

THE EMERGENCE OF AMERICAN AIR POWER IN WORLD WAR I

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## Preface and Acknowledgements

When the United States declared war on Germany on April 6, 1917, the country was not prepared for the use of air power in combat. However, a few hundred adventurous and visionary individual Americans were. Some would help train men to become aviators in the United States (U.S.) Army and Naval Air Services. Ultimately, there were significant advances made in equipment and its use during the Great War. Many would become "Ace" flyers, the term given to a pilot who had shot down five or more enemy planes witnessed by two flyers in his squadron or from the ground.

There are many heroes of the Great War: Those who fought on the ground or at sea as well as in the air. More is known about those who served in the trenches than those who served in the air. Fifteen individuals and their colleagues are highlighted in this paper to demonstrate the emergence of American air power in World War I. While the discussion on each is brief, the References section lists resources to enable the reader to learn more about these extraordinary individuals who sought out the challenge.

Most of my extended family members who served in World War I were in the U.S. Army and the Infantry. I had long wished to pay tribute to them by touring the battlefields in France where they fought. That opportunity came when the Smithsonian Institution offered such a trip in May of 2015 on "Remembering the Great War" under the very able leadership of military historian and archivist Mitchell Yockelson. It was a memorable experience visiting the battlefields, trenches, monuments, cemeteries, and museums. We participated in a bouquet laying ceremony in the Chapel of the Saint Mihiel American Cemetery to honor all those who served. We visited Chamery where nearby the pilot Quentin Roosevelt had fallen to his death and the Germans had buried him with respect. Our last visit was to the Monument to the Lafayette Escadrille and Flying Corps located outside Paris. A few of the pictures included in this paper were taken while on this trip; others in Washington, DC where applicable.

Thus began my interest in learning more about the air service. I had wanted to see the World War I epic film "Wings" (1927) that won the first Academy Award for Best Picture in 1929. I was able to attend a viewing at the American Film Institute in Silver Spring, Maryland on November 14, 2015. The film was introduced by William Wellman, Jr., the son of the director, who had just published a book on his father. William Wellman, Sr. had served with the Lafayette Flying Corps in World War I.

Special thanks are due to the following who helped to make this research possible. Ellen McCallister Clark, Library Director, provided me with a listing of the resources available in the library of The Society of the Cincinnati on World War I. She and Rachel Jirka, then Research Services Librarian, helped me locate the related books. It turns out that Paul Ayres Rockwell, the historian for the Lafayette Escadrille, became an active member of The Society of the Cincinnati in 1934 and General John J. Pershing, head of the American Expeditionary Forces, became an honorary member of The Society in 1932 as did the poet Henry van Dyke in 1911. Fortunately many books on World War I are available through the Library of Congress (LOC); some of the photographs used in this report had been digitized and made available to the public by the LOC Prints and Photographs Division. The DC Martin Luther King, Jr. Memorial Library also has an excellent selection of books on World War I and biographies of some of the individuals. Sarah Andrews, Manager of Marketing and Special Events at The President Woodrow Wilson House, helped me obtain the image of the "Liberty Rug" as showcased in the Library of the House. Mary Kay Cooney, guide at The President Woodrow Wilson House, brought to my attention that Mrs. Wilson (Edith Bolling Galt Wilson) was related to Colonel Raynal Bolling for whom Bolling Field was named. Meredith DeHart, a guide at the Anderson House where



The Society of the Cincinnati Headquarters is located, provided me with the 100<sup>th</sup> anniversary article on Kiffen Rockwell from the Asheville Citizen-Times. Jon Willen, also a guide at the Anderson House, advised me that a film on "The Millionaire's Unit" had been released in 2015 about the First Yale Unit who flew for the U.S. Naval Air Service in World War I. Related articles were located in newspapers obtained from the ProQuest Historical Newspapers database available at the LOC. The listing of the names on the District of Columbia War Memorial and for whom memorial trees were planted compiled by William Brown, President of the Association of Oldest Inhabitants, has been invaluable. I also found the Internet and Google Search most helpful.

Many authors quoted excerpts from poems of World War I in their books. Gavin Mortimer did so for Henry van Dyke's "In the Blue Heaven" written in 1919 and dedicated to the aviators who lost their lives in World War I. This poem in its entirety has been chosen to open this paper to pay tribute to those who sacrificed their lives in the Great War.

A few authors referred to the spirit of Lafayette as Americans landed on French soil. With the arrival of General John J. Pershing and his troops in France in June and the approach of July 4, 1917, the French wanted to join them in celebration as a tribute to Washington and Lafayette. The American battalion was provided with a flag from Puy where the Marquis de Lafayette was born and Pershing was provided one from the Order of the Cincinnati. Following a parade through Paris they arrived at the tomb of Lafayette where Pershing's staff officer, Captain Charles E. Stanton, concluded his remarks with "Lafayette, we are here." When the allied troops conquered the St. Mihiel Salient in September 1918 under General Pershing's command, Secretary of War Newton Baker had been an observer of the battle. According to Palmer, Baker rode into town afterward with Colonel Aldebert de Chambrun, the French aide in liaison. Chambrun was a descendant of Lafayette and became a member of The Society of the Cincinnati in 1926. When they arrived at the seat of his ancestor, Chambrun went inside and returned with a gift to Baker of a steel engraving of Lafayette.

As we honor the 100<sup>th</sup> anniversary of World War I, let us remember all those who made the sacrifice, learned from their mistakes, and laid the ground work for the United States to become the greatest air power in the world after World War II.

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Washington, DC

## IN THE BLUE HEAVEN

In the blue heaven the clouds will come and go.  
Scuddling before the gale, or drifting slow  
As galleons becalmed in Sundown Bay:  
And through the air the birds will wing their way  
Soaring to far-off heights, or flapping low,  
Or darting like an arrow from the bow;  
And when the twilight comes the stars will show,  
One after one, their tranquil bright array  
In the blue heaven.

But ye who fearless flew to meet the foe,  
Eagles of freedom,---nevermore, we know,  
Shall we behold you floating far away.  
Yet clouds and birds and every starry ray  
Will draw our heart to where your spirits glow  
In the blue heaven.

--Henry van Dyke



## The Emergence of American Air Power in World War I

Many Americans volunteered to serve with the Allies after war broke out in Europe in August 1914 before the United States (U.S.) joined the war by declaring war on Germany on April 6, 1917 and on Austria-Hungary on December 7, 1917. They joined the French Foreign Legion, Canadian and British Armed Forces as well as the American volunteer ambulance services. From there, some would transfer into the French Air Service and Royal Flying Corps/Royal Naval Air Force (RFC/RNAF). The RFC and RNAF merged into the Royal Air Force (RAF) on April 1, 1918. Still others such as the First Yale Unit and individuals would learn to fly on their own in the U.S. to be ready when the United States entered the war. At that time, many of these trained flyers would join the U.S. Army and Naval Air Services.

Those that served first with the Allies did receive medals and recognition while in their service. They were also honored after the war. The French dedicated the Monument to the American Volunteers who Fell for France on July 4, 1923. Located at the Place des Etas Unis in Paris, it was sculpted by Jean Boucher who took the photograph of soldier and poet Alan Seeger as his inspiration. The bronze statue honors those who lost their lives while serving in the French Foreign Legion and 24 names are listed on the back of the base. A Monument to the Lafayette Escadrille and Lafayette Flying Corps located outside of Paris in Marnes-la-Coquette was dedicated on July 4, 1928. It was designed by the French architect Alexandre Marcel modeled after the Arc de Triomphe and built with private funds on land donated by the French government. It honors the 212 American pilots who flew at the Front with France; of these, 38 flew with the Lafayette Escadrille. Among them, there were 13 Ace pilots. By the end of the war, 67 of these men had died including some who had transferred to the U.S. Air Service. On January 9, 2017, the American Battle Monuments Commission assumed ownership of the Lafayette Escadrille Memorial Cemetery noting it "commemorates the birth place of American combat aviation and serves as a symbol of the Franco-American comradeship during World War I." The Canadians dedicated the Canadian Cross of Sacrifice on Armistice Day 1927 to the large number of Americans who enlisted in the Canadian Armed Forces and lost their lives in World War I; it is located in Arlington National Cemetery. Some of these transferred to the RFC/RNAF; 300 Americans flew in operational squadrons with the British during World War I and 28 became Ace pilots. Across all of the services for which they flew, some 113 American pursuit pilots became Ace flyers.

When the United States did enter World War I, the U.S. Army established eight aviation instruction centers in Europe. The largest designed for advanced training was the 3<sup>rd</sup> Aviation Instruction Center at Issoudun, France. More than 1,800 men attended training there and 829 completed pursuit pilot training; 627 served in combat and 202 became instructors. The Center was closed down on June 18, 1919. Afterward, a 15-ft. concrete monument was raised at the cemetery at Volvaut with bronze plaques commemorating the sacrifice of 171 Americans who died there. A restored monument and rededication took place on June 28, 2009.

World War I was the first air war. What began as use of airplanes for observation soon grew into their use in combat once machine guns were successfully mounted. The British had created the RFC in April 1912, the French its flying service in April 1914, and Italy did so in January 1915. When the U.S. joined the war, American flight students were sent to facilities in these three countries for training. Aircraft equipment continued to improve in its speed, height, and load bearing capacity. According to Kennett, "And the changes in aircraft capabilities were the key changes underlying the evolution of aerial warfare..." He also states that while the first all-metal plane appeared by the end of the war, "the



airplanes most widely used consisted of a braced wooden framework covered with fabric." Floats and seaplane hulls were also fragile made up of plywood and canvas. Seaplanes required calm water for take off anticipating the need to take off from aboard a ship.

With a reputation for being dangerous, many did not apply to become pilots and a number who did were hurt or died during training sessions. The French did require seat belts and cork and leather crash helmets for the fliers in these open cockpit planes. While the French had also provided balloon observers with parachutes in late 1915, these were not as useful as they should have been. Nevertheless, a major complaint of American ace pilot Eddie Rickenbacker was the lack of parachutes for air pilots during the war.

American pilots also played a role in bringing the war to an end. President Woodrow Wilson gave the address on war aims to Congress on January 8, 1918 that became known as the "Fourteen Points." Pilots scattered leaflets on the Points printed in French and German over the German trenches, cities and towns. On October 11, 1918, German Chancellor Maximilian of Baden contacted the Swiss government to appeal to President Wilson to open peace negotiations on the basis of these Points.

The pilots were mostly young, single, well-educated, and drawn to the adventure of flying. Fifteen remarkable American pilots, their colleagues and leaders, have been selected for this report to showcase how they participated in the emergence of air power during World War I and how the formation of the Air Corps built on their efforts. Three of these pilots had air bases named for them and one had a World War II destroyer escort named for him. Three from Washington, DC who died in service are listed on the District of Columbia War Memorial and had memorial trees planted in their honor on 16<sup>th</sup> Street, NW. One is buried with a memorial dedicated to him in the Washington National Cathedral.

### **The Lafayette Escadrille and Lafayette Flying Corps**

**Kiffen Yates Rockwell (1892-1916)** was born in Tennessee and moved with his family to Asheville, North Carolina in 1906. After his graduation from Washington and Lee University, he joined his older brother Paul Ayres Rockwell (1889-1985) in Atlanta where he was working for a newspaper. Both were among the first Americans to enlist in the French Foreign Legion at the outbreak of the war in Europe. They sailed for France on August 7, 1914 and by the end of August, they were accepted into the French Army. They served in the trenches in Aisne and Champagne in the winter of 1914-1915. Paul received a shoulder wound in May 1915 and after a long recovery obtained a medical discharge. Kiffen was wounded in the thigh in the Artois offensive on May 9, 1915 and could no longer do the long marches and carry a 60 lb. pack as required by the Legion. While recovering, he spoke with William Thaw II (1893-1934) who had transferred to the French Air Service in December 1914. William had left Yale University in 1913 to learn to fly but when he arrived in France, he served first in the Legion. He suggested to Kiffen that he transfer to the Air Service. Kiffen then applied and on September 2, 1915, he became a Corporal and member of the Paris Air Guard. A number of other Americans transferred to the Air Service from the Legion and Ambulance Services.

**Norman Prince (1887-1916)** was born in Massachusetts and graduated from Harvard Law School in 1911. He then took flying lessons and received his pilot's license in 1912. In November of 1914, he attended the Burgess flying school at Marblehead to learn to fly hydro-aeroplanes. His friend from



Boston and Harvard, Frazier Curtis (1876-1940), was also enrolled. He told him of his idea of an all-American squadron of volunteer airmen to fly for the French. He sailed for France in January 1915 and was joined by Curtis in February. They joined the Foreign Legion in March and then transferred to the French Air Service. Curtis had worked with Prince on his plan. Unfortunately for Curtis, he suffered injuries from two crashes while in training and was honorably discharged in August 1915. William Thaw had also thought of the idea. Prince enlisted his help on getting the French interested in an all-American squadron. They made contacts and gained the support of Undersecretary of the French Ministry of Foreign Affairs Jarousses de Sillac, Dr. Edmund Gros, William K. Vanderbilt I (1849-1920) among others. Dr. Gros, Medical Director to the American Field Service, led the effort to gain support of the French government. The French Air Department authorized the formation of the Escadrille Americaine (N.124) on March 21, 1916 to consist of American volunteer aviators to fly French aircraft with French mechanics and wear French uniforms under French officers. The unit was officially established on April 20 at Luxeuil-les-Bains and provided with new Nieuport planes. Dr. Gros had formed the Franco-American Committee and William K. Vanderbilt provided the financial support for the squadron. The Committee contributed monthly sums to supplement the low French Army pay, supplied free uniforms every three months to each of the flyers, and gave cash prizes for successful missions. Hall and Nordhoff dedicated their book to William K. Vanderbilt as a "generous and loyal friend of the Lafayette Flying Corps."

The seven founders of the Escadrille Americaine (Nieuport 124) were William Thaw, Norman Prince, Elliot Cowdin, Victor Chapman, Kiffen Rockwell, Bert Hall and James McConnell. Five more joined them including Horace Clyde Balsley (1893-1942) and Gervais Raoul Lufbery (1895-1918). The highly respected French officer, Georges Thenault (1887-1948), served as their leader until the unit was dissolved on February 18, 1918 when many of the members transferred to the 103<sup>rd</sup> Pursuit Squadron of the U.S. Air Service. Paul Rockwell had remained in Paris as a war correspondent and when the squadron was formed, he became its official historian. Kiffen Rockwell became the first American aviator to shoot down a German airplane while in combat when he was flying over the Alsace battlefield on May 18, 1916. The French awarded him the Medaille Militaire as well as the Croix de Guerre with Palm. Over the next four months he flew above the Verdun Front and shot down several German planes. He was awarded the Order of the Army Citation and promoted to Sous-Lieutenant. On September 23, he and Lufbery were chosen to fly the improved Nieuport 17 airplanes. They became separated while flying over the Vosges. Kiffen was shot and killed by the enemy with an explosive bullet that passed through his chest and his plane fell to the earth. He was buried at Luxeuil-les-Bains. He was posthumously made Chevalier (Knight) of the Legion of Honor. Norman Prince flew over a hundred combat missions and was credited with four victories over German aircraft. He received the Medaille Militaire and Croix de Guerre with three Palms and Star from the French. On October 12, Prince flew escort for a bombing raid on the Mauser Works at Oberndorf. In returning to the Corcieux airfield in the dark, his landing wheels hit an electric cable and he was fatally wounded. He died in the hospital three days later on October 15, 1916. He was promoted to Sous-Lieutenant and awarded the French Legion of Honor. He was first buried at Luxeuil-les-Bains, and in 1937, he was moved to the tomb below a 7 ft. statue of him by the French sculptor Paul Landowski located in the Washington National Cathedral, Washington, DC. Both Kiffen Rockwell and Norman Prince are commemorated at the Lafayette Escadrille Memorial Cemetery and were honored in the press on the 100<sup>th</sup> Anniversary of their deaths respectively in the Asheville Citizen-Times on September 28, 2016 and in The Washington Post on October 14, 2016.



Due to complaints of the Germans over the name of the squadron as America was neutral, the name was changed to Lafayette Escadrille in December 1916. According to Parsons, Edmond Genet (1896-1917) conceived of the idea of Lafayette for the name ... "that, since Lafayette had come to America when we needed help and we were returning the favor to France more than a hundred years later, what could be more appropriate as a sort of token of respect to the chap than to call our poor nameless outfit the Escadrille.Lafayette."

As a result of the publicity given the American squadron, more Americans joined so the Franco-American Flying Corps was renamed the Lafayette Flying Corps. The Escadrille only had 12 to 15 flyers at any one time and a total of 38 who served. The other American flyers were assigned to separate French flying units.

**Eugene Jacques Bullard (1894-1961)** was born in Columbus, Georgia and left home at a young age. He was befriended by a band of Gypsies who told him life was better for African Americans in Europe. He worked odd jobs until he arrived in Norfolk and boarded a ship to Scotland. He was sixteen when he arrived in Europe. He learned to box and earned money as a boxer and entertainer. He joined a tour group that took him to Paris. Here Bullard enlisted in the French Foreign Legion in October 1914. He fought with the Third Marching Regiment in the Somme, Artois, and Champagne battles. He then transferred to the 170<sup>th</sup> Infantry Regiment, a noted combat unit named "The Swallows of Death" by the Germans. He was wounded by a poisoned bullet at the Battle of Verdun in March 1916. In spite of the wound, he carried a message from one French officer to another. He was picked up by the Red Cross in a Ford ambulance and taken to a "Red Cross" Train headed for Lyon. He was awarded the Medaille Militaire and Croix de Guerre with Bronze Star. After his recovery, he volunteered for the French Air Service on October 2, 1916 as a machine gunner. He met Edmond Genet who told him about the Lafayette Flying Corps and the fund set up for the American pilots by the Vanderbilts. He then applied for training as a pilot and received his license on May 5, 1917. He flew combat missions from August 27 to November 11, 1917. Late in 1917, he applied for transfer to the U.S. Air Service. He passed all the tests to become a pilot; his name was the last on the list but he was not assigned an officer rank. Only officers could be pilots. He later learned that no African American was accepted as a flyer in the U.S. Army during World War I. He had a confrontation with a French officer and was dismissed from the Flying Corps. He was transferred back to a service battalion of the 170<sup>th</sup> Infantry Regiment until the end of the war. As Carisella and Ryan wrote, he "served bravely with French Foreign Legion for two years winning a dozen decorations while twice being wounded and in summer 1917 became the world's very first Negro combat flyer." After the war he learned that his older brother had been lynched. Bullard remained in Paris and became active during the jazz-age, as a musician, impresario, nightclub and bar owner. He recruited "Bricktop" who was mentor to Josephine Baker. He hired Langston Hughes as a busboy in his club. He served for the French in World War II in counterintelligence winning two additional medals. He had to flee Paris and served with the French Army until wounded. He escaped to the U.S. and settled in New York. In 1954 he was one of the veterans invited back to relight the everlasting flame at the Tomb of the Unknown Soldier under the Arc de Triomphe in Paris. On his 65<sup>th</sup> birthday, he was made a Chevalier (Knight) of the Legion of Honor—his 15<sup>th</sup> decoration from the French government. He retained his American citizenship but his wounds for France also brought him French citizenship. At his request when he died, he was dressed in his French Foreign Legionnaire uniform, with the French flag draped over his brass coffin. He was given a military funeral and buried in the Federation of French War Veterans Cemetery in Flushing,



New York. In 1994 he was posthumously promoted to 2<sup>nd</sup> Lieutenant by the U.S. Air Force that also dedicated a section to him at their Museum; a bronze bust of him by the artist Eddie Dixon is on display at the Smithsonian National Air and Space Museum.

**William Augustus Wellman (1896-1975)** was born in Massachusetts. He was expelled from Newton High School. He worked at various jobs and then turned to ice hockey where he met the early aviation pioneer Earl Ovington from whom he developed an interest in flying. On March 29, 1917, he applied to the U.S. Naval Aviation Service and was rejected mainly due to his lack of education. He joined the Norton-Harjes Ambulance Corps in April and arrived in France on June 1, 1917. He transferred to the French Foreign Legion; he then took and passed his tests for the Lafayette Flying Corps. On December 3, he was assigned to the Escadrille N.87, Les Chats Noir (the Black Cats), a famed group of French fliers stationed at Luneville in the Alsace-Lorraine sector. He was the first American to join them and had difficulties with the other fliers at first. He received the nickname "Wild Bill" and kept it. He named his plane(s) for his mother Celia. Within a week he was joined by another American pilot Tommy Hitchcock. They were given the assignment to drop President Wilson's message to Congress and American people printed in French and German over the enemy territory. Hitchcock completed his assignment but the motor on Wellman's plane stopped and he had to land and run for safety. Hitchcock was taken prisoner on March 9, 1918. Wellman was then ordered to provide air support to America's 42<sup>nd</sup> Division known as the Rainbow Division composed of handpicked units from 26 states and DC. According to Wellman, Jr., their chief of staff, Brigadier General Douglas MacArthur, said "The 42<sup>nd</sup> Division stretched like a Rainbow from one end of America to the other." Wellman was the only American in the air to provide such support. On March 21, he was sent on a reconnaissance mission; he shot up a village taken over by Germans, but he himself was hit and his plane destroyed. His back was broken in two places; he was given a brace but his days as fighter pilot were over. He received an honorable discharge from the French Army and Lafayette Flying Corps on March 29, 1918. During his service, Sergeant Wellman received the Croix de Guerre with two Palms, French Grande Guerre, Verdun Commemorative Medal, and Order of the Army Citation. He had four official victories from air battles. He arrived back in New York on May 2. He applied to the RAF but was rejected because of his injury. Then Capt. H. Clyde Balsley, one of the original members of the Escadrille Americaine and the first American to be shot down in aerial combat, offered him a teaching position in the Pursuit Division of the U.S. Air Service. Wellman was assigned to Rockwell Field in San Diego, California as a 1<sup>st</sup> Lieutenant. After the Armistice, he resigned. He had met Douglas Fairbanks who found him a part as actor and then as messenger in Hollywood. He wanted to be a director and worked his way up. As a result of talking with General Pershing at an event, he was made Assistant Director. By May 1923 he had completed 18 films and with the 19<sup>th</sup> became a Director. His famous air film "Wings" premiered in New York on August 12, 1927 and won best picture award. He was part of the Golden Age of Hollywood and directed many more award winning films. In 1958 he directed "Lafayette Escadrille" with a script that he wrote but the ending was changed. It was not well received; surviving members from the unit felt it did not accurately reflect their experiences. While he never won an oscar for directing, he did receive the D.W. Griffith Lifetime Achievement Award in 1973. He died on Thanksgiving Day 1975. He was cremated and his ashes distributed along the flight path he had once taken between Hollywood and San Diego.

According to the Lafayette Flying Corps Member Roster, four of the aviators were from Washington, DC. **Charles McIlvaine Kinsolving (1893-1984)** joined the American Ambulance Field Service and



was a driver in France for five months in the Verdun, Champagne, and Vosges districts. He enlisted in the Flying Corps on June 13, 1917 and after training flew missions at the Front from November 21 until June 16, 1918. He received the Croix de Guerre with Palm and Star. He had transferred to the U.S. Air Service and was commissioned a 1<sup>st</sup> Lieutenant. He was an instructor at the 7<sup>th</sup> Aviation Instruction Center until September 1918 and was commanding officer of the 163<sup>rd</sup> Day Bombardment Squadron until the Armistice. He left the U.S. Air Service in 1919. He later served for ten years as a Trustee of the Lafayette Escadrille Memorial. **Gorman De Freest Larner (1897-1984)** applied to the U.S. Signal Corps when the U.S. had joined the war but was rejected because of his youth. He sailed for France and joined the Flying Corps on July 10, 1917. After training he flew missions at the Front from December 3 to June 15, 1918. He was credited with destroying two enemy planes. He received the Croix de Guerre with two Palms. He had transferred to the U.S. Air Service and was commissioned a Lieutenant. On June 16, 1918, he joined the 103<sup>rd</sup> Pursuit Squadron and flew with that unit as a flight commander until the Armistice. During this time, he was credited with destruction of five enemy planes making him an Ace flyer. He was awarded the U.S. Distinguished Service Cross with Bronze Oak Leaf. On November 8 he was appointed Captain and served as an intelligence officer on the staff of Colonel House at the Peace Commission in Paris. He returned to the U.S. in September 1919 and in February 1920 he joined the Army Air Corps reserve. During World War II, Larner joined the U.S. Army Air Corps as a Colonel and served on active duty for four years in London as Air Attache and then at the Pentagon. **Harold Young Saxon (1894-1965)** joined the American Ambulance Field Service. He sailed for France and transferred to the Flying Corps on June 10, 1917. After his training he served at the Front from January 21, 1918 until the Armistice. He was credited with destroying two enemy planes. He received the Croix de Guerre with two Palms. **Benjamin Stuart Walcott (1896-1917)** joined the U.S. Army in April 1917 and took flight training. He then resigned and sailed for France. He joined the Flying Corps. After training, his first combat patrol was on December 12, 1917. He shot down a German biplane over enemy lines in the Champagne sector. On his return to French lines, he was shot down and killed. He was buried by German troops at Leffincourt on December 14, 1917. He was posthumously awarded the Croix de Guerre with Palm and Medaille Militaire. He had applied for transfer to the U.S. Air Service and notice of his commission as Lieutenant had arrived. In 1928 his remains were placed in the newly completed Lafayette Escadrille Memorial. A marker honoring him was placed in Rock Creek Cemetery in Washington, DC. He is also one of the three aviators whose names are etched on the District of Columbia War Memorial dedicated on Armistice Day 1931 and who had memorial trees planted in their honor on 16<sup>th</sup> Street, NW.

On July 7, 1917 a special event took place on the airfield at Chaudun in the Aisne sector for the Lafayette Escadrille. During a military parade, the members were presented with an American flag by the elite French Chasseurs Apins Regiment. This silk flag had been handstitched by Mrs. William McAdoo, wife of Secretary of the Treasury and daughter of President Woodrow Wilson, and other women representing the U.S. Department of the Treasury. Lieutenant William Thaw accepted the flag on behalf of the squadron. It is possible that this was the flag seen flying over their headquarters at Chaudun that month.



## **The Royal Flying Corps/Royal Naval Air Force (Royal Air Force)**

When Americans joined what became the RAF, they often had to give up their U.S. citizenship although once the U.S. joined the war, they were able to regain it. The French had established the Foreign Legion so Americans could join the Legion and transfer to the French Air Service without losing their citizenship. While more American pilots served with the British than with the French before the U.S. joined the war, they did not receive the same level of recognition as those who served with the French.

Americans flying with the French and the British units faced similar hardships in their daily patrols. The French Air Force and the RAF provided alcohol in the mess tents in the evenings for their relaxation. However, one of the differences was the language barrier in France, and even isolation for some of the Americans assigned to an all-French squadron. Another was that the British did not denote a flyer as an "Ace" until the pilot had downed six or more planes in contrast to five acknowledged by the other countries. The British were also reluctant to give praise to individuals although they did give out military awards such as the Military Cross and Distinguished Service Order.

In late August 1914, the Canadian government agreed to recruit pilots to the RFC in Canada. Most of the Americans who joined the British air units enlisted through Canada and did some training there.

**Oliver Colin LeBoutillier (1894-1983)** was born in New Jersey. His nickname was "Boots." He took flying lessons at the Wright Brothers Flying School in Mineola, NY. He then entered Canada and joined the RCAF on August 21, 1916. He left in the fall for more training in Britain; he considered it to be very dangerous. By April 1917 he was in the No.9 Squadron as a sub-Lieutenant piloting the Sopwith Triplane. Between May 25 and July 29, he shot down four enemy planes. On April 1, 1918 this squadron became No.209 of the RAF. He participated in a squadron dog fight on April 21 and was witness to Capt. Roy Brown downing the triplane of Manfred von Richthofen ("The Red Baron"). He was wounded on June 14 and returned to the U.S. in February 1919. He obtained the rank of Captain and had achieved ten aerial victories. He was an Ace pilot and received the British Distinguished Flying Cross. In the U.S. he became a skywriter and official of the Skywriting Corporation of America. He was a barnstormer and stunt pilot in 18 Hollywood movies. Howard Hughes hired him as a test pilot. He gave Amelia Earhart her first lesson on a twin engine aircraft. He became a Civil Aviation Authority inspector in charge of CO. and WY. He received a Silver Star of Valor by the Civil Air Patrol for the rescue of a pilot who had crashed into deep snow in CO. He settled in Las Vegas, NV and became President of a pharmaceutical company. He died on May 12, 1983 in Las Vegas and was buried there in the Bunkers Memory Gardens Cemetery.

**Frederick Libby (1891-1970)** was born in Colorado. He learned to ride horses at an early age. He lived with an aunt in MA to finish high school. He then moved to AZ and worked as a cowboy. He was in Calgary, Canada when war broke out. He had been there for an oil investment that did not work out. He enlisted in the Canadian Army in late 1914 and was assigned to a motor transport unit in the Canadian Expeditionary Force. He had six months of training in Toronto. He then went to Halifax where he sailed for England in April 1915. He took his new truck to Rouen, France where he began his assignment to support the Canadian 2<sup>nd</sup> Division. He served in motor transport as a Private through the winter of 1915-1916. His job was to haul supplies to those in Britain's 85 mile long trenches. He saw a notice on a bulletin board from the RFC recruiting observers. He reasoned that they don't fly in the rain and he wanted out of the rain. In an interview he was asked if he could ride a horse; as he could he



was accepted and applied to become an officer. He never quite saw the connection and his memoirs were titled Horses Don't Fly. He joined the 23<sup>rd</sup> squadron and took training to become an aerial observer that included map reading, machine guns, and bombing. He received orders to go to Waddington Air Field to learn to fly and get a pilot's license. He became a qualified pilot on March 6, 1917. He had been able to shoot since childhood so on his first combat mission on July 15, his birthday, he scored a victory. In August 1916 he was commissioned and transferred to 11 Squadron. He became an Ace on August 25, 1916 and by October 20 was a double Ace as an observer. He saw the first use of tanks in battle while on observation duty on September 15. He was sent for pilot training on October 28, 1916. On December 13, he and Capt. Stephen Price were awarded the Military Cross by King George V in Buckingham Palace. He was the first American to be so honored and according to Libby, he was the "first American that year to be credited with more enemy planes destroyed than any other American in any service on the Western Front." He completed pilot training on March 5, 1917 and scored two victories on his next assignment. He was transferred to Squadron 25 where he scored two more victories. On May 28, 1917 he began flying the American flag as streamers and these were the first American colors to cross over German lines. He was promoted to Flight Commander and served with Squadron 25 until he left the RFC. He had destroyed two aircraft and downed 12 planes as both observer and pilot. He had obtained the rank of Captain. At the request of General Billy Mitchell, he transferred to the U.S. Air Service on September 15, 1917. He returned to the U.S. and reclaimed his citizenship. He raised funds for the Liberty Loan drive by auctioning off his flight streamers before joining the 22 Aero Squadron at Hicks Airfield in TX. He had become seriously ill and went to a series of hospitals. He took 6 months of sick leave to go to NY to see the great specialist Dr. Joseph Frankel at his own expense. He found out that he had spondylitis deformans of the spine. He left for Imperial Valley, CA where he saw everyone wearing a flue mask. He got sick with it and Armistice was declared while he was in the hospital. He resigned from the U.S. Air Service having never flown with them. After the war, he worked in the oil industry. He founded Eastern Oil Company as well as Western Air Express that had begun as a cargo airline and became a commercial carrier after being sold to Western Airlines. At age 65, the U.S. Air Force presented him with the honor to fly in a supersonic jet with a top test pilot during their 50<sup>th</sup> Anniversary; he was given the controls while in flight so flew his first jet. He was completing his memoirs when he passed away on January 9, 1970. He was buried in Los Angeles National Cemetery. According to a family member, he spoke of some level of honor among pilots; when a German Ace was shot down, RFC pilots flew over enemy lines and dropped a wreath over his home squadron in his honor. Libby thought highly of his service during the war. He wrote "To have been a participant with the Canadians for my first year of service and the Royal Flying Corps through 1916 and 1917 on active duty is a memory in itself."

As Nellesen wrote "The group of American pilots who flew under French and British command had a very large impact both in combat and in the creation of the United States Air Force."



## **The First Yale Unit and the United States Naval Air Service**

Frederick Trubee Davison (1896-1974) is given credit for getting the Yale Unit established. He had volunteered with the American Ambulance Field Service in France in the summer of 1915 and learned of aviation. He shared his idea of going into aviation with Robert Ambercrombie Lovett (1895-1986). According to Hall and Niles, Davison and Lovett visited the Lafayette Escadrille in France so realized the importance of an air unit to the war effort. Davison was Crew Team Manager at Yale University, and the Crew Team was in training in June 1916 when war with Mexico seemed a possibility. Many of the Crew had indicated an interest in aviation. Davison recruited some Yale students and two non-Yale men for the first twelve members of the Yale Unit. He contacted the Aero Club of America and was advised to train for the first Aerial Coastal Patrol Unit. There was still the problem of finding airplanes and instructors. Davison turned to Rodman Wanamaker who was operating a flying school at Port Washington, Long Island. He offered him one Curtiss flying boat and instructor David McCulloch. The Yale Unit formed at Locust Valley in the summer of 1916 to learn to fly as well as how to maintain aircraft. In the early fall while civilians, they served as members of the Aerial Coastal Patrol. Two seaplanes were donated to them. The Unit moved their aircraft to the New London submarine base. More members joined in 1917 so there were 30 members ready to join the U.S. Navy. Secretary of Navy Josephus Daniels did not provide assurances of support but Assistant Secretary of Navy Franklin D. Roosevelt and Rear Admiral Robert Peary did. Davison continued to work on getting more support. He asked Colonel Lewis Thompson to join him in Washington, DC to meet with Lt. John H. Towers who had started the first training center for the U.S. Navy Air Corps in Pensacola, FL. Towers suggested that the Aero Club members enlist in the U.S. Navy Reserve and plan to train in Palm Beach. Thompson raised \$200,000 to cover the costs for the Unit in the months to come. They bought every aircraft they could find. On Saturday, March 24, 1917 the now 29 members of the Unit enlisted in the U.S. Naval Air Reserve making them the first Naval Air Reserve squadron or the First Yale Unit. They transferred to West Palm Beach, FL the following week with a Navy Lieutenant in charge. While they had official status, no funds were provided for their training nor did they have a home base. Lt. Towers sent Naval officer Lt. Edward Orrick McDonnell to serve as Commanding Officer and to teach discipline. One of the men Stewart left the Unit in May. While others wanted to join, Davison could not expand the group as it was expensive and the effort all privately funded. The U.S. Navy never reimbursed the donors for the funds provided for their training. The Yale Unit left for Huntington Bay, NY in May. On July 28, 1917, 28 members of the Yale Unit passed their written exams. Then came the flying test. Davison crashed during the test and was seriously injured. There were now 27 among the first 100 men to win their Navy wings. In addition to Lovett, this included Albert Dillon Sturtevant (1894-1918), Curtis Seaman Read (1895-1918), Kenneth MacLeish (1894-1918), Artemis Lamb Gates (1895-1976), David Sinton Ingalls (1899-1985), and John Martin Vorys (1896-1968). It was the country's first naval aviation unit in World War I. Many were sent to set up new training centers in the U.S. and they were upset. Finally the Navy sent the two most senior officers, Lovett and Gates, to France. They arrived in August. Lovett was sent to Moutchi, the first of the American Naval Air Stations. He began to work on creating the base that would become the main overseas flying, bombing and gunnery school through which every American flying boat pilot would pass. He assembled a Franco-British Aviation flying boat and on September 27, he flew its inaugural flight. It was the first flight by a naval aviator on an American base overseas. Gates went to a French station at Dunkirk. He was recommended for the Congressional Medal of Honor for the rescue at sea of two of his squadron. On October 4, he was shot down and taken prisoner of war and released by the Germans after the Armistice. In the fall, the next two sent overseas were Sturtevant and Vorys. After training, they were sent to Felixstowe to fly in English U-boat patrols and guard convoys crossing the North Sea.



According to Wortman, "They were the first American officers to serve with the British and were carefully chosen for the assignment." Other members of the Yale Unit followed overseas. Lovett came up with an innovative bombing strategy and plan for creating the first strategic bombing force that was approved by the Navy. It was the largest aerial program in history. He had sent men to Italy to train on Capronies; they were met by Army Major Fiorella La Guardia. The Yale Unit did not like these planes. Lovett also suggested that an independent air force be set up. Most of the men flew bombers. As Wortman wrote, "Ingalls embarked on the greatest string of aerial combat successes of the war by an American Navy pilot." He was the Navy's first and only Ace pilot during World War I with 6 victories. He was honored with the British Distinguished Flying Cross and the U.S. Navy's Distinguished Service Medal.

**Albert Dillon Sturtevant (1894-1918)** was born in Washington, DC. He studied mechanical engineering at the Sheffield Scientific School of Yale University. He stayed on an extra year as Captain of the Yale Crew Team. He signed up for the Yale Unit with Davison in June 1916. He had already made arrangements for flying at Mineola Field and then Governor's Island with the National Guard. Captain Raynal C. Bolling had previously organized the first aviation unit of the State National Guard. Sturtevant joined the Yale Unit afterward. He graduated from Yale University in 1916 and entered Harvard Law School that fall. He kept in touch with Davison. On March 24, 1917, he enlisted with the Unit in the Naval Air Reserve Corps. He joined them for training in Palm Beach and went with them to Huntington Bay, NY in May. He was one of the 27 flyers who passed the test in July 1917 and obtained his Navy wings. Sturtevant and Vorys were the second group to be sent overseas. After training, they reported to the RAF station at Felixstowe, England to fly U-boat patrols and escort merchant convoys crossing the North Sea. They were based there with a British operating squadron in December 1917. They flew their missions in a Curtiss H-12 Flying Boat. On February 15, 1918, Sturtevant asked to trade his assignment with Vorys to escort a convoy of ships carrying beef between Holland and Britain in one of two seaplanes. He was nearly half-way back from this mission when they were attacked by ten German seaplanes that split their group in two. His plane was struck by a German aircraft from Belgium. The oil and gas tanks burst, the canvas and wood hull caught fire and the plane fell in flames into the North Sea. His remains were never recovered. Ensign Sturtevant's name is inscribed on the Wall of the Missing in the Memorial Chapel of the Brookwood American Cemetery in Surry, England. He was the first American Navy flier to die in action in the war. Two more fliers from the First Yale Unit followed: Ensign Curtis Reed died in France on February 27, 1918 from a seaplane accident; and Lieutenant Kenneth MacLeish was shot down by the enemy in Belgium on October 15, 1918. Their names are etched on the war memorial in Woolsey Hall on the Yale University campus. Sturtevant received the Navy Cross posthumously. He is also one of the three aviators whose names are carved on the District of Columbia War Memorial dedicated on Armistice Day 1931 and who had memorial trees planted in their honor on 16<sup>th</sup> Street, NW. He had two ships named for him: The first *USS Sturtevant* was a destroyer launched in July 1920 and sank in a mine field off Key West on April 26, 1942. The second *USS Sturtevant* was a destroyer escort launched on December 3, 1942, decommissioned in June 1960, and sold for scrapping on September 20, 1973. Most likely it is the name plate from the second vessel that hangs in the U.S. Naval Museum in Washington, DC.

Davison recuperated in New York and kept in touch with members of the Unit. He remained on inactive duty until December 24, 1918. He was awarded the Navy Cross for his organization of



the First Yale Aviation Unit. He was appointed the nation's first Assistant Secretary of War for Aviation and served from 1926 to 1933. He dedicated Yale's World War I Memorial on June 19, 1927. Funded by Yale Alumni, it was designed by Thomas Hastings with Everett V. Meeks and is located in Hewitt Quadrangle. He became a Brigadier General while serving in World War II as Assistant Chief of Staff of the Army Air Corps. In 1966 on the 50<sup>th</sup> Anniversary of the Naval Air Reserve, the U.S. Navy presented him with a set of Navy wings and designated him an Honorary Naval Aviator. Lovett became Assistant Secretary of War for Air in 1941. He saw his earlier vision of an independent Army Air Corps become a reality. President Truman awarded him the Distinguished Service Medal in September 1945 for the expansion of the Army Air Force during World War II. In 1946 he served as Under Secretary of State with General George Marshall; in 1948 as Acting Secretary of State he convinced the Air Force to take on the task of feeding those in the city of Berlin at the time of the Berlin Blockade by the Soviet Union. He later served as Marshall's Deputy Secretary of Defense and succeeded him to become Secretary of Defense in 1951. After his retirement, President John F. Kennedy called him in over the Cuban Missile Crisis; he offered the approach of a blockade. He received the Presidential Medal of Freedom in 1963. Ingalls served as the first Assistant Secretary of Navy for Air from 1929 to 1933 while Gates served as Under Secretary of Navy for Air in World War II from 1941 to 1945. President Truman cited Gates for building the air sea power. Wortman wrote that "Applying what they had learned as young flyers on Long Island and Palm Beach, and in England and in France in 1917 and 1918, these men made the greatness of the "Greatest Generation" possible."

The First Yale Unit received further public recognition from the documentary film "The Millionaire Unit: America's Pioneer Pilots of the Great War" with its world premier screening in March 2015. Two of the three co-producers are descendants: Ron King is the grandson of Vorys and Henry Davison is the grandson of Davison. They along with documentary filmmaker Darroch Greer brought this effort to fruition through the Humanus Documentary Films Corporation.

### **The United States Air Service**

According to Kennett, American military aviation began on February 10, 1908 when the Signal Corps of the U.S. Army negotiated for a Wright airplane and arranged for flight lessons with the Wright brothers for two officers. Benjamin Foulois (1879-1967) became a third flyer in 1909. McCullough describes the test flights that took place at Fort Myer, Virginia including the one on September 17, 1908 that took the life of Lieutenant Thomas Selfridge who was a passenger in the plane piloted by Orville Wright. This was the first military aviation fatality. Finally on July 30, 1909 with an improved aircraft, Orville Wright successfully flew the final trial that would lead to the formal acceptance by the U.S. War Department of the plane at a cost of \$30,000. The U.S. Army identified it as "Airplane No. 1." In the summer of 1911, additional pilots received training including Henry "Hap" Arnold (1886-1950) who became the 29<sup>th</sup> licensed pilot. By early 1913, Army aviators who were in training were sent to Texas for maneuvers and on December 4, they were designated the 1<sup>st</sup> Aero Squadron. They assisted General John J. Pershing (1860-1948) in The Punitive Expedition of 1916 into Mexico becoming the first air combat unit in the U.S. Army. There were eleven pilots in this squadron including Capt. Foulois, their leader, Col. Townsend F. Dodd (1886-1919), Edgar S. Gorrell (1891-1945), and Herbert A. Dargue (1886-1941) with only eight Curtis JN-3 (Jenny) biplanes. The planes could not fly high enough to go over the mountains. On July 18, 1914, Congress had legislated the creation of the Aviation Section



of the Signal Corps to replace the Aeronautical Division. In the summer of 1915, Captain Raynal C. Bolling helped organize two New York National Guard aero units; they took flying lessons on Wright property. A year later, the U.S. Army opened a Signal Corps Aviation Station at Mineola. William (Billy) Mitchell took flying lessons on his own as did others. Many received their licenses through the Aero Club and had become members. Pershing commented on the primitive state of aviation at the beginning of the war. When the U.S. entered the war, the Army only had 35 trained pilots; an additional 90 transferred from the Lafayette Escadrille and Flying Corps. On July 24, 1917, Congress authorized a temporary increase in the Aviation Section of the Signal Corps and more flying schools were opened. In April 1918, the Division of Military Aeronautics (DMA) was created to train a combat force; Col. Arnold was the Assistant Director. On May 24, 1918, President Woodrow Wilson established the United States Air Service (USAS) by Executive Order as a temporary branch of the U.S. War Department replacing the Aviation Section of the Signal Corps. Only one aviatrix, Ruth Bancroft Law, could wear the uniform of a non-commissioned soldier in the U.S. Army but was not allowed to fly in military aircraft. When the U.S. established airmail service on May 15, 1918, they used Army airplanes and pilots; the Post Office Department took over the service in August with civilian pilots and their own planes.

In May 1917, General Pershing was selected to command the American Expeditionary Forces (AEF) in Europe. He appointed Major Dodd as Aviation Officer of the AEF superseded by Colonel Mitchell. Dodd then served as Chief of Material and Assistant Chief of Supply. Edward Rickenbacker, race car driver, was recruited as chauffeur for aviation headquarters and was given the rank of Sergeant 1<sup>st</sup> class. Colonel Gorrell became part of Pershing's staff; in August 1917 he was appointed 1<sup>st</sup> Chief of the Technical Section and in December, Chief of Strategic Aviation. At the end of the war, he was asked to compile and edit the reports from all the units; in spring 1919 he completed the History of the Air Service AEF in 282 volumes. In late August 1917, Brigadier General William Kenly was appointed Chief of Aviation, AEF and Colonel Mitchell was given jurisdiction over the Front (Zone of Advance). Colonel Bolling was put in charge of the Zone of the Interior. In November, Foulois was appointed Chief of Air Service and replaced by General Mason M Patrick on May 29, 1918; Foulois was made second in command. Kenly had returned to the U.S. to head the DMA. In August 1918, Mitchell was appointed Chief of Air Service, First Army. Lt. Colonel George C. Marshall, Jr. (1880-1959) became Pershing's Aide for the duration of the war. He became Assistant Chief of Staff 1<sup>st</sup> Army and prepared the battle plan for St. Mihiel and organized the Meuse-Argonne offensive. The 2<sup>nd</sup> and 3<sup>rd</sup> Armies were established and General Pershing received the rank of General of the Armies. The 3<sup>rd</sup> Army formed for the occupation after the Armistice.

The American pilots after passing their tests in the U.S. were sent to flying schools in England, France and Italy. At the suggestion of the French, the U.S. Army began establishing their own training centers in Europe; the first was located at Issoudun. General Pershing ordered all of his officers to wear the Sam Browne belt as a distinction of rank. He also disallowed strong liquor and declared any restaurant serving anything other than wine or beer to be off limits.

**Ruth Bancroft Law (1887-1970)** was born in Massachusetts. She enrolled in the Burgess Flying School in June 1912. She received her pilot's license in November 1912 and that same year bought her first plane from Orville Wright. She later purchased a Curtiss Pusher and installed the Wright Brothers control levers on it. According to Skelley, she perfected acrobatic maneuvers and in November 1916



set a cross country distance record by flying from Chicago to New York. On December 2, 1916, President Woodrow Wilson was on the Presidential Yacht *Mayflower* near the island when he pressed a wireless key that set off the first floodlights on the Statue of Liberty. Law was the aviatrix flying her plane over head with the lower wing flashing "Liberty." This event has been memorialized in the Liberty Rug manufactured by Shuttleworth Brothers, Amsterdam, New York for W. & J. Sloane. President Wilson received the first of these Karnak Wilton 12' by 9' rugs made and it is currently on view at the President Woodrow Wilson House, Washington, DC. In 1917 she applied to the U.S. Army to fly combat missions in the war and was denied that request. However, she was the first aviatrix enlisted in the Army and to wear a military uniform. She was sent to Europe to observe the battle fronts and returned to the U.S. to become a recruiter. She also did exhibition flights to raise funds for the Red Cross and Liberty Loan drives. Included in Foxwell's book is the article that Law wrote for Air Times in February 1918 on "Let Women Fly!" It expresses her disappointment and points out that she had the support of Congress to receive a commission in the Air Service but was turned down by Secretary of War Baker who said that they didn't want to "let down the bars to women in the army." In 1919 Law carried the first airmail to the Philippines. She was married to Charles August Oliver who had managed her exhibitions. She formed Ruth Law's Flying Circus after the war and because of her husband's concerns for her safety, she retired in 1922. They moved to California where they both died in San Francisco and are buried in Pine Grove Cemetery in Lynn, Essex County, Massachusetts. Law was a pioneer aviatrix and became a national hero. She received the Glenn H. Curtiss Medal and Aero Club of America Medal for her many achievements.

**Raynal Cawthorne Bolling (1877-1918)** was born in Arkansas and became a resident of Greenwich, Connecticut in 1911. He graduated from Harvard Law School in 1902 and became a corporate lawyer. By 1913 he was general counsel for U.S. Steel. He was a member of the American Aero Club and took flying lessons in 1915 on Wright Company property in New York. He had joined the National Guard. In November 1915, Bolling was appointed 1<sup>st</sup> Lieutenant in the New York National Guard and organized the Aviation Detachment that became known as the 1<sup>st</sup> Aero Company. It was the first national guard aviation unit in the U.S. The company under Captain Bolling was mustered into federal service on July 13, 1916. When the Signal Corps Aviation Station opened at Mineola, the 1<sup>st</sup> Aero Company received regulation training from two veterans of the Punitive Expedition in Mexico. Bolling passed his flying test for an expert pilot's license on October 23, received an international certificate, and passed the Reserve Military Aviation qualification test. The 1<sup>st</sup> Aero Company never left New York but trained 25 of its own pilots before mustering out of federal service in November 1916. At about the same time, another private pilot training program began called the Governors Island Training Corps. A number of these pilots were commissioned in the new aviation section of the Signal Reserve Corps. The 1<sup>st</sup> Aero Company was disbanded in May 1917. Bolling was called into service as a Major in the Aviation Section of the U.S. Signal Corps on April 27, 1917 and he organized the first Army air reserve unit in the U.S. It became the 26<sup>th</sup> Aero Squadron after being sent to France and included former guardsmen of the 1<sup>st</sup> Aero Company. In June 1917, Bolling was assigned to help draft legislation to fund the development of military aviation; known as the Aviation Act, it was passed on July 24, the largest such appropriation up to that time. He was then appointed to the advisory Aircraft Production Board of the Council of National Defense to head an aeronautical commission to Europe known as the Bolling Mission. The Commission was to study the types of military aircraft used by the Allies, recommend the types to be produced in the U.S., and what types were to be purchased directly from the Allies. They left for Europe on June 17, 1917 and he reported to the Chief Signal Officer



from Paris on August 15. They recommended that the U.S. send materials for assembly of airplanes in Europe, that the best cadets be sent to France to complete flight training under French instruction; and, that a large number of combat airplanes and bombers be manufactured in the U.S.; however, only the De Havilland DH-4, named after the English designer Geoffrey de Havilland, was suitable for American production. Bolling prepared the preliminary draft of the contract with France for delivery of 5,000 planes by July 1, 1918. He stayed in Europe and joined Colonel Mitchell's aviation headquarters in Paris. On September 3, he was chosen Director of Air Service Supply and promoted to Colonel; one of the first tasks was to hasten the building of the large flying school at Issoudun. He then became Chief of Air Service for U.S. II Corps when it formed in the spring. To prepare for this, he visited aerodromes of the RFC. He was on a scouting trip on March 26, 1918 when he and his driver were ambushed by German soliders; he was killed near Amiens and his remains were never recovered. He is listed on the Tablets of the Missing on the walls of the Memorial Chapel in the Somme American Cemetery. He was the first high-ranking air service officer to be killed in the war. He was posthumously awarded the Legion of Honor by the French government and the Distinguished Service Medal by the U.S. Army. Bolling Field in Washington, DC was opened in his honor on July 1, 1918. It was renamed Bolling Air Force Base in 1948 and is now part of the Joint Base Anacostia-Bolling.

The **U.S. Airmail Service** was officially established on May 15, 1918 between Washington, DC and New York using Army aircraft and pilots. They flew the route until August 10, 1918 when the Post Office Department took over with their own planes and civilian pilots. Major Reuben H. Fleet, executive officer to Colonel Arnold in charge of instruction at Army Air Services schools, was given the assignment to get an airmail route started. Postmaster General Albert Burleson had issued a press release announcing the airmail route calling for daily flights five days a week between Washington, DC, Philadelphia, and New York. Fleet made arrangements with the Curtiss Aeroplane Corporation on Long Island to convert six JN-4Ds to JN-4Hs for the effort. The U.S. Postage Stamp, the inverted Jenny, was issued on May 10, 1918 in honor of the inaugural flights. The image of the Curtiss JN-4 airplane appears upside down and is likely the most famous postage stamp error in U.S. history. On September 22, 2013, the U.S. Postal Service issued a souvenir sheet with six inverted Jennys on it each stamp selling for the same price of \$.24 as originally issued. The Potomac Park Polo Field was selected as the site where planes would leave from Washington, DC; later when Bolling Field opened on July 1, 1918, the planes would leave from there. Fleet chose four of the Army pilots and the postal officials chose two including Lieutenant George Doyle, an inexperienced pilot, selected to fly out of Washington to Philadelphia the relay stop over. President and Mrs. Wilson were at the polo grounds as were other officials for the take off; he gave Doyle a letter for the Mayor of New York. The President made his send off speech and Doyle got into the plane to find out it had not been refueled. Once the tanks were filled, Doyle flew off only to get lost and made an emergency landing on a farm in Waldorf, Maryland. Fortunately, the mail was not damaged and Fleet ordered Doyle to take the mail back to Washington where it was flown out the next day. Two days later Doyle was given a second chance and still didn't make it so he was removed from service. The five other pilots performed well and completed their flights. The mail had gone through. History was made and another contribution to the the development of aviation was accomplished.

The **3<sup>rd</sup> Aviation Instruction Center at Issoudun Aerodrome** evolved from the French suggestion that an American advanced flying school be established in France. France agreed to supply the planes, motors and cleared space and the U.S. would furnish 200 men to erect the school. In July 1917, the



first Construction Squadron arrived. It was intended to provide a refresher course for American pursuit pilots but due to the lack of advanced training schools in the U.S., a complete training course in advanced flying and tactics was developed at the Center. By the time of the Armistice, it was the largest flying school in the world. Major Raoul Lufbery (1895-1918), the first American flying Ace with 16 victories, transferred from the Lafayette Escadrille and was given a squadron there. Quentin Roosevelt and Eddie Rickenbacker were assigned to Issoudun. Two of the instructors were from Washington, DC and their names are listed on the plaques at the base of the Volvaut Monument, the stone obelisk, erected by the World War I Aviator Association to honor those who died at the Center. **Edward Claypool Gwynne (1898-1918)** was born in Paris, France. He attended school in Washington, DC where his grandfather Franklin Steele had been a long time resident. He left the U.S. on January 30, 1915 to study in England and visit his mother in France. In 1917 he joined the Army Aviation Corps and was assigned to the Instruction Center at Issoudun as a 2<sup>nd</sup> Lieutenant. He died in an air battle with the Germans on October 19, 1918. He is buried in Suresnes American Cemetery in France. President Woodrow Wilson made a major address at this cemetery on Memorial Day, 1919 and he and Mrs. Wilson placed a wreath in honor of those buried there. The local women had placed an American flag and wreath at each grave. **Lenwood Hugh Ott (1894-1918)** was born in Lexington, Virginia and moved to Washington, DC where he resided for 19 years. He enlisted in the Army Aviation Corps when war was declared by the U.S. He attended ground school in Austin, Texas and took flying lessons in Dayton, Ohio. He left for France on December 1, 1917 and soon became an instructor at the Center at Issoudun. 1<sup>st</sup> Lieutenant Ott was also a test monitor and indicated he had flight tested most of the planes used by the Allies. He died in an airplane accident on August 9, 1918. He is buried in St. Mihiel American Cemetery in France. He is one of the three pilots whose names are carved on the District of Columbia War Memorial dedicated on Armistice Day 1931 and who had memorial trees planted in their honor on 16<sup>th</sup> Street, NW.

**Quentin Roosevelt (1897-1918)** was born in Washington, DC and was the youngest child of former U.S. President Theodore Roosevelt and his wife Edith. He attended Episcopal High School in Alexandria, Virginia, then went to Evans School for Boys in Mesa, Arizona and Groton School in Massachusetts. He was accepted into Harvard University in 1915. In August 1915, he attended a volunteer summer camp funded by the Preparedness Group at Plattsburg, New York established by a group of wealthy Americans. The camp was designed to provide military training for business and professional men at their own expense. Bolling had also attended in August. In May 1917 Roosevelt dropped out of school to join the newly formed 1<sup>st</sup> Reserve Aero Squadron that had been organized by Bolling. Roosevelt was commissioned a 2<sup>nd</sup> Lieutenant and went to France in 1918 to help set up the Center at Issoudun. He was a supply officer and even ran one of the training fields. He was assigned to the 95<sup>th</sup> Aero Squadron, part of the 1<sup>st</sup> Pursuit Group. His squadron along with 17 and 34 were assisting the 94<sup>th</sup> in the Chateau-Thierry sector. According to Rickenbacker, Roosevelt was popular; he was also considered reckless and his bravery was notorious. Roosevelt was shot down on July 14, 1918, Bastille Day, in aerial combat over Chamery, France then behind German lines. He was buried by the German military with full battlefield honors. They used pieces of wire from his plane to bind together two basswood saplings to create a cross. This is probably the most famous example of the honor among pilots during World War I. Following a custom that had sprung up, the broken propeller blades and bent and scarred wheels of the plane marked the resting place. When the French retook the area, they placed an oaken enclosure around it. It became a shrine. In 1955, the family removed his remains and placed them next to those of his eldest brother who died after landing on Omaha Beach in World



War II. They are buried in Normandy American Cemetery. His original gravestone is located at Sagamore Hill and the German-made basswood cross is on display at the U.S. Air Force Museum at Wright-Patterson Air Force Base, Dayton, Ohio. The family left a marker at the original grave site and also placed a memorial fountain in Chamery. According to Rubin, a quote from Theodore Roosevelt is inscribed on the fountain, "Those Are Fit to Live Who Are Not Afraid to Die." His father died six months after he did. He was awarded the Croix de Guerre with Palm by the French and posthumously his A.B. Degree from Harvard University.

**Edward (Eddie) Vernon Rickenbacker (1890-1973)** was born in Columbus, Ohio. He left school at age 12 when his father died to support his mother and four younger siblings. He worked a number of odd jobs and became devoted to engines. In 1906 he went to work for a race car driver who was head of Frayer-Miller Automobile Company; Frayer let him ride in major races as his mechanic. He became a race car driver and was known as a daring one. In November 1916 while preparing for a race in California, he had his first airplane ride with Glenn Martin. He was in London in 1916 and learned of the Lafayette Escadrille. When he returned he talked to other race car drivers about forming a unit like the Escadrille. After the U.S. joined the war, he went to Washington, DC to persuade the Signal Corps to put together such a unit. His request was denied as he was past 25 years of age, too old for aerial service, and was not a college graduate. He was contacted by a military officer who was a racing enthusiast who encouraged him to enlist and become an automobile driver on the staff of General Pershing. He joined as a Sergeant and drove for Mitchell who showed him a village called Issoudun and the site of the air field. A friend James Miller, an officer in the air service, offered him a position as engineering officer. This post required pilot training. He became a pilot with rank of 1<sup>st</sup> Lieutenant and was posted to Issoudun in September as chief engineer. He was then assigned to the 94<sup>th</sup> Squadron as a combat pilot under Major John Huffer. He was coached by Major Raoul Lufbery from whom he learned situational awareness among other skills. The squadron obtained its name of "Hat-in-the-Ring" from Major Huffer and Lt. Gary Walters; Huffer suggested the Stovepipe Hat of Uncle Sam with Stars and Strips for the hat band and Walters selected the name derived from an old American custom of throwing the hat in ring as a call to battle. He was not initially popular with the other pilots who were mostly Ivy League graduates; however, as his victories grew so did their respect. He had scored his 6<sup>th</sup> victory on May 30, 1918. He was treated in Paris on July 1 for ear pain, and returned on August 18 for surgery. He reported that it never bothered him again. Rickenbacker was given command of the 94<sup>th</sup> on September 25 and that same day he went on a solo patrol when he encountered several German planes and fired at them. He was awarded the French Croix de Guerre and received the Medal of Honor in 1930 for this event. By October 1 his score was 12 and he held the rank of Captain. As Glines stated, "He was the most successful U.S. Air Service fighter pilot alive, and the press dubbed him 'America's Ace of Aces.'" In October he scored 14 more victories that made a total of 26. The 94<sup>th</sup> was given the honor of being the only squadron to accompany Pershing and the Army of Occupation into Germany. Laurence La Tourette Driggs in the foreword to Rickenbacker's book stated that "The 94<sup>th</sup> had the best record of any American squadron in the war. It won the first and last victories by an American unit, shot down more German planes, and had more Aces on its roster." Rickenbacker received seven Distinguished Service Crosses. After the war he tried automobile manufacturing but lost money on his motor company. In November 1927, he bought the Indianapolis Motor Speedway and ran it until he sold it in 1945. He worked in commercial aviation and became general manager of Eastern Air Transport a subsidiary of North American Aviation. In a reorganization, it became Eastern Airlines. He assisted Mrs. Woodrow Wilson returning from her first extended plane trip on Eastern



Airlines in 1935. In 1938 he and others bought the Airlines and he became its president and general manager. During World War II he was sent on inspection trips by the War Department barely surviving one to the Pacific. In 1953 he became Chairman of the Board of Eastern Airlines. One innovation was the introduction of the Eastern Air Shuttle between Washington, DC and New York in 1961. He retired in 1963 and died of pneumonia on July 23, 1973 while visiting Switzerland. He is buried in Green Lawn Cemetery, Columbus, Ohio. The U.S. Air Force renamed Lockbourne Air Force Base in Columbus for him in 1974. In 1992 he was inducted into the International Motorsports Hall of Fame and National Sprint Car Hall of Fame; in 1994 into the Motorsports Hall of Fame of America.

**William (Billy) Lundrum Mitchell (1879-1936)** was born in Nice, France and grew up in Wisconsin. He attended Racine College in Wisconsin and The George Washington University in Washington, DC where he left as a junior in 1898 to serve in the Spanish-American War. He completed his studies in 1919 and was awarded his bachelor of arts degree "as of the Class of 1899." He enlisted as a Private in the 1<sup>st</sup> Wisconsin Infantry Regiment on May 14, 1898 and six days later was made 2<sup>nd</sup> Lieutenant and signal officer. He served in Cuba and participated in the Philippine Campaign in 1899. He was honorably discharged on April 17, 1899 and then joined the regular army as a Lieutenant in the Signal Corps. From 1900 to 1904, he was posted in Alaska as one of the overseers of construction of the Washington-Alaska Military Cable and Telegraph system to connect U.S. Army outposts and civilian Gold Rush camps. In 1906 he was an instructor at the Army Signal School at Fort Leavenworth, KS. He graduated from the Army School of Line in 1908 and the Army Staff College in 1909. From his overseas assignments in the Philippines, he toured battlefields of the Russo-Japanese War. In March 1912, he was selected as one of 21 officers to serve on the General Staff. As its only Signal Corps officer, he was chosen in May 1916 as the temporary head of the Aviation Section of the Signal Corps until the new head Lieutenant Colonel George O. Squier arrived; he then became his assistant. Mitchell sought to take aviator training in the Army but was advised he couldn't because of age and rank. In June, he took private flying lessons from the Curtiss Aviation School at Newport News, VA at his own expense of \$1,470. After the U.S. entered the war, Mitchell was sent to Europe as an observer and to set up an office for the Aviation Section. He collaborated with the British and French air services, and learned all that he could of their strategies and aircraft. He flew as a gunner in French and British two-seaters, went up in kite balloons, travelled to as many units at the Front that he could. He was the first American aviation officer to fly over German lines on April 24, 1917 with a French pilot. He saw the stalemated Front and thought that the airplane used as a bomber could solve the problem. In May he was promoted to Lieutenant Colonel. In August 1917, he was put in command of the combat squadrons at the Front. He worked on organizational matters building the American Air program in Europe and developed the first Air Service organizational chart. On August 26, 1918, the First Army was activated and Mitchell was appointed its Chief of Air Service. He was in charge of preparations for the air offensive for the Battle of St. Mihiel and was able to coordinate pilots from the Allied air services. According to Yockelson, the "First Army Air Service would utilize 1,481 American, French, British and Italian planes and balloons, spread around fourteen mobile flying fields—the greatest concentration of aircraft during the war." The American pilots used the U.S. made Liberty-powered De Havillands. The Battle began on September 12 and was declared over on September 16, 1918. Thayer wrote that "Taking American aviation as a whole, its accomplishments during the St. Mihiel period had been substantial." The major Battle of the Meuse-Argonne began next on September 27 and continued through the morning of the Armistice on November 11, 1918. Mitchell had a smaller concentration of Allied planes to provide support but it was enough for the American



Army to maintain control of the air. Most were flown by Americans with some French aviators. On October 12, the Second Army was formed and Mitchell was promoted to Chief of Air Service of Group of Armies with the temporary rank of Brigadier General. Mitchell was also named Chief of Air Services, Third Army on November 14, 1918. He was replaced in January 1919 by Colonel Harold Fowler who transferred from the RFC when the U.S. entered the war. The Third Army was closed down in July 1919 after the Treaty of Versailles was signed. According to Smythe, Pershing thought that while Mitchell was hard to get along with, he was a good airman and superior in tactical use of airpower. Mitchell was a passionate believer in an Air Service independent of the other branches. His outspokenness alienated many. Nevertheless, when he returned to the United States, he was considered a hero. In addition to medals for former Army service, he received many medals for his World War I service including the Distinguished Service Cross, Distinguished Service Medal, World War I Victory Medal with 8 campaign clasps (8 bronze stars), the British Companion of the Order of St. Michael and St. George, Commander French Legion of Honor, French Croix de Guerre with 1 silver star, 1 silver palm, and 3 bronze palms, French Verdun Medal, Grand Officer of the Order of the Crown of Italy, Commander Italian Order of Saints Maurice and Lazarus, Italian War Merit Cross. When Congress reorganized the Army on June 4, 1920, the Air Service received recognition as a combatant arm of the line. In July Mitchell received the rank of Colonel in the Signal Corps and a recess appointment as Assistant Chief of Air Service with rank of Brigadier General. There was resistance to his belief that there should be an air force separate from the Army and Navy. He began to attack the War and Navy Departments for lacking vision regarding airpower. He advocated for a number of innovations. In February 1921, the Secretaries of War and Navy agreed to a series of demonstrations where Mitchell claimed he could sink battleships under war conditions. In May he assembled the 1<sup>st</sup> Provisional Air Brigade for a series of tests of the bombing of captured German battleships. Tests were repeated on obsolete battleships and proved the sinking from the air. He was then sent to stop warfare among mine workers in West Virginia in August 1921, on an inspection tour of Europe during the winter of 1921-1922, and to Hawaii and Asia in 1924 where he predicted a surprise air attack on the Hawaiian Islands. In March 1925, his term as Assistant Chief of the Air Service expired and he was transferred to San Antonio as a Colonel and air officer. After a Navy airship crashed and the loss of 3 seaplanes in 1925, he accused leaders in the Army and Navy of incompetence and "almost treasonable administration of the national defense." In October 1925, he was accused of violation of the 96<sup>th</sup> Article of War; the court martial began in November and lasted seven weeks. Those testifying for him included Eddie Rickenbacker, Hap Arnold, and Fiorello La Guardia. Public opinion supported him. Still he was found guilty on December 17, 1925. He was suspended from active duty for five years without pay (later amended to half pay). Mitchell resigned instead on February 1, 1926 and continued to write and speak on airpower. He moved to Boxwood Farm in Middleburg, VA and it remained his permanent residence for the rest of his life. He died in a New York City hospital on February 19, 1936 and is buried in Forest Home Cemetery, Milwaukee, WI. He received a number of honors after his death. The General Mitchell International Airport in Milwaukee is named after him. In 1955, the Air Force Association passed a resolution to void his court martial. In writing on the U.S. Air Service of World War I, Thayer noted that a significant development in airpower was that of bombing from the air. He wrote of the Air Service that "...in a direct manner, it contributed to victory with a trained body of flyers second to none in the world in skill and fearlessness in combat." And for his part, Billy Mitchell posthumously received the Special Congressional Medal of Honor in 1946. This medal is the only one of its kind and sculpted by Erwin F. Springweiler with the inscription "Award of Congress August 8, 1946 For Outstanding Pioneer Service and Foresight in Field of American Military Aviation."



**Mason Mathews Patrick (1863-1942)** was born in Lewisburg, West Virginia. He graduated from the U.S. Military Academy at West Point in 1886 second in his class after John J. Pershing. He was commissioned a 2<sup>nd</sup> Lieutenant in the Army Corps of Engineers. He attended the Engineering School of Application at Willets Point, NY and graduated in 1889. He taught engineering at West Point from 1892 to 1895 and again from 1903-1906. From 1897 to 1901 he was involved in the Mississippi River improvements; later with river and harbor work in Norfolk, VA from 1909-1912 and in the Great Lakes, Detroit, MI from 1912-1916. He was assigned Chief Engineer for Army of Cuban Pacification from 1907 to 1909 and served on the Mexican Border in 1916. In August 1917 he went to France to command the 1st Engineers in World War I and was promoted to temporary Brigadier General. In September he was named Chief Engineer of Lines of Communication and Development of Construction/Forestry for the AEF. On May 29, 1918, Pershing appointed him Chief of the Air Service of the AEF. While he was an experienced engineer, he had never flown in an airplane. However, he had excellent organizational and administrative skills. As F. Trubee Davison wrote in the introduction to Patrick's book, "Those familiar with General Patrick's work are in a position to appreciate the effectiveness with which he discharged his duties, and to realize that under his leadership the Air Service, from very small beginnings, grew to a vital force in the AEF by Armistice Day." Patrick wrote that "No finer body of young men than these Air Service pilots ever went forth to do battle for their country." He referred to them as "knights of the sky." After the Armistice he was told to close up all air services in Europe. He was a member of the Committee to draft military terms in the treaty imposed on Germany. He had proposed that a commission draft a convention to govern international flying; because it was linked to the League of Nations, it was never referred to the Senate and placed in files at the State Department. He was awarded the Distinguished Service Medal, the Order of the British Empire (Knight Commander), Legion of Honor (Commander), Order of St. Maurice and St. Lazarus (Commander), and the Order of Leopold. He sailed from Brest and landed in New York on July 20, 1919. In June 1921, he took command of the engineering school at Camp Humphreys. The Secretary of War recommended that Patrick be assigned as Chief of Air Service; he was approved by the Senate with rank of Major General. He assumed this position on October 5, 1921 and retained it until his retirement on December 13, 1927. Innovations in air service continued through these years such as low flying planes used as crop dusters, fire patrols, and improved parachutes. On September 4, 1922, Lt. James Harold "Jimmy" Doolittle (1896-1993) completed the first continental crossing in a single day; his major contribution was the development of instrument flying. Patrick flew as often as possible to show confidence in the Air Service. He then decided to get his license. He asked Major Dargue, his aerial chauffeur, to teach him. Patrick took lessons and on June 27, 1923 at the age of 60 he was qualified as a pilot. He was then authorized to plan a round the world flight which took place in 1924. He introduced a bill in January 1926 to give the Air Service limited autonomy. After many changes, the Army Air Corps Act of 1926 was passed; the Air Service was now named the Air Corps, and a five year expansion program for personnel and equipment was established. Patrick felt that this assured the future of an independent air branch. He retired the next year. He remained in Washington, DC at his home in Forest Hills designed by the architect Russell O. Kluge. He had purchased the property at 3010 Albemarle Street, NW from Maddux Marshall & Co., Inc. on December 21, 1923. He and his wife became Charter members of the Forest Hills Citizens Association in June 1929; he also served as an officer. From 1929 to 1933, he was Public Utilities Commissioner for the District of Columbia. He continued to write and speak on aviation topics and was an advisor to Presidents Hoover and Roosevelt. He died on January 29, 1942 in Walter Reed Hospital. He is buried in Arlington National Cemetery. In 1950 the Air Force named the Joint Long Range Proving Ground Base at Cocoa, FL in his honor.



Kennett states that "While the role of the air weapon in the Great War was a modest one, the role of the Great War in the rise of air power was anything but modest." He refers to the end of the war as a new era for the airplane called "the Golden Age of Flight" and the airmen of the Great War were "lionized." Many who had served would hold leadership positions in the military that would support efforts to create an independent air service. Two pioneer airmen, Doolittle and Arnold, who had remained in the U.S. during the war to train the pilots who did serve overseas also made contributions to the advancement of aviation. Lt. James Doolittle, an aeronautical engineer as well as a pilot made the first instrument flight and achieved other aviation records. He was selected to command what became known as the Doolittle Raiders after Japan bombed Pearl Harbor on December 7, 1941. As a Lt. Colonel, he led the daylight raid on Tokyo and Yokohama on April 18, 1942. He received the Congressional Medal of Honor for this mission and was promoted to Brigadier General. He commanded other Air Force units during World War II. He was awarded the Presidential Medal of Freedom in 1993. In 1938, Major General "Hap" Arnold became Chief of the Army Air Corps. He is given credit for transforming the Air Corps into a modern air force. On June 10, 1941, General George C. Marshall, U.S. Army Chief of Staff, established the U.S. Air Forces to control both the Air Corps and Air Force Combat Command. In 1943 Arnold was commissioned a full General. He served on both the Joint Chiefs of Staff and Allied Combined Chiefs of Staff in World War II. In 1945 he became one of the five-star generals of the Army. Arnold retired in March 1946. The National Security Act of 1947 created the Department of the Air Force headed by the Secretary of the Air Force fulfilling the dream of so many of the pioneer pilots who helped make it happen. In 1949, in recognition of his many contributions to the flying forces, Arnold was commissioned General of the Air Force, the first such commission ever given, and he was the only one in American military history to attain this position in the U.S. Army and the U.S. Air Force.



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## Photos for The Emergence of American Air Power in World War I

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(from Roger G. Miller, Like a Thunderbolt: The Lafayette Escadrille and the Advent of American Pursuit in World War I, Washington, D.C.: Air Force History and Museum Program, 2007.)

### 2. Grave Site of Kiffen Yates Rockwell at Luxeuil-les-Bains, France

(from James Norman Hall and Charles Bernard Nordhoff, ed., The Lafayette Flying Corps, Volume I, Port Washington, NY: Kennikat Press, 1984 [c.1920].)

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(Courtesy of the Library of Congress Prints & Photographs Division)

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39. Capt. Eddie Rickenbacker with Mrs. Woodrow Wilson Completing Her First Extended Plane Trip on Eastern Airlines on January 17, 1935

(Courtesy of the Library of Congress Prints & Photographs Division)

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41. Major General Mason Mathews Patrick as Chief of the Air Service

(Courtesy of the Library of Congress Prints & Photographs Division)

42. The Patrick Home at 3010 Albermarle Street, NW, Washington, DC



Kiffen Rockwell

(from Roger G. Miller, Like a Thunderbolt: The Lafayette Escadrille and the Advent of American Pursuit in World War I, Washington, D.C.: Air Force History and Museum Program, 2007.)





ROCKWELL'S GRAVE

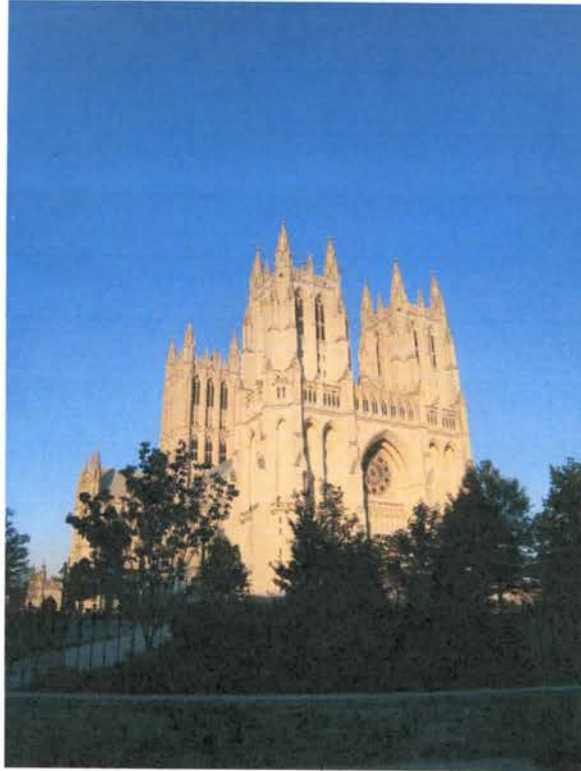
Grave Site at Luxeuil-les-Bains, France

(from James Norman Hall and Charles Bernard Nordhoff, ed., The Lafayette Flying Corps, Volume I,  
Port Washington, NY: Kennikat Press, 1984 [c.1920].)



(Courtesy of the Library of Congress Prints & Photographs Division)





Washington National Cathedral



Tomb of Norman Prince with Statue designed by French Sculptor Paul Landowski



Eugene Jacques Bullard as a French Army Corporal

(from Wikipedia Web Site)





(from the National Museum of the Air Force Web Site)



Bronze Sculpture of Eugene Jacques Bullard by Eddie Dixon on Display at the Smithsonian National Air and Space Museum



Corporal William Augustus Wellman and Nieuport 24 Fighter Plane named Celia after His Mother  
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Capt. Oliver Colin LeBoutillier

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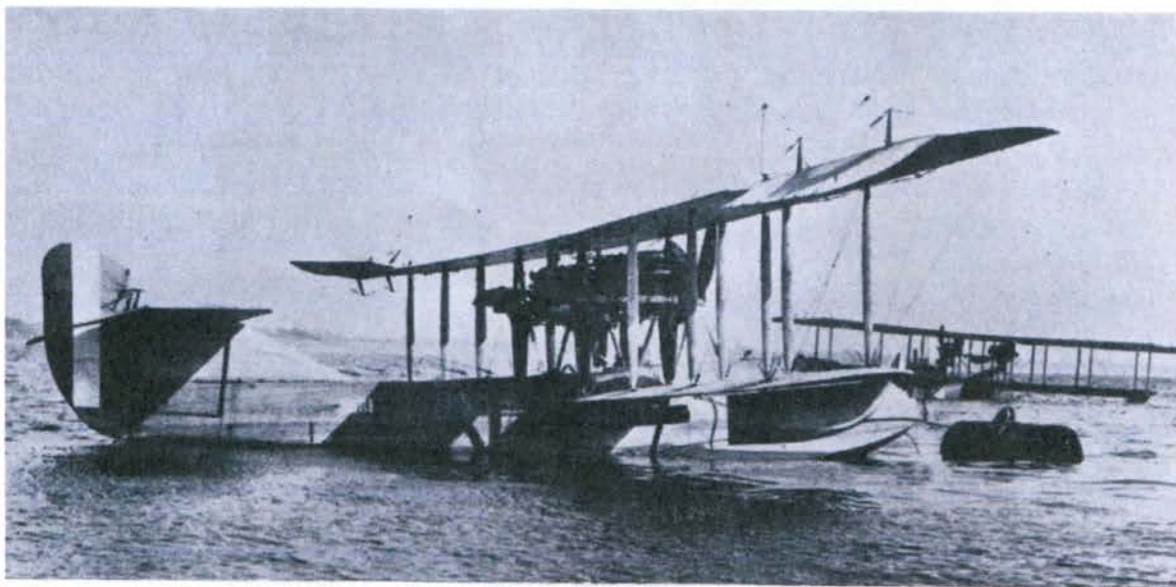




Capt. Frederick Libby in Full Dress Uniform of the Royal Flying Corps  
(from Find A Grave Memorial)



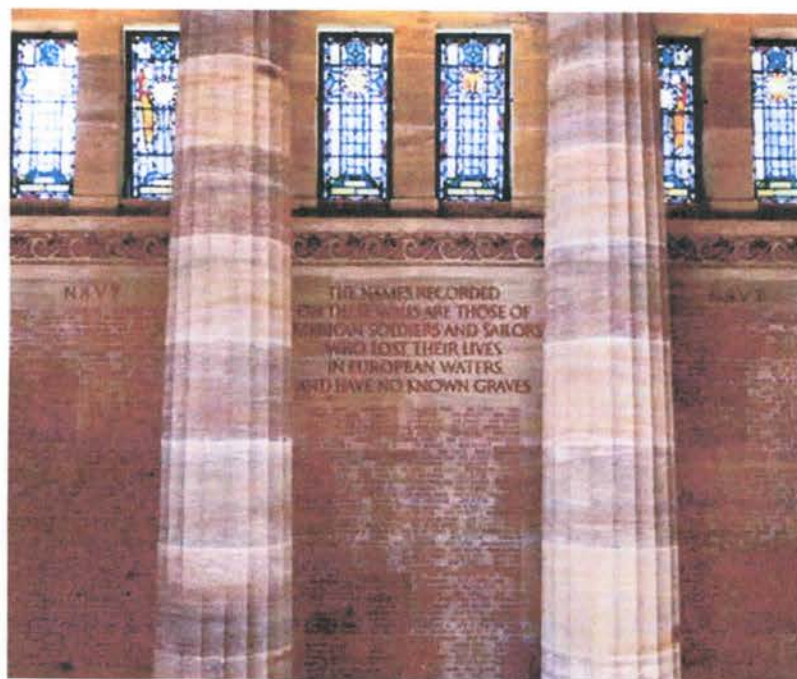
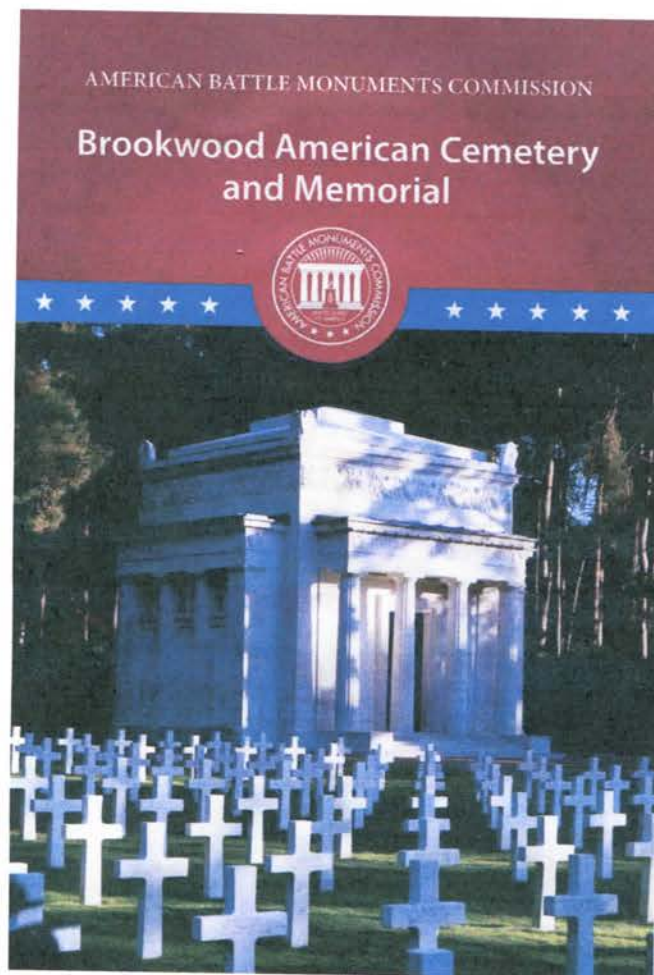
(Courtesy of the Library of Congress Prints & Photographs Division)



The Curtiss H-12 Fying Boat Flown by A. D. Sturtevant

(from Wikipedia Web Site)





Chapel interior and the Walls of the Missing. (ABMC photo/Warrick Page)

(Courtesy of the American Battle Monuments Commission)



The Yale Alumni Memorial in Hewitt Quadrangle, New Haven, Connecticut





Liberty Rug in the Library of The President Woodrow Wilson House  
(Courtesy of The President Woodrow Wilson House)



Ruth Bancroft Law in Curtiss Pusher with Wright Brother Control Levers  
(Courtesy of the Library of Congress Prints & Photographs Division)



Ruth Law, who flew  
over the Western Front



Ruth Law in U.S. Army Uniform

(from Dorothy and Carl J. Schneider, Into the Breach: American Women Overseas in World War I,  
New York: Viking, 1991. before p.177)



Colonel Raynal Cawthorne Bolling

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Somme American Cemetery Memorial Chapel with  
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U.S. Mail Service Curtiss Jenny Plane Being Readied for Take Off with George Boyle from the Polo Fields in Washington, D.C. on May 15, 1918

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President and Mrs. Woodrow Wilson at Polo Fields for Flight Take Off on May 15, 1918





3<sup>rd</sup> Aviation Instruction Center Memorial Raised at the Cemetery at Volvaut, France

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Suresnes American Cemetery and President and Mrs. Woodrow Wilson Laying Wreath

(Courtesy of the American Battle Monuments Commission)

## Washington Flier Dies In France



LIEUT. LENWOOD H. OTT.

Washington boy, killed in aeroplane accident in France. The photograph, which he sent his mother, is one taken in France, showing him in his favorite plane, nicknamed by him the "Good Ship No. 9."

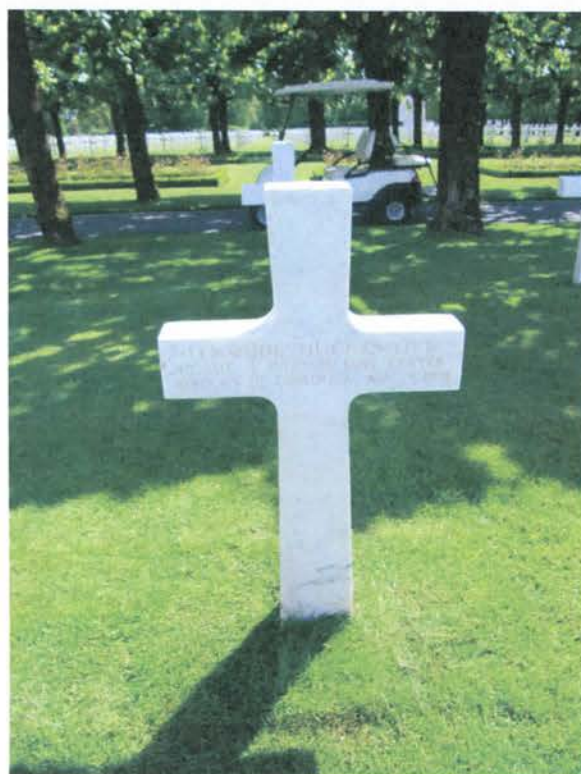
1<sup>st</sup> Lt. Lenwood Hugh Ott

(from Find A Grave Memorial)





St. Mihiel American Cemetery



Grave Site of Lenwood Hugh Ott





LENWOOD HUGHES OTT

ALBERT D. STURTEVANT

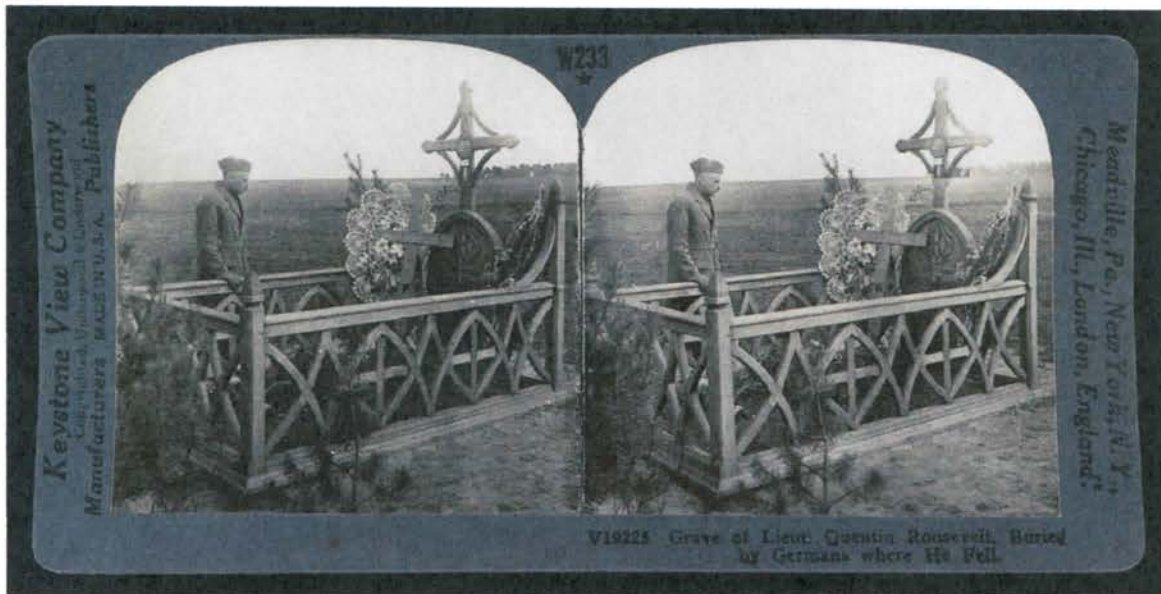
B. STUART WALCOTT

Three American Pilots Whose Names are Etched on the District of Columbia War Memorial



1<sup>st</sup> Lt. Quentin Roosevelt  
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German Grave Site for Quentin Roosevelt near Chamery, France before Replacement by Marker When the Family Had Him Removed for Burial in Normandy American Cemetery

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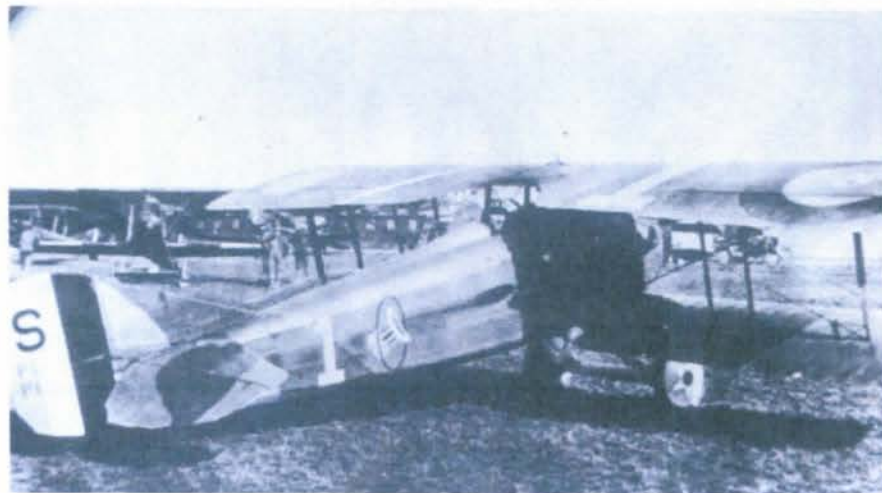


Memorial Fountain Placed in Chamery by the Family



Edward Vernon Rickenbacker

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

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