## I. The Early Years: 1912-1941

arine Aviation was officially born on May 22, 1912, when First Lieutenant Alfred A. Cunningham, USMC, reported to the camp "for duty in connection with aviation." This was several months after the Naval Aviation Camp was established at Annapolis in 1911, manned by Lieutenants T. G. Ellyson, John Rodgers and J. H. Towers, plus mechanics and three aircraft.

There was much talk at the time of an emerging mission for the Marine Corps of the "occupation and defense of advance bases for the fleet." The Advance Base School had been commissioned at the Philadelphia Navy Yard and Cunningham was among the first Marines to be assigned. In the spring of 1912, Lt. Cunningham was ordered to Annapolis for flight instruction. A second Marine was soon assigned to the school, First Lieutenant Bernard L. Smith, followed by Second Lieutenant William M. McIlvain in December, and First Lieutenant Francis T. Evans in June 1915. On March 31, 1916, First Lieutenant Roy S. Geiger reported to Lieutenant Commander Henry C. Mustin at Pensacola. Each of these five Marines, all eager to "learn the new," had his own concept of how this new arm could enhance the effectiveness of Marine Corps operations. They were the prewar nucleus of Marine Aviation.

Cunningham obtained orders to the Burgess Company and Curtiss factory at Marblehead, Mass. After two hours and 40 minutes of instruction, he soloed on August 20, 1912, even though he had only *witnessed* two landings prior to his own. Cunningham stated that just as the gasoline gage stick was indicating about empty, "I got up my nerve and made a good landing, how I don't know....This was my first solo."

First Lieutenant B. L. Smith became Marine Aviator No. 2 with an official designation as Naval Aviator No. 6. Like Cunningham, Smith's contributions were enormous in the experimental and early developmental phases of Naval and Marine Aviation. There was some difference between them concerning the concept of Marine Aviation. Cunningham favored complete emphasis on support of the Corps as the function of Marine Aviation, whereas Smith viewed Marine Corps support as a combined effort of Naval and Marine Aviation. It would seem that the passage of time has confirmed the soundness of both of their concepts.

One of B. L. Smith's earliest contributions to Marine Aviation came with a combined landing force/fleet exercise at Culebra, P.R., in January February 1914. It was a test of the ability of a Marine force to occupy, fortify and defend an advance base and hold it against hostile attack. Smith and McIlvain, with 10 enlisted mechanics, one flying boat and one amphibian, embarked at Philadelphia and arrived at Culebra early in January.

Using their C-3 Curtiss flying boat primarily, Smith and McIlvain flew scouting and reconnaissance missions. Throughout the exercise on an almost daily basis, the two pilots took officers of the bridgade on flights over the island and its defenses to "show the ease and speed of aerial reconnaissance and range of vision open to the eyes of the aerial scout." Based on his experience at Culebra, Lt. Smith later recommended that the Marine air unit for the advance base mission be composed of five aviators and about 20 enlisted mechanics and ground crewmen.

Smith was ordered to the U.S. Embassy in Paris by the Secretary of the Navy in 1914, where he served as aviation observer and as an intelligence officer. During this tour, he visited French aviation units and occasionally flew in combat with them. After being ordered back from France in 1917, he directed much of the design and procurement of naval aircraft, and also organized the aerial gunnery and bombing school at Miami. In 1918, Smith was ordered back to Europe to organize the Intelligence and Planning Section for Naval Aviation at Navy Headquarters in Paris. After the war, he had charge of assembling material and equipment for the famous transatlantic flight of the Navy's NC-4 in 1919.

Second Lieutenant McIlvain reported to Annapolis for flight instruction in December 1912, becoming Marine Aviator No. 3 and officially designated Naval Aviator No. 12.

In January 1915, McIlvain was the only Marine left at the Navy Flying School, and it was at this time that the "Marine Section, Navy Flying School" was officially formed. In August as the war in Europe escalated, an agreement was reached between the Navy and the Army for the training of Navy and Marine pilots in land planes at the Signal Corps Aviation School in San Diego. Secretary of the Navy Daniels believed that defense of advance bases and, in the case of Marines, possible joint operations with the Army, required an aviation force able to operate from either land or water. McIlvain was one of the first two Naval Aviators sent to the Army flight school.

During his training there, McIlvain flew for the first time in a cockpit inside a fuselage instead of from a seat in the open, in front of the wings of a primitive "pusher." He stated later that he never would forget "the feeling of security I felt to have a fuselage around me."

First Lieutenant Francis T. Evans reported to Pensacola in the summer of 1915, becoming the fourth Marine Aviator and Naval Aviator No. 26. One of his many contributions to Marine and Naval Aviation involved spin-recovery as a basic element of aviation safety. Up to that time if one inadvertently got into a spin, there was no known recovery technique. A spin usually meant the loss of both aircraft and pilot.

At the time, there was much discussion about whether or not a seaplane, with its heavy pontoons, could be looped successfully. Early in 1917, on a routine flight over Pensacola Bay in a new N-9 seaplane, Evans decided to make an attempt to end such discussions. At an altitude of about 3,500 feet, he put the plane into a dive to pick up enough speed to get "over the top" of the loop maneuver. He lost too much speed on the way up and the plane stalled and went into a spin. Evans, without realizing he was in a spin, instinctively pushed his control wheel forward to regain air speed and controlled the turning motion of the spin with the rudder. Recovering from the spin, he climbed back up and tried again, stalling, spinning and recovering until he finally managed to complete the loop without a stall. To make sure he had witnesses, Evans then flew over the seaplane hangars and repeated the



Marine Aviator No. 1, Capt. Alfred A. Cunningham.

whole show. Pensacola incorporated the spin-recovery technique into the training syllabus, and Evans was awarded a Distinguished Flying Cross retroactively in 1936 for his extraordinary discovery in 1917.

First Lieutenant Roy S. Geiger reported to Pensacola March 31, 1916, as Marine Aviator No. 5. He was formally designated a Naval Aviator on June 9, 1917, becoming the 49th naval pilot to win his wings. During his training Geiger made 107 heavier-than-air flights, totaling 73 hours of flight time, plus 14 free balloon ascents, totaling 28 hours and 45 minutes.

Geiger was undoubtedly the most distinguished aviator in Marine Aviation history and one of its greatest pilots. His distinction stems primarily from his early entry into aviation, his participation in every significant Marine Corps action from WW I through WW II, and his continued and constant leadership role in Marine Aviation over a period of almost 30 developmental and action-packed years. Geiger became a career model for both aviation and ground Marines in WW II, serving with superior distinction as both the commanding general of the First Marine Air Wing in the hardest days of the battle for Guadalcanal, and later as commander of the Third Marine Amphibious Corps at Bougainville, Guam, Peleliu and Okinawa.

As the war in Europe increased in intensity and the United States came closer to becoming involved, these five —

Cunningham, Smith, McIlvain, Evans and Geiger — were the foundation on which Marine Aviation was built.

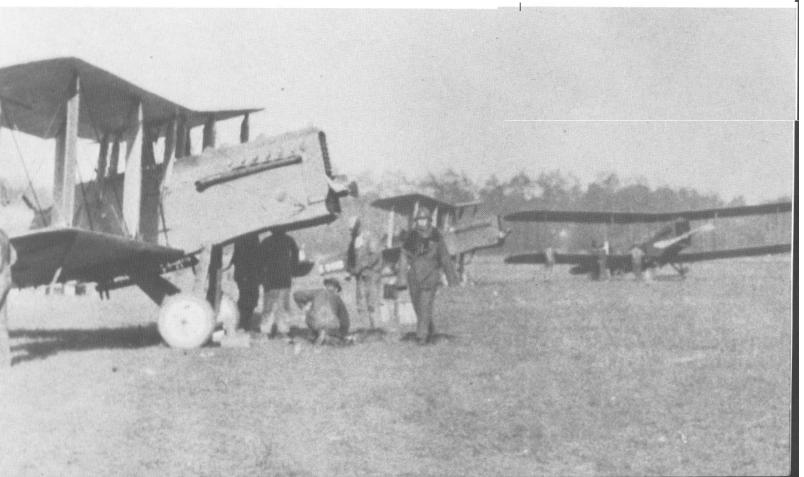
With the U.S. declaration of war against Germany, the Navy and Marine Corps air arms entered a period of greatly accelerated growth in manpower and equipment. Marine Aviation developed its own units and bases, and the Navy Department adopted antisubmarine warfare as Naval Aviation's principal mission.

The Marine Corps entered the war with 511 officers and 13.214 enlisted personnel and, by November 11, 1918, reached a strength of 2,400 officers and 70,000 men. Under the energetic direction of Major General Commandant George Barnett, the Marine Corps' primary goal was to send a brigade to France to fight alongside the Army. Marine Aviation began an aggressive effort to ensure that the new arm got its share of the Corps expanding manpower and that its units would be sent to France in support of the brigade. Cunningham, as the designated commanding officer of the Aviation Company of the Advance Base Force at Philadelphia, became the principal leader and driving force of Marine Aviation expansion.

Marine Corps Aviation soon found itself split between two separate missions. Cunningham's Aviation Company at Philadelphia, renamed the Marine Aeronautic Company, was assigned the mission of flying seaplanes on antisubmarine patrols. Maj.Gen. Barnett had secured Navy Department approval in the summer of 1917 for the formation of a Marine air unit of landplanes to provide reconnaissance and artillery spotting for the brigade being sent to France. By October 14, the Marine Aeronautic Company had attained a strength of 34 officers and 330 enlisted men, and was divided into the two projected units. The 1st Marine Aeronautic Company of 10 officers and 93 men would prepare for seaplane missions, while the 1st Aviation Squadron of 24 officers and 237 enlisted would organize to support the Marine brigade in France.

The 1st Marine Aeronautic Company led the way into active service. In October the company, commanded by then-Captain Francis T. Evans, moved from Philadelphia to Naval Air Station (NAS), Cape May, N.J. On January 9, 1918, the company embarked at Philadelphia for duty in the Azores to begin antisubmarine operations. The unit's strength on deployment was 12 officers and 133 enlisted personnel, with equipment initially at 10 Curtiss R-6s and two N-9s. Later in the deployment, the company received six Curtiss HS-2Ls, which greatly enhanced its ability to carry out its basic mission.

During 1918, the Aeronautic company operated from its base at Punta Delgada on the island of San Miguel. It flew regular patrols to deny enemy submarines ready access to the convoy routes and any kind of base activity in the



Azores. It was not the stuff of which great heroes are made, but the First Aeronautic Company was the first American aviation unit to deploy with a specific mission, which was well and faithfully carried out.

## The First Marine Aviation Force

The deployment of the First Aviation Force, was a much more complex undertaking. The story begins with the Marine landplane unit, the 1st Aviation Squadron, commanded by Captain McIlvain. The squadron was to receive basic flight training at the Army Aviation School at Hazelhurst Field, Mineola, L.I., N.Y. It would then move to the Army Advanced Flying School at Houston, Texas, and upon completion of that syllabus would be deployed to combat. The squadron moved from Philadelphia to Mineola on October 17, 1917, to begin training. In November, the six officers in its balloon contingent were sent to Fort Omaha, Neb., for training as artillery observers. The rest of the story reveals Marine initiative, determination, flexibility and success.

At Mineola, the squadron flew JN-4B Jenny trainers with civilian instructors, and the main body of the squadron lived in tents. Training progressed reasonably well but, by December, temperatures were dropping rapidly and something had to be done. In the absence of any other orders, Capt. McIlvain packed his troops, equipment and aircraft on a train that he had requisitioned and headed south on January 1, 1918. They paused at Washington to request orders, resumed the journey, and somewhere en route they received orders to the Army's Gerstner Field at Lake Charles, La., where training continued in a more suitable climate.

The next chapter in this account of a firm resolution to prepare for combat concerns Captain Geiger's Aeronautic Detachment at Philadelphia. This unit was organized on December 15, 1917, with four officers and 36 enlisted men, most of whom were detached from McIlvain's squadron. The unit's mission was not yet clearly defined, but it was planned to be a supporting element of the Advanced Base Force. However, on February 4, 1918, Geiger received orders to take his detachment, now 11 officers and 41 men, to NAS Miami, Fla. Soon after arriving, Geiger, seeking a base for the entire 1st Aviation Force, moved his command to a small airstrip on the edge of the Everglades, owned at the time by the Curtiss Flying School. To secure Marine training facilities independent of the Army, Geiger absorbed the entire School into the Marine Corps, arranging to commission the instructors in the reserves and requisition the school's Jennies. On April 1, McIlvain's squadron arrived at the field from Lake Charles and, for the first time, the nucleus of the 1st Aviation Force was consolidated at one location.

Capt. Cunningham launched a campaign to bring his squadrons to full

strength in men and machines. He made repeated recruiting visits to the Officers' School at Quantico, Va., and collected other volunteers elsewhere. As long as they seemed willing, able and in possession of a reasonable set of credentials as potential pilots or mechanics, they got orders to Miami.

Even with this influx of strength, the two detachments could not furnish enough pilots for the planned four squadrons of the 1st Aviation Force. Realizing this, Cunningham toured the Navy air installations and recruited Naval Aviators, most of them young reservists who wanted to go to France. These officers, already qualified Navy seaplane pilots, transferred from the Navy to the Marine Corps, and reported to the Marine field at Miami for landplane training. Of 135 pilots who eventually flew in France with the 1st Aviation Force, 78 were transferred naval officers.

By June 16, the force was organized into a headquarters and four squadrons designated A, B, C and D. On July 13, the force, less Squadron D which was left behind temporarily, trained at Miami. On July 18, the 107 officers and 654 enlisted men of the three squadrons sailed for France in the transport USS *De Kalb*.

At Miami, the Marine Flying Field became a bustling military complex of

Marine DH-4s comprised the Day Wing of the Northern Bombing Group in France.



hangars, warehouses, machine shops, and gunnery and bombing ranges. The completion of the manning and training of Squdaron D was accomplished as a first priority, and then additional personnel were trained to provide air patrols off the Florida coast.

## First Marine Aviation Force in France

The force disembarked at Brest on July 30 and found а full bag of administrative and supply problems. Foremost among them was the fact that no arrangements had been made to move them the 400 miles to their base locations near Calais. This was solved and the two-day trip accomplished with the requisition of a French train by Maj. Cunningham. Squadrons A and B were located at landing field sites in Calais and Dunkirk, with Squadron C occupying a field near the town of La Fresne. The force headquarters were established in the town of Bois en Ardres.

The worst problem encountered was a delay in the arrival of the force's aircraft. Before leaving for France, Cunningham had made arrangements with the Army for the delivery of 72 DH-4 bombers. These British-designed aircraft were to be shipped to France, assembled there and issued to the Marine force. Due to delays in assembly, followed by an administrative error which sent most of the assembled aircraft to England, the first one did not reach the force until September. When it became clear that the delays were in the offing, Cunningham got the Navy's approval to make a deal with the British. For every three Liberties that Cunningham sent the RAF, they sent back one DH-9A with engine installed.

Unable to get his pilots into the air immediately in American machines, Maj. Cunningham again talked to the British and made arrangements for Marine pilots to fly bombing missions with RAF Squadrons 217 and 218 in DH-4s and 9s. Each pilot flew at least three missions under this cooperative agreement.

On October 5, Squadron D arrived at La Fresne bringing the strength of the force to 149 officers and 183 enlisted. At this point, the squadrons were redesignated 7, 8, 9 and 10, to conform to the Northern Bombing Group identification system. The Germans had evacuated their submarine bases on the Channel coast, eliminating the planned mission of the Marines. Instead the Marine force was placed in general support of the British and Belgian armies in their final assault on the crumbling German defenses.

By October 12, the Marines had received enough of their own DH-4s and 9As to begin flying missions independently of the British. Two days later, Captain Robert S. Lytle of Squadron Nine led the Marines' first mission in their own aircraft, bombing the Germanheld railyards at Thielt, Belgium. The bombing was without incident but, on the way back to base, the formation of eight DHs was jumped by 12 German fighters. The Germans succeeded in separating one aircraft from the rest of the formation and concentrated their attack on Second Lieutenant Ralph Talbot, one of the Naval Reserve officers who had transferred to Marine Aviation. Talbot's gunner.

Corporal Robert G. Robinson, quickly shot down one attacker, but two others closed in from below, spraying the DH with fire and wounding Robinson in the arm. In spite of his wounds, Robinson cleared a jam in his gun and continued to fire until hit twice more, while Talbot took frantic evasive action. With Robinson unconscious in the rear seat, Talbot brought down a second German with his fixed guns and then put the plane into a steep dive to escape the remaining German fighters. Crossing the German lines at an altitude of 50 feet, he landed safely at a Belgium airfield where Robinson was hospitalized. Robinson ultimately recovered and, for this mission, both he and Talbot were awarded the Medal of Honor.

Between October 14 and November 11, the Marines carried out a total of 14 bombing missions against railway yards, canals, supply dumps and airfields always flying without fighter escort.

During their tour in France from August 9 to November 11, Marines of the 1st Aviation Force participated in 57 missions. They dropped a total of 33,932 pounds of bombs, at a cost of four pilots killed, and one pilot and two gunners wounded. They scored confirmed kills of four German fighters and claimed eight more. During its brief period in combat, the force earned a total of 30 awards, including Talbot's and Robinson's Medals of Honor and four Distinguished Service Medals.

The Curtiss R-6 trainer was similar to the JN-4 Jenny.

