Editor’s note: This article is the first in a series of three articles highlighting U.S. Field Artillery operations in World War I.

As Gen. John Pershing, commander of the American Expeditionary Force (AEF), and his staff surveyed the French battlefield after arriving in June 1917 there must have been a look of disgust upon his face after what he had witnessed. What he saw were miles of trench lines that stretched from northern France, weaving in and out along the French countryside pressing southward. These very same trench lines had barely moved a hundred yards in either direction since autumn of 1914. Several attempts by the French and British to break the stalemate resulted in obscene casualty figures such as those which occurred at the Battle of the Somme. Worse still, Pershing saw first-hand the toll those years of this form of warfare had taken upon the Soldiers inside the trenches. These muddy, filthy and rat-infested holes were manned by degraded men.

It was incredible to Pershing that the French and British commanders had seemingly lacked the aggressiveness to change the situation and consigned their men to this sort of horrible deadlock. He also felt that the Allies’ over-reliance on heavy weapons, particularly artillery, exacerbated the circumstances. Determined to make America’s participation significant and help bring about an end to the war, Pershing and his staff desperately desired to show the Allies the “American” way to fight a war.

Pershing held strongly to the battle doctrine outlined in the U.S. Army’s pre-war Infantry Drill Regulations and Field Service Regulations and coined the term “open warfare” in describing the American way to fight. This doctrine was centered upon the concept that infantry needed to be self-reliant so that “...the rifle and the bayonet remain the supreme weapons of the infantry Soldier and that the ultimate success of the Army depends upon their proper use in open warfare.”

These regulations also stated that heavy weaponry, such as artillery, existed solely for the purpose of supporting the infantry. If brought out of the trenches and into the open, Pershing was confident that the Germans would be decisively defeated.

Previous attempts by the Allies to bring about “open war” had failed because they just simply lacked the capability to break the stalemate due in part to the ineffectiveness of its artillery against the German fortifications and also the low quality of their artillery shells which sometimes failed to detonate upon impact. Also, Pershing believed that many years of trench warfare had taken away the Allied Soldier’s aggressiveness and led them to accept an artillery-centered doctrine that he considered to be futile. Ironically after the AEF’s initial battles, Pershing and his field commanders would eventually realize that the Allies really weren’t so over-reliant on artillery at all. In fact, as the AEF tactics evolved in the use of this critical asset, artillery would become essential to victory.

At the outbreak of World War I, the U.S. Army was utterly ill-prepared to enter the war in many ways. It lacked experienced junior leadership, trained Soldiers, weapons and equipment.

Little emphasis was given to the Army during the first three years of war as the nation wrestled with debate between neutrality and getting involved in Europe’s affairs. By April of 1917, the active Army’s ranks had consisted of only 137,000 men with another 181,000 more Soldiers in the National Guard. This was hardly the million Soldiers that Pershing felt were required to defeat the Germans.

The artillery branch of the U.S. Army represented these and other shortcomings as well. In August 1914, the outbreak of the war, the artillery ranks numbered only 266 officers and 4,992 enlisted men. By the time Pershing first walked the battlefields in northern France, the artillery had grown to 1,130 officers and 21,874 enlisted men. Toward the end of the war in November 1918, its ranks had swelled to 22,393 officers and 439,760 enlisted men. It’s important to point out that this huge increase in strength occurred during the last 19 months of the war while the previous 33 months were literally squandered. In short, by the time the AEF artillerymen entered combat they were primarily made up of raw recruits with inexperienced junior officers leading them. With the Allies clamoring for the AEF to get into the war, training had begun immediately during the fall of 1917.

Because time was of the essence, the training that the Americans received in the U.S. was very brief and taught them the minimum skills necessary of an...
artilleryman. Addressing an incoming class of artillery officers at the School of Fire for Field Artillery at Fort Sill, Okla., Col. A. S. Fleming made it clear that, “The need of even partially educated Field Artillery officers is so urgent that the school term has been reduced to a minimum. Tactics and broad knowledge necessary for the proper emplacement and use of artillery you must learn elsewhere...And since the ultimate reason for the existence of artillery is to shoot, our primary and final object is to teach you the technique of shooting.” Unfortunately for the Americans, they wound up being instructed in the French manner of shooting.

Due to the lack of trained American artillery officers, the AEF relied upon the French to provide artillery instructors. There were between 70 and 80 French artillery officers in America, which included one or two at each Field Artillery camp. The French, obviously, were well-versed in artillery techniques used in trench warfare and also woefully ignorant of Pershing’s concept of open warfare. Maj. Gen. William Snow, chief of Field Artillery for the U.S. Army, observed that the French instructors, “had been but a little time in the service, were not well grounded in Field Artillery, had left France at the height of stabilized warfare, and consequently knew no Field Artillery except the trench phase.”

To further compound these early problems, severe shortages of equipment left the AEF little to train with. Early on when the U.S. entered the war it was decided not take up precious cargo space on troop ships crossing the Atlantic with American artillery pieces. Rather, it was decided that the AEF would use French artillery guns upon arriving in Europe. The U.S. stopped producing its own artillery piece, the M1903 3-inch gun, in order to produce a gun that would chamber the French ammunition.

As it turned out, this gun was not produced in significant numbers nor was it readily available for training. To make up for this equipment shortfall, a rather resourceful artilleryman, Capt. James Fort, came up with an excellent idea to train his battery. Artillery guns were available once every three days and for only an hour and a half for Fort’s Soldiers to train on. Instead of waiting, Fort took the initiative and had a local college, the Georgia School of Technology, build a wooden replica. The gun was complete with a spare sighting mechanism and iron wheels. Fort had noted that this training aid worked rather well as, “The gun has inspired great enthusiasm on the part of the men and is proving to be of considerable value in their training.” As 1917 drew to a close and with the smallest amount of instruction conducted in the States, the AEF shipped off to France to continue their training.

Arriving in Valdahon, France, in January 1918, the first artillery units of the AEF began training on their newly assigned French artillery pieces, the 75 mm and 155 mm guns. Brig. Gen. George Irwin commanded one of the largest Field Artillery brigades, the 2nd Field Artillery Brigade of the 2nd Infantry Division. Contrary to the way in which his counterparts in the U.S. regarded the French trainers, Irwin noted that, “The French instructors were officers of experience, devoted to their profession, and eager to render every assistance to their allies.” However, he also sided with those same detractors by collaborating that, “It became apparent to me, as the instruction proceeded, that the long period of stationary or trench warfare had caused a very palpable disregard of the methods necessary in a war of movement.” This was but a precursor to the training they were to receive over the next several months.

Adding to the difficulty, the AEF artillery lacked the number of horses required for its mobility. Horses were obviously instrumental in transporting artillery guns around the battlefield. This made it extremely complex, if not impossible, for the men to rehearse the movements required of Pershing’s open warfare concept.

As a result, the artillerymen of the 2nd Field Artillery Brigade spent six to eight weeks becoming quite adept at firing pre-arranged defensive and shifting barrages. Upon completion, the brigade worked jointly with French artillery batteries in a “quiet” sector of the front south of the town of Verdun. The final phase of their training was to culminate in a month-long exercise emphasizing the concepts of open warfare. Unfortunately, a major German offensive in the Chemin des Dames area in May 1918 cut this training short to only six days. Being rushed to the battlefield, the entire AEF would soon be forced to put their abbreviated training into practice.

7 As quoted in: Grotelueschen, Doctrine Under Trial, 13.
8 Hogg, The Guns 1914-1918, 94.
11 Grotelueschen, Doctrine Under Trial, 21-22.