol, crossed paths with two observation aircraft escorted by three Fokkers and again attacked. One against five, and three of them well-

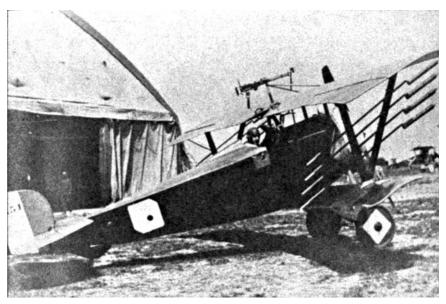


Victor Chapman.

armed Eindeckers, showed more guts than judgement. Chapman managed to shoot down one of the two-seaters, but the others hemmed him in, giving the American a deep scalp wound before he escaped. Such escapades gave *l'Escadrille Americaine* a reputation for audacity, but the potential for serious loss was all too apparent.

As the Escadrille gained experience, additional pilots brought it up to full strength. The first was Raoul Lufbery, who joined on May 24. In contrast to the educated, cultured members of the unit, Lufbery was a stocky, muscular loner who spoke poor English and was believed devoid of fear, or any other emotion for that matter. He was also a remarkable marksman and skilled mechanic who kept his machines in immaculate condition, and he would prove to be an able teacher, willing to mentor newcomers into the intricacies of air-to-air fighting. Lufbery and Thaw would become the soul of the Escadrille: "To see Thaw's big 'T' or Lufbery's Swastika on the wings of a neighboring plane was always a heartening sight when there were enemy machines in the vicinity," a veteran later wrote. "And how those young airmen kept the insignia in view until they mastered their combat tactics!"⁶

Other new arrivals included Clyde Balsley, Charles Chouteau Johnson, Lawrence Rumsey, Dudley Hill, and Didier Masson. They proved a mixed bag. The experienced adventurer, Masson, was a talented air warrior, while Johnson



Charles Chouteau Johnson in a Nieuport 16 armed with Le Prieur rockets.

and Hill would do well. Rumsey, however, turned out to be dependent on liquid courage, and Balsley lasted only a few days.

On June 18, Thénault led Prince, Rockwell, and Balsley into German territory. They found business, and during the subsequent fight, the beginner attacked a two-seater. Balsley fired twice before his gun jammed. Four enemy aircraft appeared while he was clearing the weapon. An explosive bullet hit him in the pelvis and he was lucky to survive the crash landing. Balsley endured several major operations and never returned to the air.

On June 23, Victor Chapman paid the price for his lack of discipline. He saw Thénault, Lufbery, and Thaw leave on patrol and followed. The formation ran into two LVGs with Fokker escorts and broke off after a short, inconclusive fight. Late to the fray, Chapman plunged in heedless of the odds. Unseen by his comrades, he attacked a Fokker and, in turn, was shot down by others. Chapman's death shocked the Escadrille, in which he was respected and beloved.

The loss of two pilots weakened N 124, but in mid-July it received reinforcement when the flamboyant ace from N 65, Charles Nungessor, joined temporarily. Nungessor, who habitually wore all his medals when flying combat and decorated his airplane with symbols of death, brought down his tenth kill while with N 124. In addition to Nungesser, Bert Hall and de Laage made kills, and Lufbery brought down his first three Germans, all in nine days.

In contrast to Rockwell and Chapman, the methodical Lufbery demonstrated patience and good judgement and quickly developed into a remarkable air tactician. "When he accepted or forced combat, he was always in the most favorable



Lafayette Escadrille pilots, including Didier Masson (5th from L.), William Thaw (6th from L.), and Raoul Lufbery (7th from L.).

position for attack," according to James Norman Hall. "We knew where to look for him, always very high, for he kept his altitude."⁷ He preferred to hunt solo and, rather than launching head-long attacks, methodically stalked his target, ensuring that it wasn't a decoy. Once certain of his target, Lufbery usually dove out of the clouds or sun and launched a devastating, close-range attack. After his fourth kill on August 16, Lufbery received the *Médaille Militaire*. He was well on the way to becoming the ace of aces of N 124.

It was not all victories. In mid-August, James McConnell overshot the landing field at dusk and crashed. A severely wrenched back put him into the hospital for months. And Elliott Cowdin, who disobeyed orders and quarreled continually with the other pilots, overstayed leave once too often. Rather than charge him with desertion, Thénault allowed Cowdin to resign. These losses were partially remedied by the arrival of Paul Pavelka, a professional adventurer who had served in the Foreign Legion.

On September 12, *l'Escadrille Americaine* received orders to leave its Nieuports behind and return to its original base at Luxheuil in the quiet Vosges. The pilots had done well at Verdun. They had flown over 1,000 sorties, fought in 146 combats, and brought down thirteen enemy aircraft at a cost of one dead and three seriously wounded. The Escadrille departed Behonne by train on September 14. Shortly after its arrival at Luxheuil, Robert Rockwell joined N 124, and on September 19, the first of its new Nieuports 17s arrived. These were similar to the *Bébé* in design, but, powered by a 110 h.p. Le Rhone rotary, were larger and faster with a good rate of climb. The aircraft mounted one belt-fed Vickers machine gun synchronized to fire through the propeller, but most of N 124's pilots also had a Lewis gun installed on the top wing.



Luxeuil-les-Bains, May 1916. (L. to R.) James McConnell, Victor Chapman, Mme. Voge, and Kiffen Rockwell.

The Americans were ordered to avoid combat for the time being, but they proved impossible to restrain. Soon, Lufbery and Kiffen Rockwell were hunting, alone or in pairs. On September 23, the two found Fokkers, but Lufbery's gun jammed. Rockwell, by himself, found an Albatross two-seater. As was his style, he disdained surprise and closed to point-blank range when an explosive bullet hit him in the throat. Kiffen Rockwell's death was a terrible blow to N 124, and his funeral a magnificent affair.

At Luxeuil, N 124 found a contingent of about fifty British fliers equipped with single-engine Sopwith "1 and 1/2 Strutter" aircraft. Powered by a 110 h.p. Clerget rotary, the Sopwith was a two-seater used for observation and bombardment in one version and as a pursuit in another. Surprisingly, the fliers were from No. 3 Wing of the Royal Naval Air Service (RNAS), operating far from the ocean. In a short time, it became apparent why N 124 and the RNAS were at Luxeuil. The restless imagination of Winston Churchill while First Lord of the Admiralty had led the RNAS to develop a long-range, strategic bombing capability, and the Allies planned a combined bomber offensive against industrial centers in southwestern Germany. Luxeuil, home of Groupe de Bombardment 4, had been selected as the primary base for the effort; and l'Escadrille Americaine was one of the chasse units chosen to fly escort. The campaign began on July 30, 1916, with an attack by three Sopwiths and six French bombers on Mülheim, but continued sporadically thanks to a diversion of aircraft to the Somme. On October 12, however, an armada of over sixty aircraft, a huge effort for the time, took to the air to bomb the Mauser factories at Oberndorf-am-Neckar, some 175 kilometers distant. The assault force comprised some 62 Sopwith, Maurice Farman, and Breguet bombers, while thirteen Caudron bombers provided a diversionary attack on Lörrach to the south. Seven Sopwiths, and a batch of Nieuports, including four from N 124 flown by de Laage, Prince, Masson, and Lufbery, furnished the escort.

The mission anticipated in miniature those that would come to characterize a later war in Europe. The main force feinted toward St. Die, then turned east shedding some aircraft with mechanical problems. Near the Rhine River, the escorts turned back to refuel at an advanced field at Corcieu. Between Colmar and Neu-Breisach, the bombers experienced heavy anti-aircraft fire and then were subject to almost continuous air-to-air attack until they rendezvoused with the escorts at the Rhine. The raid caused limited damage as the aircraft could carry only 660 pounds of bombs per Breguet, 125 pounds per Sopwith, and 110 per Farman. Only fourteen of the bombers reached Oberndorf, and several of these hit the wrong target. The cost was heavy, some fifteen aircraft and twenty-one men were lost. The Allied force claimed six enemy aircraft. Lufbery and Prince received credit for one each, and Masson literally shot one out of the air after his own engine had stopped. It was Lufbery's fifth, making him N 124's first ace. The three victories were followed by a serious loss, however. Landing at dusk on the unfamiliar field at Corcieux, Norman Prince failed to see a high tension wire. It tripped his Nieuport, flipping it into a cartwheel. Prince died three days later.

The combined bomber offensive continued at a severely reduced level for a time. Thirteen bombers hit the Thyssen works on October 23, and a similar force bombed the iron works at Volklingen on 10 and 11 November. Two additional raids went against Dillingen in November and December, but all of these were anticlimactic. A sustained bombing campaign by massed bombers was simply beyond the capability of the Allied air forces at the time, and the effort was abandoned. *L'Escadrille Americaine* spent a costly month at Luxeuil. The unit had shot down three enemy aircraft, but only four pilots had taken part in the great raid and two of its best men, Rockwell and Prince, had died. On October 17, Thénault received orders sending N 124 to Cachy in the Somme, where intense fighting had been taking place since July 1st.

The Somme offensive had grown out of Allied planning sessions begun in December 1915, which called for massive attacks by some twenty-five British and forty French divisions along the Somme River. The German attack at Verdun preempted the Somme attack and sucked huge numbers of French troops into that conflagration. The Somme offensive thus became a primarily British event. The offensive began on July 1, 1916, and the British lost 58,000 men on the first day. The Somme quickly bogged down into a brutal, head-to-head slugging match that cost the combatants over 600,000 casualties.

For the first time, senior commanders understood the need for air superiority as a prerequisite to proper air support for the ground troops. The result was a real air war. No one recognized this more than Maj. Gen. Hugh Trenchard, commander of the Royal Flying Corps, who stressed offensive action at all costs to attain air superiority. In June, German observation aircraft had managed to reconnoiter behind the Allied lines and had helped identify the location, direction, and scale of the coming offensive, but Trenchard brought in 386 aircraft to the German's 129, including the superior De Havilland DH–2 single seat pushers and Nieuports.



Luxeuil-les-Bains, May 1916. (L. to R.) James McConnell, Kiffen Rockwell, Georges Thénault, Norman Prince, and Victor Chapman. A tragic photo, all four Americans would die within the next few months.

Further, the Germans continued their defensive tactics, thus the Allies achieved and maintained air superiority in the early days of the offensive. The Germans were driven from the sky, but at an expensive price. The RFC lost 20 percent of its aircraft in the first few days. In August, the German High Command began transferring veteran air units to the Somme, many of them equipped with superb new Albatross biplanes armed with twin, synchronized machine guns. These were concentrated into powerful hunting groups of some 60 aircraft. By September, German air resistence had stiffened and by October, 540 of the 885 German aircraft on the Western Front were assigned to the Somme. When N 124 received its orders, the Allies no longer had air superiority over the battlefield.

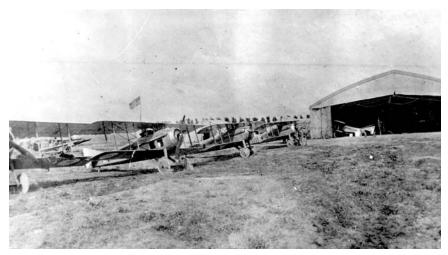
On October 18, Captain Thénault, Didier Masson, and Raoul Lufbery flew to Cachy. The remainder of N 124 traveled by train and, on their arrival, took over aircraft left by another unit. By October 23, all were ready. At Cachy, they joined four other escadrilles to make up *Groupe de Combat 13* (CG 13) under Commandant Philippe Féquant. French leaders had gained combat strength by concentrating the fighters in larger units, but they then sacrificed that advantage in October. Responding to appeals from ground forces threatened by the increased German air strength, the French instituted a system of high- and medium-level patrols across the front, regardless of the presence of enemy aircraft. Once again, the patrol system sacrificed the principles of concentration and of offensive operations and made it much more difficult to deal with the German resurgence.

Other problems affected N 124. Cachy was a mud hole offering limited amenities. Instead of a comfortable villa, the unit was housed in portable barracks, and only a loan from Dr. Gros for the purchase of stoves and other necessities allowed the Escadrille to establish a mess. Initially, the airmen lacked blankets, and a thick mist seemed to hang perpetually over the field. Pilots used to a pampered war received a rude awakening. N 124 was short of pilots, as well, since in addition to the losses already mentioned, Bert Hall and Laurence Rumsey departed. The arrival of three replacements brought the Escadrille's strength to fourteen. Frederick H. Prince, Jr., Norman Prince's brother, would become a popular member of the Escadrille during his short stay; Willis B. Haviland would measure up; and Robert Soubiran, a mechanic and former racing car driver, would become an excellent pilot and leader.

An additional change took place. The adventures of l'Escadrille Americaine had generated considerable publicity in the U.S., where the public was enthralled by the idea of American airmen fighting on the Western Front in this romantic new medium. Count Johann von Bernstorff, the German ambassador, however, formally protested that the American squadron violated the Hague Convention and complained that it had bombed American citizens in Germany. Secretary of State Robert Lansing brought the problem to the French ambassador, Jules Jusserand. William Thaw, home on leave, addressed the situation, telling reporters that only the press called the unit l'Escadrille Americaine; its official name was N 124, while the French minister of war unilaterally announced that henceforth the unit would be called *l'Escadrille des Volontaires*, a pronouncement that pleased no one. Eventually, someone suggested l'Escadrille Lafayette in honor of the Marquis de Lafayette, a French aristocrat who had fought for American independence during the Revolutionary War. Dr. Gros always claimed credit, but the name was logical and had been around for a bit. Monsieur de Sillac had referenced Lafayette in a letter in mid-1915, and in a July 1916 article in Collier's Magazine, former President, Theodore Roosevelt, called the airmen "Lafayettes of the Air." The name proved popular, and, to German frustration, the unit's fame and prestige continued to grow under its new official title.

At Cachy, the French high command reemphasized the status of the Lafayette Escadrille as an elite unit by replacing its Nieuport 17s with the brand new Spad VII powered by a 150 h.p. Hispano Suiza water-cooled V-8 engine. The Spad lacked the maneuverability and climbing ability of the Nieuport, but more than made up for these with straight line speed, diving ability, and robust strength, which allowed it to survive stresses that would have ripped the Nieuport apart. The Spad matched anything that the Germans could put in the air, and the Lafayette Escadrille, now designated SPA 124, would have given a good account of itself, had the weather permitted.

Winter in the Somme area proved miserably wet and cold, however, and grounded the aircraft most days while the pilots huddled around any available source of warmth. November saw only fifteen flying days. The Lafayette Escadrille put up over a hundred sorties on those days but rarely made contact. Lufbery shot down a pursuit on November 10. December saw more of the same.



The American flag flies over Spad VIIs of the Lafayette Escadrille.

Ronald W. Hoskier, top graduate of his flying class, joined the Escadrille that month, and after returning from leave, Lufbery shot down an enemy aircraft on December 27. Poor weather continued through January, during which the Escadrille had ten days of flying weather, put up sixty sorties, and reported ten combats. Lufbery scored once again, on January 24.

Two days later *Groupe de Combat 13* moved to Ravenal about fifty kilometers south of Cachy. The Escadrille pilots were happy to leave Cachy, where they had spent most of their time just surviving the miserable conditions They left behind Paul Pavelka, who voluntarily departed to join N 321, but at Ravenal, two new pilots joined: Edwin C. "Ted" Parsons and Edmond C. Genêt, the latter a descendent of the famous, or infamous, "Citizen Genêt", a French representative who had precipitated a diplomatic crisis with the U.S. during the early 1790s.

Ravenal proved even worse than Cachy. The weather was miserable, and no preparations to receive the unit had been made. The pilots slept on the dirt floor of underground bomb shelters fully clothed to stave off the numbing cold. Patrols flown in open cockpit aircraft were a nightmare. Freezing water and congealed oil made the engines hard to start, and forced landings thanks to motor failure were all too common. And even when its pilots could get into the air, the Escadrille was forbidden to attack the enemy to preserve security.

The move to Ravenal was part of a general buildup of airpower around Montdidier supporting a major French offensive. Allied strategy for 1917 was determined largely by the status of the major players. A weakened Russia was probably on its way out, a development which threatened to release massive German forces to the Western Front. Great Britain, with an effusion of forces from its Empire continued to grow stronger despite the losses on the Somme. The United States remained neutral, but under the threat of German U-boats, had begun to tip toward the Allies. As for France, after the tremendous blood-draining of 1916, the nation was reaching the limits of its strength. Enough remained for one more great offensive. Gen. Robert Nivelle had masterminded the recapture of Fort Douaumont at Verdun that had allowed the French to hold the line. Nivelle believed that his techniques provided the key to victory and proposed to apply that key on a grand scale to win the war. His strategy called for a British attack at Arras to divert the German reserves to the north, followed by a major French offensive between Soisson and Rheims.

In March, the Germans, learning of Nivelle's plans, conducted a strategic retreat to better defensive positions. Orders lifted restrictions on the escadrilles and directed them to harass the retreating Germans and bring back information on troop concentrations and movements. March was filled with patrols and combats, and the Lafayette Escadille received plaudits from French commanders for its efforts to gather and dispense information and harass German ground forces. There was a price for the effort. James McConnell, one of the original members of the unit, had been in hospital with a wrenched back. He checked himself out on March 19, and went up with the novice Genêt. They ran into a German patrol, and McConnell failed to return. The Escadrille came to believe that because of his condition, McConnell could not turn his head to watch his own tail, a necessity for a chasse pilot. Frederick Prince was also lost to the Escadrille. He had joined to avenge his brother Norman's death, but their wealthy, influential father, fearing the loss of another son, wangled a transfer for him to Pau as an instructor. Seven newcomers, however, brought SPA 124 up to strength. These were Stephen Bigelow, Walter Lovell, Harold Willis, Edward Hinkle, William Dugan, Kenneth Marr, and Thomas Hewitt. All except Bigelow and Hewitt would make solid contributions to the Escadrille.

While at Ravenal, the Lafayette Escadrille adopted an insignia. Weeks earlier, Victor Chapman's uncle had sent the unit a dozen shotguns and a supply of shells. The shotgun shell boxes bore a Seminole Indian head in profile, a trademark the pilots found uniquely American. They had borrowed this as the unit insignia; however, at Ravenal one of the new arrivals, Ed Hinkle, a talented artist, found the insignia too unwarlike. Working with Willis, Hinkle redesigned the insignia into the profile of a Sioux (Lakota) warrior painted in red, white, and blue, the national colors of France and the U.S. The new insignia was distinctive, visible at great distance, and, again, thoroughly American.

The German retreat to its new defensive lines had placed Ravenal more than forty miles from the Front, making pursuit operations more difficult. On April 7, *Groupe de Chasse 13* transferred to a field near Ham, a village that had been within German lines for over two years. The change also heralded an new period of intense combat as spring approached. The British tuned up for a major assault to the north at Arras on April 9, while to the southeast, General Nivelle assembled the Fifth and Sixth French armies for the offensive in the Chemin des Dames area planned for April 16. On April 8, every member of the Lafayette Escadrille took to the air. It was a day of multiples. Lufbery attacked three aircraft near St. Quentin, while de Laage rescued a formation of British bombers, shooting down two enemy pursuits in the process.

Ham turned out to be an unlucky base, though. On the afternoon of April 16, Lufbery and Genêt set out on a patrol between St. Quentin and LaFere. Crossing the lines, they came under anti-aircraft fire and several shells burst near Genêt, who turned back. Genêt subsequently crashed, probably the result of the anti-aircraft fire. A few days later, on April 23, the Escadrille flew in full force, some of the sorties being made in an two-seat Morane-Saulnier parasol monoplane normally used for training. Ronald Hoskier liked to fly the Morane, and de Laage's orderly volunteered to join him. The two ran into three Albatrosses. Hoskier damaged one, but was shot down and both men died. The Escadrille scored also. On April 16, Chouteau Johnson gained his first victory, while Thaw and Haviland forced another aircraft to crash minutes later. Lufbery scored again on April 24, shooting down a Rumpler.

On April 6, the U.S. declared war on Germany and the Central Powers. Members of the Lafayette Escadrille celebrated the announcement. Wilson's strict neutrality had been an embarrassment to those committed to Allied victory. What it meant for the unit in the long run was unclear, however. Some of the pilots probably expected to fly under U.S. colors soon, while most hoped to do so at some point in the future. In the short term, however, no change took place in SPA 124's status. The war went on.

May 1917 was even more intense than April. The Escadrille flew over 350 sorties, engaged in thirty-four combats, and made several attacks on balloons. Unfortunately, victories were nonexistent despite extreme efforts, especially by Lufbery, who more than once took on four enemy aircraft at a time. The Escadrille also began receiving the first examples of a new, more powerful aircraft, the Spad XIII, powered by a 180 h.p. Hispano Suiza engine and armed with two synchronized machine guns. The first Spad XIIIs went to the best pilots, Lufbery and de Laage. On May 23, an enthusiastic de Laage attempted a *chandelle* over the field in the unfamiliar aircraft, a common combat maneuver, but one dangerous at low altitude. The Spad's engine quit, and de Laage died in the crash.

De Laage's replacement, Lt. Arneaux de Maison-Rouge, was the son of a French general and a former cavalryman from SPA 67. Other replacements included Andrew Campbell, Ray Bridgeman, John Drexel, Charles "Carl" Dolan, and Henry Jones. Campbell, Bridgeman, and Jones proved to be skilled pilots. And Dolan, a good pilot and leader, had an engineering background which he put to work. SPA 124's "aircraft in commission rate" had been low thanks to problems maintaining the complex Hispano Suiza engine. It went to a new highs under Drexel's watchful eye. However, his parents soon had Drexel assigned to the U.S. Air Service office established in Paris a little over a month later.

The Nivelle offensive, the Second Battle of the Aisne, began on April 16. Nivelle had assembled some 7,000 pieces of artillery and 1.2 million troops in the area between Royle and Rheims and expected to break the German lines along the Aisne River in 48 hours. Instead, he precipitated a complete and utter disaster. The Germans knew the French were coming, and their tactical retreat to better defensive lines had created a killing zone for two French armies. Instead of calling the offensive off, Nivelle continued to feed troops into the maelstrom. The cost was



Chaudun, July 10, 1917. (L. to R. standing) Robert Soubiran, James Doolittle, A. Courtney Campbell, Edwin Parsons, Ray Bridgman, William Dugan, Douglas, McMonagle, Walter Lovell, Harold Willis, Henry Jones, David Peterson, Antoine Arneux de Maison-Rouge. (Seated) Dudley Hill, Didier Masson, William Thaw, George Thénault, Raoul Lufbery, Chouteau Johnson, Stephen Bigelow, Robert Rockwell.

over 187,000 casualties, and the French army cracked. Fifty-four infantry divisions, well over half the French army, defied its officers and refused to attack. French leaders managed to keep the mutiny a secret. They ended the offensive on May 9, sacked Nivelle, placed Gen. Henri-Philippe Pétain in charge, and tried and executed some mutiny ring leaders. Pétain, a stolid defensive specialist respected by the soldiers, devoted himself to correcting the deficiencies in the French army and restoring shattered morale. The French army, for the time being, left the burden of the war to the British, and waited for the Americans to arrive.

On June 3, *Groupe de Combat 13* moved from Ham to a field near Chaudun, not far from where Nivelle's offensive had sputtered to a bloody halt. Shortly afterward, the unit was joined by a new pilot, James Norman Hall, an adventurer who had already served in the British army and would achieve fame as a Pulitzer Prizewinning author. SPA 124's primary mission while at Chaudun was to provide escort for the five reconnaissance squadrons in the area as they penetrated deep behind the German lines. The Lafayette Escadrille had a reputation for providing effective protection. "For this work, no fighting escadrille was more sought after than our own," Thénault asserted. "The sheep were always delighted with their watchdogs, particularly when there were so many wolves around."⁸

The Lafayette Escadrille also flew standard patrols to prevent enemy observation behind the French lines. The 50 kilometers between Soissons and Rheims was too long to patrol in any strength, so the patrol area was divided into sections



James Norman Hall. (Photo courtesy Bert Frandsen, Air Command & Staff College, Maxwell AFB, Ala.)

numbered one through four. If enemy aircraft entered one section while SPA 124 patrols were in another, a French anti-aircraft battery in the area would fire. The number of shells showed which quarter the Germans had entered while the height of the exploding shells indicated the altitude of the intruders. The system worked well, enabling the Lafayette Escadrille to throw surprise parties for unwelcome guests. Reconnaissance missions provided a third role for SPA 124. These were normally flown over areas judged too dangerous for two-seat observation aircraft. Aggressive pilots could also volunteer for "free flight," missions against targets of opportunity, provided they flew in groups of three or more.

The next month and a half was a busy time, although the sector was relatively quiet. In forty-three days at Chaudun, the Lafayette Escadrille flew 400 sorties and participated in 62 combats. Honors were even. The unit claimed one victory, Lufbery's tenth, earning him promotion to *sous-lieutenant*. On June 26, however, SPA 124 put up a patrol to impress some visiting U.S. Army officers. Nine pilots took off, followed at a distance by Hall. He soon joined up, only to discover himself in the midst of a German formation. Wounded in the subsequent fight, Hall was out of the war for a time. To fill the roster, weakened by the departed Drexel and hospitalized Hall, three new pilots arrived: David McK. Peterson, Douglas McMonogle, and James Doolittle—no relation to later Gen. James H. "Jimmie" Doolittle All proved good pilots, but the latter two would have extremely short careers.

On July 17, the Lafayette Escadrille moved once again, transferring to St. Polsur-Mer, a field about two kilometers southwest of Dunkirk on the English Channel. Sir Douglas Haig, commander of the British Expeditionary Force (BEF), had planned a major offensive, the Third Battle of Ypres, at Passchendaele in Flanders. Participating in the British offensive would be the French First Army supported by three aviation groups, including *Groupe de Combat 13*. The evening flight without maps to an unfamiliar region in marginal weather conditions was a fiasco. Peterson crashed while attempting an emergency landing on a British field; Parsons and Willis just missed hitting a British balloon; Masson's motor failed, but he got down in one piece: and a disoriented Doolittle tried to land on a German air field. A premature burst of machine gun fire warned him, but while escaping, he ran into a German pursuit which put a bullet through his leg. Doolittle's war was over.

At St. Pol-sur-Mer, SPA 124 added a new technique to its repertoire. The unit received orders to bomb and strafe German troops and positions. Ground attack was a dangerous duty generally despised by most self-respecting pursuit pilots. The Escadrille's armament officer developed a technique that required the pilots to fly level at 1,000 meters until the target disappeared under the lower wing, then dive at a forty-five degree angle to 500 meters, level out, count ten, and release. Adding the weight and drag of the externally-mounted bombs to an already fully-loaded Spad, however, presented what the pilots saw as an unnecessary hazard, as did the requirement to fly within the range of ground-based weapons.

On July 31, the British offensive kicked off despite a massive downpour that turned the Flanders region into a sea of liquid mud. The early gains seemed promising, but were misleading. The German army had adopted a new defensive system designed to give ground until the attackers had advanced beyond their artillery support. Haig's forces were drawn in, and the German defenses hardened. The result was a muddy bloodbath that would sear British memories for generations. Allied aviation had seized air superiority during the clear weather prior to the 31st, but the deluge largely ended aviation activity. SPA 124 flew only five short missions that first day and few thereafter. The rain and low clouds kept the forces largely grounded. The Allies had assembled over 500 aircraft for a major air campaign, but the weather proved victorious.

The French, fearful of being drawn into the British morass, withdrew their forces, including *Groupe de Combat 13*, sending it to a field at Senard in the Verdun sector. Verdun had been comparatively quiet since the great battle of 1916, but Pétain had decided to launch a limited attack in the area to test the mettle of his rebuilding army. The preliminary artillery bombardment began on August 17. The

air campaign prior to the Lafayette Escadrille's arrival was of critical importance, with French and German pursuits fighting to control the local air space. The result was a series of vicious air-to-air fights that led to an intense air campaign.

It began quietly. SPA 124 flew its first mission on August 16 without seeing a German aircraft. On the following day, however, nineteen sorties resulted in eleven fights. On August 18 the Escadrille escorted French bombers raiding targets at Dun-sur-Meuse when a flock of German pursuits intervened. During the ensuing fight, SPA 124 claimed two enemy aircraft, but Harold Willis was shot down, becoming the first member of the Escadrille captured.

The air battle continued through the remainder of August and well into September with SPA 124 flying constant patrols, conducting ground attack missions, and performing observation missions too dangerous for the slower twoseaters. In six weeks, the Escadrille flew 460 sorties and tallied 150 individual combats. The Escadrille had five victories, including Lufbery's eleventh and twelfth, but Stephen Bigelow took a bullet through the face while rescuing a twoseater from six German pursuits. He was released from the service. And on September 24, Lufbery, Parsons, Robert Rockwell, and Douglas McMonagle ran into eight German pursuits. Lufbery sought to gain altitude and the up-sun position before attacking, but MacMonagle unexpectedly went straight for the Germans. He was shot down before the others could intervene.

In mid-September, bad weather set in, and *Groupe de Combat 13* returned to its old field at Chaudun in the Aisne sector, a month before a planned assault to clear the Germans from the heights of the Aisne between Allemont and Malmaison. The Lafayette Escadrille continued to add to its reputation for protecting photographic and observation missions. The Germans generally reacted passively, but SPA 124 still found plenty of fighting during escort missions and occasionally during regular patrols. On October 1, Henry Jones and Courtney Campbell ran into four Albatross pursuits. Jones fought his way out, but Campbell was never seen again. He would be the last member of the Lafayette Escadrille to die while the unit was in French service. Other combats saw more positive results. On October 14, Lufbery gained his thirteenth victory. In the meantime, de Maison-Rouge left for SPA 78 on October 6. Louis Verdier-Fauverty, a highly regarded veteran from SPA 65, replaced him. James Norman Hall returned and Christopher Ford, the last new man received while the Escadrille was in French service, joined at the beginning of November.

On October 23, the Malmaison offensive, or Third Battle of the Aisne, began with a massive artillery barrage. Rain, low clouds, and fog grounded the air forces, however. The weather cleared on the following day, and the Germans came up in force. SPA 124 flew twenty-one missions, and as usual, Lufbery was the star. During his first patrol he brought down two enemy aircraft. After refueling and reaarming, he went back up and fought three Germans in succession, sending two down. On his third sortie, Lufbery downed two more. Six aircraft in one day was phenomenal, but unfortunately, French ground troops confirmed only one, his fourteenth kill. The French offensive ended on November 2, but the air fighting continued. On December 2, Lufbery gained his fifteenth and sixteenth victories.

Five days later, the Lafayette Escadrille made its last move while in French service, transferring to La Noblette in the Champagne sector where French intelligence had identified preparations that suggested a German offensive. The attack never came, and SPA 124 stood down from combat as it awaited transfer to the U.S. Army.

Lafayette Pilots Transfer to the U.S. Air Service

When the United States declared war in April 1917, elated members of the Lafayette Escadrille hoisted an American flag over their air field at Ham. Despite their exuberance, however, no American army or air force would reach France for many months. At first, no problem seemed to exist. On the same day that the U.S. declared war, Ambassador Jusserand requested that the Americans assigned to the Escadrille be transferred to the U.S. Air Service as quickly as possible, while the French minister of war announced that "from this day forward, all flying and non-flying personnel attached to the Lafayette Escadrille will fight in the uniform and under the flag of the United States."⁹

It fell to Captain Thénault to address the complications ignored by his government. He pointed out that the Americans had sworn an oath to serve for the duration of the war, and some legal step had to be taken to release them from this oath. Additionally, Americans wore enlisted rank in French service, but U.S. military pilots were officers. To give the pilots officer rank while still under French command, however, would upset the system. These and other concerns caused both French and American authorities to back away from an immediate transfer. The truth of the matter was that the U.S. Army Air Service, which existed as a small program under the Signal Corps, was totally unprepared to equip and support even one squadron. Unfortunately, no one bothered to inform the Escadrille, where the airmen expected word daily that they would be "called on to help the United States form a real aviation corps,"¹⁰ and that word did not come. Told nothing of what was taking place, the pilots concluded that they were unwanted. This cloud hovered over the Escadrille through the remainder of 1917.

The transfer question also became entangled in the establishment of an American Air Service in France. Gen. John J. "Black Jack" Pershing brought the headquarters of the AEF to France in June 1917, and he and his staff accomplished considerable organizational planning during the voyage. During the Punitive Expedition into Mexico in 1916, Pershing had separated his aviation unit from his Signal Corps organization. Thus, the 1st Aero Squadron reported directly to the commander, not to the Expedition's signal officer. Pershing did the same for the AEF, separating his Air Service from the Signal Corps and directing it to report to him. When Pershing reached France, he found that a military observer already on the scene, Lt. Col. William "Billy" Mitchell, had established an aviation office in Paris shortly after the declaration of war and had been touring the lines, gathering information, and consulting with French and British leaders. Mitchell, an energetic, ambitious Signal Corps officer previously assigned to the General Staff, had become intrigued by aviation and taken private flying lessons. Pershing folded this

office into his headquarters. Subsequently, the AEF, following European practice, developed a Zone of the Advance to manage the combat forces and a Zone of the Interior (later Lines of Communication) to handle logistics. The Air Service organization mirrored this arrangement, and Mitchell took charge of aviation in the Zone of the Advance.

Meanwhile, the War Department had sent a special mission led by Col. Raynal C. Bolling to Europe in June to assess the state of aviation and determine what aircraft the United States should produce. Bolling, the general solicitor for United States Steel in civilian life, had learned to fly before the war and helped form the First Aero Company of the National Guard in 1915. When the Bolling mission completed its work, Pershing placed Bolling in charge of aviation in the Zone of the Interior. Pershing selected an artilleryman, Maj. Gen. William L. Kenly, to head the Air Service, AEF.

Colonel Bolling accepted the importance of transferring American airmen in the *Service Aéronautique* to the U.S. Air Service. Thanks to his intervention, the Air Service, AEF, established an evaluation board composed of three American officers and the Lafayette Escadrille's sponsor, Dr. Gros, now a major in the U.S. Army. The board visited French air installations, examined applicants, and interviewed commanders. As for the Lafayette Escadrille, the Board's report, presented to General Kenly in mid-October, recommended Thaw, Lufbery, Hall, Hill, Marr, Peterson, Rockwell, and Soubiran for the rank of major and Dolan, Dugan, Jones, and Chouteau Johnson for the rank of captain.

These recommendations were interesting given that most of the Escadrille members failed to meet the Air Service's medical standards. Thaw, a superb leader and combat pilot, had a defective knee, crippled elbow, and damaged vision in this left eye. Lufbery, a master pilot and triple ace, was overage, had rheumatism, and could not walk a straight line backwards, one of the tests. Among the other applicants, Lovell was overage and color blind, Jones had flat feet, Dolan had mild vision defects, and Hill was blind in one eye. The board members, however, placed a higher value on experience than on medical condition: "It is the opinion of the Board and also of the French officers commanding these Americans, that their position should be settled as soon as possible; that they should be allowed to remain at the front until required by the A.E.F.; and that as soon as they are required they should immediately undertake the new duties assigned them."¹¹ The Air Service secured waivers for those with medical problems.

Despite progress, by the end of 1917, the opportunity which had looked so enticing in April appeared less attractive to the volunteers. While many still wanted to transfer to U.S. service, others had become increasingly concerned about the slow development of the Air Service, which still lacked airplanes; others felt a debt to France and deep attachment to their French comrades; and still others were concerned that they might be sent to the U.S. as instructors. While some pilots applied for transfer, others planned to wait until the Air Service was ready to fight. Still others decided to remain in French service. On December 25, French authorities announced that enlistments for all American pilots who requested them would be approved immediately.



Brig. Gen. Benjamin D. Foulois. (USAF photo.)

Unfortunately, even before the French authorities made their announcement, an unexpected change brought new officers to command of the Air Service, AEF, complicating the situation. In November, Brig. Gen. Benjamin D. Foulois, one of the U.S. Army's most experienced airmen, arrived in France and took command of the Air Service, AEF, replacing General Kenly. With him, Foulois brought a staff of over a hundred newly commissioned civilians and a scattering of regular officers. Foulois reorganized Air Service headquarters into eight divisions and filled most of the new positions from the ranks of the new arrivals.

Foulois refused to accept the decisions made by Kenly about the Lafayette Escadrille. He was a professional officer with little use either for idealistic volunteers or romantic adventurers and no commitment to using them to build an Air Service no matter how many combat victories they had earned. He asked the French commanders to re-evaluate the American pilots in terms of discipline, capability, behavior, and leadership potential. Lafayette veterans considered the resulting delay unjustifiable, especially since it placed those already released by the French in an indeterminate status, members neither of the *Service Aéronautique* nor the U.S. Air Service.

Even more important, the Air Service reduced the recommendations for U.S. rank made by the board by one across the board. The Escadrille blamed this decision on Foulois; however, organizational plans called for U.S. squadrons to be commanded by captains, thus the ranks were in line with the planned organizational structure. Unfortunately, the volunteers expected the higher rank and the seemingly arbitrary demotion provoked resentment, especially since new arrivals from the U.S. appeared to be snitching the higher ranks. Foulois did take the positive step of ensuring that the U.S. Army paid those airmen placed in limbo. He also had his own concept of how he wanted to proceed. Foulois planned to activate a single U.S. Air Service squadron that would operate under French control for the time being. In the longer term, he expected to spread American veterans of the Service Aéronautique-that is, those considered to be part of the informal "Lafayette Flying Corps"-who joined the U.S. Air Service throughout the new American squadrons as they came on line. Eventually some 93 Flying Corps personnel transferred to the Air Service, AEF. Foulois's approach benefitted the Lafayette Escadrille, since SPA 124 already existed as a squadron.

Foulois signed the "Conventions Concerning the Creation of an American Escadrille, called 'Escadrille Lafayette'" on February 14, 1918. The agreement stated that the squadron would be considered French until the date of actual transfer of command. France would provide the aircraft, equipment, spare parts, and gasoline, but a strict accounting would ensure proper reimbursement. The new commander was Maj. William Thaw, and all personnel would be American; however, French mechanics would remain for a short time to instruct inexperienced personnel. On February 16, American ground personnel arrived at La Noblette, and on February 18, 1918, the Lafayette Escadrille ceased to exist. Its pilots became members of the 103rd Aero Squadron of the Air Service, AEF.

A new SPA 124 replaced the Lafayette Escadrille in French service. It, too, had a foreign presence, listing three Portugese, one Czech, one Russian, and an American—1st Lt. Henry H. Marsh, on detached assignment from the U.S. Air Service—on its roll of pilots. A helmeted bust of Joan of Arc, based on the statue by Emmanuel Frémiet, served as the new SPA 124's insignia.

All of the American pilots of the Lafayette Escadrille except Raoul Lufbery and Edwin Parsons transferred to the new squadron. In addition to Thaw, these included Ray Bridgeman, Charles Dolan, William Dugan, Christopher Ford, James Norman Hall, Henry James, Kenneth Marr, David McK. Peterson, Robert Rockwell, and Robert Soubiran. Six additional Lafayette Flying Corps veterans reinforced the 103rd to the strength of an American squadron. These were Charles Biddle and Charles Jones from SPA 73; Paul Baer and Charles Wilcox from SPA 80; George Ternure from SPA 103, and Phelps Collins from SPA 313. Lufbery, designated to command the U.S. 95th Aero Squadron, went temporarily to the U.S.



Capt. Charles Biddle, 103rd Aero Squadron.

Third Aviation Training Center at Issoudun. Parsons chose to remain with the *Service Aéronautique* and would compile an outstanding record with famed SPA 3 of *Les Cigognes*.

The 103rd Aero Squadron had originally mustered at Kelly Field, the Signal Corps's primary aviation mobilization center near San Antonio, Texas, where the enlisted men learned military drill and built facilities. On October 30, the squadron departed for Garden City, New York, and on November 23, it sailed for Europe. On December 28, the command arrived at Issoudun, where it again went into the construction business, erecting machine shops and hangars, while its mechanics received special instruction in engines and airframes. The squadron, its new commander, the contingent of former Lafayette Escadrille pilots, and SPA 124's complement of Spad pursuit aircraft were finally united when the 103rd reached La

Noblette on February 18. The Lakota Indian head insignia of the Lafayette Escadrille, which already decorated the Spads, became the insignia of the 103rd.

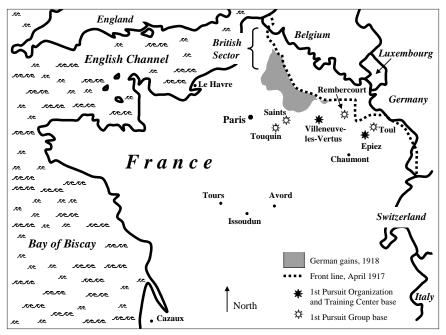
The French assigned the 103rd to *Groupe de Combat 21*, and Thaw put the unit to work immediately. He reorganized his command, named new flight leaders, and established daily patrols. Transition for the pilots was simple, since they had been flying Spads for months. Meanwhile, under the tutelage of the veteran French mechanics, the Americans became familiar with the intricacies of the Spad and its complex, water-cooled Hispano Suiza engine. Paul Baer, ex-Lafayette Flying Corps, got the squadron's first victory on March 11 and tallied another five days later. Since the 103rd was under French command; however, Baer was denied credit for the first U.S. Air Service kill of the war. On March 12, Phelps Collins became the squadron's first casualty. An intense, hard working pilot, he may have fainted from fatigue during a mission and crashed south of Château-Thierry.

The 103rd Aero Squadron spent the next few months participating in the heavy fighting necessary to halt German Gen. Eric Ludendorf's Spring Offensive, which had begun on March 21 and all but destroyed the British Fifth Army. The squadron first operated under the Fourth Army at La Noblette, then under the Seventh Army at Bonne Maison near Fismes from April 11 until the end of that month. It then transferred to Leffrinckoucke near Dunkirk as part of the Detachment of the Army of the North (D.A.N.) from May 2 through June 8. Through the end of June, the 103rd received credit for fifteen enemy aircraft and two balloons at a cost of five pilots.

The 1st Pursuit Group

Eventually, the 103rd Aero Squadron would transfer from French to American command. When it did, the squadron took its place in a very different force. Billy Mitchell had devised a plan that called for 120 pursuit squadrons, 80 observation squadrons, and 60 bomber squadrons, the large number of pursuit units reflecting the requirement for air superiority. Above the level of squadron, the Air Service would mirror the organization of the *Service Aéronautique* with groups and wings. For squadron organization, Mitchell borrowed from the British. A U.S. pursuit squadron would thus comprise eighteen aircraft organized into three flights of six planes. The three flight commanders and fifteen pilots would provide the unit's combat edge. A pursuit squadron would consist of 23 officers and 150 enlisted men. The basic plan was to assemble the pilots, who were trained—for the most part—by the Air Service in France; equip them with aircraft purchased—for the most part—from France; and add a standard aero squadron of enlisted men formed in the U.S.

Bert M. Atkinson was one of the few qualified military pilots in the U.S. Army when the U.S. declared war in April 1917. Son of a governor of Georgia, graduate of the University of Georgia, and a veteran infantry officer, he completed the Signal Corps Aviation School flight course in 1916, then joined Captain Foulois's 1st Aero Squadron on the border with Mexico. Most of the Army's aviators served on the border at one time or another in 1916 and early 1917 including Atkinson's best



Western Front with 1st Pursuit Group locations during the war and major training bases.

friend Lt. Carl Spatz (later changed to Spaatz), who would one day be the first chief of staff of the U.S. Air Force. The veterans of Foulois's operation developed informal bonds and, as historian Bert Frandsen has described, formed an identifiable if informal group of "insiders" who would shape the U.S. Army Air Service.

In April 1917, Atkinson led the first flight of Curtiss JN–4 training airplanes to Kelly Field, and he was in place when trains soon began depositing loads of raw, untrained recruits in the cactus, scrub, and dust on the site. By the middle of May, over 4,400 recruits were crowded on to the field. As the men detrained, the few officers and veteran noncommissioned officers on hand counted them off in groups of 150 men and formed them into standard aero squadrons. In October, Atkinson and ten aero squadrons sailed for Europe.

On January 16, 1918, Major Atkinson led a convoy of men, equipment, and supplies to the French aerodrome at Villeneuve-les-Vertus, selected as the site of the 1st Pursuit Organization and Training Center. Villeneuve was the home of the French *Escadre 1* under Commandant Victor Ménard. The first multi-group fighter wing, *Escadre 1* consisted of three *groupes de combat*, each comprised of four squadrons of *chasse* aircraft. The presence of the 1st Pursuit Organization and Training Center at the same aerodrome reflected the Air Service's aspiration to learn modern pursuit operations from France's best *chasse* units. By February 16, the construction of barracks and hangars for thirty-six aircraft had been completed, and on that date, the officers and men of the 95th Aero Squadron, one of the



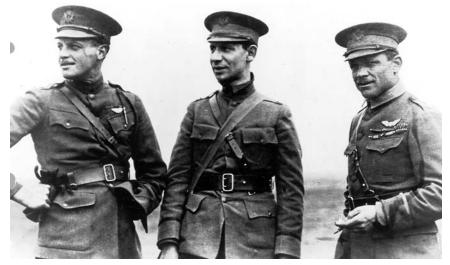
Bert M. Atkinson, as a lieutenant colonel and commander of the 1st Pursuit Wing, late 1918. (USAF photo.)

units Atkinson had brought with him from Kelly, departed Issoudun for Villeneuve with flags flying and a band playing.

Atkinson had the responsibility to prepare the first Air Service pursuit squadrons for combat. "The purpose of this Center, as I interpret it, is to form pursuit squadrons from completely trained personnel, both commissioned and enlisted, and to coordinate and adjust them to their equipment," he wrote. "At the same time, with the aid of the French here, to break the pilots in over the front."¹² He also sought to draw on the experienced veterans of the Lafayette Escadrille and Lafayette Flying Corps, but this effort was made with reservations and met with mixed success.

The first Lafayette veteran to reach Villeneuve was Raoul Lufbery, who toured the site on January 22, 1918, in advance of the 95th Aero Squadron. Lufbery judged the field too small and recommended that Atkinson base the squadron with the Lafayette Escadrille at La Noblette. Atkinson, in turn, found La Noblette unsatisfactory and came to the same conclusion about Lufbery. Essentially an adventurer with little education and almost no formal officer training, Lufbery spoke poor English and disdained the administrative tasks demanded of a squadron leader. Atkinson recommended that the veteran be relieved of squadron command, and Lufbery spont the next month marking time at Issoudun.

This incident evidenced the importance of professional training and practice to the Air Service, AEF. General Pershing's goal was an AEF patterned after West



Maj. James Huffer on left and Maj. Raoul Lufbery on right, with the editor of Stars and Stripes. (Photo courtesy Bert Frandsen, Air Command & Staff College, Maxwell AFB, Ala.)

Point and the Regular Army. Following his lead, Air Service leaders determined to establish a professional military air force. The Air Service would make use of the Lafayette adventurers and idealists, but they would not characterize the new organization. The men in charge of building the Air Service had more than a touch of adventurer themselves, and many were outsiders to a degree, as well. Foulois, Atkinson, and Billy Mitchell, for example, had never attended West Point. But all were first and foremost regular officers, and the Air Service and its pursuit component would become a regular, professional military force. Maj. Davenport Johnson, a graduate of West Point and veteran of the 1st Aero Squadron, eventually replaced Lufbery as commander of the 95th. Under the circumstances, the 95th Aero Squadron's insignia of a mule, the traditional mascot of West Point, was more than a little symbolic.

While, none of the 95th Aero Squadron's original pilots were Lafayette Flying Corps veterans, three, Walter L. Avery and Lansing C. Holden, Jr., from N 471and Robert G. Eoff from N 157, would join the squadron in July. The only Lafayette Escadrille veteran would be David McK. Peterson, who would join the 95th on May 16. A West Point graduate for a commander, the limited involvement of Lafayette veterans, and a curious set of events to be described below meant that, ultimately, when the spirit of the Lafayette Escadrille entered the 1st Pursuit Group, it would do so primarily through the aegis of the 95th's sister unit, the 94th Aero Squadron.

The 94th differed from the 95th in that it had a high percentage of former Lafayette personnel. Its commander was Maj. James W. F. M. Huffer. Born in France and living in Paris at the beginning of the war, Huffer had served with several escadrilles including both reconnaissance and *chasse* units, and he arranged to have other Flying Corps veterans assigned to the 94th, including three from the Lafayette Escadrille. Capts. James Norman Hall, Kenneth Marr, and David McK. Peterson—before he went to the 95th—became the 94th's three flight leaders. Most important, through Major Thaw's intervention, the Lafayette Escadrille's finest warrior, Raul Lufbery, joined the 94th as advisor and instructor. The 94th would begin operations with experienced combat veterans to teach the novices and set the tone for the unit.

The 94th Aero Squadron arrived at Villeneuve several days after the 95th. Its pilots were thus the late comers. The 95th was scheduled to get its aircraft first and to fly the first patrols. It could thus expect to see combat first and achieve the first victories. The 95th's pilots were cock-of the-walk at Villeneuve and lorded it over the pilots of the 94th, who naturally resented their second class status.

On March 6, the American squadrons began receiving airplanes. Months earlier, the Bolling mission had recommended the purchase of two different pursuits. One was the new Spad XIII, successor to the Spad VII, believed to be the best French *chasse* available. The other was a rotary-powered Nieuport *chasse* then under development. The Air Service received the new Nieuport 28C–1, powered by the 160 h.p. Gnôme Monosoupape rotary engine, first. The Nieuport was a graceful, esthetically pleasing design with contoured lines, equal span wings, and a slim, round fuselage that featured excellent speed, rate of climb, and maneuverability. They, however, arrived without machine guns, a condition that failed to deter Atkinson. Plans called for the two American squadrons to fly joint patrols with *Escadre 1*. The 95th began these on March 15, each patrol consisting of three unarmed Nieuports led by one or two armed, French-flown Spads. The 95th ultimately flew eight unarmed patrols, two each day.

Then, however, the 95th Aero Squadron experienced a shock. In all the confusion of expansion, the squadron's pilots had bypassed the gunnery training course required for pursuit pilots. On March 25, Air Service leaders unceremoniously packed the 95th pilots off to the training center at Cazeaux and, humiliatingly, gave their aircraft to the 94th Aero Squadron. The 95th would complete gunnery training in mid-April, but by then the 94th had leaped ahead in the pursuit pecking order.

As the 95th departed, machine guns arrived. The advent of armed aircraft was electrifying for the 94th. Assigned a Nieuport, 1st Lt. Douglas Campbell spent most of his waking hours in the hangar as mechanics prepared it for combat: "In an hour or two I expect to test the sights and take the machine up for a few minutes to see whether it is properly aligned," he wrote home. "Then it will be ready for business . . ."¹³

By March 28, all of the aircraft mounted at least one machine gun, and Lufbery selected two promising pilots to join him on the 94th's first combat patrol. He chose Campbell, who had breezed through flight training, and another man distinguished for his exceptional technical knowledge, the celebrated racing car driver, Eddie Rickenbacker. The patrol was anticlimactic. Rickenbacker spent a good deal of the flight just trying to stay in formation and avoid airsickness. Neither of



Nieuport 28s of the 95th Aero Squadron warming up. (USAF photo.)

the neophytes saw any aircraft, and Campbell barely noted the enemy antiaircraft fire even though several near bursts gave Rickenbacker a good shaking. Lufbery administered the sobering lessons of the patrol on the ground by enumerating the number and type of aircraft he had seen, both enemy and friendly, and pointing out shrapnel damage to Rickenbacker's airplane.

On April 2, the 94th, twenty-two aircraft strong, flew from Villenueve to a field at Epiez, in the Vosges sector near Toul, which Air Service leaders considered an ideal location for introducing new units to aerial combat since the Germans were "neither aggressive, numerous, or equipped with the best types of machines."¹⁴ Frustrated by the incessant rain and deep, gooey mud, as well as by the fact that he had to fly a Nieuport, an aircraft he disliked, Rickenbacker applied for a transfer to the 103rd Aero Squadron. Major Huffer, however, quashed the move. He did not want to lose the competitiveness and technical knowledge of the veteran racing driver.

At Epiez, the 94th adopted an insignia for its aircraft. While with the Lafayette Flying Corps, Huffer had used an Uncle Sam top hat with a stars and stripes hat band as his personal symbol, and he recommended that it as the squadron insignia. The old political saying about tossing one's hat in the ring as an indication of commitment suggested itself, so the squadron added an encircling ring to the hat. Along with the "Big Red One" of the 1st Infantry Division and the "Rainbow" of the 42nd, the "Hat in the Ring" would become one of the most recognized insignia of the war.

On April 9, the 94th moved to Gengoult Aerodrome northeast of Toul, where it came under operational command of the French Eighth Army. Maj. Gen. Hunter Liggett's U.S. 1st Corps provided administrative and logistic support. On April 14,



Maj. Raoul Lufbery with the 94th Aero Squadron at Tours.

Captain Peterson organized the first regular patrol with Rickenbacker and Reed Chambers, but thanks to a misunderstanding, the two novices flew the mission in fog, heavy mist, and low lying clouds by themselves. They attracted enemy attention, and the Germans sent up two pursuits. These were spotted and the alarm sounded. Douglas Campbell and Alan Winslow, a Lafayette Flying Corps veteran, took off. In the dim visibility, the Germans probably tried to land at the American aerodrome by mistake. Winslow shot down an Albatross D-III over the field, followed a few minutes later by Campbell who downed a Pfalz D-III. Crowds of civilians from nearby Toul joined the airmen of the 94th in a celebration of the first U.S. victories.

Rickenbacker's early efforts were hamstrung by poor judgement and bad luck. Even patrolling with Lufbery, who could seemingly conjure German aircraft out of thin air, brought no success. Rickenbacker's luck finally changed on April 17, when he and the Lafayette Escadrille veteran, James Norman Hall, caught a Pfalz near Pont-à-Mousson. Both airmen received credit for the kill, although Rickenbacker believed that all credit should have gone to Hall. Here was a direct one-to-one connection between the Escadrille and the American Air Service. The veteran Hall made the kill, but in doing so, he gave the novice the confidence to make future ones.

The 94th soon began to develop a persona, a culture straight from the Lafayette Escadrille. Thanks to the influence and example of Lufbery, Hall, Peterson, and Marr, the 94th Aero Squadron absorbed the heritage of the Escadrille. The Lafayette veterans, especially Lufbery and Hall, taught the 94th the Escadrille's tactics and traditions, and the 94th developed a distinctive personality reflected even in the language it spoke. A dependable comrade was a "Gimper"

after a mythical bird that would stick no matter what happened. The Gimper was the highest standard for a pursuit pilot. Everyone, according to Rickenbacker, wanted to be a Gimper :

"If you were up in the air and ran into a dozen enemies and you were getting the worst of it, and the fellow with you stuck with you and gave it to them until they fled, then you'd know he was a Gimper. If he didn't have motor trouble, and his gun didn't jam [and] he didn't accept any one of dozen excuses for zooming off home and leaving you to do the same if you could get away, he'd be a Gimper all right."¹⁵

On May 7, Hall, Rickenbacker, and Lt. M. Edwin Green took on three German pursuits near Pont-à-Mousson. During the fight, the leading edge of the top wing of Hall's Nieuport collapsed, crippling the aircraft. Then an anti-aircraft shell hit his engine. Hall crash landed and was captured. On May 8, Rickenbacker replaced Hall as one of the 94th's flight commanders.

On May 19, a second tragedy struck. The 94th received a report that a German Rumpler observation aircraft was in the area. Lufbery, took off in a borrowed aircraft, caught the two-seater, and attacked. Early accounts reported that Lufbery jumped without a parachute when his aircraft caught fire. Later ones concluded that in his haste to get in the air, the ace had failed to fasten his seat belt and fell out when the controls were shot away. With Lufbery's death went an irreplaceable connection with the Lafayette Escadrille: "Nothing," historian W. David Lewis later wrote, "could compensate for the loss of a man who was not only a beloved warrior but also a teacher able to inspire inexperienced pilots as he prepared them for combat."¹⁶

Before these losses, the aerodrome at Gengoult had become crowded. With the tempo of the ground war increasing, Atkinson argued that it was time for the Air Service to bring the 95th Aero Squadron to Gengoult and activate the 1st Pursuit Group. Air Service leaders finally agreed. An additional fifty men from the 1st Air Depot at Colombey-les Belles beefed up the group headquarters, and, on May 4, the 95th flew its Nieuports to Gengoult. The 1st Pursuit Group, at two squadron strength, became operational on that date. The group continued the system of area patrols and alerts and also began flying protection patrols for observation aircraft operating in the area. Davenport Johnson led the first 95th patrol on April 27, and the unit saw its first combat on May 2.

On May 27, the third blow of the German spring offensive hit the French positions along the Chemins-des-Dames between Rheims and Soissons. The French defenses collapsed and the German forces reached the Marne River at Château-Thierry, little more than forty miles from Paris. Pershing sent American troops to help stem the offensive, and the requirement for air support impelled the Air Service to complete the organization of the 1st Pursuit Group.

On May 31, the 27th Aero Squadron under Maj. Harold Hartney and 147th Aero Squadron under Maj. Goeffrey Bonnell joined the group. These two units,



Some of the Gimpers of the 94th Aero Squadron. (L. to R.) Lt. Joseph Eastman, Capt. James Meissner, Lt. Eddie Rickenbacker, Lt. Reed Chambers, and Lt. Thorne Taylor, October 1918. (*From the Rickenbacker Papers, Auburn University, courtesy of Bert Frandsen, Air Command & Staff College, Maxwell AFB, Ala.*)

known as the "Canadian Circus" when together, were vastly different from the 94th and 95th with their largely French origin. Hartney and Bonnell were veterans of the Royal Flying Corps. The former, a Canadian lawyer before the war, was a senior flight commander and an ace with six kills. The latter, an American of Canadian ancestry, had been an acting flight commander. Hartney was small and precise; Bonnell large and dominating. Though Hartney was senior based on date of rank, Bonnell took charge when the two units were together.

Though the two squadrons had originated at Kelly Field, they were products of the Reciprocal Training Program, an arrangement under which the RFC agreed to train ten U.S. squadrons in exchange for the use of flying fields in Texas, which enabled the British flying training program to function year round. The Canadian Circus was commanded by RFC officers, trained and disciplined by RFC sergeants according to British practice, and its pilots had learned to fly in the British system. The Circus brought with it a strong sense of identity and a sense of cultural superiority over the two Franco-American squadrons. Most important, they and their leaders embraced the RFC doctrine of the offensive and were willing to accept its corollary of heavy losses.

The U.S. Air Service pursuit force would thus have its origins in both French and British beliefs and practices. The 1st Pursuit Group, four squadrons strong,

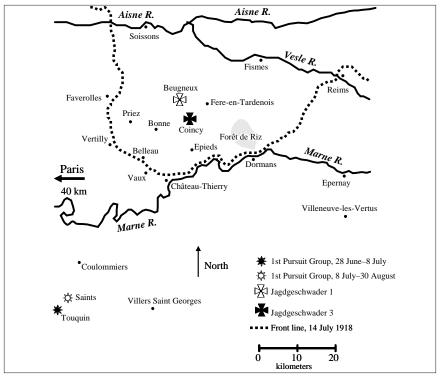


Maj. Kenneth Marr. (Photo courtesy of Bert Frandsen, Air Command & Staff College, Maxwell AFB, Ala.)

nominally with 72 aircraft but rarely at full strength, began flight operations on June 2, 1918.

On June 4, Jean Huffer left the 94th Aero Squadron. Huffer had done well with the squadron, establishing it on a solid basis and helping give it a strong identity. He appointed experienced flight leaders, kept Rickenbacker, and helped design the Hat in the Ring insignia. Under his command, the 94th was an effective organization credited with seventeen kills at the cost of five pilots, had been decorated by both the U.S. Air Service and the *Service Aéronautique*, and had become the most famous Air Service unit on the Western Front. Kenneth Marr, ex-Lafayette Escadrille, replaced Huffer as commander. Marr appointed Chambers, Campbell, and James Meissner to be his flight commanders. Two flights had five pilots, one had four, and flight each had a spare aircraft assigned. Marr did not assign Rickenbacker to a flight, enabling him to free lance as needed and to make the fullest possible use of his position as deputy commander and combat instructor. Rickenbacker thus further assumed the role of his mentor, Raoul Lufbery.

On June 13, the Air Service, AEF, ordered the 1st Pursuit Group to the Château-Thierry region. Anticipating large-scale combat against some of Germany's best flyers, Atkinson directed his command to practice squadron-size formations. And before the group left Toul, Rickenbacker got his fifth victory on



Château-Thierry Sector.

May 30, though it was unconfirmed for two weeks. In the meantime, Campbell shot down his fifth victim on May 31, giving him the recognition as the U.S. Air Service's first ace. Campbell shared his sixth victory with Meissner (his third) but was wounded in the engagement. He recovered, but was sent home to assist with training, severing another connection between the Lafayette Escadrille and the 94th. Campbell and Rickenbacker had been Lufbery's star pupils since that first combat patrol from Toul in March.

On June 27, the 1st Pursuit Group flew to its new station near the village of Tonquin in the Château-Thierry region about twenty-five miles from the front, where it replaced the French Sixth Army's *groupe de combat*, which literally had been shot out of the air. Two experienced German commands, *Jagdgeschwader* (*JG*) 1 based at Beugeaux and *JG* 3 based at Coincy, formed the opposition. Manfred von Richthofen, who had organized *JG-1*, had been killed in April; but Ernst Udet, Germany's second ranked ace was on hand, and the best German pilots flew what was widely considered the war's finest pursuit, the Fokker D-VII powered by the 185 h.p. BMW engine.

As the 1st Pursuit Group departed Toul, the Air Service backfilled with the 103rd Aero Squadron. The veterans of the Lafayette Escadrille who still remained had finally joined up with the U.S. Air Service, and the squadron formed the nucle-

us around which the 2nd Pursuit Group would be assembled. The Lafayette veterans were welcome: "If the troops on the ground in the Toul Sector had any concerns about the air," historian James Cooke wrote, "worries were quickly dispelled when the planes with the Indian head insignia flew into the Toul airfield."¹⁷

The sector remained quiet, however, and bad weather grounded the squadron much of the time. During July, the 103rd saw only five days of combat. The squadron also changed as its members continued to scatter to new American squadrons, spreading the outlook, attitude, culture, and techniques of the Lafayette Flying Corps flyers throughout the American pursuit force. "The Lafayette squadron is being all broken up," Capt. Ray Bridgman, who went to the 139th Aero Squadron and later command of the 22nd, wrote home. "The old pilots are sent to command and help run new American squadrons, and new pilots take their places at the Lafayette."¹⁸

The process had begun in March and April when Hall, Marr, and Peterson departed to become the Flight Leaders for the 94th Aero Squadron. Over the next few months, Charles Dolan took command of the 23nd Aero Squadron. Dudley Hill went first to the 139th Aero Squadron, then became commander of the 138th. Charles Biddle left to command the 13th Aero Squadron and later stepped up to command of the 4th Pursuit Group. Charles Jones went with him to the 13th as a Flight Leader and later took command of the 28th Aero Squadron. George Turnure also transferred to the 28th, while Charles Dolan and Charles Wilcox ultimately returned to the U.S. as flight instructors. The most significant change took place on July 29, when Major Thaw stepped up to command the new 3rd Pursuit Group. Capt. Robert Rockwell led the 103rd through the St. Mihiel offensive. Capt. Robert Soubiran later took command on October 18 in the middle of the Meuse-Argonne campaign. This dispersion of experience throughout the American pursuit force provided a continuous leavening for the Air Service, AEF.

In the meantime, events had been exciting—and deadly—for the 1st Pursuit Group, which took part in a graduate course in air-to-air combat near Château-Thierry. On June 30, the group began familiarization flights under orders from Atkinson to patrol in formations of at least five aircraft and to avoid combat unless there was a good chance of success. On the next day, the group supported the 2nd Infantry Division attack on Vaux, the first U.S. offensive of the war. Until then, German aircraft had dominated the battlefield in the area and its observation aircraft had had free reign. American losses, especially at Belleau Wood had been severe, but the advent of the 1st Pursuit Group altered the situation.

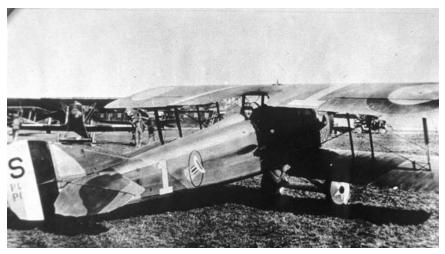
The 1st Pursuit Group's assignment during the Vaux attack was twofold: to protect friendly observation aircraft and to deny operational freedom for enemy observation. The initial plan was to fly two patrols on the morning of the attack, then surge the group in the afternoon. Enemy excursions in the morning demonstrated the inadequacy of the plan, and Atkinson moved quickly to establish complete control of the air over the attack area at H-Hour. The entire 1st Pursuit Group went up, and patrols were flown at squadron strength. The American pursuit dominated the sky during the opening hours of the offensive. The operations officer of the 23rd Infantry Regiment of the 2nd Infantry Division reported that "Our air-



Maj. Harold Hartney. (USAF photo.)

planes overwhelmed those of the enemy."¹⁹ The group's success enabled the observation aircraft to do their job, and American artillery preparation and support was effective. The 2nd Infantry Division took Vaux by evening in an attack that epitomized the combined-arms approach to combat that Pershing expected of the AEF.

On July 2, the 1st Pursuit Group began defending the entire French Sixth Army area using a system of patrols and alerts. It fought fifteen combats that day and others on successive days, taking heavy losses during several encounters. The 1st Pursuit Group lost eight pilots during the stay at Tonquin, though it claimed ten victories. Neither side was able to gain air superiority. However, the 1st proved that it could seize control locally when necessary, and the Americans pushed the German air force on to the defensive. Atkinson sought to fly squadron-sized formations, but logistics made these difficult to sustain. The 1st began the campaign with 64 Nieuports, and mechanics had to scramble to keep 70 percent of those in the air.



Capt. Eddie Rickenbacker in his Spad XIII. (USAF photo.)

On July 9, the 1st Pursuit Group moved to a new operating base at Saints. Intelligence had revealed that the Germans would launch a major attack on either side of Rheims. General Ferdinand Foch, the Allied commander in chief since March 1918, repositioned his forces to meet the threat and assembled a large Allied air force in the area, including the French *Division Aerienne*, some 600 fighters and bombers in two brigades; the British 9th Brigade, nine squadrons of Sopwith Camels, Airco SE-5s, and De Havilland DH–9 bombers; and the four squadrons of the U.S. 1st Pursuit Group.

On July 13 Spad XIIIs began to arrive. The 94th spent the first few days installing two-gun batteries on fourteen Spads. Most of the Hat in the Ring pilots were happy to have the fast, powerful, robust aircraft. Unfortunately, however, the complex Spads proved to be even greater maintenance nightmares than the Nieuports. The engines were subject to overheating and oil leaks, while faulty pumps, carburetors, magnetos, and gas tanks overwhelmed the squadron Engineering Department. The reduction gears in the 220 h.p. version of the Hispano Suiza engine proved especially vulnerable and fragile. Several of the new aircraft were lost in crashes caused by the shoddy workmanship. Hispano engines did not require overhauls as often as the Gnôme, but a complete overhaul of the complex water-cooled V-eight took four days instead of the four hours required by the much simpler rotary. Additionally, French manufacturing could not keep up with the demand for critical parts, and these were all too often in limited supply.

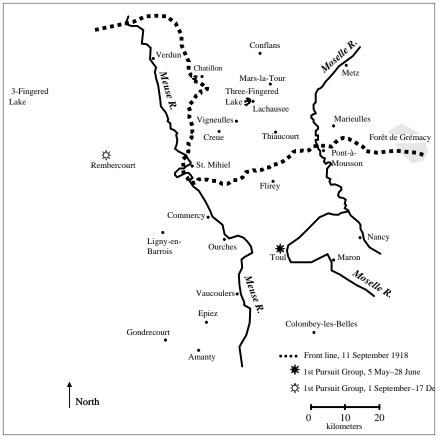
With the 94th Aero Squadron down for transition into the Spads, the three squadrons of the 1st could only field forty-three pursuits on July 15, when the thunder of artillery announced the German attack. In what became known as the Second Battle of the Marne, the Germans gained a foothold across the Marne between Château-Thierry and Rheims. The bombers of the *Division Aerienne*

attacked the bridgehead on the following day. At the same time, the pursuits of the 9th Brigade and those of the 1st Pursuit Group concentrated on blinding the enemy air and providing protection for the Allied aircraft operating at low level. The 1st experienced a tense day, engaging in twenty-four combats. The three squadrons downed six aircraft and one balloon at the cost of three pilots, and the Germans called off their attack on July 16. Air power in the form of the adjustment of artillery fire, strafing, and bombing attacks contributed to the victory by preventing the Germans from sustaining the ten divisions that had crossed the Marne. The 1st Pursuit Group had assisted in seizing control of the air over the battle area. General Foch prepared to assume the offensive. The Germans had lost the initiative on the western front, an initiative they would never regain.

By July 18, the 1st Pursuit Group was at full strength once again. Both the 94th and 95th Aero Squadrons had been reinforced to twenty-six Spads each in response to Billy Mitchell's decision to expand the strength of pursuit squadrons to twenty-five aircraft, making larger patrols possible. The commanders of the Canadian Circus, however, hoped that their units might be allowed to keep the Nieuports. In this, their commanders opposed the decision of the 1st Pursuit Group commander. Neither respected Atkinson who did not fly combat missions. Hartney, more circumspect than Bonnell managed to avoid trouble, but the outspoken Bonnell was less fortunate. The 147th received an order to fly a mission in marginal weather. Bonnell refused. Atkinson drove to the squadron and gave Bonnell the order in front of his men. Bonnell refused again, and on July 22, he and his adjutant were relieved of command. Two days later, James Meissner from the 94th took command. The 21-year old Meissner, with four victories, was the first of the college men who had joined aviation after the U.S. declared war to achieve squadron command. The 147th received its first Spad on July 22, but Meissner, delayed transition for a time. At the end of July only the 147th still flew Nieuport 28s.

The air battle of the Château-Thierry campaign essentially ended on August 1, a day on which the 27th Aero Squadron took the largest single one day loss suffered by the 1st Pursuit Group during the war. The 27th was flying an 18-plane protection patrol when it was attacked by at least four German squadrons. The formation lost integrity even before the attacks began and, during a series of dog-fights, lost six pilots killed or captured, a third of the force. After August 1, the Germans abandoned the positions won at terrible sacrifice and retreated to the Vesle River. The Saints airfield was now some 50 miles from the front, too far for efficient operations, and Atkinson established a forward field at Coincy, the former German airfield, six miles from the lines, where the pursuits could refuel, extending their patrol time and range. German air operations continued to decline, especially following the devastating British attack on the Aisne on August 8, which forced German air leaders to concentrate their forces against the British.

The 1st Pursuit Group used the lull to reorganize and recover under a new commander. Billy Mitchell's performance in the Château-Thierry campaign convinced Maj. Gen Mason Patrick, who had replaced General Foulois as commander of the Air Service, AEF, to promote Mitchell to command of the Air Service



St. Mihiel Salient.

for U.S. First Army in late July. On August 20, Mitchell ordered Major Atkinson to Toul to establish the 1st Pursuit Wing, a new organization combining two pursuit groups and a bombardment group. The logical choice to replace Atkinson was the RFC veteran, Harold Hartney. He was the only major left in the 1st Pursuit Group, and his 27th Aero Squadron had the highest score of the four pursuit squadrons, although it had taken terrible losses in the process. Lt. Alfred A. Grant took over the 27th.

Hartney's long-term, varied combat experience and detailed knowledge of equipment, tactics, and operations enabled him to exercise a personal style of command. He got to know his men intimately and talked with them often. Unable to fly as much as he would have preferred, Hartney still managed to lead from the front. He granted leave liberally to the survivors of the previous two months of combat, and also instituted an intense training program that stressed formation flying, strafing, and gunnery. Often he pitted squadron against squadron in mock maneuvers. In the meantime, the 147th turned in its Nieuports on August 13 and

spent the rest of August becoming familiar with its Spad XIIIs. On August 28 and 29, Hartney attended a conference at First Army headquarters to review plans for the St. Mihiel Offensive.

Residue of a successful German offensive in 1914, the St. Mihiel salient was a huge triangular bulge in the French line south of Verdun, which complicated French rail traffic and communications between Paris and the eastern portion of the front. The German-held city of Metz lay just beyond the base of the bulge, as did the iron mines at Briey, adding to the position's importance. Pershing and his staff had selected the bulge, seemingly vulnerable to a pincer attack, as the site of the first offensive by an American army in France and had secretly concentrated fourteen infantry divisions—nine of them American—for a massive attack designed to pinch the salient off at the base.

Airpower played a major role in the St. Mihiel offensive. Col. Billy Mitchell massed an armada of 1,481 airplanes from the U.S., France, Great Britain, and Italy, the largest concentration of aircraft of the war, enabling him to apply the theory of mass and emphasis on the offensive that he had been nursing. The force included twenty-eight American squadrons and fifty-eight squadrons from the *Division Aerienne*, mostly *chasse* and bombers. In addition to the 1st Pursuit Group, the American effort include Maj. Lewis Brereton's 1st Observation Wing and Maj. Bert Atkinson's 1st Pursuit Wing, the latter comprising the 2nd and 3rd Pursuit Groups and the 1st Day Bombardment Group. Maj. Gen. Hugh Trenchard's Independent Force of the Royal Air Force (RAF) contributed eight night bombardment squadrons; while the Italians added three more.

Between August 29 and September 3, the 1st Pursuit Group moved secretly in stages into its new field at Rembercourt, twenty miles west of St. Mihiel. This would be the Group's base for the remainder of the war, and its position on the western side of the St. Mihiel salient would make it easy to reorient the Group for the Meuse-Argonne campaign. The group immediately began flying continuous barrage patrols in its sector to prevent the Germans from learning what was taking place. The patrol system required each squadron to put up three patrols per day.

Mitchell planned to wield his air force according to a carefully orchestrated program. First, pursuit would sweep the German air force from the sky, thus denying enemy reconnaissance the ability to see what was taking place and enabling Allied reconnaissance to observe, photograph, and report. In the meantime, bombardment aircraft would attack airfields, railway stations, bridges, ammunition dumps, and troop concentrations beginning before the Doughboys attacked and continuing throughout the advance. Once the assault began, Mitchell's pursuits would range far to the German rear, eliminating enemy aircraft and opening the way for the bombardment squadrons.

On September 12, over 500,000 Doughboys and 100,000 French troops went over the top. Initially, torrential rain hampered the attack and reduced everything to slow motion. The Germans anticipated the assault and had begun to withdraw from the salient; however, the Doughboys caught the Germans in the process and reduced an orderly withdrawal to a disorganized scramble for survival. After a slow start, the assault gained speed, and the First Army completed its mission on September 16, eliminating the salient and capturing 15,000 enemy troops and 257 guns at a cost of 7,000 casualties.

The miserable weather on the first morning limited pursuit operations, so the 1st Pursuit went in low, flying mostly in pairs. Lt. Frank Luke of the 27th destroyed an observation balloon, the first of his short, meteoric career as the "Arizona balloon buster." By the afternoon, the skies had lightened, and the Group patrolled four and five strong, establishing control of the air. The 1st Pursuit Group flew sixty-two sorties on the first day.

The 3rd Pursuit Group including the 103rd Aero Squadron, participated primarily in a ground attack role. Mitchell and Atkinson were determined to provide the most effective support possible to the Doughboys. The Spads of the 103rd were hastily equipped with bomb racks enabling them to carry 20-pound bombs, and the 103rd went in low, bombing and strafing enemy positions and troop movements at altitudes from 500 feet down to ground level. Mitchell credited strafing by the pursuits on the first day with leading to the capture of several thousand German troops and credited reconnaissance by them with providing much useful information to ground commanders.

By September 13, German opposition had stiffened. On the 14th, the 1st Pursuit Group put up 123 sorties and fought 27 combats. On that day, Rickenbacker brought down his sixth aircraft and on the next day, he added his seventh. The day after that, however, Frank Luke passed Rickenbacker's score. Over the next two weeks, air combat lulled. Mitchell ordered the pursuits on to the defensive, limiting them to flying protection patrols for U.S. and French observation aircraft and to preventing German aircraft from observing the movement of American ground forces to their jump off points for the Meuse-Argonne offensive.

Following the St. Mihiel offensive, Major Hartney began to weed out weak commanders, starting with Kenneth Marr of the 94th. Curiously, for a pilot who learned his trade from Captain Thénault, Marr failed to lead combat missions and left much of the work to his second-in command. He suffered from old injuries, drank heavily, and may have had what would later be termed combat fatigue. Additionally, the men who gave the 94th its original cache were largely gone. Huffer had been sent elsewhere, and Campbell had returned to the United States. Lufbery and Hall had been shot down, and the same fate befell Alan Winslow on July 31. Meissner had taken command of the 95th, and Rickenbacker had spent much time in the hospital with mastoid problems. As a result, the 94th had performed below par, and its aircraft in-commission-rate was exceptionally low. Hartney quietly eased Marr out, and, in a controversial decision, jumped Eddie Rickenbacker over the heads of competent men of higher rank, placing him in command.

Many American airmen came from well-to-do families and had been educated at elite colleges. Rickenbacker had quit school at fourteen and worked his way up the hard way. A natural-born mechanic with an intuitive feel for machinery, he entered the automobile industry at a time when manufacturers fielded racing teams, and he became a champion driver. With the 94th, his aggressiveness, competence, sense of responsibility, and mature judgement came to the fore. His ability to select men, hold them to standards, and to elicit their best performance,



Capt. Eddie Rickenbacker and the mechanics assigned to his Spad XIII. (USAF photo.)

developed while managing professional racing teams, readily translated into the realm of air combat. His technical knowledge of machinery equaled that of any of the 94th's mechanics, and Rickenbacker played to this strength, working closely with his own mechanics, who idolized him. His aircraft was perhaps the best prepared, most reliable machine in the squadron.

Many of Rickenbacker's attributes mirrored those of the great ace of the Lafayette Escadrille, Raoul Lufbery. Both had left their families early, endured hardship and poverty, and made their own way in the world. Both were somewhat older and were experienced mechanics. Lufbery, as already noted, had selected Rickenbacker as a pupil. Rickenbacker, in turn, had identified with Lufbery as a father figure and conscientiously sought to emulate the veteran ace. When Lufbery, in the short time he had, sought to transfer the essence of the Lafayette Escadrille, and when Rickenbacker sought to learn all he could about aerial combat from the veteran, the process was complete.

Rickenbacker took command on September 25, and he quickly demonstrated organizational, administrative, and leadership skills. His goal was to establish the 94th as the top-scoring pursuit squadron in the Air Service, AEF, and he applied the techniques he had practiced as head of his pre-war racing teams. He first met with his pilots, critiqued their past performance, and set out the standards he demanded and the rules to be followed. Rickenbacker expected his men to shoot down Germans in large numbers and promised that they would not be asked to do anything he would not do. Rickenbacker then turned to the mechanics. He stressed their importance to the mission and probably went into some detail on the problems with the Hispano Suiza engine and how to deal with them. While convalesc-

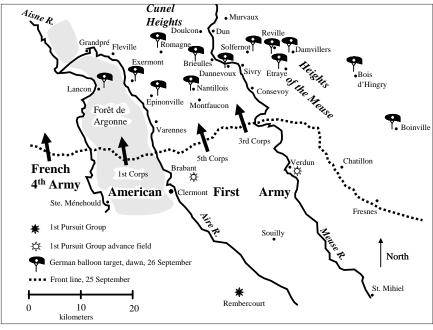
ing, Rickenbacker had met the chief Hispano Suiza engineer, and the two had delved into the details of the engine. Further, through the engineer and an American officer friend who was in charge of the aircraft acceptance group in Paris, Rickenbacker developed a back channel supply source for Hispano parts. The readiness rate for Spad aircraft was never good during the war, but under Rickenbacker, the 94th's increased dramatically. On the day after he took command, Rickenbacker set the example, shooting down two enemy aircraft. Morale in the 94th skyrocketed. Under the magnificent Rickenbacker, the Hat in the Ring gang never looked back.

Before the St. Mihiel assault ended, General Pershing began transferring the U.S. First Army north as part of an Allied offensive to break the Hindenburg line, a series of defensive positions that had existed since 1914. Under Foch's plan, the AEF would attack the area between the Meuse River and the Argonne Forrest in concert with the French Fourth Army operating west of the Argonne. The British Fourth Army would attack on the following day, and on the 28th, the British and Belgium forces in the Ypres area would advance. First Army, initially ten divisions strong, had to advance nine miles through prepared defenses just to reach the main German lines. It was a staggering task for the AEF. Pershing's veteran divisions had been committed at St. Mihiel, thus, the Argonne offensive would rely at first on less experienced divisions, several of which would see action for the first time. The AEF staff planned in days an attack that the European armies would have spent months preparing, and the big infantry divisions had to move into their assault positions in exceptionally short order. Artillery had to be brought in, positioned, and registered; and a command and communications network for the assault force established. The AEF prepared a complex logistic support network and constructed huge ammunition and supply dumps.

Mitchell led a much reduced Air Service into the Meuse-Argonne. Most of the Allied air units had returned to support their armies, leaving Mitchell with a force of about 800 aircraft, 200 of them bombers. It was a major effort to concentrate the Air Service squadrons, their support equipment, and their supplies secretly and quickly on new operating bases. Despite his weaker force, Mitchell used the same tactics as he had applied in St. Mihiel.

The 1st Pursuit Group remained at Rembercourt, while the 3rd Pursuit Group, including the 103rd Aero Squadron, transferred to Lisle-en-Barrois on September 20. The first few days at the new field were generally quiet. The weather was marginal, and the pursuit patrols found little to report when they did get in the air. Beginning about October 4, however, the situation changed. Determined to stave off final defeat, the German air force brought in many of their most accomplished Jastas, and in often abominable weather, the Americans faced enemy flights of twenty to thirty aircraft flaunting a variety of red noses, blue tails, checkerboard markings, and stripes and bands of every hue.

The first phase of the offensive began on September 26, but after some initial success, bogged down in the face of stiffening resistence and six new German divisions brought in on September 29. On October 9, Pershing renewed the offensive. The Germans fought tenaciously using natural and man-made defensive positions



Meuse-Argonne.

with great skill. The renewed assault quickly turned into a brutal, bloody head-on slugging match. Ultimately, Pershing fed more than 1,000,000 troops into the fight. and, despite desperate German efforts, by October 14, the AEF had pierced the Hindenburg line. On October 12, as new divisions came into line, Pershing reorganized, placing Maj. Gen. Hunter Liggett in command of the First Army and organizing the Second Army under Maj. Gen. Robert L. Bullard. The revitalized AEF attacked again, advancing under difficult conditions in the face of strong defensive positions. As of November 11, 1918—when an Armistice went into effect—Pershing's forward divisions stood at the outskirts of the great fortress city of Sedan, long held by the Germans.

The Air Service suffered brutal casualties during the sustained fighting. On the first day of the Meuse-Argonne attack, Mitchell's force dropped 81 tons of bombs at the cost of one airplane. After that, losses to German pursuit and ground fire were heavy. Mitchell remained committed to operating offensively, *en masse*. He attempted to use his pursuits in groups of more than 100 aircraft to oppose the enemy pursuits and to strafe enemy troop concentrations. His most massive single effort took place on October 9, when he sent out over 200 bombers and 100 pursuits The eighteen army and corps observation squadrons probably faced the most fearful challenge, often flying at low altitudes in an effort to work with the infantry and artillery.

The 1st Pursuit Group began the offensive with a carefully coordinated dawn attack on the German observation balloons arrayed along the heights of the Meuse. The group's four squadrons put up four to six aircraft each. The pursuits destroyed five balloons and five aircraft, and forced the Germans to drag the other balloons down, which was almost as good as burning them. During the next four days, the group shot down an additional eleven enemy planes and eight balloons, four of the latter by Frank Luke. Always a reckless, undisciplined loner, however, Luke completely rebelled, refusing to fly patrols with the 27th and trying to take on the entire German air force by himself. Barely avoiding arrest for insubordination on September 29, he shot down three more balloons during a twilight mission, but never returned. Wounded by defending Fokkers, he died on the ground, pistol in hand, shooting it out with German troops.

The 2nd and 3rd Pursuit Groups of the 1st Pursuit Wing had primary responsibility for attaining control of the air, and engaged in large-scale dog fights in the process. The 1st Pursuit Group's low patrols had some immunity for a time, but by the second week of October, they began facing enemy formations of ten to sixteen aircraft. Hartney developed a complex system of patrols and, despite continued low readiness rates, usually managed to put up between 70 and 80 sorties a day. The highest number was 111 on October 2.

As the air combat intensified, the 1st Pursuit Group worked out increasingly disciplined tactics. A good example of a planned mission took place on October 3, when the 1st Pursuit Group launched a complex, carefully orchestrated attack on three observation balloons located near the Cunel Heights, a key to the German position called the *Kriemhilde Stellung*. The plan called for each squadron to provide a protection patrol of eight aircraft to support the three strafers. Each squadron's patrol had a rendezvous point just inside friendly lines where they would loiter at different altitudes, the 27th Aero Squadron to the west, the 147th and 94th in the center, and the 95th to the east. The four patrols were to meet over the target at exactly 4:40, converging at the same time from different directions at different altitudes to cover the strafers. After the mission, the group would rendezvous then sweep the front from the Meuse to the Argonne.

While Hartney and his staff did much of the mission planning, Rickenbacker, the air commander, refined the project and went over the operational details carefully with the pilots before the mission, as was his practice. Unforseen circumstances forced changes. The 27th furnished only four aircraft and the 147th just two. Expecting trouble, Rickenbacker beefed up the force with thirteen Spads from the 94th and eleven from the 95th. He placed his senior flight commander, Hamilton Coolidge, with the strafers, assigning another of his flight commanders to lead the 94th. When the thirty-plane strike force left Rembercourt, he took position above the formation.

The three strafers erred, streaking toward the balloons several minutes ahead of the schedule. Coolidge burned a balloon before a German pursuit formation could interfere, but another of the strafers was less fortunate, ending up in a fight with seven D–VIIs. Coolidge then found himself the target of other enemy pursuits. The protective force arrived in time to rescue Coolidge, but not the other Spad. Rickenbacker flew toward the targets when he saw the strafers attack and his action may have signaled the protection patrols to leave the rendezvous points ahead of schedule, saving Coolidge. He also interfered with an attack by two Germans, shooting one down, then flew toward the swirling dogfight. By then, the force was scattered and at risk. With the fight spread ten miles behind the enemy lines, Rickenbacker judged the mission complete and sought to get the pursuits to disengage and reform in Allied air space. Most returned to Rembercourt, but Rickenbacker, Coolidge, and Lt. Edward P. Curtis of the 95th shot down an LVG in the aftermath of the mission. Rickenbacker, like Lufbery before him, could conjure enemy aircraft out of thin air. The mission cost two pilots, both captured, but the group earned credit for six confirmed kills, five aircraft and the balloon. "Rickenbacker's personal involvement and decisions had shaped events," according to historian Bert Frandsen. "He placed his flight commanders in key positions and positioned himself to coordinate their efforts. In the days before fighters had radios, coordination of separate elements was an almost impossible attack, but Rickenbacker managed a commendable degree of coordination."²⁰

Moreover, he made it clear who performed and who did not, and the primary determinant was his orders. During this mission, according to Rickenbacker, when the balloon strafers attacked early, they had disobeyed him, and when the 94th's protection formation moved into attack position, it did so as he had ordered. Further, his leadership and personal conduct set the standard for the others. His pilots feared to fail under Rickenbacker's watchful eye.

By October, David McK. Peterson was the only squadron leader in the 1st Pursuit Group not flying combat missions, and the 95th's performance had slipped badly. The squadron showed signs of poor discipline, alcohol was a problem, and by mid-October, Hartney had had enough. Again, one suspects that combat fatigue was an underlying problem. On October 13, Hartney replaced Peterson with Lt. John Mitchell. An accomplished pilot, Mitchell was not related to Billy Mitchell, whose brother had been killed in an airplane accident earlier. Peterson was the last veteran of the Lafayette Escadrille and Flying Corps to command in the 1st Pursuit Group. For the last month of the war, all of the 1st Pursuit Group's commanders below Hartney were fighting commanders produced through the U.S. Air Service system.

The intense fighting during the last weeks of the war took an immense toll of the Air Service, AEF, that the introduction of new squadrons to the front failed to offset. On September 26, the Air Service possessed 646 aircraft in total. Combat attrition, the abnormal wear and tear on the aircraft, and the chronic shortage of spares reduced Billy Mitchell's force steadily. By October 15, Mitchell could field 579 serviceable aircraft, despite the arrival of additional squadrons. At the end of October, the aircraft of the pursuit groups had been reduced to little more than 150 out of an authorized strength of about 300. But they had won.

Conclusion

During World War I, the 1st Pursuit Group earned credit for 201 victories, 151 aircraft and 50 balloons, 24 percent of the total aircraft victories achieved by the Air Service, AEF, and 83 percent of all observation balloons. Rickenbacker's



Capt. David McK. Peterson.

effective leadership, not to mention his contribution of 26 kills, made the 94th the highest scoring pursuit squadron with 67 kills. The 27th was second with 56, but because of Frank Luke's 14, led in balloon kills with 22. Counting aircraft, Luke had a total of 18 kills. The 95th had 47 victories, and the 147th had 31. Casualties were lighter than might have been expected. The 1st Pursuit Group had thirty-three pilots killed in combat and five severely wounded. Another twenty-one men became up as prisoners of war.

In the process of developing its pursuit force, the Air Service had borrowed heavily from the Allies, but had made its own original contribution, as well. According to historian Bert Frandsen:

That the American approach to aerial warfare represented a sort of compromise or synthesis of the British and French systems, should not be surprising. The 1st Pursuit Group developed through a transfer of technology from the British and French air forces. This transfer included the traditional hardware, such as airplanes, and the less tangible skills, tactics, and organizational structures, along with associated values.²¹

Rickenbacker, too, recognized significant differences between the French and British approach to war and, writing after the conflict, agreed that the American approach was an amalgamation of the two. "Each had worked out a method of scientific murder that did the job," according to the ace:

The French were inclined to be cautious as a settled military policy of getting the best results with the least expenditure of valuable lives and costly planes. The British were foolhardy as a matter of principle and morale, because they found they got the best results with their people in that way. Compared with the French... our men seemed reckless. Compared with the British they seemed cautious.... We were working out ours with the experience of both to help us, and the methods of both to choose from. The result was, generally, a sort of compromise.²²

But it was not only the combination of French and British methodology that provided a foundation for the American pursuit force. General Pershing was determined to organize the American Expeditionary Forces on correct military principles. Regular U.S. Army officers, career professionals held certain values important including efficiency, order, and discipline. Pershing treated the 1st Infantry Division, known throughout the AEF as "Pershing's Pets," as a model for every division of the American army. In the same way, Hunter Liggett's Ist Corps served as the model for subsequent U.S. Army corps organizations. The Air Service, AEF, followed suit, treating the 1st Pursuit Group as a model unit. In contrast to Oswald Boelcke's *Jagdstaffel 2*, a collection of hand-picked pilots, and Manfred von Richthofen's *Jagdgeschwader 1*, a unit of elite squadrons, the 1st Pursuit Group was, in Frandsen's words, "a problem-solving organization tasked with leading the way for the development of American combat aviation."²³

Rickenbacker's presence suggests something additional may also have been at work, as well. Rickenbacker, the master of the carefully calculated risk, might have been considered relatively inexperienced in air warfare by European standards, but his leadership policies and techniques reflected extensive experience and were very much home-grown. He had honed his skills in leadership, organization, and technical innovation during life-and-death competition on speedways, race tracks, and fair grounds across the United States. British and French methodologies of air warfare may have been the foundation of the U.S. pursuit force, but its success probably also owed much to such industrial-age entities as the Prest-O-Lite Racing Team.

Epilogue

Following the Armistice, Air Service headquarters selected the 94th and 103rd Aero Squadrons as the pursuit units assigned to the U.S. Amy of Occupation sent into Germany. The squadrons took up residence at Coblenz overlooking the Rhine River, where they remained for the remainder of 1918. It was a short occupation,

however. On December 23, the 103rd turned its aircraft in to the First Air Depot and began the long trip home to be demobilized. Lt. Col. Bert Atkinson, who had formed the 1st Pursuit Group and later commanded the 1st Pursuit Wing, paid special tribute to the Lafayette Escadrille and the 103rd:

> The Lafayette Escadrille, organized long before the entry of the United States into the European War played an important part in bringing home to our people the basic issues of the war. To the French people of future generations, the names of its organizers and early pilots must mean what the names of Lafavette and Rochambeau mean to us Americans, of this generation. . . . In February last the Lafayette Escadrille of the French Army was transferred to the 103rd Aero Squadron, United States Army. It was the first, and for nearly two months it was the only American Air Service organization on the front. The Squadron produced two of America's four Pursuit Group Commanders as well as a very large proportion of the squadron and flight commanders. While giving thus liberally of it's experienced personnel to new units the standard of merit of this squadron has not been lowered. No task was too arduous or too hazardous for it to perform successfully.²⁴

The 94th Aero Squadron returned to the United States shortly afterward and was demobilized on August 18, 1919; however, the squadron and the 1st Pursuit Group continued to exist. In the reorganized, post-war U.S. Air Service, the 1st Pursuit Group became the only pursuit unit, coequal with the 2nd Bombardment Group, and the 3rd Attack Group, the organization of the air force until well into the 1930s. The U.S. Air Service reconstituted the 94th on March 14, 1921 and designated it as the 94th Squadron on January 21, 1923. On January 25, 1923, the Air Service changed the designation once again, to the 94th Pursuit Squadron

In 1924, the U.S. Air Service sought to preserve the lineage and honors of units that had been disestablished and to address irregularities that characterized the service after the war. An article in the *Air Service Newsletter* explained that, "Many [distinguished] organizations are still in existence and the history of those demobilized and not provided for in existing tables of organization is being perpetuated with that of a corresponding unit."²⁵ Subsequently, War Department Circular No. 25 of April 8, 1924, consolidated the lineage and honors of the 103rd Aero Squadron with those of the 94th Pursuit Squadron, perpetuating the heritage of the 103rd. With that step, the 94th officially inherited the history and battle honors of the 103rd and the memory of the Lafayette Escadrille. It was a permanent change. Writing many years later, James N. Eastman, Jr., Chief of the Research Division, Albert F. Simpson Research Center, at Maxwell AFB, Alabama, concluded that "a consolidation of units, once accomplished, cannot be revoked."²⁶

The timing of the consolidation proved to be fortuitous in at least one respect. In an effort to capitalize on his fame, Eddie Rickenbacker and several investors



Eddie Rickenbacker presents the Hat in the Ring insignia of the 94th Aero Squadron to Lt. Glen Hubbard, commander of the 94th Pursuit Squadron, Long Beach, Calif., March 26, 1942. *(Author's collection.)*

incorporated the Rickenbacker Motor Company in August 1921, and Rickenbacker automobiles, which first appeared in December, exhibited the Hat in the Ring insignia on the radiator. Air Service regulations forbade the use of commercial emblems as unit insignia, and Air Service leaders ruled that the 94th could no longer display the Hat in the Ring, cancelling the insignia on March 26, 1924. Thanks to the consolidation of lineage and honors, however, a replacement insignia was readily at hand. On September 6, the U.S. Air Service approved the Lakota Indian head insignia of the 103rd Aero Squadron—once used by the Lafayette Escadrille—as the new insignia of the 94th Pursuit Squadron. The Rickenbacker Motor Company failed in 1927, freeing the Hat in the Ring insignia, but the 94th continued to mark its aircraft with the Indian head.

During the early days of World War II, the U.S. Army Air Forces faced serious morale problems caused by the massive aviation expansion program then taking place. In March 1942, Gen, Henry H. "Hap" Arnold, the commanding general and an old friend of Rickenbacker, invited the ace to talk with airmen at fields across the nation. Rickenbacker's 15,000-mile trip included a visit to the 94th Pursuit Squadron, then at March Field, California. Rickenbacker was impressed by the squadron's Lockheed P–38 "Lightening" and Republic P–43 "Lancer" pursuit aircraft, but was dismayed to find the planes decorated with an insignia other than the Hat in the Ring emblem he and his comrades had made famous. He urged Arnold to restore the Hat in the Ring to the 94th as a morale-building measure. "You would make this squadron of officers and enlisted personnel tremendously happy and proud if you would take it upon yourself to see that they are permitted to use the old insignia immediately," he wrote Hap, "and it would stimulate their spirit beyond words."²⁷ Arnold agreed, and on July 9, 1942, the U.S. Army Air Forces reinstated the Hat in the Ring as the insignia of the 94th Pursuit Squadron.

In 2007, the 94th Fighter Squadron continues as one of three squadrons assigned to the venerable 1st Fighter Wing at Langley AFB, Virginia. The Hat in the Ring pilots, successors to Rickenbacker, Hall, Campbell, Meisner, Chambers, Winslow, and others, fly the Lockheed-Martin F–22A "Raptor," the world's most advanced air dominance jet fighter.

Notes

1. From a speech before the House of Commons, October 29, 1917.

2. From a message to the U.S. Senate, August 19, 1914.

3. James Norman Hall in James Norman Hall and Charles Bernard Nordhoff, eds., *The Lafayette Flying Corps*, 2 vols. (Boston: Houghton Mifflin Company, 1920), I, p. 3.

4. James R. McConnell, *Flying For France* (Garden City, New York: Doubleday, Page, and Co., 1917), p. 26.

5. Quoted in Phillip M. Flammer, *The Vivid Air: The Lafayette Escadrille* (Athens: The University of Georgia Press, 1981), p. 134.

- 6. James Norman Hall in Hall and Nordhoff, eds., The Lafayette Flying Corps, I, p. 461
- 7. James Norman Hall in *ibid.*, I, p. 333.
- 8. Quoted Flammer, The Vivid Air, p. 64.
- 9. Quoted in *ibid.*, p. 163.
- 10. Quoted in *ibid.*, p. 165.
- **11**. Quoted in *ibid*., p. 174.

12. Quoted in Bert Frandsen, *Hat in the Ring: The Birth of American Air Power in the Great War* (Washington: Smithsonian Books, 2003), p. 61-2.

13. Quoted in Charles Woolley, *The Hat in the Ring Gang: The Combat History of the 94th Aero Squadron in World War I* (Atglen, Pa.: Schiffer Publishing, Ltd., 2001), p. 16.

14. Quoted in W. David Lewis, *Eddie Rickenbacker: An American Hero in the Twentieth Century* (Baltimore: The Johns Hopkins University Press, 2005), p. 125.

15. Quoted in *ibid.*, 130.

16. Ibid., p. 149.

17. James J. Cooke, *The U.S. Air Service in the Great War, 1917-1919* (Westport, Conn.: Praeger, 1996), p. 85.

18. Quoted in Dennis Gordon, *The Lafayette Flying Corps: The American Volunteers in the French Air Service in World War I* (Atglen, Pa.: Schiffer Publishing Ltd., 2000), p. 71.

19. Quoted in Frandsen, Hat in the Ring, p. 163.

20. *Ibid.*, p. 247.

21. Ibid., p. 251.

22. Capt. Edward V. Rickenbacker, "Aces' Luck," U.S. Air Service (March 1919), p. 15.

23. Frandsen, Hat in the Ring, p. 267.

24. GO, No. 17, First Pursuit Wing, Air Service, AEF, November 16, 1918, atch. to Hist, 103rd Aero Pursuit Squadron, E, vol. 16, Col. Gorrell's History of the U.S. Army Air Service, Roll 20, Microcopy T-619, National Archives and Records Administration (NARA). The statement contains one error. The Lafayette Escadrille did not transfer to the 103rd Aero Squadron. The pilots of the Escadrille transferred.

25. Lt. D. G. Lingle, "Squadron Insignia," *Air Service News Letter* (April 12, 1924), p. 6, Research Library, Air Force Historical Studies Office, Bolling AFB, DC.

26. Ltr, Eastman to Joint Operations Division, November 6, 1979, Air Force Historical Research Division, Maxwell AFB, Alabama.

27. Quoted in Lewis, Eddie Rickenbacker, p. 388.

Recommended Reading

- Cooke, James J. *The U.S. Air Service in the Great War, 1917-1919.* Westport, Conn.: Praeger, 1996.
- Flammer, Philip M. *The Vivid Air: The Lafayette Escadrille*. Athens: The University of Georgia Press, 1981.
- Frandsen, Bert. *Hat in the Ring: The Birth of American Air Power in the Great War*. Washington: Smithsonian Books, 2003.
- Gordon, Dennis, *The Lafayette Flying Corps: The American Volunteers in the French Air Service in World War One*. Atglen, Pa.: Schiffer Publishing, Limited, 2000.
- Guttman, Jon. SPA 124 "Lafayette Escadrille": American Volunteer Airmen in World War I. Osceola, Wis.: Osprey Publishing Limited, 2004.
- Hall, James Norman, and Charles Bernard Nordhoff, eds. *The Lafayette Flying Corps.* 2 Vols. Boston: Houghton Mifflin Company, 1920.
- Lewis, W. David. *Eddie Rickenbacker: An American Hero in the Twentieth Century*. Baltimore: The Johns Hopkins University Press, 2005.
- Maurer, Maurer, ed. *The U.S. Air Service in World War I.* 4 Volumes. Washington, D.C.: Office of Air Force History, 1979.
- Morrow, John H., Jr. *The Great War in the Air: Military Aviation from 1909* to 1921. Washington: Smithsonian Institution Press, 1993.
- Sloan, James J., Jr. Wings of Honor: American Airmen in World War I. Atglen, Pa.: Schiffer Publishing, Limited, 2000.
- Woolley, Charles. *The Hat in the Ring Gang: The Combat History of the* 94th Aero Squadron in Wrld War I. Atglen, Pa.: Schiffer Publishing, Limited, 2001.

Appendices

Appendix I

American Pilots of the Lafayette Escadrille

Name

Units

Balsey, Horace Clyde **Bigelow**, Stephen Sohier Bridgman, Ray Claflin Campbell, Andrew Courtney, Jr. Chapman, Victor Emmanuel. Cowdin, Elliot Christopher Dolan, Charles Heave Doolittle, James Ralph Drexel, John Armstrong Dugan, William Edward, Jr. Ford, Christopher William Genêt, Edmond Charles Clinton Hall. James Norman Hall. Weston Birch Haviland, Willis Bradley Hewitt, Thomas Moses, Jr. Hill, Dudley Lawrence Hinkle, Edward Foote Hoskier. Ronald Wood Johnson, Charles Chouteau Jones, Henry Sweet Lovell, Walter Lufbery, Gervais Raoul McConnell, James Rogers MacMonagle, Douglas Marr, Kenneth Archibald Masson, Pierre Didier Parsons, Edwin Charles Pavelka, Paul, Jr. Peterson, David McKelvy Prince, Frederick Henry, Jr. Prince, Norman Rockwell, Kiffin Yates Rockwell, Robert Lockerbie

N 124 N 102, N 124 N 49, N 124, U.S. 103rd, 139th, 22nd N 124 VB 8, N 124 VB 108, N 38, N 49, N 65, N 124 N 124, U.S. 103rd N 124 N124 N 124, U.S. 103rd SPA 124, U.S. 103rd, 213th N 124 N 124, SPA 112, U.S. 103rd, 94th D 6, MS 38, N 124, N 103 N 124, RNAS 13th N 124 N 124, U.S. 103rd, 139th N 124 N 124 V 97, N 124, U.S. 2nd AIC SPA 124, U.S. 103rd, N 124 VB 106, N 124, U.S. 94th (atch.) N 124 N 124 N 124, U.S. 103rd, 94th C 18, N 68, N 124, N 471 N 124, SPA 3 N 124, N 391, N 507 N 124, U.S. 103rd, 94th, 95th N 124 VB 108, VB 113, N 124 N 124 N 124, U.S. 103rd[,] 93rd

Rumsey, Laurence, Dana, Jr.	N 124
Soubiran, Robert	N 124, U.S. 103rd, 3rd P.G.
Thaw, William	D 6, C 42, N 65, N 124, U.S. 103rd
	3rd P.G.
Willis, Harold Buckley	N 124

Appendix II

Aces of the Lafayette Escadrille*

Name	Units	Victories
Lufbery, Gervais Raoul	VB 106, N 124,	
	U.S. 94th (atch.)	16
Parsons, Edwin C.	N 124, SPA 3	8
Biddle, Charles J.	SPA 73, N 124, U.S. 103rd,	
	U.S. 13th, 4th P.G.	7
Peterson, David McK.	N 124, U.S. 103rd,	
	U.S. 94th, U.S. 95th	6
Thaw, William	D 6, C 42, N 65, N 104,	
	U.S. 103rd, 3rd P.G.	5

*Only Raoul Lufbery became an ace while serving in the Lafayette Escadrille.

Appendix III

Air Fields of the Lafayette Escadrille and 103rd Aero Squadron

Apr 20, 1916	Luxeuil-les-Bains, a spa in the Vosges sector.
May 20, 1916	Behonne near Bar-le-Duc in the Verdun sector.
Sep 14, 1916	Luxeuil-les-Bains,
Oct 18, 1916	Cachy, a village in the Somme Sector.
Jan 26, 1917	Ravenal, 50 kms. southeast of Cachy.
Apr 7, 1917	Ham, a village behind the juncture of the French and British lines.
Jun 3, 1917	Chaudun, a field near the Chemin des Dames area in the Aisne sector.
Jul 17, 1917	St. Pol-ser-Mer to support British forces in the Flanders sector.
Aug 17, 1917	Senard, at edge of the Ardennes Forest
Dec 7, 1917	La Noblette Farm, in the Champagne sector.

[Pilots trans	ferred to 103rd Aero Squadron, Feb 18, 1918]
Apr 9, 1918	Bonne Maisson, a village near Fismes.
Jul 4, 1918	Toul in the U.S. sector.
Aug 7, 1918	Vaucouleurs for the St. Mihiel assault.
Sep 20 1918	Lisle-en-Barrrois for the Meuse-Argonne campaign.

Appendix IV

Lafayette Escadrille Memorial

The *Memorial de l'Escadrille Lafayette* is located in the *Parc de Villeneuve l'Etang* in *Marnes-le-Coquet*, a suburb eight miles outside Paris about halfway to Versailles. It honors the memory of the American pilots who flew with the French Air Force during World War I. A total of 269 Americans joined the *Service Aéronautique* during the war, 181 of whom actually flew in front-line units. Only 38 were assigned to the Lafayette Escadrille (Escadrille 124) 143 served in other French units. Collectively, all Americans in the *Service Aéronautique* were considered to be part of the Lafayette Flying Corps, a designation without organizational or operational significance.

The Memorial, on several acres of quiet grassy grounds, is surprisingly large, but almost completely hidden by lush foliage. It consists of a central arch fronted by a reflecting pool and flanked by two arched wings. The central arch, exactly half the size of the *Arch de Triomphe*, dominates the edifice. A mosaic of the head of a Lakota (Sioux) warrior, the insignia of the Lafayette Escadrille, is placed below the central arch. The wings are inscribed with the names of 68 members killed during the war and the battles that they fought. Likenesses of "Whiskey" and "Soda," the lion cub mascots of the Escadrille, are carved into the Memorial's base. Colorful stained glass windows recreate the air battles of the Lafayette Escadrille.

Stairs back of the monument descend into a semi-circular crypt containing 68 sarcophagi, the last resting place of 51 Americans and two French leaders, Gen. Felix Brocard, who helped Americans enlist in the *Service Aéronautique* in 1915-1916, and Lt. Col. George Thénault, the commander of Escadrille 124. Seventeen of the sarcophigi are empty. Those they honor are buried elsewhere. Only six of the twelve Lafayette Escadrille pilots killed during the war are buried in the Memorial: Edmond Genêt, James R. Doolittle, Ronald Hoskier, Raoul Lufbery, Douglas MacMonagle, and Paul Pavelka. Some question exists concerning the Andrew Campbell casket. Remains recovered in October 1919 were identified as his, but some Escadrille veterans doubted the identification. The casket bearing Victor Chapman's name is empty; his body was never identified with certainty.

Following World War I, Edgar G. Hamilton, a Lafayette Flying Corps pilot, assisted Allied authorities to locate the bodies of fallen aviators.

Hamilton decided that they should rest together in a memorial that would honor their memory and perpetuate the spirit that called them to serve France. He enlisted the aid of American and French leaders and formed the *Association du Memorial de l'Escadrille Lafayette* in March 1923 to campaign for a memorial. The French government donated the land, the Association raised 1.6 million francs through private donations, and M. Alexandre Marcel, chief architect of the French government designed the structures. The dedication of the Memorial took place on July 4, 1928. U.S. Ambassador to France Myron Herrick, Marshal of France Ferdinand Foch, Allied Commander-in-Chief in1918, and French Minister of War Paul Painlev presided over the ceremonies.

From the beginning, construction of the Memorial was enveloped in controversy. Among those involved in the project was an incredibly wealthy industrialist, Frederick Prince, Sr., the father of Norman and Frederick Prince, Jr., of the Lafayette Escadrille. Prince, Sr., who had fought against his son's involvement in aviation, sought to take charge of the Memorial Foundation in an effort to exalt Norman's participation in the Escadrille. He had already financed publication of a memorial edition of a biography of his dead son in 1917 and in 1920, without George Thénault's knowledge, had inserted material into Thénault's book, L'Escadrille Lafayette, which gave Prince credit for founding the squadron. This action infuriated William Thaw, who used his prestige and personal connections to undermine the senior Prince's efforts to turn the Memorial into a monument to Norman Prince. Thaw was successful. Norman Prince's remains were initially buried in the Memorial. His father, however, secured an agreement to erect the Chapel of St. John in the National Cathedral in Washington, D.C., which included burial vaults in the Chapel. In 1937, he had Norman Prince's remains transferred from the Memorial to the National Cathedral.

The Board of the Memorial Association made many errors. The booklet produced for the dedication, for example, confused the difference between the Lafayette Escadrille and the Lafayette Flying Corps by calling the Memorial "the last resting place for 67 dead of the Lafayette Escadrille." For another, the Memorial ignored 60 of the 269 Lafayette Flying Corps airman; only 209 are honored. Some omissions were made on purpose. Both Dr. Edmund Gros, who served as the President of the Board, and Paul Rockwell, Kiffen's brother, detested Bert Hall, a founding member of the Escadrille, and exluded his name from the Memorial. Two Lafayette Flying Corps pilots, Harold Wright and Eugene Bullard, shared Hall's fate. Wright was posted as a deserter during the war and Bullard, the U.S.'s first Black combat airman, was probably the victim of prejudice. Also excluded were several Lafayette Flying Corps pilots who died of disease, four who passed away in the U.S., and two who committed suicide.

In 1930, William Nelson Cromwell, an American lawyer based in Paris, founded the Lafayette Escadrille Memorial Foundation to ensure the permanent upkeep of the Memorial, provide for appropriate religious observances at the Memorial, and educate the youth of the United States, France, and other nations on the history of all the nations. The Foundation raised an endowment fund of \$1.5 million to ensure maintenance of the memorial. Construction costs of the Memorial went well over budget, however, necessitating economies that in the long run cost the facility structurally and made expensive repairs mandatory. Repairs and changes began immediately after the 1928 dedication and continued through 1936. Restorations took place in 1980 and 1986. The additional costs ate up funds, and the Foundation's capital dwindled over time, a problem compounded by unsuccessful investments and the rising costs of basic maintenance.

As time passed, veterans died, more recent events took precedence, and public memories of the Great War receded. Memorials and ceremonies once important and oft-attended ceased to be of significance. Water damage, pollution, and neglect all had their impact. The steps cracked, masonry crumbled, and floor tiles were broke. The huge blocks of granite cracked in places and turned black with pollution. Moisture in the crypt caused the plaster to deteriorate and prevented the holding of memorial services inside the facility By the late 1990s, in the words of one report, attendance at ceremonies at the Memorial consisted of little more than "three people and a bugler."

A tour by Lt. Gen. T. Michael Moseley, later Chief of Staff of the U.S. Air Force, during a visit to France began to change the situation. General Moseley found the neglected Memorial beautiful and historically significant, but was appalled by the condition of the structure. His efforts and those of others led to a revitalization of interest in the Lafayette Escadrille, capped by a special wreath-laying ceremony and military flyover on June 17, 2001, in honor of the 85th anniversary of the Escadrille. More than forty U.S. Senators and Congressmen and hundreds of U.S. and French dignitaries, businessmen, tourists, military personnel and officials witnessed the events. The ceremony generated enthusiasm and support. The French government subsequently raised \$485,000 for the Lafayette Escadrille Foundation, and the American Legion contributed \$25,000 more. In the U.S. Congress, Congressman Cliff Stearns of Florida spearheaded an effort to pass legislation supporting the Memorial. Congress approved the bill in December 2001 and earmarked some \$2 million for the Memorial.

Plans for the Memorial's restoration called for three stages of repair. The first was to waterproof the crypt, fix drains, restore and waterproof the terrace and roof, make structural repairs to the crypt, and redo the stained glass windows. The second stage was to restore and clean the facade, clean around the coffins, and restore the stucco in the crypt. The third stage was to restore the pavement, grade the grounds, and landscape the outside areas of the Memorial.

Appendix V

Lafayette Flying Corps Personnel Interred in the Lafayette Escadrille Memorial

Name

Unit

Barclay, Leif Norman Baugham, James Henry Baylies, 2d Lt. Frank Leaman Bayne, 1st Lt. James Alexander Benny, Philip Phillips Booth, William Vernon, Jr. Campbell, Andrew Courtney, Jr.** Chadwick, Oliver Moulton Chamberlain, Cyrus Foss Chapman, Charles Wesley, Jr.*** Clapp, Roger Harvey Collins, Phelps
Davis Philip Washburn*** Doolittle, James Ralph** Dowd, Meredith Loveland
Drew, Sydney Rankin, Jr. Edgar, Stuart Emmet Ely, Dinsmore Fowler, Eric Anderson Gnet, Edmond Charles Clinton** Grieb, Henry Norman Gundelach, Andre Hanford, Robert Marshall Hobbs, Warren Tucker Hoskier, Ronald Wood** Johnson, Harry Firmstone Whelen de Kruijff, Theodore Adrian Loughran, Edward J. Lufbery, Gervais Raoul** McConnell, James Rogers.** MacMonagle, Douglas** Meeker, William Henry Miller, Walter Bernard*** Nichols, Alan Hammond Palmer, Henry Brewster

N 82 N 157, SPA 98 SPA 73* SPA 85, SPA 81* SPA 67 SPA 96 N 124 **SPA 73** SPA 85, SPA 98. U.S. 94th BR 120, U.S.96th SPA 313, SPA 103, SPA 124, U.S. 103rd U.S. 94th N 124 N 152, 471st (Paris Defense), U.S. 147th **SPA 31** N 158, U.S. 103rd SPA 102* (In training, Pau) N 124 (In training, Avord) SPA 95, Sop 111, U.S. 96th (In training, Avord) N 153, N 158, U.S. 103th N 124 N 85, N 98, SPA 168* N 158, U.S. AIC, Romorantin **SPA 84** VB 106, N 124, U.S. 94th (atch.) N 124 N 124 (In training, Pau) U.S. 1st SPA 85 (In training, Pau)

N 124, N 391, N 507
N 151, N 97
SPA 94, SPA 156, SPA 38, U.S. 139th
(Waiting assignment)
N 150
(In training, Tours)
SPA 67
C 74, SPA 102, (U.S. Navy aviator)
(U.S. Navy aviator)
N 68
SPA 74, SPA 15
SPA 85
SPA 84
SPA 94, MS 156,

* On detached service from U.S. Air Service to the *Service Aéronautique* at time of death.

**Lafayette Escadrille

*** Enlisted in and trained by the *Service Aéronautique*, but never assigned to a French combat unit.

A Canadian citizen, Pelton was the only "foreign" member of the Lafayette Flying Corps.

Appendix VI

The French Lafayette Escadrilles

Following the war, in 1920 the *Service Aéronautique* designated the 7th Squadron of the 35th Aero Regiment to take the name "Lafayette Escadrille' and display the Indian head insignia. In 1933, the squadron joined with another famed unit, *Les Cigognes*, to form *Groupe de Chasse 2/5*, the *Escadron Lafayette*. This group served at various locations in France during the 1930s and was based at Toul-Croix-de-Metz when World War II began in 1939. On September, 20, 1940, *Sergent Pilote* Legrand downed a Messerchmidt Bf 109 to score *Escadron Lafayette's* first aerial victory. Legrand flew an American Curtiss Hawk 75, the export version of the Curtiss P–36.

Later, *Groupe de Chasse* 2/5 reformed under the Free French Air Force in North Africa equipped with Curtiss P–40Fs. Subsequently, the unit fought in North Africa, Italy, France, and Germany. In April 1944, the unit was reequipped with the Republic P–47 "Thunderbolt." The *Armee de l'Air* credited the *Groupe* with 8,531 sorties, 1,452 missions, and 103 victories during World War II. In January 1945, the *Groupe* was based at Luxeuil Air Base, the field from which the original Lafayette Escadrille first flew in 1916. In July 1946, the unit was reorganized as *Groupe de Chasse 2/4 Lafayette*, and in the next few years it saw combat in Indo-China flying Supermarine Spitfires and in Algeria flying North American AT–6 "Texans." The unit entered the jet age in 1949 with the De Havilland DH 100 "Vampire" and successively has flown the Republic F–84 "Thunderjet," Dassault-Breguet "Mirage IIIE," and Dassault-Breguet "Mirage 2000N."