

The Operational Capability of the American Expeditionary Forces in the World War

A Monograph

by

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Abstract

The Operational Capability of the American Expeditionary Forces in the World War, by MAJ Joshua M Betty, United States Army, 60 pages.

In 1918, the American Expeditionary Forces (AEF) had to change to fight in the new and complex environment of World War I. The AEF increased its operational capabilities significantly from the United States declaration of war in 1917 to the time of the Armistice in November 1918. The examination and analysis of the pre-war doctrine, the difficulty of selecting a general officer with experience to lead a large army, and the selection and training of both the officers and soldiers of the AEF establishes the state of the AEF prior to the start war. Further analysis of the progression of the AEF during actual fighting in the summer and fall of 1918 tracks the growth and changes of the AEF. Finally, examining the AEF's change in organizational structure, ability to grow as a learning organization, and application of operational art identifies the AEF's increase in operational capability. Understanding the techniques used by the AEF to improve operational capability could have major impacts on United States Army and could help large units faced with difficult and ambiguous problems to adapt. Primary source accounts, doctrine, and unit histories as well as secondary historical studies of the AEF provide the information for the study of the AEF. The last thirteen years of operational deployments has required the United States military to adapt to a constantly changing environment. Studying the AEF and the adaptation from a small force to a large industrial army can provide the current US Army with examples on transformation and growth in complex environments.

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Acronyms

AEF	American Expeditionary Forces
AGSC	Army General Staff College
GHQ	General Headquarters
FSR	Field Service Regulation
SoS	Service of Supply

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Introduction

The most intense energy should be put into developing America's fighting forces for active service during the coming summer. Winning the war is vital to our future, and if humanly possible it ought to be done in 1918. There is no telling what might happen if we defer our utmost exertion until 1919.

—GEN John J. Pershing, *My Experiences in the First World War*

In late September 1914, invading German forces established positions in the St. Mihiel Salient south of Verdun. The area around Verdun would be the future scene of some of the worst bloodletting to occur in the World War. Throughout 1915 and 1916, the salient withstood numerous assaults from French forces and remained firmly in German hands. The soldiers of the American Expeditionary Forces (AEF) arrived in this area in late summer of 1918 to challenge the German Army for control of the terrain. The rolling hills, small villages, and extensive well-prepared German defensive system of the St. Mihiel Salient were the location of the first operation of the new American First Army.¹ On 13 September 1918, only a day after the offensive on the St. Mihiel Salient began, the United States Army began the largest logistical undertaking in its history. The forces of the AEF moved near fifty miles beneath the masterful eye of Colonel George C. Marshall, part of the American First Army operations staff. Three French dirt roads and three light railways provided the AEF the only avenues to move fifteen divisions, three corps headquarters with their associated troops, three separate brigades, and about sixty-eight independent regiments from the fighting in the St. Mihiel Salient. The AEF units moved sixty miles from the St. Mihiel battlefield, to staging areas near the Meuse-Argonne region in preparation for operations in only two short weeks.² In the next two months, the

¹ Paul F. Braim, *The Test of Battle* (PhD diss., University of Delaware, 1983), 108-109; Epigraph see John J. Pershing, *My Experiences in the First World War, vol 1* (New York: De Capo, 1995), 238. Epigraph is part of a letter from General Pershing to Secretary of War Newton Baker discussing the need to hasten the arrival of United States forces in France. General Pershing wrote the letter in November of 1917.

² Edward G. Lengel, *To Conquer Hell: The Meuse-Argonne, 1918* (New York: Henry

American Army would transform from a tactically focused frontier constabulary to a powerful strategic force capable of highly complex and large-scale operations.

At the end of the fighting in the Meuse-Argonne, the AEF's operational capability was much greater than then it was during the opening phase of the offensive.³ Changes in the AEF from May 1918 to the beginning of November 1918 increased the effectiveness of the force, enabling AEF units to penetrate German defenses and gain considerable ground, especially when compared to the initial phase of the Meuse-Argonne offensive. The increased proficiency of the force in the final weeks of the war demonstrated the Americans would have been a defining force on the battlefield had the war continued past the November 11, 1918 armistice. The AEF's ability to practice operational art greatly contributed to their increased success during operations in the autumn of 1918. The policies, orders, and organizational changes the AEF implemented immensely contributed to the improvement their operational capabilities in the last phase of the Meuse-Argonne offensive. In contemporary operations, the techniques used by the AEF to improve operational capability could have major impacts on the United States Army and could help large units adapt to difficult and ambiguous problems.

Examination of the operations of the AEF during the World War answers the question of how they changed to meet the modern battlefield they faced on the Western Front. First, understanding the American Army of April 1917 gives the background on the Army before the declaration of war. Analysis of the doctrine the AEF would employ in preparation for the Western Front, the schooling of the Regular Army, the selection of a commanding officer, and the training

Holt and Company, 2008), 69-72; George C. Marshall, *Memoirs of My Services in the World War, 1917-1918* (Boston: Houghton Mifflin, 1976), 137-142.

³ The definition of operational capability is the ability of a military organization to perform its assigned tasks and accomplish its missions. The level of operational capability depends on the quality and quantity of the tasks and missions a military unit is able to accomplish with its organizational structure and competencies.

of both officers and enlisted men provides the basis for analysis of the army before and during the war. Incorporating an understanding of the background provides insight on how the AEF changed as an organization and adapted to the modern battlefield.

Second, analyzing the progression of operations from the first division level operation at Cantigny to the army-sized attack at St. Mihiel shows a increase in the AEFs combat experience in Europe. This provides the background on how the army formed during the period leading up to the Meuse-Argonne Campaign. It also shows how the AEF and the American First Army assembled and gained valuable experience for the operations in the Meuse-Argonne. This background and analysis shows the progression of the AEF from a green unseasoned force, to an army that would contribute greatly to the final offenses of the World War.

Next, an analysis of the Meuse-Argonne Campaign, the largest engagement of the war fought by the AEF, focuses on what troubles the GHQ, AEF and the American First Army faced trying to integrate into the war as an independent force. Focusing on the changes the AEF made to the organizational structure and other lessons the force applied to improve the culture of the organization to cope with the modern battlefield explains how the AEF was able to integrate in the Allied armies. While many events and changes occurred in the AEF leading up to the Meuse-Argonne offensive, the actions during the operations from September to November 1918 best illustrate the change in the operational capability of the GHQ, AEF and the American First Army.

Finally, analysis of the operational capability of the AEF provides insight on how the United States was able to improve to face the German forces in the World War. The analysis of the AEF focuses on three models that show an improvement in the operational capability of the AEF by the Armistice. The models evaluate the change in the organizational structure of the AEF, the learning capacity of the organization, and the application of operational art as defined by current United States doctrine and theory. The AEF adapted from a traditionally constabulary force to an effective modern army in the extremely complex battlefield of the World War. The

Meuse-Argonne offensive and the experience of the AEF offers lessons for contemporary, large-scale operations. The AEFs techniques to improve operational capabilities in the face of complex and often ambiguous problems can inform current adaptations and preparations for operations.

The United States Army Before the World War

All instruction must contemplate the assumption of a vigorous offensive. This purpose will be emphasized in every phase of training until it becomes a settled habit of thought.

—GEN John J. Pershing, *My Experiences in the First World War*

On 6 April 1917, after nearly three year of neutrality, the United States entered the World War against Imperial Germany.⁴ The World War raged into its fourth year as the situation on the Western Front reached a deadly and costly stalemate between the Entente Powers of France, Great Britain and Russia and the Central Powers of Germany and Austria-Hungary. During this period, France lost more than 800,000 soldiers killed in the fighting, Great Britain more than 235,000 killed, and Germany more than 340,000 soldiers killed.⁵ The Allies large losses meant the United States needed to send soldiers to Europe to support the war effort. The United States Army was organized differently than all of the armies engaged in the war, and would have to dramatically change to meet the new challenges it would face on the battlefields of the Europe.

The United States Army of 1917 was a product of the multiple overseas adventures the country had pursued during the last two decades. Soldiers secured United States interest from China and the Philippines in the east, south to Panama, across the entire western United States, and had recently returned from Mexico after completing the Punitive Expedition in February of

⁴ Pershing, *My Experience*, vol 1, 153; Braim, *Test*, 2.

⁵ John Mosier, *The Myth of the Great War: How the Germans Won the Battles and How the Americans Saved the Allies* (New York: HarperCollins Publishers, 2001), 12.

1917.⁶ The American Army entered the World War small in comparison to European armies and handicapped by a number of issues.⁷ These included doctrine based on pre-World War concepts, the officer corps had received limited continued military schooling, and the need to select a general officer with the knowledge and experience to lead a large army. Lastly, the United States Army and the War Department recognized the difficulty in raising and training the mass citizen army required for war. However, the American Army had the advantage of just returning from the Punitive Expedition in Mexico where the Regular Army and National Guard gained valuable experience. The officers of the American Army would have to deal with all of these issues in a very short period and deploy to Europe the largest army the United States had ever employed.

The first major problem facing the leaders and commanders of the United States Army was the current doctrine in use by its schools and training centers. The doctrine used by the Army in 1917 was the United States Army *Field Service Regulation, 1914*. Updates and corrections to the regulation continued up to 1917; however, these corrections were to individual words and had little to do with the overall content of the document. United States Army doctrinal updates and evolution did not keep pace with the changes on the Western Front of the World War. United States Army doctrine still proclaimed the infantry as the “the principle and most important arm” and the artillery as merely a “close supporting arm of the infantry.”⁸ Combat on the European

⁶ Mark E. Grotelueschen, *The AEF Way of War: The American Army and Combat in World War I* (New York, Cambridge University Press, 2007), 11; John S. D. Eisenhower, *Intervention! The United States and the Mexican Revolution, 1913-1917* (New York: W.W. Norton & Co, 1993), 307.

⁷ Braim, *Test*, 30; Grotelueschen, *AEF Way*, 12. The American army was small in comparison to the large formation fighting in Europe with less than 250,000 soldiers from both the Regular Army and the National Guard. The Regular Army officer corps was less than 6,000 officers and just over half had served more than a year.

⁸ War Department, United States, *Field Service Regulation, United States Army, 1914* (Washington, DC: Government Printing Office, 1914); War Department, United States, *Field Service Regulation, United States Army, 1914, Corrected to April 15, 1917* (Washington

battlefields had become much more complex and dangerous than simply stating artillery was a close supporting arm to the infantry. The armies fighting the World War used artillery at rates not trained by Americans at the time the country declared war on Germany. The training focused on outdated artillery techniques and did not account for the larger artillery guns used in Europe. The infantry drills of close and open order formations were more reminiscent of nineteenth century armies.⁹

In addition to doctrine, the schooling and education of Army officers were both limited and not a priority for the Regular Army in the years leading up to World War. In multiple reports from different commandants of the Army Service Schools at Fort Leavenworth, they state each year there were not enough officers to fill the classes.¹⁰ By most accounts, the schooling at Fort Leavenworth was very effective and provided many officers increased opportunities to learn but the out of date doctrine handicapped the instructors. The education received by the student officers at Fort Leavenworth did provide a great amount of knowledge to those that attended, but

D.C., Government Printing Office, 1917), 74; War Department, United States, *Infantry Drill Regulation, United States Army, 1911*(Washington, DC: Government Printing Office, 1911), 123. Even the *Infantry Drill Regulation*, which governed the actions of infantry units up to and including the brigade level, was from 1911. The regulation included information on defensive techniques with little reference to trench warfare, and it did not address the large increase in use of machine guns in the World War. In fact, both the *Field Service Regulation* and the *Infantry Drill Regulation* considered the machine gun an “emergency weapon” primarily used for surprise and of limited use on any type of operation other than defense.

⁹ Grotelueschen, *AEF Way*, 22-23.

¹⁰ U.S. Army Command and General Staff School, *Annual Report (s) of the Command and General Staff School, 1912-1913 through 1919-1920* (Fort Leavenworth, KS: Command and General Staff School Press, 1913-1920). The commander of the Command and Staff School suggested remedy for this problem was the General Staff should require the regiments to send more officers to ensure they received the proper education. Often the officers that attended the course were lower rank than prescribed. The schools at Fort Leavenworth, including the Command and Staff School and the School of the Line suspended in 1916 for the Punitive Expedition and the World War and resumed until 1919.

because of the limited class sizes, their influence on the army was minimal.¹¹ The outdated doctrine of the United States Army proved to be a major hurdle for both training the army and fighting on the battlefields of France.

The next dilemma facing the United States Army and the War Department was selecting a general to lead the American Army in France. Since the end of the Spanish-American War, a limited number of American officers had led a troop formation above the battalion level let alone the division, corps, and army sized forces fighting in Europe. General John Pershing was not the senior general in the army, but he was the only one with command of a brigade size or larger field force on his résumé. General Pershing was a favorite in the US Army, and had been a general officer since 1906.¹² On 2 May 1917, General Pershing received a cable from Washington DC, ordering him to proceed to France as the commander of an American force and he was to choose four infantry regiments and one artillery regiment to support the deployment. Pershing originally construed this message to mean the forces requested would form an American division and he would lead it in combat in France.¹³

¹¹ Grotelueschen, *AEF Way*, 23; Timothy K. Nenninger, *The Leavenworth Schools and the Old Army: Education, Professionalism, and the Officer Corps of the United States Army, 1881-1918* (Westport: Greenwood Press, 1978), 126: 129-130. The instruction at Fort Leavenworth based on 1914 doctrine did not reflect the techniques used by the European armies on the Western Front and was heavily infantry focused.

¹² Grotelueschen, *AEF Way*, 12; Eisenhower, *Intervention!*, 235; James J. Cooke, *Pershing and His Generals: Command and Staff in the AEF* (Westport: Praeger Publishers, 1997), 2. General Pershing promoted directly from the rank of captain to the rank of brigadier general bypassing 862 senior officers. General Pershing's father-in-law was Senator Francis Warren from Wyoming and President Theodore Roosevelt attended General Pershing's wedding. There was speculation General Pershing's connections could have aided in his promotion over so many officers from captain to brigadier general, and by law President Roosevelt could only nominate General Pershing for the rank of brigadier general.

¹³ Pershing, *My Experiences*, vol 1, 2-3. Major General J. Franklin Bell, former Chief of Staff of the Army, suggested Pershing was the best officer for commander of the American Army in France. General Pershing thought his selection was not possible because of all of the other

However, much to his surprise the Secretary of War, Newton D. Baker, informed him upon his arrival in Washington, DC he was to be commander of the American Expeditionary Forces (AEF) in France in the World War.¹⁴ The selection of General Pershing as the overall commander of all American forces in France was the next crucial step in the mass deployment of American troops in support of the World War. General Pershing would face many challenges as the commander of the AEF beginning with the drafting and training of both his staff and the forces that would make up the AEF, by all accounts, the largest army the United States had ever fielded.

In early May 1917, when General Pershing assumed duties as AEF commander, he learned the Army staff had done little planning or preparation for the deployment of forces across the Atlantic Ocean. In addition to commanding the AEF in France, Pershing would be responsible for selecting his staff and many of the commanders to serve under him during the fighting. General Pershing would spend the next three weeks selecting officers who would accompany him to France and build the AEF. He selected a staff of 191 officers and enlisted men he knew and could trust.¹⁵ These officers would be young, fit, capable soldiers that could meet the rigors of combat and would resemble Pershing himself in both discipline and thinking. It was a daunting responsibility, but one Pershing attacked with great energy and skill.

After selecting General Pershing as the commander-in-chief of the AEF, the United States Army General Staff and Secretary of War Newton Baker developed a plan to build the army to fight against Germany. In 1917, the US Army of about 250,000 men was roughly the

senior general officers currently serving.

¹⁴ Pershing, *My Experiences*, vol 1, 18.

¹⁵ Pershing, *My Experience*, vol 1, 18; Cooke, *Pershing and His Generals*, 5-6.

equivalent of the losses France had sustained during the previous year of the war.¹⁶ In May 1917, Congress passed the Selective Service Act, which filled the enlisted ranks of the army America would send to France. Many believed the previous year's National Defense Act of 1916 provided the requirements to fill the officer ranks and produce the leaders for the huge American Army. However, as both Mark Grotelueschen and Richard Faulkner, two prominent Great War historians, point out the 1916 act had failed to produce the expected results of increasing the size of the Army or the size of the officer corps that would be so vital to lead the AEF in the World War.¹⁷ The Selective Service Act and the Defense Act of 1916 grew the size of the American Army, caused massive problems in training civilians to perform as soldiers, and affected the capability of the AEF during the six months of offensives it participated in on the Western Front.

Training of the officers and soldiers was the largest problem for the AEF during the World War. The large citizen army the United States fielded received training in a very short period and officers and non-commissioned officers often had no more experience than those they were leading. The American Army attempted to address the problem of training the officers needed to fight in Europe through a number of methods. In the years leading up to the declaration of war the Army, and those interested in preparedness, instituted a number of different programs to bolster the numbers of officers available in the time of war. These programs ranged from the training of students at colleges by Regular Army officers, to the "Plattsburg" camps that instructed over twenty thousand citizens in military skills, to a hastily executed training camp at Fort Leavenworth to train provisional lieutenants for service in the Regular Army. Finally, was

¹⁶ Grotelueschen, *AEF Way*, 11; Moiser, *The Myth*, 12. The 250,000 soldiers in the United States Army in 1917 was the combined size of the Regular Army and the National Guard.

¹⁷ Richard S. Faulkner, *The School of Hard Knocks: Combat Leadership in the American Expeditionary Forces* (College Station: Texas A&M University Press, 2012), 29; Grotelueschen, *AEF Way*, 11.

the Officer Training Camps (OTC), which commissioned and trained the civilian recruits into the large number of officers needed to fill the ranks of the AEF. Only the OTCs provided the Army with the sufficient number of officers needed to fight in the trenches in France.¹⁸

Another obstacle for officer training was providing officers able to function on division, corps, and higher general staffs. Peter Schifferle, a noted historian on United States Army training and professor at the United States Army School of Advanced Military Studies, pointed out the graduates of the Fort Leavenworth schools could fill some of these requirements, but this was a very small population and would not be enough to operate all of the general staffs in the AEF. General Pershing established the Army General Staff College in Langres, France to train officers to serve on a general staff. The instruction the officers received from these schools was short and focused, but increased the overall competence of the AEF general staffs.¹⁹

The army the United States fielded for the World War required a large number of officers to lead at all levels. The measures used to build and train the officer corps did provide the number of officers required for the AEF. The training the new officers received was limited but the schools and additional training organizations established in the United States, and France attempted to aid the officers in surviving in combat. However, the selection and training of AEF officers was only part of the overall training story.

¹⁸ Faulkner, *School*, 26-28: 43-67. The OTCs training for officer candidates was ninety days and based on the antiquated doctrine the American Army had been using since 1914. The instructors at the OTCs did not employ the translated French and British doctrine, which accounted for the trench warfare conditions on the Western Front. The quality of instruction for practical situations used to familiarize the candidates with tactics was poor. The camps were set up quickly, the instruction and the resources for instruction were very ad hoc and often did not train the candidates their actual combat tasks. The quality of instruction and the instructors to teach the candidates was a problem that plagued the program until the end of the war.

¹⁹ Peter J. Schifferle, *America's School for War: Fort Leavenworth, Officer Education, and Victory in World War II* (Lawrence: University Press of Kansas, 2010), 6-13.

The next aspect of training the AEF for the World War was the training of the troops, and as Shipley Thomas, author of *The History of the A.E.F.*, asserts was just as important and vital to success as training the officer corps.²⁰ The American Army consisted of citizens called to the colors by patriotism and the Selective Service Act transformed into an organized and disciplined army ready to fight against Germany.²¹ The American Army grouped the raw recruits into new divisions housed at camps all across the country. As an example, the 77th Division formed at Camp Upton on Long Island in New York City. After the initial reception and medical examination, the recruits' training began immediately, and the official history of the 77th Division describes the training of the new recruits as urgent.²² Citizens transformed into soldiers at Camp Upton, New York; however, the out-of-date doctrine and the lack of experience of the division left them unprepared to face the Germans.

The AEF prescribed a four-month unit training program, but large turnovers in personnel and the limited number of experienced and trained leaders in the division necessitated further training in France. Numerous Allied officers and non-commissioned officers provided training to the incoming American units and worked to ensure that the soldiers and officers understood the best ways to fight on the modern battlefield. Once established for the 1st Division the training regiment was standardized for all new American divisions as they arrived in France to ensure all divisions received the same level of training.²³ Ultimately, the training would maintain a uniquely

²⁰ Shipley Thomas, *The History of the A. E. F.* (New York: George H. Doran Company, 1920), 38.

²¹ Pershing, *My Experiences*, vol 1, 150.

²² The 77th Division Association, *History of the Seventy Seventh Division: August 25th, 1917-November 11th 1918* (New York: Wynkoop Hallenbeck Crawford Company, 1919), 7-8, 14-15.

²³ 77th Division, *77th Division History*, 7-8; Braim, *Test*, 58; Pershing, *My Experiences*, 150-154; Thomas, *History*, 38. General Pershing states in his memoir both the British and French

American feel with a large emphasis on the infantryman and his rifle. The offensive spirit of the AEF, commonly referred to by many experts, was in many respects reminiscent of the initial fighting in 1914.

Possibly the most positive event for the United States Army as it grew to meet the demands of the European battlefields was the Punitive Expedition of 1916. On the morning of March 9, 1916, a Mexican band of outlaws raided the American town of Columbus, New Mexico. This event created outrage in the United States and a call for action from the citizens in the Mexican border region. The selection of Brigadier General John J. “Black Jack” Pershing to lead the brigade size force into Mexico happened shortly after the raid on New Mexico. On March 16, 1916, General Pershing and his men crossed the border into Mexico in search of the perpetrators of the Columbus, New Mexico attack. For approximately the next year, General Pershing searched the deserts of northern Mexico in pursuit of Pancho Villa and his outlaws.²⁴

The expedition failed to capture the outlaws but it provided the officers and non-commissioned officers present with experience that would greatly benefit them and the Army during the World War. As General Pershing explains in his memoirs, the troop’s sole task after the first few months of the expedition was guarding their lines of communication. At this time, the soldiers and leaders of the Punitive Expedition began courses in battle tactics for all levels, the principles of the attack and defense and the conduct of practical exercises using all of these techniques.²⁵

aided training in France, and that he initially preferred the British system of trench warfare for its aggressiveness. However, the constant theme for Pershing and his staff was the European powers had lost their offensive spirit and had settled into a “trench warfare” mentality solely.

²⁴ Eisenhower, *Intervention!*, 228-229, 241, 307.

²⁵ Pershing, *My Experiences*, vol 1, 10.

During his search for Pancho Villa, General Pershing realized the importance of a full staff to gather and collate intelligence, develop plans, coordinate supplies, and deal with the demands from Washington, DC.²⁶ General Pershing's ability to adapt to his environment and change the structure of his force and staff would greatly aid him during his time as the commander of the AEF. Additionally, a common held belief is the activation of National Guard units and the deployment of the Regular Army during the Punitive Expedition helped the United States to recognize many of the problems it would face in the World War.

The American Army at the time of the declaration of war against Imperial Germany was small and unprepared to fight anything resembling a modern war. The United States Army was primarily a constabulary force designed to protect the borders of the United States. The World War had raged for nearly three years; however, the American Army had failed to learn any of the lessons or incorporate any of the techniques the European armies had bleed for across 150 miles of France. This was apparent in the pre-war doctrine used by the American army that was more akin to a 19th century army than the ones fighting in the 20th century.

This doctrine affected the entire army and was the basis for all training of both new recruits and officers and it contributed to the unprepared state of the Army as the United States entered the World War. Additionally, because the American Army was securing American interest very few officers had experience leading large formations and only General Pershing had experience leading a brigade or larger formation since the end of the Spanish-American War. This proved to be a great challenge for the American Army in finding leaders to command the large formations fielded for the World War.

²⁶ Eisenhower, *Intervention!*, 251. The text makes mention General Pershing increased the size of his staff to meet the needs of the expedition.

Finally, the last challenge the American Army had to face was the issue of training a mass citizen army to fill the ranks of both the officers and enlisted troops. This problem would plague the AEF until the end of the war. Overall, the American Army entered the World War unprepared, with a hastily trained civilian army, but was able to find ways to improve and solve the problems of the modern battlefield.

The Progression of the AEF in the World War

About ten minutes' consideration made it apparent that to reach the new front in time to deploy for a battle on September 25th, would require many of these troops to get under way on the evening of the first day of the St. Mihiel battle, notwithstanding the fact that the advance in that fight was expected to continue for at least two days. This appalling proposition rather disturbed my equilibrium and I went out on the canal to have a walk while thinking it over.

— George C. Marshall, *Memoirs of My Service in the World War: 1917-1918*

The spring of 1918 marked one year since the American declaration of war against the Empire of Germany. The AEF General Headquarters (GHQ) and its divisions had conducted extensive training under the guise of French and British trainers, but had not conducted any offensive operations by the spring of 1918. On 21 March 1918, things dramatically changed for the Allies when the Germans began a massive offensive that pushed the British and French armies to their breaking points. This new German offensive renewed request from the Allies to the AEF and General Pershing to move the trained American divisions to the front to participate in the fighting.²⁷ The German offensive forced the Allies' armies to retreat along large portions of the Western Front. The large set back shocked most of the Allies' nations and set in motion the involvement of American soldiers on the Western Front.

²⁷ Thomas, *History*, 67; Pershing, *My Experiences*, vol 1, 362-362. Epigraph Marshall, *Memoirs*, 137.

The fighting during the spring of 1918 prompted General Pershing to commit AEF divisions to the French and British commands to help stabilize their lines. From this point, the AEF involvement progressively grew in size. This began first with division size actions under the control of the Allies in the spring of 1918 and culminated with the operations of AEF as an Army Group of two Army size formations at the time of the Armistice in November of 1918. From the involvement of the division at Cantigny to the Armistice, the AEF continually learned how to fight and attempted to apply these lessons to each progressive battle.

General Pershing's intention, and the guidance from President Wilson and Secretary of War Baker, was to establish an independent American Army to fight the German Army in France.²⁸ This frustrated the French and British as well as many of the American leaders who watched as the Germans attacked the allied armies. After the spring 1918 German offenses started, the demands for help became even louder. General Pershing himself could no longer postpone the involvement of American troops, even if it meant they would have to fight for French and British commanders.

On 28 March 1918, there was a Supreme War Council conference held at Doullens, France. At the conference, the council appointed Marshall Foch as the Coordinator of the Allied Armies. This announcement combined with the German offensive provided the motivation for General Pershing to commit the AEF's trained divisions in France to help plug the gaps which developed in the Allies lines from the massive German offenses.²⁹ General Pershing's action

²⁸ Pershing, *My Experiences*, vol 1, 38.

²⁹ Thomas, *History*, 67; Braim, *Test*, 85; Pershing, *My Experiences*, vol 1, 364-365. General Pershing drove to Marshall Foch's headquarters and delivered the following message to him: I have come to tell you that the American people would consider it a great honor for our troops to be engaged in the present battle. I ask you for this in their name and my own. At this moment there are no other question but of fighting. Infantry, artillery, aviation, all that we have are yours; use them as you wish. More will come, in numbers equal to requirements. I have come especially to tell you that the American people will be proud to take part in the greatest battle of history.

would give large numbers of American troop's vital combat experience and benefit them in the coming months of fighting. Ultimately, it would help to strengthen the American position in the coalition and expedite the formation of the American First Army.

The first offensive by an AEF element was conducted at Cantigny by the 1st Division of the AEF. 1st Division conducted their final training in open warfare maneuvers on 16 April 1918. After observing the maneuvers, General Pershing delivered his "Farewell to the First" speech to the officers of the division. During his speech, he impressed upon the officers the dire situation of the Allies and that he selected them to make a reputation for the AEF as a fighting force.³⁰ Shortly after his speech, the 1st Division relieved a French division in the area west of Cantigny, a small village located approximately seventy-five miles north of Paris, on 25 April 1918.³¹

West of Cantigny was the location where the Allies finally blunted the German offensive. The 1st Division assumed control of the frontline trenches were of the village offensive and prepared for operations against the Germans. However, to the dismay of the American officers, and because of the recent gains of the German forces, 1st Division assumed control of a line of occupied shell holes not a developed trench system.³² Immediately the soldiers of the division set about making the line into a connected and developed trench system.

³⁰ Pershing, *My Experiences*, vol 2, 391; Thomas, *AEF History*, 69.

³¹ Thomas, *AEF History*, 70.

³² *Ibid.*, 67-76.

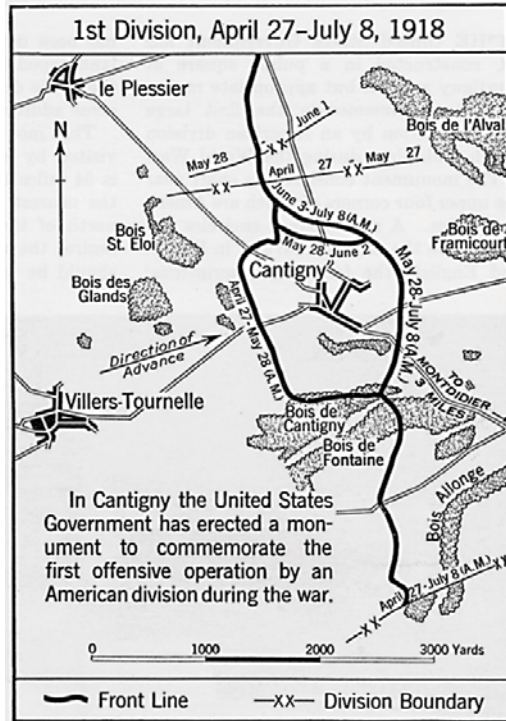


Figure 1. 1st Division at Cantigny

Source: United States Army Center of Military History, *American Armies and Battlefields in Europe: A History, Guide, and Reference Book*. CMH Publication 23-24 (Washington, DC: Government Printing Office, 1992), 415.

The first American offensive operation, the attack on Cantigny, was meticulously planned and rehearsed by 1st Division to ensure its success. The plan developed by the division staff included massive artillery employment as both preparatory fire and in direct support of the infantry in the form of a rolling barrage. The 28th Infantry Regiment was in charge of the execution of the infantry advance, including the attached French tanks and flamethrowers. The operation plan called for the artillery to begin preparatory fires approximately two hours before the start of the operation. The focus of the barrage was the neutralization of the German Artillery. At one hour prior to execution, the focus of the artillery was the German positions and to a diversionary attack to deceive, the Germans where the main attack would occur. The infantry would then commence their attack and move forward behind a rolling artillery barrage at a rate of

one-hundred meters every four minutes. The final objective was to seize the west side of the village and establish a defensive perimeter³³ (See Map 2).

The division developed the plan for the Cantigny attack to support Allied operations to the north. However, the conditions on the Western Front had changed. On 27 May 1918, the Germans began a devastating attack to the south in the area near Soissons. The attack in the south by the German forces affected the Cantigny operation by drawing off a number of French artillery units that were to support the 1st Division's attack.³⁴ The renewal of the German offensive set the conditions for the 1st Division, as part of the larger French Army, to begin offensive operations against Cantigny.

On the morning of 28 May 1918, at 6:45 a.m., 1st Division initiated the first offensive attack by the AEF in the World War. The 28th Infantry Regiment followed closely behind a rolling artillery barrage and by 8:30 a.m. established defensive positions on the west side of Cantigny. The division achieved all of its objectives and gained a distance of 2,186 yards capturing or killing all of the Germans that occupied the village. The success of the 1st Division's attack was answered almost immediately with three German counterattacks on 28 May. The same troops that attacked the village held the American line and they ably repulsed these determined counterattacks by the Germans. For the next three days, the soldiers of the 28th Infantry Regiment continued to repulse German counterattacks until the 16th Infantry Regiment conducted a relief in place of the 28th Infantry Regiment east of Cantigny.³⁵ The actions of the 1st Division at Cantigny portrayed the fighting spirit of the AEF and the division.

³³ 1st Division, and 1st United States Army, United States, *World war records: First Division, A.E.F., Regular* (Washington DC, 1928), 379-394.

³⁴ Marshal, *Memoirs*, 94.

³⁵ Thomas, *AEF History*, 76-77; Marshall, *Memoirs*, 98-99. The first counterattack was immediately following the American seizure of the village, and the next two counterattacks were

During the summer of 1918, the trained divisions of the AEF engaged in operations along the Western Front as part of the French and British armies. The remaining AEF divisions not involved in the fighting continued to train and each day more troops arrived from the United States increasing the size of the AEF. The Allies conducted a counteroffensive on 18 July 1918, which finally blunted nearly four months of German offensives. The attack of French and American troops near Reims during the end of July 1918 halted and then reversed the German Offensives of the spring and summer. The success of the attack was a devastating defeat to the Germans and was the opportunity the Allies had been waiting for to conduct an offensive of their own.³⁶ The AEF seized the opportunity of the offensive to stand up a separate American Army. For the next two months, General Pershing would fight to establish the American First Army, AEF as a combat force responsible for its own portion of the Western Front.³⁷

The designated officers of the American First Army staff began moving into their new headquarters (HQ) at the same time the commanders of the Allied armies met to discuss the upcoming offensives. Marshall Foch, recorded in notes by the GHQ, AEF staff, made a point of discussing a number of different future operations, including the clearing of German forces around the Paris-Avrincourt railroad in the area of the St. Mihiel salient. The reduction of the St. Mihiel salient would fall to the newly formed American First Army.³⁸ The reduction of the salient

much larger and the German forces used heavy artillery barrages in the attempts to dislodge the American forces.

³⁶ Pershing, *My Experiences*, vol 2, 157, 171.

³⁷ Historical Division, *United States Army in the World War*, vol 16, 393. On 24 July 1918, the American First Army, AEF was established. The headquarters of the American First Army was set to become operational on 10 August 1918. The American First Army staff was separate from the staff of the GHQ, AEF but was still under the command of General Pershing.

³⁸ Historical Division, *United States Army in the World War*, vol 8, 115; Pershing, *My Experiences*, vol 2, 172-173; In his memoir General Pershing states the railroad freed by the operations in the St. Mihiel operation is the Paris-Avrincourt railroad during the initial discussion

and the operations in the surround area would be the first by the American First Army as a distinct and unique force. The operation would combine divisions and corps with experience on the Western Front and those newly arrived in France. Even though the salient had stood in German hands since 1914, it would be a resounding American success. The next tasks for the GHQ, AEF and the American First Army were to develop a plan for the St. Mihiel operation.³⁹

The planning for the reduction of the St. Mihiel salient began after the conference of the commanders-in chief at the end of July, but as is often the case in war, the situation on the front changed. Marshal Foch determined an operation in the area between the Marne and the Meuse was now of the utmost importance and should take precedence over any operation in the St. Mihiel area. On 30 August 1918, he visited the headquarters of General Pershing and informed him the operation the nascent American First Army had been planning near St. Mihiel was no longer a priority. He stated the American forces would be needed further north to support French operations in September. General Pershing was determined to maintain the American First Army as a separate entity and to conduct the operation at St. Mihiel. He was given a day to think over the discussion with Marshall Foch. He responded with a plan that would enable the operations at St. Mihiel and support the French plan in the Meuse area during September.⁴⁰ The changes General Pershing purposed would have far-reaching consequences for his own force and would set in motion the largest logistical movement of troops in the American Army's history.

with Marshall Foch. Later in his memoir; however, General Pershing refers to the railroad as the Paris-Nancy railroad. Pershing, *My Experiences*, vol 2, 272. In his memoir Marshall states the railroad freed is the Nancy-Paris railroad see Marshall, *Memoirs*, 123.

³⁹ Thomas, *AEF History*, 208-212; Marshall, *Memoirs*, 127. In addition to the difficulties of the battlefield, many of the headquarters officers at the Army and Corps level were new and inexperienced, further complicating the tasks facing the AEF.

⁴⁰ Pershing, *My Experiences*, vol 2, 243-254; Historical Division, *United States Army in the World War*, vol 8, 36-41.

General Pershing's response to Marshal Foch's 30 August 1918, memorandum about the dispersal of American divisions and the cancelling of the St. Mihiel offensive was for the American Army to assume more of a role in the current fight. He insisted the St. Mihiel operations should continue and presented a plan that would include the involvement of the American First Army to support the operation in the Meuse-Argonne sector. General Pershing argued against Marshall Foch's proposal of moving the St. Mihiel division north because it could not be accomplished by mid-September. He stated instead the St. Mihiel operations should continue, and the American Army could then shift its additional divisions, not involved in St. Mihiel, to the area north of Verdun and support the offensive with the required force between 20 and 25 September 1918.⁴¹ This plan would involve the American Army in two large offensives in a very short amount of time.

After two days of deliberation, Marshal Foch responded to General Pershing's plan and approved of the American offensives in both the St. Mihiel region and the Meuse-Argonne sector. The initial planned dates of attacks were 10 September and between 20 and 25 September respectively.⁴² With the plan for the St. Mihiel operation confirmed the staffs of the GHQ, AEF and the American First Army finalized the details of the attack. The staffs had planned for nearly a month for the reduction of the salient; however, the addition of the offensive following in quick succession to the St. Mihiel operation added a new dimension to the attack all together.

The movement from St. Mihiel to the Meuse-Argonne posed a major problem that needed special attention above planning for the rest of the operation. The task fell to Colonel George Marshall, attached to the Operations Section of the American First Army from the AEF, GHQ. In

⁴¹ Historical Division, *United States Army in the World War*, vol 8, 42-44.

⁴² *Ibid.*, 47.

the span of one evening, he developed a detailed plan of transferring the required troops and equipment from St. Mihiel to the staging points for the Meuse-Argonne offensive.⁴³ The massive logistical move of the large number of troops and equipment completed the orders for the reduction of the St. Mihiel salient.

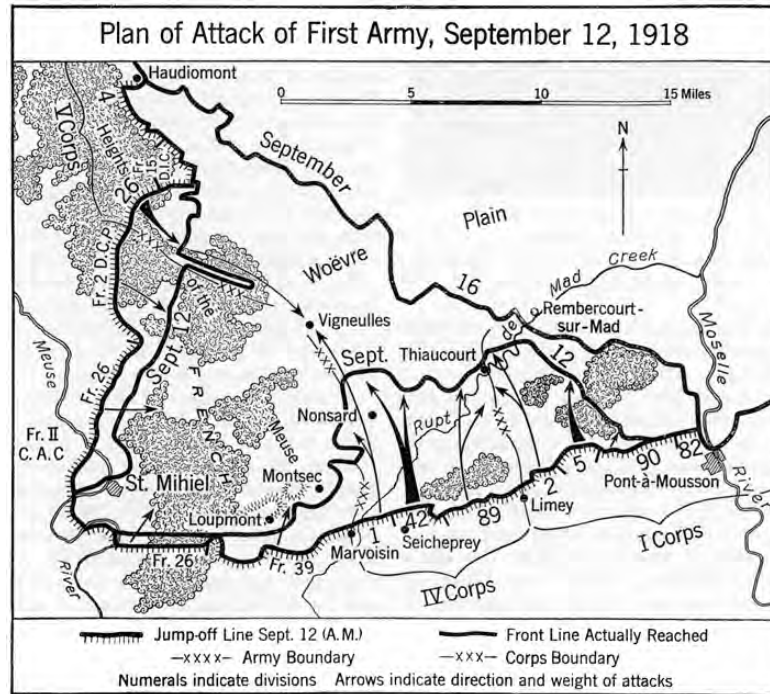


Figure 2. First Army at St. Mihiel

Source: United States Army Center of Military History, *American Armies and Battlefields in Europe: A History, Guide, and Reference Book*. CMH Publication 23-24 (Washington, DC: Government Printing Office, 1992), 109.

The plan of the American First Army called for three American and one French Corps to attack the St. Mihiel salient. Two of the American corps would attack from the south, one American corps would attack from the north, and one French division would attack east from the point of the salient in a large envelopment (See Map 3). The remaining divisions of the French Second Colonial Corps would hold the point of the salient. The great envelopment would involve

⁴³ Marshall, *Memoirs*, 137-142.

twelve divisions in the line with an additional seven in reserve.⁴⁴ The next crucial step to the plan was the artillery barrage used to support the movement of the infantry. There was a large debate on how long the barrage should be and what was enough to maintain surprise and still be productive. As General Pershing remarked in his memoirs, after weighing the options he decided on a four-hour preparatory barrage.⁴⁵ On 5 September 1918, Field Order No. 9 added the final touches to the combined arms efforts with the addition of both French and American tanks and the employment of Air Service Units to support the maneuver of the First Army.⁴⁶ The American First Army published its orders and all the corps and divisions made the final preparations while they waited for the word to begin the initial operation of the American First Army.

At one o'clock in the morning four hours before the designated start time, the American First Army artillery barrage began pounding the German trenches and artillery positions. Then at five o'clock on 12 September 1918, the infantrymen of the American First Army began their assault behind a rolling artillery barrage. As the infantry reached the German wire positions, they used the cover of the rolling barrage to cut the wire and continue their attack, a tactic never before employed by the Allies.⁴⁷ The attack on the German positions in the St. Mihiel salient would continue throughout the day and into the next afternoon and prove extremely successful for the

⁴⁴ Thoms, *AEF History*, 209-210.

⁴⁵ Pershing, *My Experiences*, vol 2, 265.

⁴⁶ Historical Division, *United States Army in the World War*, vol 8, 215-217: 233-234. On 10 September 1918, Hugh Drum, the Chief of Staff of the American First Army, issued a letter to all subordinate units designating 12 September 1918, at 5:00 a.m. in the morning as the hour of attack on the St. Mihiel salient.

⁴⁷ Thomas, *AEF History*, 213-214; Marshall, *Memoirs*, 147. This is a comment is from the 1920 popular history written by Shipley Thomas, but is corroborated by George Marshall in him memoirs. Marshall makes mention the wire was cut by both pioneer infantry units and engineers and the French were so bewildered by the incident they sent 800 officers and non-commissioned officers to see how the Americans had crossed the wire.

American First Army and the AEF. By noon on 13 September, elements of the First American Army had closed the base of the salient and experienced only 5,000 casualties. At this time, the American First Army command asked Colonel George Marshall for his opinion on whether to continue the advance. He and Walter Grant, the Deputy Chief of Staff for the American First Army, made the following statement regarding further advancement, “Grant and I drew up a joint statement *vigorously opposing* any idea of such action.(emphasis added).”⁴⁸ Marshall understood the situation of the American Army, as well as its other commitments for the Meuse-Argonne offensive was exceptional and his recommendation was no doubt one of the deciding factors for the remaining actions at St. Mihiel.

Beginning on 13 September, the American First Army began firming up the line they had captured near Vigneulles (see Map 3) on 12 September and over the next three days expanded their defensive positions further to the northeast. The American First Army took most of the large numbers of German prisoners, approximately 14,000, on the first day of the offensive. Gains by all divisions were much less in the successive days of the offensive leading up to 16 September. By the evening of 15 September, divisions were being withdrawn and sent north to participate in the coming Meuse-Argonne Offensive. The remaining troops established a defensive line from Haudiomont to Pont-à-Mousson (see Map 3).⁴⁹ The establishment of the defensive line officially brought to a close the St. Mihiel offensive and the American First Army’s opening operation on the Western Front.

The commanders and staffs of the American First Army turned their attention to the Verdun region after the second day of the St. Mihiel operation and prepared for the upcoming battle in the Meuse-Argonne. The past four months of fighting provided the nascent American

⁴⁸ Marshall, *Memoirs*, 146.

⁴⁹ Thomas, *AEF History*, 217-226.

Army with valuable experience and updated techniques. However, this was concentrated in a few divisions and the major headquarters of the American First Army and many of the Corps headquarters were still relatively untested. St. Mihiel provided many valuable lessons to all of the AEF elements that participated, but because of the short duration between the attacks at St. Mihiel and the Meuse-Argonne, many of the lessons were not evident to the American First Army. Most of the lessons from St. Mihiel, and others overlooked by the staffs due to the short duration of the St. Mihiel operation, would become painfully evident to the American First Army as it slogged through the attack in the Meuse-Argonne.

Meuse-Argonne Offensive

The Meuse-Argonne offensive opened on the morning of September 26th. To call it a battle may be a misnomer, yet it was a battle, the greatest, the most prolonged in American history. Through forty-seven days we were engaged in a persistent struggle with the enemy to smash through his defenses.

— GEN John J. Pershing, *My Experiences in the First World War*

The World War had raged on for more than four years by the time the American Expeditionary Forces (AEF) had finished the operation at St. Mihiel. After the near disastrous German spring and summer offenses of 1918, the Allies had rebounded in late summer and begun an offensive of their own. At the end of August 1918, Marshal Foch the commander of the Allied Armies, began planning an offensive for September aimed at pushing the Germans back all along the Western Front.⁵⁰ This major offensive would include all of the Allied armies and proved to be overwhelming for Germany. The AEF's part would take place north of the famous Verdun battlefield between the Meuse River and the Argonne forest.

⁵⁰ Historical Division, *United States Army in the World War*, vol 8, 36-41; Epitaph see, Pershing, *My Experiences*, vol 2, 294.

The Meuse-Argonne operation was the largest campaign of the World War for the AEF, and possible for the American Army before or since the war. The large and complex campaign by the AEF in the Meuse-Argonne region demonstrated the larger role the American forces would have played in the World War had it lasted past November 1918. The following aspects define the Meuse-Argonne campaign: the situation on the Western Front, the plan created to execute the operation, and the actions of the AEF that occurred during the campaign.

The American First Army had completed the main operation at St. Mihiel and had begun moving north to prepare for operations in the Verdun area in accordance with Marshal Foch's orders from 3 September 1918. In his order, Marshal Foch laid out operations from Verdun to the English Channel set to begin between 20 to 25 September.⁵¹ (see Map 4) This order outlined both of the American First Army operations of St. Mihiel and the area from the Meuse River west to the Argonne forest. General Pétain, commander of the French Armies that included the American army, issued additional orders to the AEF and the French Fourth Army on 16 September 1918. His orders further detailed the boundaries of the operations and the objective lines of the armies. The order included the coordination the two armies should undertake during the operation and special instruction for each army.⁵² These orders provided the guidance the GHQ, AEF and the American First Army used to develop their plans for the attack in late September 1918.

⁵¹ Historical Division, *United States Army in the World War*, vol 8, 50.

⁵² *Ibid.*, 68-72.



Figure 3. Allied offensive September 1918

Source: United States Army Center of Military History, *American Armies and Battlefields in Europe: A History, Guide, and Reference Book*. CMH Publication 23-24 (Washington, DC: Government Printing Office, 1992), 189.

The German defenses in the Meuse-Argonne region were the next aspect that affected the AEF plan for the offensive. The German army in the region from Metz to the Argonne forest included five German divisions in the area of the planned AEF attack.⁵³ The AEF intelligence section estimated the Germans could reinforce the Meuse-Argonne area with at least four divisions on the first day and as many as nine divisions on the third day of operations. However, the German troops in the area were mostly poor quality and their dedication to the German cause was questionable. The AEF reports on the German strength put the divisions at about one-third of

⁵³ The American First Army faced elements from three German armies, and the area of the Meuse-Argonne offensive faced primarily those of the Fifth German Army, which included five in line from the Meuse to the Argonne forest. There were a total of ten divisions in the line from Fresnes-en-Woevre to the Argonne forest with another ten in reserve, see General Pershing report in Historical Division, US Department of the Army, *United States Army in the World War 1917-1919, vol. 12* (Washington DC: GPO, 1948. Reprint, Center for Military History, 1990), 41.

their strength, but the command structure was very effective and the forces were in well-prepared defenses (see Map 4).⁵⁴ The Germans in the Meuse-Argonne presented a much different threat than at St. Mihiel and the defensive system a greater obstacle than any the American First Army had faced.



Figure 4. German defense in Meuse-Argonne

Source: United States Army Center of Military History, *American Armies and Battlefields in Europe: A History, Guide, and Reference Book*. CMH Publication 23-24 (Washington, DC: Government Printing Office, 1992), 170.

The front the American First Army would assume in the Meuse-Argonne region belonged to the French Second Army.⁵⁵ Before the St. Mihiel operation was complete the staffs of the American First Army and the General Headquarters (GHQ), AEF were engrossed in the plan for the Meuse-Argonne offensive. The first problem facing the staffs was the concentration of American forces for the operation. As discussed previously, the AEF executed Colonel George

⁵⁴ Braim, *Test*, 139-140.

⁵⁵ Historical Division, *United States Army in the World War*, vol 8, 60-61.

Marshall's plan for the movement of troops to the Meuse-Argonne, and under his watchful eye, 600,000 troops moved into the operations area in the largest logistical move in the history of the United States Army.⁵⁶ Troops converged from numerous parts of France and initially fell under the control of the French Second Army. By 10 September 1918, the Third American Army Corps was the first to establish in the region. Over the next ten days, the rest of the divisions and troops of the American First Army concentrated in the Meuse-Argonne region in preparation for the upcoming offensive.⁵⁷

The concentration of the American troops was near completion on 22 September 1918, when General Pershing, as the American First Army commander, issued Field Order Number 21 assuming control of the area from the Meuse River to the Argonne forest. The AEF did not relinquish control of the area around St. Mihiel and when it assumed the Meuse-Argonne line, the Americans became responsible for seventy-two miles of the Western Front.⁵⁸ Two days prior to assuming control of the Meuse-Argonne region, the American First Army issued the order that provided the plan for the conduct of the offensive.⁵⁹ The plan issued by the American First Army staff provided the guidance to the American and French corps and divisions that would take part in the largest American operation in history.

Five days after the American First Army issued the plan of attack for the Meuse-Argonne Offensive the headquarters announced the commencement of the operation for the next morning,

⁵⁶ Lengel, *Conquer*, 69.

⁵⁷ Historical Division, *United States Army in the World War*, vol 9, 3-47.

⁵⁸ Historical Division, *United States Army in the World War*, vol 9, 48-52; Thomas, *AEF History*, 236.

⁵⁹ Historical Division, *United States Army in the World War*, vol 9, 82-88. Field Order 20, issued by the American First Army on 20 September 1918, was the base order the American and French forces used to execute the opening phase of the Meuse-Argonne Campaign.

26 September 1918, at 5:30 am.⁶⁰ The American First Army plan consisted of three corps attacking across the entire Meuse-Argonne front. Simultaneously, the Fourth American Army Corps and the French Second Colonial Corps conducted a demonstration in the St. Mihiel area. The American First Army and the French Fourth Army action and maneuver were coordinated to ensure both armies progressed at the same speed. There were nine divisions in line for the three corps and six in reserve, one each at the corps level and three at the American First Army level. The American First Army planned three stages for the offensive. The first stage would penetrate the enemy defenses to a distance of approximately ten miles, clear the Argonne forest, and establish a line with the Fourth French Army from Grandpre to Dun-sur-Meuse. The second stage would penetrate another approximate ten miles and establish a line from La Chesne to Stenay (see Map 6). The final stage would attack on the east side of the Meuse River to clear the heights of the River.⁶¹

⁶⁰ Historical Division, *United States Army in the World War*, vol 9, 127.

⁶¹ Historical Division, *United States Army in the World War*, vol 9, 129-130; Pershing, *My Experiences*, 292. These stages provided the framework for the development of the overall Meuse-Argonne offensive. Field orders issued by the American First Army throughout the operation changed and modified the initial order of 20 September 1918. The three stages mentioned, as part of the planning should not be confused with the commonly understood three phase of the Meuse-Argonne offensive which has been a way for historians and military scholars to dissect the actions that occurred during the actual operation.

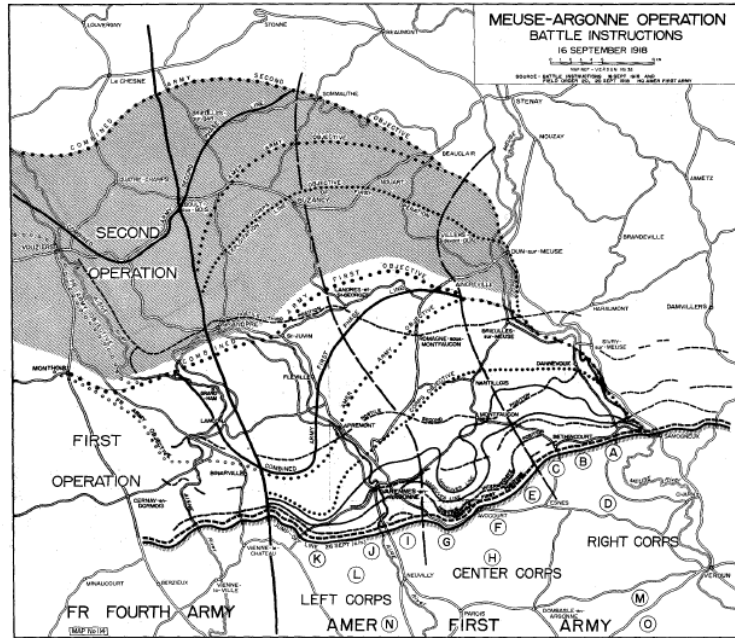


Figure 5. First two stages of the Meuse-Argonne Offensive

Source: United States Army Center of Military History. *The United States Army in the World War, 1917-1919. vol. 9* (Washington, DC: Government Printing Office, 1988-1992), 81.

The action of the American First Army in the Meuse-Argonne offensive began at 2:30 am on 26 September 1918, with the thundering of the preparatory artillery barrage.⁶² This was similar to the one executed at the beginning of the St. Mihiel offensive and was typically short in comparison to the barrages preceding other allied offensives on the Western Front. Three hours after the artillery fired the first rounds of the Meuse-Argonne offensive, at 5:30 am, the artillery brigades changed their fire to a rolling barrage and the corps of the American First Army began their attack. The three corps of the American First Army followed behind a rolling barrage similar to the previous operations that moved at a pace of one-hundred meters every four minutes.⁶³ The American infantrymen emerge from their trenches and commence the final battle of the World War.

⁶² Historical Division, *United States Army in the World War, vol 9*, 126-127.

⁶³ *Ibid.*, 127: 89.

The divisions in line on the opening day of the Meuse-Argonne campaign were mostly inexperienced. Of the nine total front line divisions, only three had experience in offensive operations. Further, five divisions involved in the opening day of the operation had not completed training and three were employing artillery brigades that were not their own.⁶⁴ The lack of experience of the fighting divisions would present a number of problems for the American First Army in the coming days of the operation. The American First Army objective, as stated in Field Order Number 20, was the penetration, but by the end of 26 September 1918, all three corps of the army were short of the objective. The American First Corps in the west made slow progress through the Argonne forest and in the center; the American Fifth Corps was unable to take the high ground at Mountfaucon.⁶⁵ The following day, 27 September, a division from the American Fifth Corps seized Mountfaucon, and for the next three days, the American First Army fought forward to a position approximately a mile and half to its front.⁶⁶ The position achieved by the American First Army by 30 September 1918, was still well short of the stated army objective for the initial phase of the battle.

The staff of the American First Army planned the Meuse-Argonne offensive in two operations. The first operation and the first phase began when the army initiated its attack; the staff further divided the operation into five total phases. 1 October 1918, started the next phase of the Meuse-Argonne offensive with all three corps continuing the attack to achieve the line of the initial American First Army objective.⁶⁷ The second phase began with the replacement of three

⁶⁴ Lengel, *Conquer*, 62; Marshall, *Memoirs*, 160.

⁶⁵ Historical Division, *United States Army in the World War*, vol 9, 139.

⁶⁶ *Ibid.*, 128.

⁶⁷ John J. Pershing and Hunter Liggett, and 1st United States Army. *Report of the First Army, American Expeditionary Forces: Organization and Operations* (Fort Leavenworth, Kansas: General Service Schools Press, 1923), 48. The American First Army Staff documented

divisions, 35th Division, 79th Division, and 37th Division by 1st Division, 3rd Division, and 32nd Division respectively. The replacement of the three divisions was an urgent matter. All three inexperienced divisions were failing from a combination of the physical pains of crossing difficult terrain and the mental strain of intense combat.⁶⁸ For the next five days, the American First Army continued to attack all along its front to clear the German forces all the way to the third position and to clear the Argonne forest. Toward the end of the second phase, on 5 October 1918, the French Corps attached to the American First Army received orders to attack the heights east of the Meuse River.⁶⁹

Phase three of the first operation began with an attack by the east sector of the American First Army front. The First Corps attacked north in the Argonne forest and by 11 October had secured the forest and established a line just south of Grandpre.⁷⁰ Along the entire line, the American First Army continued the attack and with the gains by the First Corps, the army had achieved a position near the line of the initial operations objective. Simultaneously while the First Corps was attacking in the Argonne forest the French Seventeenth Corps attacked east of the Meuse River on 8 October. The attack east of the Meuse River by the French Seventeenth Corps seized numerous German observation posts limiting the ability of the Germans to observe

the construct of two operations, with the first operation consisting of five phases. General Pershing numbers the phases from the beginning of the Meuse-Argonne to the Armistice and lists five phases, see Pershing, *My Experiences*, vol 2, 294-387. Following the operations and phasing construct recorded by the American First Army and GHQ, AEF provides a more coherent understanding of the action.

⁶⁸ Marshall, *Memoirs*, 164-167.

⁶⁹ Historical Division, *United States Army in the World War*, vol 9, 215-216.

⁷⁰ *Ibid.*, 234. The term operation refers to the sequencing of multiple tactical actions by units corps and below to achieve a common purpose.

American First Army's movement.⁷¹ 11 October 1918, closed the third phase of the first operation and established a line near the primary objective the American First Army planned to achieve on the first day of the Meuse-Argonne offensive.

The American First Army offensive in the Meuse-Argonne region had raged for sixteen days by 12 October 1918. General Pershing, as both commander of the American First Army and the AEF, was responsible for the massive offensive in the Meuse-Argonne region, the area around St. Mihiel, and coordination with the US government and the Allies. The front in the Meuse-Argonne region had expanded to the east of the Meuse River. It was also becoming apparent the American First Army would need to conduct further operations in the St. Mihiel region. General Pershing, with these circumstances in mind, formed the American Second Army on 12 October 1918. He placed the American Third Corps commander, Major General Robert Bullard, in command of the American Second Army and relinquished command of the American First Army to Major General Hunter Liggett. He then assumed the command of the Group of American Armies.⁷² From then until the Armistice Major General Liggett was responsible for all the actions of the American Army in the Meuse-Argonne.

The fourth phase of the first operation began as Major General Liggett assumed command of the American First Army on 12 October 1918. The following day, the corps of the American First Army consolidated their gains from the previous phase and planned for the continuation of the attack. On 14 October, the American First Army continued to attack north and attempted to penetrate the Kriemhild Stellung of the German defenses (see Map 5). The attack by

⁷¹ Pershing and Liggett, *Report of the First Army*, 60.

⁷² Pershing, *My Experience*, vol 2, 335-336.

all three corps met heavy resistance and they were able to make only small gains by the end of the fourth phase on 16 October 1918.⁷³

The fifth and final phase of the first operation began on 17 October and lasted until the end of the month.⁷⁴ Colonel George Marshall summed up this phase as, “The fighting in latter half of October consisted of a series of seemingly detached operations, but all were directed with the object of securing a favorable line of departure for a general assault as soon as enough experienced divisions could be collected.”⁷⁵ Colonel Marshall’s assessment describes the action of the American First Army as it prepared for the upcoming second operation of the Meuse-Argonne offensive. The three American Corps and one French Corps fighting in the Meuse-Argonne faced difficult and determined resistance; however, all four corps were able to penetrate the German Kriemhild Stellung. After penetrating this German defensive zone position, the American First Army consolidated its gains and secured suitable positions for the coordinated second operation with the French Fourth Army.⁷⁶

The American First Army’s fight in October of 1918 was part of the larger Allied offensive all along the Western Front. The pressure of this offensive and the effects of the setbacks during the summer began to take their toll on the German Army. General Pershing recounts in his memoir that at the beginning of October and throughout the rest of the month the Government of Germany reached out to President Wilson in an attempt to negotiate an Armistice. The German Government communicated with the American Government through communiqués

⁷³ Pershing and Liggett, *Report of the First Army*, 64-66.

⁷⁴ *Ibid.*, 75.

⁷⁵ Marshall, *Memoirs*, 178.

⁷⁶ Pershing and Liggett, *Report of the First Army*, 75-77. The second operation was the denotation given to the operation from the line held on 31 October to the Armistice.

passed through the Swiss. After nearly a month of passing notes, the two governments were nearing a resolution that would allow all belligerents to achieve an armistice.⁷⁷

The American First Army continued to fight in the Meuse-Argonne as the political leaders of the United States attempted to end the war through diplomatic communications. At the end of October 1918, the American First Army established a line from Grandpre to just south of Dun-sur-Meuse. This would serve as their line of departure for the second operation of the Meuse-Argonne offensive.⁷⁸ Marshal Foch ordered the second operation of the Meuse-Argonne offensive in a directive on 21 October 1918, requiring a combined attack by the American First Army and the French Fourth Army on 28 October. However, the French Fourth Army was unable to complete its preparation for the attack, and the American First Army delayed their attack until the beginning of November.⁷⁹ After a two-hour artillery barrage at 5:30 am on 1 November 1918, the second operation of the Meuse-Argonne offensive began.⁸⁰

⁷⁷ Pershing, *My Experiences*, vol 2, 341-349.

⁷⁸ Historical Division, *United States Army in the World War*, vol 9, 363.

⁷⁹ Pershing and Liggett, *Report of the First Army*, 80-82.

⁸⁰ Historical Division, *United States Army in the World War*, vol 9, 372.



Figure 6. Second Operation of the Meuse-Argonne Offensive

Source: United States Army Center of Military History, *American Armies and Battlefields in Europe: A History, Guide, and Reference Book*. CMH Publication 23-24 (Washington, DC: Government Printing Office, 1992), 186.

The American First Army continued to attack north and east for the next ten days pressing the German Army first against the Meuse River and then over it (see Map 7). By 4 November 1918, the German forces were in full retreat. The attacks by the American First Army pressed the enemy relentlessly during the day and often continued the attack through the night. On 9 November the American First Army received instructions from GHQ, AEF to conduct a general attack and crossing sites on the Meuse River were secured during the next night of the 10 to 11 November.⁸¹ Shortly after the American First Corps seized crossing sites on the Meuse River word passed to all commanders that the Allies had reached an Armistice with Germany. At

⁸¹ Pershing and Liggett, *Report of the First Army*, 85-87.

11:00 am on 11 November 1918, all hostilities between the Allies and the Germany forces ceased.⁸² The World War ended as the American First Army and the AEF reached the Meuse River near Sedan and prepared to assault toward the heart of the German Empire.

The Meuse-Argonne offensive brought to a close the American fighting experience on the Western Front and helped the Allies to end the hostilities of the World War. The American Army that departed from the United States in the summer of 1917 was dramatically different from the one that helped secure the Armistice in the fall of 1918. The inexperienced divisions that entered the offensive often lacked the complete training required to consider them combat ready units, but through the dedication and courage of the soldiers and officers, they were able to prevail. The forty-seven days that made up the offensive transformed many of those divisions into effective fighting units and their experience was vital in the final days of the fighting and would have played a key role in further success had the war continued.

Analysis of the Operational Capability of the AEF

The success of the American Expeditionary Forces (AEF) during the final phase of the Meuse-Argonne offensive was due to the increase in the operational capability of the American command. Operational capability is the ability of a military organization to perform its assigned tasks and accomplish its missions. The level of operational capability depends on the quality and quantity of the tasks and missions a military unit is able to accomplish with its organizational structure and competencies. The following models provide an evaluation of the increase in operational capability of the AEF; the changes in the organizational structure of the American forces, the organizational learning ability of the forces during operations on the Western Front, and the characteristics of operational art as defined by Dr. James Schneider.

⁸² Historical Division, *United States Army in the World War*, vol 9, 411-412.

The initial model used to evaluate the increase in AEF operational capability was the change in the organizational structure of the force. The AEF's American First and Second Armies positioned along the Meuse River on 11 November 1918 bore no resemblance to the American Army of 1917. When the United States entered the World War in April of 1917, the US Army did not have any organized divisions. The National Defense Act of 1916 authorized such a force structure the year prior in June; however, the War Department did not publish the tables containing the actual structure of the new force until May of 1917.⁸³ The National Defense act of 1916 had been an attempt to prepare the nation for possible involvement in the World War, but it had failed to organize the Army to face the threats of modern war. The US Army did not have one organized division out of the nearly 250,000 Regular Army and National Guard troops when the country declared war, but by the end of hostilities, they were able to field a fighting force comparable to any on the Western Front.

The 1st Division of the AEF was officially organized by General Order number 14 on July 15, 1917.⁸⁴ The Big Red One, a reference to the large red number one centered on its patch, was the first division in France and as earlier noted the first division to participate in offensive operations for the AEF. The AEF size continued to increase and in order to improve the command and control of operations the AEF established the American First Corps on 15 January 1918.⁸⁵ In July of 1918, the addition of the American First Army to the command and control framework provided the AEF with a similar structure to the Allied armies fighting on the Western

⁸³ Historical Division, *United States Army in the World War, vol 1*, 117.

⁸⁴ Historical Division, *United States Army in the World War, vol 16*, 35.

⁸⁵ Historical Division, *United States Army in the World War, vol 16*, 166; Historical Division, *United States Army in the World War, vol 12*, 345-355. Following the establishment of the American First Corp the AEF added six additional corps headquarters number from two to seven.

Front. The American First Army was ultimately responsible for eighty-three miles of the Western Front and the command and control of the operations at St. Mihiel and Meuse-Argonne. Later, during the Meuse-Argonne offensive and following the Armistice, the AEF activated the American Second and Third Armies.⁸⁶

Ultimately, General Pershing commanded the AEF as a group of armies from the Argonne forest to the heights along the Meuse River near St. Mihiel. At the time of the Armistice, the AEF organization had completely transformed from a frontier constabulary with no organized divisions to a group of armies with two army, seven corps, and more than thirty division headquarters.⁸⁷ The large increase in size and the establishment of multiple headquarters is only part of the reason why the organizational structure was important to the increase in operational capability. The second way organizational structured affected operational capabilities were the development of the general staffs from division to the General Headquarters (GHQ) level of the AEF.

The development of the general staff started before the AEF even arrived in France. General Pershing and the top members of his selected team began developing a skeleton structure for the AEF General Staff during their voyage from the United States to France. This structure, in conjunction with study of the British and French general staff systems, provided the basis for the

⁸⁶ United States Army Center of Military History, *American Armies and Battlefields in Europe: A History, Guide, and Reference Book*. CMH Publication 23-24 (Washington, DC: Government Printing Office, 1992), 501.

⁸⁷ Historical Division, *United States Army in the World War*, vol 12, 345-355. The number of division headquarters varies in the tables included in the final report quoted. The breakdown of the Army and Corps headquarters accounts for thirty-two headquarters; however, the final two tables that account for the number of troops in France only identify twenty-nine division headquarters. The final two tables do not account for the 8th, 87th, and 93rd Divisions, which is why the final numbers stated are more than thirty.

staff that became the GHQ, AEF.⁸⁸ The size of the GHQ, AEF grew from its initial number of 186 total soldiers, of which fifty-nine were officers, to a total strength of 4,271 total soldiers of which 547 were officers.⁸⁹ The general staffs of the corps and divisions also expanded their size from the initial organization tables to meet the needs of the modern battlefield. The increased size of the subordinate staffs made their interactions with the GHQ, AEF more effective as well as increased their capabilities to conduct operations on the Western Front.

The actual structure of the GHQ was as important as the size. The GHQ, AEF included the following special sections: Inspector General, Judge Advocate, Headquarters Commandant, Chief of Artillery, and the Commanding General Services of Supply. The GHQ, AEF staff organized in five section under the Chief of Staff which dealt with personnel, intelligence, operations, supply, and training.⁹⁰ The organizational structure of the GHQ, AEF provided the operational capability for the AEF to receive and employ nearly a million American soldiers organized in two American armies against the Empire of Germany.

The next model for evaluating the operational capability of the AEF is the capacity of the Americans as a learning organization. Mary Jo Hatch, an organizational theory expert, described many types of learning organizations; however, the two types of organizational learning that best examine how the AEF operated are exploitation and exploration. Exploitation uses current resources and knowledge in new ways to increase the capabilities of an organization. Exploration reexamines organizational knowledge and looks for new ways to employ resources or conducts

⁸⁸ Pershing, *My Experiences*, vol 1, 43.

⁸⁹ Historical Division, *United States Army in the World War*, vol 12, 90-94. The increase in size and capability of the general staffs also facilitated the movement of division in and out of corps. The ability of the divisions to move between corps headquarters allowed for the replacement of divisions during combat operations.

⁹⁰ Historical Division, *United States Army in the World War*, vol 16, 216-225.

experiments and research to identify new options for increasing the capability of an organization. Exploration leads to the concept of a learning organization, which means an organization changes how it reacts to change or enacts change in its processes.⁹¹ The concept of exploration describes how the AEF was able to become a learning organization in the World War.

The AEF demonstrated its capacity as a learning organization by developing new options for dealing with the veteran German forces it faced on the Western Front. The first example of the AEF learning was the integration of all arms into operations. Great War experts agree General Pershing believed heavily in the superiority of the infantryman and his rifle and thought open warfare was the answer to success on the battlefield.⁹² However, shortly after the 1st Division conducted operations at Cantigny the leaders of the division realized the importance of using artillery during an attack. Short intense artillery barrages proved extremely effective at Cantigny, during many early operations, and by the St. Mihiel operation, this technique became the standard procedure for the AEF.

Similar to the coordination of the artillery at Cantigny was the integration of the French tanks with the infantry formations as they maneuvered toward their objectives. The AEF learned that extensive planning and rehearsals were required to make the successful integration of tanks and other arms into operations possible. The tank had become a permanent fixture on the battlefield and the AEF began fielding its own tank organizations. The AEF had few tanks in the United States and a limited number of officers or soldiers had trained with them prior to arriving in France. The knowledge gained at Cantigny about the close coordination of infantry and tanks provided the basis for the integration of tanks into future AEF operations. The incorporations of

⁹¹ Mary Jo Hatch, and Ann L. Cunliffe, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives* (Oxford: Oxford University Press, 2006), 313.

⁹² Lengel, *Conquer*, 27; Braim, *Test*, 50; Grotelueschen, *AEF Way*, 30-31.

tanks and other arms of the military service became standard practice of the AEF in the short six months of offensive operations.

The next example of the AEF as learning organization that improved its operational capability was the evaluations and reporting system of operations used by the AEF staff best exemplified by the *Notes on Recent Operations*. The GHQ, AEF staff produced this document and distributed it to the commands of the AEF. The information in it covered the general actions by the forces involved in recent combat operations and would outline good and bad techniques for use or avoidance in future operations.⁹³ A similar document to the *Notes on Recent Operations* was General Pershing's *Combat Instructions*. General Pershing directed this document and in it he provided the standards by which the AEF was suppose to fight.⁹⁴ The documents produced by the AEF were essential since the doctrine of the American Army in 1917 was inadequate for the modern battlefield and the new doctrine, which accounted for the fighting on the Western Front was still in production.

The last example of how the AEF improved because it was a learning organization was the establishment of numerous officer development schools in the France. These schools trained officers to a higher standard and incorporated the most recent lessoned learned from the front. The artillery, infantry, and nearly every other branch of the AEF established schools to train officers to be more capable at their jobs.⁹⁵ The most influential school established in France was

⁹³ General Headquarters, American Expeditionary Forces. *Notes on recent operations, no. 3* (France: AEF Publishing Association, 1918), 5-22. The staff produced the notes periodically after major operations and they typically covered all arms and aspects of the operation.

⁹⁴ General Headquarters, American Expeditionary Forces. *Combat Instructions September 1918* (France: AEF Publishing Association, 1918), 3-10.

⁹⁵ Historical Division, *United States Army in the World War, vol 16,72-73*: 84-85.

the Army General Staff College (AGSC), AEF.⁹⁶ This school trained the officers slated to serve on general staffs from the division to AEF level and was modeled on courses taught at Fort Leavenworth. The short three-month course demonstrates the AEF's capacity to find new options to solve problems identified by the organization. The quality of programs and new options the AEF developed as a learning organization contributed greatly to the increase in the operational capabilities of the force by the end of the World War.⁹⁷

The final model employed to determine the operational capabilities of the AEF were the characteristics of operational art from both current United States doctrine and theory. Current United States joint doctrine defines operational art as the cognitive approach developed by commanders and staffs using their knowledge, skill, and experience, to sequence military actions by integrating ends, ways, and means.⁹⁸ General Pershing was the strategic commander in the European Theater of operations for the United States and in that role; he was responsible for integrating ends, ways, and means. The AEF or the American army did not use the term operational art at the time of the World War, but as a way to evaluate the actions of the commanders and staff of the AEF. Operational art provides a framework to understand how the actions of the AEF enabled mission accomplishment and increased the operational capabilities of the force.

Dr. James Schneider, a professor emeritus of the United States Army's School of Advanced Military Studies, described the characteristics of operational art that provided a clear model for understanding how the AEF conducted operational art. Dr. Schneider identified the

⁹⁶ Ibid., 93-95.

⁹⁷ Schifferle, *America's School*, 12-13.

⁹⁸ Joint Publication 3-0, *Joint Operations* (Washington, DC: Government Printing Office, 2011), II-3.

eight characteristics of operational art as distributed operations, distributed campaign, continuous logistics, instantaneous command and control, operational durability, operational vision, a distributed enemy, and distributed deployment.⁹⁹ These characteristics provide the framework for evaluating how the AEF conducted operation art to increase their operational capability by the end of the war.

The first characteristic of Dr. Schneider's model of operational art is the distributed operations. Distributed operations are actions in both depth and breadth, which sequence tactical actions to accomplish a common aim.¹⁰⁰ Prior to the establishment of the AEF, the US Army was capable of conducting its required task on the frontier and in the United States territories with little capacity for other operations. The brigade size force that pursued Poncho Villa required the activation of much of the National Guard. This force was capable of either defense on a broad front or a penetration to a shallow depth, because of its small size, but was not able to accomplish both. In contrast, the AEF was capable of both defending on a broad front and penetrating to a significant depth. This was evident by the operation during the Meuse-Argonne offensive when the AEF forces held a front nearly seventy miles long and were still able to penetrate the enemy defenses to a depth of nearly thirty miles. The ability of the AEF to conduct operation in both depth and breadth while sequencing tactical actions is why it was capable of conducting distributed operations.

Building on the distributed operations is the idea of the distributed campaign combines multiple distributed operations to achieve the same common aim. The small size of the American Army prior to the World War completely precluded it from being able to conduct multiple

⁹⁹ James J. Schneider, *Vulcan's Anvil: The American Civil War and the Foundation of the Operational Art*, Theoretical Paper No. 4 (Fort Leavenworth, KS: US Army Command and General Staff College, 2004) 35-54.

¹⁰⁰ *Ibid.*, 35-41.

simultaneous distributed operations. This was not the case for the AEF by the close of the Meuse-Argonne offensive. The GHQ, AEF was directing the distributed operations of two different American armies separated by a great distance at the time of the Armistice. The ability of the GHQ, AEF to control the multiple distributed operations and combine those operations into a distributed campaign is evidence of an increase in the operational capability of the AEF during the war.

The third characteristic of operational art according to Dr. Schneider is continuous logistic defined as the ability to supply the fielded force in order to maintain tempo.¹⁰¹ Logistics presents a challenge to every operation and was one of the greatest points of friction for the AEF in the nineteen months the United States was involved in the World War. General Pershing devoted a large amount of his personal time to the supply of the AEF. His focus on the supply of the AEF limited his ability to command the army in battle and it was not until he placed Major General Harbord in charge of the Services of Supply (SoS, AEF) that he felt confident in the logistics of the AEF.¹⁰² The SoS, AEF would continue to struggle throughout the rest of the war; however, the command was able facilitate the massive movement from St. Mihiel to the Meuse-Argonne and supply two armies until the end of hostilities. These two feats of continuous logistics alone ensure the tempo of the AEF during the final weeks of the war.

Dr. Schneider's fourth characteristic of operational art is instantaneous command and control. This means the distribution of operations and campaigns over great distance requires the ability to rapidly communicate and command different element in order for a unit to succeed.¹⁰³

¹⁰¹ Schneider, *Vulcan*, 41-50.

¹⁰² Pershing, *My Experiences*, vol 2, 168, 170.

¹⁰³ Schneider, *Vulcan*, 47-50.

The GHQ, AEF was able to rapidly communicate and control forces across the entire front through the combination of trains, telephone, telegraph, wireless communication, and runners. Further evidence of the GHQ, AEF's ability to conduct instantaneous command and control is the size of the Signal section at the headquarters.¹⁰⁴ The establishment of the American Second Army under Major General Bullard and the transferring of command of the American First Army by General Pershing to Major General Liggett improved the GHQ, AEF ability to conduct command and control. This change simplified the responsibility of General Pershing and established controlling headquarters for the distributed operations that were part of the distributed campaign conducted by the GHQ, AEF. The establishment of the two armies' headquarters greatly aided the command and control of the GHQ, AEF. The level of control this provided the GHQ, AEF increased the operational capability of the force greater than any other characteristic.

The fifth characteristic of operationally durable formations combined the previous two characteristics of continuous logistics and instantaneous command and control to enable a force to conduct indefinite distributed operations. A decisive battle cannot destroy an operationally durable force.¹⁰⁵ The AEF sustained massive casualties during the Meuse-Argonne offensive and was still able to continue operations at the time of the Armistice. The employment of the SoS, AEF and the establishment of the American First and Second Armies established the durability of the AEF formations on the Western Front. The durability of the AEF further contributed to the increase in operational capability.

The three remaining characteristics of Dr. Schneider's operational art are important (operational vision, a distributed enemy, and distributed deployment); however, only the

¹⁰⁴ Historical Division, *United States Army in the World War*, vol 16, 224.

¹⁰⁵ Schneider, *Vulcan*, 50-53

characteristic of the operational vision is important for evaluating the increase in operational capability of the AEF. Operational vision is a commander's approach to design, execution, and sustainment of an operation.¹⁰⁶ General Pershing as the commander of the American First Army provided his vision for the conduct of the Meuse-Argonne offensive. As the commander of the AEF Group of Armies, he continued to provide the vision for operations in the direction of both Sedan and Metz, operations planned to occur at the time of the Armistice. He provided the design to the American First and Second Armies of operations that never took place due to the Armistice. He also provided the vision for the AEF in the months leading up to the formation of the American First Army and his vision was the reason the army was finally established. General Pershing's vision and the ability of the GHQ, AEF staff to transform that into executable plans increased the operational capability of the AEF.

The operational capability of the GHQ, AEF increased during the final weeks of the Meuse-Argonne offensive; however, this was because of the previous six months of fighting. The tactical gains during the last ten days of operations were impressive but they do not tell the whole story of how the AEF became a truly operationally capable force. Tactical gains on the ground do not necessarily transfer to strategic success or the ending of the war. The German offensive in the spring of 1918 gained large swaths of ground but ultimately did not ensure the Germans would win the war. Likewise had the AEF not developed the operational capabilities it did the gains it achieved at the beginning of November could have just as easily fallen back into German hands. Evaluation of the changes of organizational structure of the force, the organizational learning ability, and Dr. Schneider's characteristics of operational art depict how the AEF was able to improve its operational capability by the November 1918 Armistice.

¹⁰⁶ Schneider, *Vulcan*, 53-56.

Conclusions and Recommendations

The General Headquarters (GHQ), American Expeditionary Forces (AEF) during the Meuse-Argonne offensive expanded the number subordinate headquarters to two army level commands and included nearly three quarters of the American combat forces in the offensive. Yet this offensive is one of the most forgotten battles in American history. The AEF overcame amazing odds just to fight as an independent force during the offensive, and by the time of the Armistice, the AEF had secured its place as a capable army on the Western Front.

The increase in the operational capability of the AEF during the Meuse-Argonne offensive was evident by the ability of units of the AEF to penetrate the tough German defenses. The changes in the organizational structure greatly contributed to the increase in capabilities of the AEF and the addition of the American Second Army headquarters during the Meuse-Argonne greatly added to the overall success of the operation. The characteristic of operational art, defined by Dr. Schneider, demonstrate the methods used by the American First Army and GHQ, AEF were the greatest contributing factor to the increase in operational capabilities during the offensive. The addition of an army headquarters allowed the GHQ, AEF to more effectively integrate the means and ways of the AEF to meet the United States strategic objective of having a large enough presence in the war to be included in the peace process. Overall, the adaptability and skill of the AEF commanders and staff provide a valuable example of an adaptive and capable organization. The lessons learned by the AEF provide an excellent base of knowledge to assist large units trying to adapt to ambiguous and difficult problems in the contemporary environment.

The rapid change required to make the AEF the force it was in November of 1918 is an excellent example of adaptability for the current United States Army. The American Army of 1917 had to grow rapidly, to face a complex battlefield it was not prepared for, with weapons it

had never used, and employ soldiers not trained to the standards the Army traditionally employed. The parallels to the current United States Army situation are striking. The battlefields are vastly different, the United States is not engaged in state on state conflict, but the complexity of the situation, and the requirements on the army are very similar. The actions of the commanders and staff can provide some insight on how the current United States Army could remain flexible to meet the changing and complex battlefield. Studying the American Army in the World War could help identify some of the similarities between the two forces.

The World War provides historical examples of large-scale operations with mass armies the current army has not had the opportunity to participate in during the recent conflicts. The American Army in April 1917 entered the World War as a small professional force focused on protecting the American frontier and territories. This is not dissimilar than the current state of the United States Army, which is use to fighting small determined terrorist and insurgent forces. The transformation of the AEF from a similar type formation to a large army in 1918 is an excellent example for modern planners on transformations to meet a peer to near-peer state threat.

The AEF at the time of the Armistice was still learning how to fight on the Western Front. They had increased their operational capability significantly, and they were continuing to improve at all levels as the war ended. If Germany had not asked for an armistice the AEF armies that would have participated in the spring 1919 offensive could possibly have been the most dominating force on the Western Front. The increased operational capability of the AEF during the World War is an excellent study of how an army can transform.

Recommendation

The United States Army's operational deployments and combat actions over the last thirteen years have centered on mostly brigade and below actions. It is very likely these types of operational deployments will continue in the near future for the Army; however, it is vital the Army

is ready to respond to large combat operations. Carl von Clausewitz, the noted Prussian military theorist, discussed how historical examples might help to explain an idea, show how the idea has application, support a statement, or in combination with a number of events make it possible to develop a doctrine.¹⁰⁷ Using Clausewitz logic of historical examples to explain an idea, the United States Army's actions in the World War can support current statements about the need to train for large-scale conventional operations. His logic can also be used to apply the ideas of large conventional fighting in the Meuse-Argonne offensive and the AEF response to mobilization to the need to continue to train for such operations today. Further study of the Meuse-Argonne offensive can provide military planners and leaders an excellent historical example to use to understand how to transform a small army into a large citizen based army and prepare for the difficulties of a complex battlefield.

Next, the Meuse-Argonne offensive and the actions of the AEF provide a great example of operational art. The study of the Meuse-Argonne offensive outside of the School of Advanced Military Studies can provides planners and leaders an excellent example of operational art. The incorporation of the Meuse-Argonne offensive into officer education at the tactical and intermediate levels can help officers gain a better understanding of operational art from both the Army and Joint perspectives. Especially at the field grad officer level, the United State Army should incorporate more education and training on operational art and the use of the principle of operational art in planning. The Meuse-Argonne offensive is an excellent example of operational art as defined by theorists, including Dr. Schneider, and in doctrine. Including of the AEF's experiences in the World War may increase the current education of United States Army officers and provide leaders with another tool to plan operations.

¹⁰⁷ Carl von Clausewitz, Edited and Translated by Michael Eliot Howard, and Peter Paret. *On War* (Princeton: Princeton University Press, 2008), 171.

The last recommendation for the use of the Meuse-Argonne offensive and actions of the AEF is as a method to educate officers that do not have combat experience. The last thirteen year the United States Army has been involved in almost constant conflicts and a large number of officers and soldiers have combat experience. This will not always be the case and could be the opposite in the near future. The implications of this are fewer soldiers will have combat experience and the United States Army will have rely more heavily on training and education to prepare for combat. Carl von Clausewitz stated, experience is the best way to negate the friction in combat but this is not always possible since states may not engage in conflict for long periods. His remedy for lack of combat experience is to train and educate soldiers to the highest levels to ensure the best success in combat.¹⁰⁸ The Meuse-Argonne is an excellent example for training officers in the difficulties planning large-scale operations. The incorporation of the operation into training can better prepare leaders for future major combat operations. Additionally, the study of the offensive is a lost cost endeavor and under the current fiscal constraints is an effective way to educate officers in both the institutional and organizational Army.

¹⁰⁸ Clausewitz, *On War*, 122-123.

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