



erations of this division are strictly confidential and no information will be given out by any party except through the Chief Signal Officer of the Army or his authorized representative. Captain Charles DeF. Chandler, Signal Corps., is detailed in charge of this division and Corporal Edward Ward and First Class Private Joseph E. Barrett will report to Captain Chandler for duty in this division under his immediate direction.

J. Allen
Brigadier General
Chief Signal Officer of the Army

Asked if the Memorandum seemed satisfactory, Captain Chandler replied that it did. General Allen then told Chandler that would be all, but to be sure to keep him informed of the progress he was making.

Who was this Captain Chandler, who had been selected as the first Chief of the Aeronautical Division? Born in Cleveland, Ohio in 1879, he attended the Case School of Applied Science in his native city. When the Spanish American War came along in 1898, he volunteered for Army service and was appointed a 1st Lieutenant in the U.S. Volunteers, Signal Corps.¹ In 1901 he was appointed a 1st Lieutenant in the Signal Corps, Regular Army. He campaigned in the Philippines during the Philippine Insurrection and served with the Punitive Expedition into Mexico in 1916. He advanced through all the grades and became a Colonel in 1918.

Col. CHARLES DeFORREST CHANDLER, Air Service, U.S. Army

By Lt. Gen. HOWARD A. CRAIG, USAF (Ret.)

On a hot and muggy afternoon in the latter part of July, 1907, Brigadier General James Allen, Chief Signal Officer of the Army, sent for one of his subordinates, Captain Charles DeF. Chandler. The General had, what was to prove a momentous issue to discuss with Chandler. This obscure meeting would be recognized in years to come as marking the beginning of an era of military aviation.

The State, War and Navy Building in Washington, although among the new structures in the Capitol, had no air-conditioning and only a few of its rooms — those of high ranking officers had ceiling fans. Captain Chandler was naturally pleased to leave his own super-heated cubby hole to wait in General Allen's relatively cool office. And he did not have long to wait.

As Chandler sat in a chair before his chief's cluttered desk, General Allen explained that aeronautical activity in the Army had increased to such an extent that he could no longer handle the work personally. He had, Allen said, been authorized to establish an Aeronautical Division in his office. Then he added, with a dramatic pause that Captain Chandler would take charge of this new division. With this announcement, the General handed Chandler a document which read:

WAR DEPARTMENT
Office of the Chief Signal Officer
Washington, D.C.

August 1, 1907

OFFICE MEMORANDUM No. 6

An Aeronautical Division of this office is hereby established, to take effect this date.

This division will have charge of all matters pertaining to military ballooning, air machines and all kindred subjects. All data on hand will be carefully classified and plans perfected for future tests and experiments. The op-

Chandler transferred to the Air Service early in 1920 and in October of that year, retired from active service.

At the time of his appointment as Chief of the Aeronautical Division, only a few officers in the Army were interested in aeronautics. In fact, just two, besides himself could really be counted: Lieutenant Frank P. Lahm of the Cavalry and Lieutenant Benjamin Foulois of the Infantry. Chandler's interest in aeronautics started while he toured Europe in 1905, while on a leave of absence. Chandler, a Signal Corps officer, fully aware that the Signal Corps had been charged by law with all matters pertaining to aeronautics, took advantage of an invitation he received while in London, to visit the British balloon facilities at Farnsworth. The information he received on this visit would prove of use later when new equipment had to be ordered for the Signal Corps Balloon School at Ft. Omaha, Nebraska.

In 1906, Lieutenant Lahm also took a leave of absence in France. His father, who lived in Paris, and an ardent balloonist, had taught his son much about the "sport". In fact, young Lahm competed in the first Gordon Bennett International Balloon Race in Europe in 1906, placing first. In October of this same year, 1906, Captain Chandler and Major Samuel Reber officially represented the War Department in a free balloon ascent in Massachusetts which was sponsored by the Aero Club of America.²

ABOUT THE AUTHOR

General Craig enlisted in the Aviation Section, Signal Enlisted Reserve Corps in 1917, and retired from the Air Force in 1955, then Commandant of the National War College. In between, as a career officer of 38 years, he served in many command and staff positions, notably on the War Department General Staff in the pre-WWII years; as G-3 for the European Theatre of Operations and Deputy for Air, E.T.O.; Commanding General of the XIIth Support Command, 12th Air Force; and Commander in Chief, Alaska, U.S. Army. After the War and on the formation of the U.S. Air Force, he became Deputy Chief of Staff, Materiel, with the rank of Lieutenant General. His personal acquaintance with the early leaders of the Air Service, Air Corps and Air Force gives a special insight to the founding of this nation's air arm. We welcome this first in a series of articles on the pioneers of the Air Force.

Chandler and his partner bettered the record set by Lahm in the Gordon Bennett Race. Major Reber mentioned here, one of the senior officers of the Signal Corps, a graduate of West Point in 1886, maintained his interest in aeronautics during his entire career, serving as Chief of the Aeronautical Division several times.

The two enlisted men mentioned in Memorandum No.6 were on duty in Leo Steven's balloon manufacturing plant in New York City at the time the Memo was published. Private Joseph E. Barrett was not the slightest interested in aeronautics and deciding that he was becoming more involved each day whether he liked it or not, he decided to go "over the hill." In other words, Barrett deserted. Besides Reber and Foulois there was one other officer, on detail with the Signal Corps and on duty in the Chief's office — Lieutenant Thomas Selfridge of the Field Artillery, who was destined to be the first military man in America to lose his life while participating in an aerial flight.

In October 1907, General Allen, always enthusiastic about the possibilities of aeronautics for military purposes, attended an air meet in St. Louis and witnessed the performance of Captain Thomas S. Baldwin's dirigible airship, equipped with an engine and steering mechanism.³ The General came away from the show so impressed that he discussed with Baldwin the practicality of building a dirigible airship for the Signal Corps.

Since no funds were available for this purpose, Allen applied to the Board of Ordnance and Fortification of the War Department, whose annual appropriation usually allowed it to purchase samples of new weapons. Allen's application for funds won approval on 7 November 1907. Specifications were immediately drawn up and bids advertised. The bids were opened on 15 January 1908 but complaints from nearly all bidders, against the rubberized silk gas bags, caused all proposals to be rejected. Rubberized silk was a material new to the bidders, being made only in Europe, and not available in the United States. A new proposal was issued on 21 January and the bids opened on 24 February. General Allen awarded the contract to Baldwin who submitted a low bid of \$6750.

The airship, officially accepted on 28 August 1908, was shipped to Fort Omaha, Nebraska, where personnel were to be instructed in its operation under the supervision of Captain Baldwin and Glenn Curtiss, who had built the engine.⁴ On 26 May, 1909, Lahm and Foulois made their first ascent in the dirigible and thus became the Army's first airship pilots. Lahm was issued Federation Aeronautique Internationale Dirigible Balloon Pilot Certificate No. 2. Foulois although eligible for Certificate No. 1 did not attach any significance to obtaining an FAI certificate for either airship or airplane pilot qualification. The military became interested in obtaining such certificates only at a later date.

Early in 1908, the Signal Corps opened a balloon plant at Fort Omaha. On May 13 of that year, Captain Chandler became Commanding Officer of the new plant. Lieutenant Lahm was assigned as Chief of the Aeronautical Division in Washington, a position he held until 1910, when Captain Arthur S. Cowan, Signal Corps, assumed direction of the Division. At this same time, Captain Chandler was relieved of duty at Fort Omaha and assigned to the Signal Corps Schools at Fort Leavenworth, Kansas. He remained at the school until mid-1911 when he returned to Washington for duty.

As part of the contract with the War Department for an airplane, which the Wright Brothers were awarded in 1908, they agreed to train two officers in the operation of their machine upon its acceptance by the government. The grounds at Fort Myer, Virginia were too small for instructional purposes. The Army leased an area of ground at College Park, Maryland for this purpose and Lieutenant Lahm and Lieutenant Foulois were selected for training. However, before a start could be made, Foulois was detailed as a delegate to the International Congress of Aeronautics at Paris, France. Lieutenant Frederick E. Humphreys of the Corps of Engineers was designated to replace Foulois.

Instruction began on 8 October 1909. Humphreys made his first solo flight a few minutes before Lahm. In the latter part of October Foulois, back from France, reported for instruction. After about three hours of instruction the Wrights had to leave and Lieutenant Humphreys took over the teaching job — but Foulois never soloed at College Park.

The College Park aviation school was still operating when Captain Chandler arrived in Washington as the Chief of the Aeronautical Division in June 1911. He immediately took command of the school and organized it on a military basis. He operated in both jobs at the same time and in addition enrolled himself for pilot instruction. He completed the course of flying satisfactorily and was awarded his F.A.I. airplane pilot certificate in September 1911 and his War Department Military Aviator Certificate in July 1912.⁵ He now had aeronautical ratings of balloon pilot, airship pilot and airplane pilot. The Ordnance Department manufactured the dies for the Military Aviator badge and the two original gold insignia were presented to Chandler and Lieutenant Milling on 6 October 1913. Apropos of his three flying ratings it is related that Foulois had stated: "I am firmly of the opinion that a non-flier should be placed in charge of aviation matters and kept in charge, until all aviators have at least learned something about their work." Chandler believed, "that the man in charge of military aviation matters should be qualified to fly any type aircraft and know by actual experience what he was talking about." Chandler proceeded to qualify himself in every type of aircraft then available.

Winter weather at College Park made flying instruction hazardous. Captain Chandler had a survey made of possible winter flying locations, however, and decided on the Barnes Farm near Augusta, Georgia. The school at College Park closed on 28 November 1911 and its personnel and equipment were moved by special train to Georgia. Chandler took charge of the movement and flying began at the Georgia location on 7 December and continued until 11 April 1912, when the school reopened at College Park.

The School at College Park continued to operate during the summer of 1912, training new students. Captain Chandler meantime was making a strenuous effort to obtain more pilot candidates and during the summer six new trainees arrived at College Park. It was at this time that Chandler following a new War Department regulation, required all flying personnel to take periodic physical examinations. This marked the beginning of required, stringent physical examinations for aviation candidates and regular Army pilots.

The summer 1912 was a busy one for the flying personnel at College Park. Early in May, Captain Chandler led a flight of three airplanes on a visit to Washington, D.C. They landed successfully at the Chevy Chase Country Club — the first such group flight to be made by the Army's embryo aviation arm. The Aero Club of America announced 13 May as Army Day, at its aeronautic exposition in New York City and held a luncheon which honored Army pilots: Charles Chandler, Henry Arnold, Thomas Milling, Frank Kennedy and Harold Geiger all of whom attended, representing the War Department.

Later in the summer a small group of pilots from the school participated in the Army maneuvers in New England. A tragic accident occurred on 11 June at College Station when a new Wright machine being tested by Mr. A.L. Welsh, a Wright pilot of great experience, with Lieutenant L.W. Hazelhurst as observer, crashed, killing both men.⁶ Another grievous accident occurred at the school, on 28 September, involving Lieutenant L.C. Rockwell and Corporal Frank S. Scott, when their plane suddenly dived into the ground. Scott was killed instantly and Rockwell died three hours later at Walter Reed Hospital.

On 18 November, 1912, the school at College Park was again closed as the weather was no longer suitable for flying. When Glenn Curtiss invited the Signal Corps to send officers to his

school at San Diego, California for winter flying, it was decided to divide the personnel of the College Park school. Those pilots and mechanics who had been trained at the Curtiss school at Hammondsport, N.Y., were sent to San Diego and the Wright trained pilots and mechanics were sent to Augusta. The move to San Diego marked the inception of what was to become the Army's first permanent aviation school and the school at College Park closed on 18 November 1912 — permanently.

That same day, a special train transported Captain Chandler and two other Wright pilots, five airplanes and the small contingent of enlisted men to Augusta. Lieutenant Roy Kirtland, who was detailed to aviation duty and learned to fly at College Park during 1911 and Lieutenant Thomas DeW. Milling, who had learned to fly at the Wright brothers' school at Dayton, Ohio, with Lieutenant Henry Arnold in 1911, followed later.

The weather at Augusta, from the beginning, was not at all favorable. Rain and high winds slowed down and sometimes prevented, every effort to fly. Up to the end of February 1913, no flights that included a landing away from the school had been made from Augusta. Captain Chandler, who wished to encourage cross-country training, made the first such flight on 25 February, when he flew to Waynesboro, Georgia, 28 miles south of Augusta and landed in an open field, near the home of a friend who invited him to spend the night. That evening, Chandler received a telephone call from the school advising him that all personnel and equipment were to be sent to Texas City, Texas, as quickly as possible. The reason for the precipitate move: the tense situation with Mexico, resulting from the revolution and seizure of power on 22 February by General Victoriano Huerta, whose government had not been recognized by the United States. The next morning, with the help of a tail wind Chandler returned to the school in 36 minutes. After two hectic days of packing, the detachment left Augusta on 28 February in a special train of 11 cars carrying five officers, 21 enlisted men, the airplanes and all the necessary equipment for field service. Two cars of garrison equipment were shipped back to College Park.

In the Philippines, in June 1913, Chandler had responsibility as the Assistant Department Signal officer but also retained his position on Aviation Duty (flying status) and given an additional assignment with the Philippine Department Air School, located on the edge of the polo field at Fort William McKinley. Lieutenant Lahm, who had rejoined his regiment, the 7th Cavalry in the Philippines in November 1911, was detailed to temporary duty for aviation with the Signal Corps and opened the Philippine Air School on 12 March 1912.

At this, June 1913, there were six Wright pilots at the school: Chandler, Frank P. Lahm, Herbert A. Dargue, Carleton G. Chapman, C. Perry Rich and Corporal Vernon Burge. By December 1913, Dargue was the only officer left on aviation duty in the Philippines since Chandler had been relieved of duty at the Air School and made Acting Chief Signal Officer of the Department. The other officers had returned to duty with their regiments. On 15 March 1914, Chandler became the Chief Signal Officer of the Philippine Department.

Upon completion of his tour of duty in the Philippines Chandler received orders assigning him to the Signal Corps Schools, Fort Leavenworth, Kansas, as Director. Relieved of his duty on 11 November 1916 and ordered to the Signal Corps Balloon School at Fort Omaha, Nebraska via Washington, D.C., he remained on duty at Fort Omaha until 5 April 1917 when he moved once again to Washington, D.C.

In August 1917, Captain Lahm stopped in Chandler's office in Washington enroute to New York to board a transport sailing for France. Not long afterward Chandler followed him — in fact, Chandler landed in France on 14 November 1917 — having crossed the Atlantic on the same ship with Benjamin Foulois.

In France, as the senior officer, he immediately succeeded Lahm

as Chief, Balloon Section, Air Service, AEF with his headquarters in Paris. He was designated Assistant Chief of Air Service, Balloons. Lahm was designated Chief, Balloon Section, Air Service, General Headquarters, AEF with station at Chaumont, the headquarters for the American Expeditionary Forces. There were many long conferences between Lahm and Chandler during the following days, chiefly concerning organization of the balloon service. It was fortunate that the two men had known each other before the war; both were balloon, airship and airplane pilots and had a mutual respect for each other's expertise and experience. However, as time went on Chandler exhibited a greater interest in balloons and Lahm leaned more toward airplanes.

The Army ground forces were calling for more and more balloons to regulate artillery fire and for visual reconnaissance of the battle area but only French balloons and crews were available. Neither Chandler nor Lahm could find out when shipments of American balloon companies might start arriving in France. Chandler tried to persuade Lahm to go back to the States and straighten out this exasperating balloondifficulty but Lahm declined. The scheduling and shipment of baloon companies to France had been one of Chandler's principal responsibilities when he had been stationed in Washington but at that time there seemed to be no particular hurry to get balloon companies to France.

Finally, on 10 December 1917, Chandler received a cable saying that four balloon companies with a total of 27 officers and 400 men had been on their way to France since 4 December. On 28 December, he received notice that four balloon companies had arrived at Havre but with only 20 officers and 365 men, under the command of Major John Paegelow. These balloon companies were designated A, B, C, and D of the 2nd Balloon Squadron. (Later, in June 1918, they became the 1st, 2nd, 3rd and 4th Balloon Companies, the first American balloon companies to be employed at the Front in France.)

Chandler received information on the first day of the New Year that a Major Fleischman was on his way with another balloon company. This news turned out to be in error; Fleischman had already arrived in France in command of B Company of the 2nd Balloon Squadron. He was located and detailed to set up a balloon school at Cuperly, northeast of Paris, between the Vesle River and the Argonne Forest. After completing the establishment of the school, Fleishman returned to the United States.

Chandler moved his headquarters in mid-January from Paris to Tours, which was also the Headquarters, Air Service, Service of Supply (and the Army SOS). The Air Service, SOS, had just been reorganized and Chandler found himself in charge of Radio, Photographic and Information Sections in addition to Balloons. His long experience, even temperament, unfailing courtesy and his wide technical knowledge, enabled him to give satisfaction in a unique position that probably would have brought disaster to anyone else.

In the middle of February, Chandler persuaded Lahm to take over the operations end of the American balloons, which were beginning to arrive in France in increasing numbers. But in the latter part of the month, after another long conference, a decision was made to turn back to Chandler, all balloon matters, including matters previously handled at AEF Headquarters at Chaumont, except supervisory final battle training prior to assignment of the companies to tactical units at the Front. This arrangement continued until the end of the war.

Much shifting of command function took place between Foulois and Billy Mitchell but it did not affect Chandler. He remained Chief, Balloon Section, Air Service, AEF, during the remainder of the war. That he did an excellent job is obvious by the absence of any complaint from the Army Commanders.

Colonel Chandler returned to the United States late in 1919 and was assigned to the Office of the Chief of Air Service, in Washington. A desk job however, had lost all of its attraction for him

