CANNON FODDER OR CORPS D’ELITE?
THE AMERICAN EXPEDITIONARY
FORCE IN THE GREAT WAR

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by

JEFFREY J. BERNASCONI, CDR, USN
B.S., Oregon State University, Corvallis, OR, 1990

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The analysis of the impact of the American Expeditionary Force (AEF) in the Great War has fallen into two competing camps. The first believes that the AEF was the war winning factor in coalition warfare. The opposite view holds that the AEF itself had no true impact, but rather it was the industrial might and the manpower potential of the United States that was the key element to victory. The caveat to both views was that the AEF did not have enough time in combat to truly show its martial ability. This thesis attempts to analyze the combat effectiveness of the AEF by comparing its experience with that of the British Expeditionary Force (BEF) in 1916. The rate of change in the ability of the AEF to adapt to modern warfare is shown to be slightly higher than that of the BEF of 1916. By November 1918 the AEF was not completely tactically combat effective, but it had dramatically improved from where it started and clearly demonstrated the potential to continue to improve at the same pace.
Name of Candidate: CDR Jeffrey J. Bernasconi

Thesis Title: Cannon Fodder or Corps d’elite? The American Expeditionary Force in the Great War

Approved by:

__________________________________________, Thesis Committee Chair
LTC Richard S. Faulkner, M.A.

__________________________________________, Member
D. Scott Stephenson, M.A.

__________________________________________, Member
Scott W. Lackey, Ph.D.

Accepted this 16th day of June 2006 by:

__________________________________________, Director, Graduate Degree Programs
Robert F. Baumann, Ph.D.

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ABSTRACT

CANNON FODDER OR CORPS D’ELITE? THE AMERICAN EXPEDITIONARY FORCE IN THE GREAT WAR, by Jeffrey J. Bernasconi, CDR, USN, 141 pages.

The analysis of the impact of the American Expeditionary Force (AEF) in the Great War has fallen into two competing camps. The first believes that the AEF was the war winning factor in coalition warfare. The opposite view holds that the AEF itself had no true impact, but rather it was the industrial might and the manpower potential of the United States (US) that was the key element to victory. The caveat to both views was that the AEF did not have enough time in combat to truly show its martial ability. This thesis attempts to analyze the combat effectiveness of the AEF by comparing its experience with that of the British Expeditionary Force (BEF) in 1916. The rate of change in the ability of the AEF to adapt to modern warfare will be shown to be slightly higher than that of the BEF of 1916. By November 1918, the AEF was not completely tactically combat effective, but it had dramatically improved from where it started and clearly demonstrated the potential to continue to improve at the same pace.
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ACRONYMS

AEF American Expeditionary Force
BEF British Expeditionary Force
FSR Field Service Regulations
G-5 Training Section
GHQ General Headquarters
IDR Infantry Drill Regulations
SOS Service of Supply
US United States
CHAPTER 1
TOO LITTLE, TOO LATE?

The popular view of the American Expeditionary Forces (AEF) contribution to the victory in the Great War has often be summed up with the phrase “Too Little, too Late.”\(^1\) David F. Trask, in his book *The AEF and Coalition Warmaking, 1917-1918*, takes the stand that the AEF was forced into battle too soon, that they were unprepared, and that they really did not make a difference in the arena of combat. He comes down rather harshly on John J. Pershing, specifically on the slow training program and the decision to create an independent American Army, theorizing that some form of amalgamation would have been a more efficient use of American manpower.\(^2\) John Terraine also comes in very heavily on the side of the “Too Little, too Late” group of historians. He is primarily concerned with the experience of the British Expeditionary Force (BEF), making the claim that the BEF was responsible for finally defeating the German Army on the field of battle. While defending his thesis, John Terraine belittles the contribution of the AEF, citing the following concerning the Saint Mihiel battle to bolster his position.

The Americans used 3,010 guns, not one of them of American manufacture; the French provided most of the 1,400 aircraft and also lent 267 light tanks. The attacking infantry was American; catching the Germans in the act of withdrawal, it scored a great success: 15,000 prisoners and 450 guns at a cost of some 7,000 casualties. But visiting the scene the next day Colonel Repington noted an ominous sign: “[W]e found the country roads much blocked with troops and transport of all kinds. The Staff work has failed here, and for miles transport congested all the approaches. One enterprising Boche air squadron, flying low, could have played the deuce on these roads, but not one came.” Such scenes would be witnessed again.\(^3\)
On the surface, John Terraine is correct; the AEF did rely upon French support. The “scene” that Colonel Repington observed was to be expected, especially as the AEF, in the immediate aftermath of a successful advance, was pulling units from the line and having them reorient toward the north and redeploy towards Verdun in preparation for the Meuse-Argonne offensive. No army on the Western Front could have shifted from one battle to another over limited lines of communication without similar results.

The AEF, however, succeeded in training a mass of hastily inducted citizen soldiers and effectively employing them in modern industrial combat on the Western Front. The AEF was successful in modern combat in 1918, and a comparison with the 1916 BEF will demonstrate that the AEF, as a dynamic learning organization, was on a proven path to improve its combat effectiveness. The comparison proposed here compares the tactical and operational experience of the AEF during 1918 with that of the BEF of 1916. This comparison is further delimited by concentrating on the Meuse-Argonne campaign of 1918 for the AEF, and on the Somme campaign of 1916 for the BEF. Another possible delimitation for the two forces is on the type of division. The BEF consisted of Regular, Territorial Force, and New or “Kitchener” Army Divisions. The AEF was composed of Regular, National Guard, and National Army Divisions. However, distinctions quickly blur between these various types of divisions, and are not ultimately useful for the purpose of comparison. Additionally, the distinction in the United States (US) Army between Regular, National Guard, and National Army (those who were drafted) soldiers was eliminated on 7 August 1918. The source of the soldiers is not the crux of this thesis. The key question is once the AEF had these various formations of soldiers what did the AEF’s training organization accomplish? Was the AEF able to take
this huge mass of raw material in the form of civilians and turn it into combat effective units in the field?

Combat effectiveness is a variable, not a constant. One hundred percent combat effectiveness is the ability to convert all of a unit’s resources or potential combat power into applied or actual combat power. It is a theoretical construct, armies constantly strive for combat effectiveness, but it is impossible to achieve perfection in the reality of the modern battlefield. The divisions of the AEF were not combat effective when deployed to Europe. Nor did they ever achieve a capacity approaching total combat effectiveness during the course of the Great War. However, the AEF as a whole did rapidly improve its combat effectiveness over the course of the Great War. It is this capacity to improve, to learn from their errors, and the errors of others quickly and systematically, that was the strength of the AEF. Applying these lessons in combat is what finally demonstrates the combat effectiveness of the AEF. This is validated in the high level of tactical combat effectiveness displayed by the AEF in its final battles of the Great War.

John A. Lynn in *The Bayonets of the Republic* provides a useful methodology for defining and evaluating effectiveness. Tactical combat effectiveness is the ability to convert potential combat power into applied combat power through fire and maneuver. There are three elements making up tactical combat effectiveness. The first element is the military system itself. The military organizations discussed consist of a body of doctrine, organization, weapons systems, and training regimes. How were the divisions organized and why? What weapons systems did they deploy with, and after the first battles, what did they change? How effectively were combined arms used in both offensive and defensive operations? How did small unit doctrine change based upon the experiences of
the British (and French) in the years prior to 1917? The second element of tactical combat effectiveness is the motivation system. This consists of unit cohesion and moral.

Deciding why men fight. Or more specifically why do men risk their own lives? What policies were in place that contributed to unit cohesion, or conversely, what policies directly hindered unit cohesion. The third leg of the tactical combat effectiveness triangle is the context of combat. Tactical combat effectiveness can only truly be measured by actual combat, because the action of the enemy cannot be discounted. It is not a battle against a simulation or an automaton, but a living, breathing, thinking, and most importantly, adapting enemy.\(^5\)

The trend in modern history is to portray the AEF as combat ineffective in the Great War for three reasons. The first was that the allies did not want to acknowledge the contribution of the AEF, in order to minimize President Wilson’s power at the peace table. The second reason has already been discussed, specifically, the AEF was simply not in the fight long enough to make its contribution obvious to all the participants. Combat effectiveness can only truly be measured in combat. The third reason that the historiography portrays the AEF as combat ineffective was because by November 1918 the AEF was still not completely combat effective. To phrase this another way, there were still numerous areas that the AEF could improve upon in its conduct of modern warfare. These areas of weakness, however, were identified by the AEF’s training section (G-5) and corrective action was in progress as the Armistice arrived. The creation, by Pershing, of the G-5 section for training, was a key factor in the AEF’s ability to conduct systematic and dynamic training. The AEF by November 1918 had greatly improved, and it had identified shortcomings and was working on improvements.
The historian cannot view combat effectiveness during the Great War as an academic grade or an inspection score, with above 90 percent as “A” level work, 80 to 89 percent “B” level, 70 to 79 percent “C” level, and anything below a failing grade. A more apt analogy would be with baseball batting averages. Someone who successfully hits the ball and gets on base safely four out of ten times all season would in all likelihood be the star player of the team. The baseball analogy is also preferable because it involves the action of the opposing team or enemy. If a batter routinely bunts because he can usually outrun the throw from the shortstop, eventually that shortstop will play closer in, to get to the ball faster and throw the batter out. If one side routinely targets frontline trenches with thousands of rounds of high explosives prior to an assault, the enemy will move his men out of those trenches, preserving his forces to engage the advancing waves of infantrymen when the artillery finally lifts.

The AEF in France developed into a tactically effective fighting force. If the AEF had been totally inept at trench and open warfare, the troops deployed would have been nothing more than cannon fodder. If the AEF had not achieved a basic level of tactical combat effectiveness, then the German Army might have been able to hold the line, possibly leading to a negotiated peace on terms unfavorable to the US and the Anglo-French coalition. The style of warfare that the British and French had settled upon by the late period of the Great War is referred to as Trench Warfare. This style basically reduces combat to the assault phase, when the attacking force leaves the cover of their entrenchments and follows a rolling barrage into the frontline trenches of the enemy force. There is no preliminary movement phase, and the artillery alone achieves fire superiority. This is an effective tactic, but only for the capture of the initial enemy
positions. Once an attacking force has outrun its artillery support, the theory of trench warfare was to consolidate the gains, defend against any counterattack, and wait for the artillery to displace forward to cover any additional advances. During the closing months of 1917 and early 1918, the time period when the AEF was closely looking at the doctrine of the British and French, both the British and French infantry relied upon the artillery with the infantry advancing behind a rolling barrage. Both favored the limited objective attack. The focus for the British was shifting, however, as German morale and cohesion started to collapse by October 1918, to a more open form of warfare. The AEF used all information available to them to prepare for trench and open warfare. They had access to British and French doctrine and trainers, as well as captured German documents translated into English. Pershing’s solution to the training and doctrine ambiguity was to teach trench warfare as a subset of open warfare. “Therefore . . . without neglecting thorough preparation for trench fighting, undertook to train mainly for open combat, with the objective from the start of vigorously forcing the offensive.” This also had the added benefit of providing for the AEF a combat doctrine completely different from the entente armies, thus serving as another point against the attempts to amalgamate American soldiers or small units directly into entente formations. The AEF’s training plan was designed to field an army effectively trained in open warfare in time for the planned 1919 offensive. When the situation on the Western Front changed dramatically in 1918, the AEF was committed to battle much earlier than anticipated. The AEF solution was to promulgated pamphlets down to the company commander level on tactical issues and mistakes observed by inspectors from the G-5 staff section, and also problems reported up the change of command in after action reports. For example, the AEF’s Combat
Instructions of 5 September 1918 lay out in very simple terms the practical differences between the two types of warfare.

The essential difference between open and trench warfare, so far as effect upon formations is concerned, is characterized by the presence or absence of the rolling barrage ahead of the infantry. From a tactical point of view, the method of combat in trench warfare presents a marked contrast to that employed in open warfare, and the attempt by assaulting infantry to use trench warfare methods in an open warfare combat will be successful only at great cost.  

The pamphlet goes on to discuss in detail the proper application of open warfare methods.

Failure to achieve a higher level of tactical combat effectiveness is the result of the rapid formation of forces out of the small, pre-war army, and the relatively short time between the AEF’s first engagements and the end of the Great War. Additionally, the large amounts of contradictory doctrine available from the French and British contributed to the challenge, as well as the doctrinal differences between the AEF and the War Department. A common theme surrounding the preparation and training of the AEF is a lack of time. Timothy K. Nenninger comes down harshly on Pershing’s ability and the tactical performance of the AEF in general. In one article, he wrote, “Tactical performance in the American Expeditionary Forces during World War I did not always match tactical pronouncements and intentions.” Mr. Nenninger makes the point that there were six factors that negatively affected the AEF’s performance. Four specific factors that were the direct responsibility of the Commander and, in his opinion, caused the AEF to perform poorly in battle. “These included the doctrinal ambiguity, between Pershing’s faith in open warfare and other aspects of AEF preparation emphasizing trench warfare; the split training responsibilities between the General Staff in Washington and AEF GHQ in France; personnel practices that did not pay sufficient attention to
morale, unit cohesion, and leadership; and weak combat support capabilities, especially at
the division level.” The issue of open warfare versus trench warfare will be addressed
in chapter 5, along with the difference of opinion between the General Staff and AEF
GHQ in chapter 4.

The remaining two issues both grew directly out of the early commitment and
limited time in the fight afforded the AEF. The AEF school system in France was vital
for the specialty training it provided. Approximately 200,000 officers served in the
American Army during the Great War, the vast majority with no previous military
experience. Of the officers who had previous regular army or National Guard
experience, none had ever seen a division in the field, much less employed one in modern
combat. Units who lost officers to schools during operations invariably suffered from a
temporary decrease in their tactical combat effectiveness; however, in the long run these
same units would be able to sustain a much higher level of effectiveness than if none of
the officers were detailed to these schools. If Pershing knew that the war was going to
end on 11 November 1918, then he would probably have rethought the AEF’s training
schools. But that is a spurious argument, he had no way of knowing that, and had to
proceed on the assumption that the spring 1919 offensive would be the major combat
contribution of the AEF in the defeat of Imperial Germany.

Mr. Nenninger’s final point is the failure of the AEF’s supply system.

[A]merican divisions proved difficult to supply, transport, and manage . . .
Because shipment of animals from the US to France was considerably reduced in
the spring of 1918 to make room for infantry replacements, severe shortages of
transport animals occurred later . . . the AEF did not have sufficient service troops
to carry rations, bury the dead, evacuate casualties, and perform other direct
combat support functions.15
Here he misplaces the cause of the shortage of service troops. The AEF deployment schedule was largely at the mercy of the British, and the BEF only wanted infantry and machinegun units from the Americans to use in their sector. Pershing agreed to changes in the shipping schedule at the (apparent) height of the German spring offensives, when the outcome of the war itself was in doubt.16

In another article, Mr. Nenninger again rates Pershing as a poor commander, but this time with the caveat that there was no better American Army officer to command the AEF.17 His major points were that there was confusion over the authority of staff officers and that there was a severe difference in the professional education of the division commanders and their chief’s of staff. Specifically, Mr. Nenninger points out that most chiefs of staff had attended school in Leavenworth, but that most divisional commanders had not.

Professor Coffman sees more of a similarity in the education experience of the Commanders and their Chief’s of Staff than Mr. Nenninger. The Leavenworth school transformed after the Spanish American War into a more rigorous staff college modeled on the German staff college.18 The Army War College was founded in 1903, and “in 1906, when J. Franklin Bell, the officer who had presided over the renovation of the Leavenworth school, became Chief of Staff of the Army, he brought Leavenworth methods and even some of the instructors to the War College.”19

His most damning critique of the AEF was that “Leavenworth-trained staff officers inappropriately exercised their authority in too many instances to dismiss completely such ideas.”20 He cites as an example a corps chief of staff who would issue significant orders to subordinate divisions without informing the corps commander of his
action. When the commander directed him to refrain from issuing orders without his knowledge again, the chief of staff responded that it was the method of the previous commander to allow the chief of staff to issue orders without his knowledge or consent, and that he would try to comply but could not guarantee that he would always remember. The commander fired him as the chief of staff. This is an example of the process working correctly. A subordinate exceeded his authority and the commander took immediate steps and corrected the situation. None of the officers involved had ever held comparable positions of authority or responsibility previously because during peacetime the American Army did not have organized divisions let alone corps or armies. That incidents did occur is unarguable, however, in the context of the massive buildup, they are rather insignificant.

From the literature review, it has become apparent that there are two dominant schools of thought with regard to the ultimate effectiveness of the AEF in the Great War. On the one hand, you have the AEF as the war winning organization school, a view originally championed by Pershing himself. Countering this line is the revisionist school, exemplified by David Trask and his previously cited *The AEF and Coalition Warmaking, 1917-1918*. However, out of these two diametrically opposite positions comes a more moderate middle ground. Tim Travers, in his forward to *Doctrine Under Trial: American Artillery Employment in World War I* by Mark E. Grotelueschen, wrote “In the end the wonder is not that the 2nd US Division and the American Expeditionary Force(s) had problems in trying to solve a new and puzzling style of warfare, but that they adapted so well in such a short time.” As has already been demonstrated, the AEF was not perfect, nor was it ever able to achieve perfection. Nevertheless, it also was not a total failure. It
was a dynamically adapting and evolving organization that achieved some remarkable successes.

This thesis will demonstrate that the AEF was adapting to the requirements of modern, industrial warfare at a more rapid rate, and in a more systematic manner than the BEF. Then, it will address the “So What?” “Training has long been recognized as a combat multiplier, but it must be geared to the circumstances of battle to be truly effective. A training system designed for an imperial garrison is unlikely to be appropriate for a continental war. Further, advances in technology affect tactics, which in turn affect training.”22 This is not to say that all training is doomed to failure, but rather that it must be flexible enough to adapt and have some kind of feedback to all concerned. There is also the continuing problem of time constraints. Both the BEF in 1916 and the AEF in 1918 were in the process of training and preparing for the “big push” of the next year, when the action of the enemy forced them to commit their forces earlier than planned. Ultimately, both forces successfully adapted to the battle it had to fight. Research will show that the AEF was the quicker study. Also, the AEF embraced the learning process in a more systematic fashion than the BEF. If the AEF had adopted the British or French methods of warfare, the possibility existed that the Germans could have conducted a more successful delaying action, possibly leading to the mutual exhaustion of both sides and a negotiated peace. The AEF was not an elite fighting force at the end of 1918, but several of its component divisions were highly rated. It was unquestionably not just cannon fodder.

Late” as his chapter title sarcastically, and instead proposes that the AEF did play a significant role in the Great War.

2David F. Trask, *The AEF and Coalition Warmaking, 1917-1918* (Lawrence, KS: University of Kansas Press, 1993), 174-6. The one positive position Professor Trask does make is that the manpower potential of America demonstrated by the arrival of the AEF in France was a key factor in forcing the Allied powers to accept President Wilson’s ideals for peace. Additionally, the amalgamation favored by Professor Trask is at the Corps and Division level, not individual battalions or soldiers as originally proposed by the Allied Powers.

3John Terraine, *White Heat: The New Warfare 1914-1918* (London: Sidgwick and Jackson, 1982), 310. Additionally, on 320 John Terraine takes Pershing to task for removing the American II Corps from British control. Also, in his book *To Win A War: 1918, The Year of Victory* (New York, Doubleday and Company, Inc, 1981), John Terraine continued his attack on 205 against the AEF “Pershing promised Haig that he would bring II Corps up to strength again; yet--unbelievable though it may sound, with a combat strength of 1,256,478 on 23 October--he had to break up no less than seven divisions to provide reinforcements for the rest.” The point missing from this argument is that allied control of shipping combined with the desire to get as many American divisions into France as possible left the AEF with no pool of replacements, other than to break up existing divisions. It was not “reinforcement” it was “replacement” of troops that had become casualties from all causes to include non battle injuries and sickness.


9The amalgamation issue will be addressed in depth in chapter 3 of this thesis.

10Headquarters, American Expeditionary Forces, General Headquarters, Document 1348, *Combat Instructions* (Chaumont, France: A.G. Printing Department, September 1918), 3. This pamphlet as well as AEF pamphlets 1376 and 1417 will be discussed further in chapter 6.
11 Timothy K. Nenninger, “Tactical Dysfunction in the AEF 1917-1918,” Military Affairs 51, no.4 (October 1987): 177. The same statement could have been made about the BEF prior to the battle of the Somme, and the French army for the Nivelle offensive.

12 Two of these directly relate to the short amount of time the AEF was committed to combat, and where thus completely outside the control of the commander. Specifically, the AEF was committed early, prior to the completion of its training regime, and the short relative amount of time in combat did not allow for it to improve.

13 Ibid., 181.

14 Edward M. Coffman, The War to End All Wars: The American Military Experience In World War I (Madison, WI: University of Wisconsin Press, 1986), 55. Also see Ayres, 21. Professor Coffman arrives at different numbers for officers with previous experience than those found in the Ayres book. Regardless of which figure is correct, the total is still less than ten percent of all the officers serving in the AEF.


19 Ibid, 147.

20 Nenninger, “Unsystematic as a Mode of Command,” 766.


CHAPTER 2
MOBILIZATION

The American government confronted similar questions in the spring and summer of 1917 to those that the British government faced at the end of 1914. How does a nation raise a large army for modern war? Every nation involved in the Great War confronted and resolved this question, with varying levels of success. A more fundamental question existed, however, for the British and Americans; to wit, why raise an army at all?

At the beginning of major ground operations the contribution of the British army seemed minuscule; the early battles saw Germany deploy eighty-seven divisions against the seventy-six divisions of the Allies (sixty-two French, seven Belgian, and only seven British). Nevertheless, the BEF was there, it was in the line on the continent with her French ally. Was this force on the continent going to stay the same size, which still required replacement and reinforcement, grow into a larger army, or be prepared if ground combat goes against the British to evacuate via the channel ports to the sea?

These questions of policy were the responsibility of the Secretary of State for War. During the July-August crisis of 1914, Britain did not have a Secretary of State for War. Prime Minister Herbert Henry Asquith had allowed the office to remain vacant after the resignation of the previous Secretary over his handling of the Curragh incident. This situation may have been tolerable during peacetime, but it could not stand once Britain declared war and the BEF deployed to France. Asquith’s options were limited. His first choice as Secretary of State for War was Lord Richard Burdon Haldane. He would have been an excellent choice; Lord Haldane was the man responsible for the Army reforms after the Boer War, which included the organization of the Territorial Force, the Special
Reserve, and the Officer Training Command. Unfortunately, Lord Haldane was educated in Germany and so the public would not accept him as the Secretary of State for War; public sentiment against all things German was already too high. The Asquith government’s final selection was Field Marshal Earl Horatio Herbert Kitchener, usually referred to as Lord Kitchener.

Often described as an autocratic soldier, Lord Kitchener seemed more at home on the frontier of empire than ensconced in its capital city. On one of his first appearances at a Cabinet meeting, Lord Kitchener was reported to have predicted

[A] three-year war, which would need at least a million men . . . Foreign Secretary Grey thought Kitchener’s prediction ‘unlikely if not incredible.’ He thought that the war would be over before a million men could even be trained. If not, then ‘of course’ the million would be sent abroad.

Thus, British political authorities accepted one of the pivotal decisions for the ultimate size and employment of the British Army almost as an afterthought. The British government was committed to raising a mass army.

Lord Kitchener inherited several policies when he became Secretary of State for War. The most obvious was the movement of the BEF to France. He had already determined that the Great War would be a long war, contrary to the professional opinions of several other senior officers including the Director of Military Operations, Sir Henry Wilson. The commitment of the BEF to the continent in Lord Kitchener’s long war plan implied that the British government would maintain it in the field.

Fortunately, for Lord Kitchener, Lord Haldane’s previous reforms had established the Special Reserve and the Territorial Force. The Special Reserve was set up specifically to provide drafts of trained men to bring regular formations up to authorized strength and to replace casualties. The Territorial Force was a compromise. Lord Haldane was able to
curtail the power of the County associations with the old Militia, but he could not force the Territorial’s to serve overseas. Their role was limited strictly to home defense. This limitation meant that Lord Kitchener had no guarantee that a rapid expansion of the Territorial Force would accomplish his desired end state, a million-man army on the Continent.

The Territorial Force was not all bad; it did accomplish several specific tasks. The first was its original mission of defense of the homeland. At the beginning of the Great War, the possibility of a German invasion of England was constantly on the mind of the government and the public. The existence of the Territorial divisions did much to quiet that very real, if ultimately unfounded, fear. In addition, some of the units volunteered for overseas service.

Some of the earliest battalions to leave Britain were Territorial units that volunteered for overseas service to relieve Regular Army battalions in garrisons throughout the empire. The second and third order effects of this initial deployment were that the Territorial Force units sent did not require the lengthy training for modern combat to assume their garrison role in the empire, as well as freeing the regular battalions serving in the garrison to deploy to France and form new Regular Army divisions. This also meant that those Territorial’s who had the highest level of motivation and training were sent to garrisons, leaving the units of lower motivation and training levels in England. The Territorial divisions did not quickly deploy to the continent because of their home island defense responsibility and the challenge of sorting the Territorial soldiers who volunteered for overseas service into whole units. Many individual battalions deployed overseas, necessitating their replacement by the second-
line battalions. Some, as already mentioned, went to relatively safe garrisons whereas others deployed to France as line of communication troops.

Lord Kitchener authorized the County authorities to raise an additional battalion to replace each battalion accepted for Foreign Service. These new battalions were designated second line Territorial Force battalions. These new battalions required extensive recruitment and lengthy training before they were up to the home defense standard, let alone prepared for combat in France. Eventually, Lord Kitchener authorized the establishment of third line Territorial Force battalions. To differentiate these various battalions, Britain adopted a very specific numbering scheme. 1/1st was the first of the first line territorial battalions of its parent regiment. 2/1st was the first of the second line territorial force battalions of its parent regiment, and 3/1st was the first of the third line territorial force battalions of its parent regiment. For example, one battalion in the 68th (2nd/Welsh) Division (a second line Territorial Force division) was the 2/4th Royal Welch Fusiliers.

The second line Territorial Force battalions eventually formed eighteen second line Territorial divisions. Of these divisions, nine served overseas, and the other nine remained in Britain. Both first and second line Territorial divisions suffered from repeated loss of trained men to make up drafts of replacements for regular and other Territorial divisions already engaged in combat. This constant drain on units added to the challenge of getting territorials to volunteer for overseas service, thereby adding to the apparent lengthy delay of these divisions employment on the continent. Additionally, the amount of time required to train units went up because they faced these arbitrary drafts. One source demonstrated this phenomenon by illustrating that the average length
of time a first line territorial battalion received before deployment was eight months, with Kitchener Army battalions averaging nine months and second line Territorial Force battalions averaging twenty-seven months.¹⁰

The Territorial Force was useful and eventually got into the front lines alongside the regulars. However, they did not live up to Lord Haldane’s vision of the sole framework for an expandable army. Lord Kitchener chose to look elsewhere for his million-man army.

Where Lord Kitchener looked was at volunteer enlistment. He would raise his million-man army by direct appeal to the patriotism of the British working man. At that time, Lord Kitchener did not attempt to force conscription on Britain. This was unfortunate, as the political cost of forcing conscription at this stage probably would have been worth the price. The impact of Lord Kitchener’s volunteer policy was devastating. The volunteer recruitment effort pulled into the enlisted ranks a large number of men who possessed leadership potential. Many of the better educated men (for Britain this meant public school or University graduates) voluntarily enlisted and became riflemen, often wasting their talents and being killed or wounded in France as an early replacement draft. Identifying these men as potential leaders and placing them into some form of training unit for potential subalterns was the correct solution to the shortages of officers. However, this again goes back to the confusion over the idea of a short war or Lord Kitchener’s early realization of the long war. With the general assumption that the war was going to be short, many men enlisted early in order to do their “bit” before it was all over. Lord Kitchener knew this was not the case, yet still these natural leaders voluntarily enlisted because there was no logical or coherent manpower policy for the Army as a
whole. This also put undue strain on the economy as it shifted from peacetime to wartime requirements. Large numbers of trained munitions workers and miners volunteered for service, precisely at the time their skills were required at home. Conscription was the solution to the acquisition and allocation of manpower for modern industrial warfare. That it took Britain two years to admit this is unfortunate, and the price was unnecessarily high. British historian, Peter Simkins assessed Lord Kitchener’s logic as follows:

> Being largely ignorant of British politics, Kitchener was willing to defer to the judgement of Asquith and the Cabinet that the introduction of compulsory military service might endanger national unity at a critical moment in the country’s history. Accordingly, he resolved to raise his new formations by the traditional system of voluntary enlistment.¹¹

Lord Kitchener embarked on the creation of the New Armies, also called the Kitchener Armies, through direct appeal to the public and voluntary enlistment. His initial plan called for four New Armies of six divisions each. Including the BEF forces already on the continent, this would give Britain a force of thirty divisions in the field, discounting forces assigned home defense (Territorials) and imperial garrisons. The first New Army was composed of the Ninth through Fourteenth Divisions. On 7 August 1914, newspapers published the call for the first 100,000 men. By recruiting an additional battalion for each of the regular line regiments in existence, the New Army came into existence. This method had the advantage of instantly providing the New Army battalions (called service battalions) with a link to the lineage and culture of existing regular army battalions, as well as training facilities and a cadre taking from the regiment’s other battalions.¹² Numbered consecutively in their parent regiments organization these units differentiated from the regular battalions only by the word “service” in brackets. Nevertheless, the regular battalions of the line regiments had mostly deployed to combat. The source of

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officers for these new units was problematic. The first New Army battalion raised from each line regiment typically took the entire officer cadre left behind by the regular battalions, as well as retired officers (referred to as “dug-outs”) and those of the Indian Army home on leave. This plan for force generation that looked perfect on paper was rife with problems. These issues were widely publicized, for example Ian Hay, in his novel *The First Hundred Thousand* says:

> Over there . . . stands the Colonel . . . He is pleased to call himself a “dug-out.” . . . The Second in Command has seen almost as much service as himself. Of the four company commanders, two have been commandeered while home on leave from India, and the other two have practiced the art of war in company with brother Boer. Of the rest, there are three subalterns from the Second Battalion – left behind, to their unspeakable woe—and four from the O.T.C. The juniors are very junior, but keen as mustard. But the men! Is it possible? Can that awkward, shy, self-conscious mob, with scarcely an old soldier in their ranks, be pounded, within the space of a few months, into the Seventh (Service) Battalion of the Bruce and Wallace Highlanders--one of the most famous regiments in the British Army?¹³

There were significant problems with this method of force generation. As the quote above shows, even with the Officer Training Command and the Special Reserve, there was a shortage of subalterns. The Officer Training Command was a subset of the Haldane reforms. Organized in 1908, it consisted of a Senior (university) and Junior (public school) division. This element of the preparedness movement went a long way to providing the basic material for potential subalterns. The theory relied on the perceived value of the public school ethos, where ability in team sports was a higher accomplishment than scholastic achievement.

The British Army offered temporary commissions for subalterns to help fill the massive shortfall of required officers for both the New Armies and the Territorial Force. Most regular officers were concerned that the New Armies were going to fail in battle
against the German Army. How could rank amateurs leading hastily trained mobs of men hope to succeed on the modern battlefield?

Falling back on the public school ethos, regular officers considered that the temporary officers might be acceptable as leaders if they were sportsman. This idea makes logical sense when put in the context of regular officer training. Leadership was not a subject taught in the classroom at either Sandhurst or Woolwich, both primary sources for pre-war regular officers. By reducing the length of training at Sandhurst and Woolwich, accepting for commission men from colonial military schools, and the existing (though shallow) pool of special reserve officers and Officer Training Command graduates the British Army was able to cover the losses of subalterns in the regular formations.

Nevertheless, officer casualties were just too high, and the system too haphazard to function effectively along these lines for a long war. Eventually, in February 1916 the Officer Cadet Battalions were formally established. This system finally formalized the acquisition and training of junior officers for the British Army. Candidates for commission then had to have already served in the ranks and been recommended by their commanding officers. Candidates retained their current enlisted rank, so if they failed out they returned to their previous unit. It took the British over eighteen months of war to develop a logical and effective method of generating junior officer replacements. A similarly logical means of generating non-commissioned officer replacements never developed.

A direct impact of this lengthy muddle is the high officer casualty rate suffered by the BEF. Formal non-commissioned officer training did not exist in the BEF, the
subalterns were required to lead from the front all platoon actions. British patrols almost always commanded by an officer, with only one or two men with him. The Germans, conversely, routinely sent out stronger patrols under a non-commissioned officer.\textsuperscript{16} Demonstrating the superior formal training of its non-commissioned officer’s via the German reserve system, German patrols were as effective as their BEF counterparts were.

Finally, there was the question of the higher headquarters for these new battalions. Who would command them and where would they find appropriate staff officers? One of the biggest challenges proved to be finding trained staff officers for the new divisions and echelons above division. Britain had a staff college, whose graduates were entitled to place the initials “psc” (passed, staff college) after their names, but it was not effective. The British Army’s best and brightest did not necessarily go to the Staff College, nor was graduation a mark of positive distinction for an officer’s record. “It was a proud boast of the Gordon (Highlanders) that none of their officers had ever entered the staff college or ever would. To permit oneself to even breathe the name of such a place was held to be excessively bad ‘form.’”\textsuperscript{17} This Edwardian prejudice would come back to haunt the BEF, as staff officers would have to learn on the job many of the tasks involved in the command and control of a modern army in the field.

There was also a shortage of all manner of equipment for the new battalions. Most Territorial Force units did not posses the current rifle, the Short Magazine Lee-Enfield, and there were insufficient stocks on hand to equip either the Territorial Force or the Kitchener Armies. After initially outfitting the BEF, the British Army had a reserve of only 70,000 rifles. This was insufficient for the Territorial Forces yet alone the Kitchener Armies. Production was increased, but a lengthy time lag between the issuance of
contracts and the arrival of rifles at the new units existed. Canadian Ross rifles and wooden replicas took the place of Lee-Enfield’s in the training of New Army battalions, at least until the spring of 1915. Both general unpreparedness and the volunteer systems of enlistment contributed to this problem, with no pre-planned stock of rifles to equip the new forces available, and the loss of trained manpower into the very army that needed the equipment. Providing machineguns to units proved even more difficult than rifles. Machine guns suffered from all the previously identified problems; lack of on hand reserve stocks, limited production facilities, loss of skilled manpower to expand and increase production. Added to this, the allocation of machine guns per division was increased. New weapons went to equip regular formations already in the field before equipping new formations.\(^\text{18}\)

Another area that Lord Kitchener had difficulty with was the physical recruiting infrastructure. The recruiting offices just were not big enough to accept the numbers of men that Lord Kitchener demanded. It was not just the number of offices, but also a shortage of recruiters, administrative clerks, supply sergeants, and associated material. The theory of a short war continued to affect Lord Kitchener’s ability to recruit a large volunteer army. The challenge with the volunteer armies in 1914 was not in getting men to volunteer, but rather the whole administrative machinery to get them into equipped and organized formations ready for further training and eventual deployment. Prior to 1914, the British Army annual intake of recruits was only 30,000 men a year. The shock to the administrative machinery of this massive increase in workload was dramatic. There was no prior planning or thought put into how to process this massive increase in recruiting numbers generated by Lord Kitchener’s call for the first 100,000 men. The same
recruiting sergeants started the morning at their recruiting desks, but instead of one or two prospective recruits, hundreds mobbed the recruiting offices.19

Another issue effecting recruiting had to do with the regulars and their reserves. Recruitment for regular formations continued alongside the recruitment for new formations. An added impetus was the higher than expected casualty rates suffered by the BEF in France. Pre-war planning figures anticipated forty percent casualties in the BEF in a six-month continental war. Instead of the planned 40 percent casualties in six months, the BEF actually suffered 105 percent casualties in only three months. Greater than expected casualty rates was a source of continual strain on the recruiting and training of forces, as replacements for the deployed divisions had priority over other formations. Both the Territorials and New Army units lost drafts of men to the regular units to replace casualties. This contributed to the length of time required to train newly raised units, replacing every trained (or partially trained) man removed with the only source of replacement available being the newly recruited men.

A solution to the lack of recruiting infrastructure was to allow localities to raise “Pals” battalions. The concept was very similar to the Territorial Forces, except that the Pals battalions were liable for overseas service from the start. It had two significant positive effects to the raising of the Kitchener Armies. The most obvious was encouraging men to enlist with their friends and co-workers. This had the affect of getting men who might be afraid to enlist by themselves to sign up when they realize that their friends will be enlisting with them. And additional impact was the affect of peer pressure on individuals who might not have joined but all their peers were. The other positive impact that the Pals battalions had was in taking up some of the recruiting
burden away from the government. This local recruiting assisted the War Department’s overall recruiting effort at a time when the recruiting infrastructure was operating at its maximum capacity.

The Pals battalion solution to recruiting was not without its difficulties. One issue was the lack of infrastructure and material for these additional units. Depending on when a Pals battalion reached its recruiting quota and the political connections of its patron, Pals battalions were equipped as quickly as the earliest New Army battalions or as slowly as some of the last New Army battalions. In addition, depending on the education and social makeup of the Pals, these units could pull the wrong men into the wrong place. For example, the Public Schools Battalion and the University and Public Schools Brigade recruited from the students, facility and recent graduates of University’s and Public Schools. These men had the prerequisites to be subalterns, not riflemen or grenadiers.

The experience of recruiting Pals battalions held both positive and negative currents. The Pals battalions were an expedient taken to help mitigate the problem of flagging voluntary enlistment. It also removed some of the recruiting burden off the already overstretched recruiting infrastructure of the government. However, its unintended consequences were to place men into units with little regard for army or National manpower requirements. Overall, the concept of Pals battalions had a net negative effect on the overall military effectiveness of the BEF.

The final major mobilization policy change that Britain used was conscription. Similar to previous issues surrounding mobilization conscription in Britain evolved in a haphazard fashion. The government appointed Edward Stanley, Earl of Derby, as the Director-General of Recruiting in October 1915. Lord Derby had been influential in
raising numerous Pals battalions. The first step to a more logical apportionment of manpower involved first finding out what manpower was available. The *National Registration Act* of 15 July 1915 authorized a census of all men between the ages of fifteen and sixty-five, identifying their employment and marital status. The politicians viewed this as the first step towards conscription. Rather than leap toward universal conscription, Lord Derby proposed a plan titled the Derby scheme. This scheme had men attest to serve when the government called them. This satisfied both sides of the conscription question. It was still voluntary, yet if it failed to generate the manpower required it gave the government a complete list of men available. A large majority of single men did not register. It seems more likely, however, that conscription was a more efficient way to control manpower allocation between the vital industries and the military. 22 The impact of Britain’s slow slide into conscription was to cripple British manpower policies. Lord Kitchener had identified the requirements for manpower early enough in the war that if the government resorted to conscription, a more efficient use of available British manpower could have been in place with efficiencies obtained in the war industries and the army.

The American government faced similar issues in 1917 that the British government faced in 1914. How do you mobilize an army for modern warfare, in addition should the US send an army to fight in Europe? For the American government two events changed the course of President Woodrow Wilson’s administration. Elected on the platform of “He kept us out of the war” just six months later President Wilson was asking Congress to “formally accept the status of belligerent which has thus been thrust upon it.” 23 The two primary causes of American entry into the Great War was the German
resumption of unrestricted U-boat operations, with subsequent loss of American lives and commerce, and the Zimmerman telegram. The first issue called for a strictly naval response, and the second implied raising an army and stationing it on the US southern border. Once an active belligerent, President Wilson faced these questions and the even more fundamental one of should the US even send an army overseas?

These were not idle questions. The Army War College, acting in its capacity as a long-range planning cell of the General Staff, proposed not deploying the Regular Army but instead use it as a training cadre for a national army of one and a half million men. Britain and France both sent military missions to the US in April of 1917. Both missions asked for American material support. The Entente required more money, supplies, and ships to stay in the war. French Marshal Joseph Joffre was the most succinct, noting, “We want men, men, men.” He went even further in later private talks with key Army leaders as well as with President Wilson, recommending both an immediate dispatch of at least one US division to France to show the flag, while immediately recruiting, organizing, and training a large independent American Army. The British were also insistent on the Americans dispatching a large contingent to France. Major General G. T. M. Bridges, a member of the British Mission in the US, wrote:

If you ask me how your force could quickly make itself felt in Europe, I would say by sending 500,000 untrained men at once to our depots in England to be trained there, and drafted into our armies in France. This is the view alike of our Commander-in-Chief in France and the Chief of the Imperial General Staff (Sir Douglas Haig and Sir W. Robertson), their reason being that we are short of men, the war is at a critical stage, when we may yet be able to turn the scale and force a decision during the summer, and every day counts.

This pressure for amalgamation was never removed from the AEF.
The two staunch allies (Britain and France) were not above sniping at one another when it came to access to the massive American manpower pool. Major General Bridges also remarked “[T]he French have very few English-speaking officers; not so many as they think. A good instructor can indeed seldom speak English, and men will soon get tired of being instructed through interpreters.”27 No mention was made of the projected effectiveness of an Irish or Scottish drill instructors’ accent on Americans from the farms of Middle America. The British never faced similar calls from the French in 1914 and 1915 for amalgamation of their forces with the French. Two points differentiate the British from the American experience in this regard. The first is that the British put an army into the field alongside the French almost immediately. The BEF deployed to France in an economy of force effort from the French point of view. The portion of the line covered by the BEF freed French units for offensive operations. The French goal was immediately to restore all captured French territory.

The political dimension is the other area that differs from the American experience. Britain was one of the Great Powers of the time. The French would not presume to request men from another Great Power serve in her armies, because a Great Power by definition is capable of raising, equipping, and training her own armies.

President Wilson was convinced that to secure his vision for world peace the US would have to send a large army to France. He selected General John J. Pershing to be the Commander of all US land forces in Europe. He sent him to France with the order to establish a field army “separate and distinct” from that of the Entente.28 President Wilson realized that to achieve this purpose the American Commander in France would have to have the authority to negotiate with respect to the employment and deployment of
American units with the Allied powers and the confidence that the War Department and
the American government would not undermine him. Secretary of War Newton Diehl
Baker is supposed to have told Pershing “I will give you only two orders – one to go to
France and the other to come home. In the meantime your authority in France will be
supreme.” The main outcome of President Wilson’s order was to provide General
Pershing with the ability to press on with his organization of an independent American
army in the face of repeated objections from the British and the French.

Historical precedent in the US for quickly expanding the army was to rely on
volunteer enlistments in State organized units. With this in mind, Theodore Roosevelt
wrote to the President on 18 May 1917, requesting permission to raise from two to four
divisions for frontline service. Mr. Roosevelt was already at work with a list of the
regular officers that he would require to make his scheme work. President Wilson politely
decided, reasoning that the time for theatrics was gone, and that only a methodical use of
manpower was going to get the AEF to the frontlines in a manner that would be
effective. President Wilson did not allow volunteer forces to serve alongside the
American Army in the Great War for two reasons. The first was partisan politics.
President Wilson did not want to give a forum to the Republicans to claim for the next
election that they were the party that won the war. The second reason had more to do
with rational manpower policy.

President Wilson was a firm believer that war was an evil activity and should not
exist among the civilized nations of the world. If the US was to participate in this war,
then it must use all its power to end it as quickly as possible in a manner that would leave
President Wilson in the position to dictate the peace to both sides. That peace was a
completely new world order, with war no longer the primary means of political discourse between civilized nations. President Wilson said:

[I]t is our duty to lend the full force of this nation, both moral and physical, to a league of nations which shall see to it that nobody disturbs the peace of the world without submitting his case first to the opinion of mankind.\textsuperscript{32}

This idea for a new world order shaped by the US was a part of Wilson’s thought process before he committed the US to war. It is fundamental to all the decisions subsequently made on the raising, deployment and employment of the AEF. President Wilson did not commit the AEF to “save” France, or even Belgium. Rather, his idea was to save the world. To build the necessary political capital to bend the other governments to his view, the US had to deploy a large expeditionary force to the main battlefront and engage the enemy effectively.

Another method to generate force was the voluntary increase of the Regular Army and the National Guard, organized into divisions. The Wilson administration authorized both organizations to increase their recruiting, and further federalized the National Guard in the \textit{National Defense Act of 1916}. On 18 June 1916, the entire National Guard was federalized and ordered to the Mexican border (previously individual state National Guard units had been federalized; for example, those of Texas, New Mexico, and Arizona were called to federal service on 9 May 1916). This partial mobilization was a disaster. There was a shortfall in all manner of equipment. The National Guard units were not able to fill their ranks with voluntary enlistments, and the National Guard rejected many of those who did volunteer due to medical reasons.\textsuperscript{33}

Another key aspect of the \textit{National Defense Act of 1916} was the recognition and formal centralization of the Reserve Officer Training Corps active on various campuses
Military training had previously occurred at university campuses, but the formalized Reserve Officer Training Corps standardized the education provided and gave the Army access to its graduates in times of emergency.

The *National Defense Act of 1916* also gave formal recognition to the Plattsburg movement. This part of the preparedness movement involved men of high social standing paying for the privilege of attending summer camps where they received basic military instruction. The Army Chief of Staff, Major General Leonard Wood, started the movement by establishing two summer camps where college students paid for the privilege of obtaining basic military instruction. This, added to the already mentioned formalization of Reserve Officer Training Corps at some colleges, increased the potential pool of junior officers available to the army. The preparedness movement did not provide ready-made officers, but it did at least expose those who were expected to be officers what exactly army life entailed. The officers who ran the camps keep files on their students, noting natural leaders and men with ability. These files later would serve the basis for identifying potential officer recruits for the Army. This was not any different from the British experience, except that the Americans resorted to conscription from the start, and primarily to rationalize their manpower allocations. Early identification of potential junior officers enabled the army to send them to a separate ninety-day course, prior to their deployment and employment as riflemen.

The Plattsburg movement was not without its flaws. The Plattsburg movement did not teach leadership, but rather exposed young men of good education from the middle and upper classes to army life, with a smaller portion experiencing some basic leadership. For example, during the 1914 summer camp near Monterey, the students made up two
infantry companies, with students filling all leadership positions. Over the course of the camp, student leadership of the companies rotated four times. This small taste of leadership obviously was not enough to produce trained platoon leaders or company commanders, but it did increase civilian awareness. Additionally, all students left the camp with a required reading list, which included the *Field Service Regulations (FSR)* and the *Infantry Drill Regulations (IDR).*[^35]

Eventually the government of President Wilson recognized the value of the Plattsburg movement. On 17 April 1917, the Plattsburg camps transformed into formal officers’ training camps. Men who had previously attended camps and or had completed Reserve Officer Training Corps training at a university still were required to attend the officers’ training camps. Upon completion of the training camp (originally four months long, cut down to three months) men either received commissions as officers or discharges based on the policies in effect. That not many received discharges were probably due more to the great demand for junior officers than the uniform high quality of the candidates. During the course of the war, 80,568 men received commissions through the officers’ training camps, 48,968 in the Infantry alone.[^36]

The one aspect of mobilization not yet discussed in depth is American conscription. A large portion of the American public perceived conscription as undemocratic and contrary to the principles of the US. Unlike the British experience, the US had attempted conscription in its recent history. During the Civil War, both the Union and the Confederates attempted conscription to solve manpower shortages. There were numerous problems with Civil War conscription. Both regulars and wartime volunteers held negative views of conscripts. Moreover, the draft itself was open to accusations of

[^35]: Field Service Regulations (FSR)
[^36]: Infantry Drill Regulations (IDR)
unfairness. No one who either could hire a substitute or could afford to pay three hundred dollars to the government entered military service. The draft fell disproportionately on the poor working class and recent immigrants. These negative sentiments spilled into the open during the New York City Draft riots of 1863.

However, President Wilson believed that the most efficient way to harness American manpower was to use conscription. The inability of voluntary enlistment to provide required manpower demonstrated by the British experience and by the partial mobilization of the National Guard in 1916 pushed President Wilson toward conscription.

The challenge President Wilson faced was combating the negative public sentiment with respect to conscription in the US. President Wilson solved the public perception problem with an excellent propaganda campaign, developed by Secretary of War, Newton D. Baker. To register American men, the administration used local polling stations throughout the country. This had the combined effect of quickly getting registration done with existing infrastructure and keeping the national government visibly out of the process of compelling young men to serve in the army. It was not the “government” that was sending young men to the army, but rather local people that were known and respected by the men “selected.”\textsuperscript{37} The perception across the board was that the system was fair. For President Wilson conscription was a huge internal political risk. For a sitting President who was completely against the preparedness movement to shift totally to support conscription cannot be simply described as a shift in policy. It was a complete about face. Asquith faced this same question and chose not to risk the political fall-out, only to be proven wrong later when the whole issue of manpower allocation overall for the war effort led to his fall during the 1915 shell scandal. Rather than slide
slowly into conscription, President Wilson saw the bigger manpower issues and committed himself to it, setting up the American Army more efficiently than the British.

Another aspect of army reform was the training of an officer corps to lead them into battle. Reforms in the professional education of American officers taken after the Spanish American War of 1898 by Secretary of War Elihu Root gave the fledgling AEF a dramatic advantage over the BEF. The reforms at Leavenworth and the foundation of the War College laid the groundwork for prospective American commanders and staff officers to train themselves intellectually on the topics of large unit command and control at a time when the US Army had no standing organized divisions. On paper, the reforms of the Americans and the British were very similar, but in practice, they were very divergent. As already mentioned, the British Army not only did not value their staff college, but also through its regimental system ensured that its best and brightest officers did not attend.

Wilson understood, however, that the war would not necessarily wait for the Americans to raise and train the forces required to have an impact via traditional means. The Great War entered its fourth year, and both sides were on the verge of collapse. From Wilson’s point of view, if the war ended with either side victorious without a large American army present in the theater of war then he would not be in position to shape his desired world order.

The three great advantages that America brought to the fight were its untapped manpower, its massive industrial capacity, and its huge financial markets. Industry was already working for the entente, filling orders for material and munitions. An unintended consequence of American industry supplying weapons to the entente powers was an
inability to shift quickly to supplying the new American armies with their required material. Contemporary American observers viewed early American preparations through very patriotic views, for example from Thomas Meehan’s account of the formation of his National Army division:

Early training was greatly handicapped by lack of arms and equipment . . . the spirit of the American Army could not be daunted by such minor obstacles as, lack of rifles for the infantry, machine guns for these outfits, or cannon, or even horses for the artillery.40

The spirit was not daunted, but training was. The effectiveness of rifle training with wooden rifles was clearly not as good as with the real thing. This had an adverse effect on initial training, but it did allow America to deploy the AEF as quickly as possible. This was a fundamental risk that President Wilson willingly took, to achieve his desired goals.

Once they became active belligerents, both the British and the Americans faced the significant challenge of generating a force to fight on the European continent. How does a democracy co-opt enough of its young men into its armies to allow the nation to project effective military power? Both the British and the Americans settled upon conscription to solve this problem, but for different reasons. The British resorted to conscription on a rationalization of total manpower, a realization that they could no longer allow volunteers to fill the ranks while simultaneously stripping vital industry of trained manpower. The British experience of raising the New Armies influenced President Wilson, but he also realized that to achieve his war aims the US had to field an effective force in the field as soon as possible. Both countries faced growing pains as inadequate prewar preparations led to shortages in all manner of equipment and infrastructure. The key point is that the Americans made the leap to conscription from their entry into the war, and did not stumble with volunteerism for several years. This
kept the country focused on the one objective while applying a much better method of manpower allocation than the initial British experience. Another major difference between the two experiences was that the British never faced the question of amalgamation at the level the Americans did. The failures of the Entente offenses lead to the British and French governments to press President Wilson for American manpower. But it was not until the German offenses that the Americans faced real pressure for amalgamation. The pressure shifted from the American President, where political considerations flatly eliminated amalgamation from consideration, to the AEF Commander. Pershing had the authority to make necessary political and military accommodations on the ground, firm with the knowledge that he had Presidential support.

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2Peter Simkins, *Kitchener’s Army: The Raising of the New Armies, 1914-16* (Manchester, UK: Manchester University Press, 1988), 31. Peter Simkins further explains the incident on pages 22-3 of the same book. The Curragh incident came from then Brigadier Hubert Gough securing from the Secretary of State for War J.E.B. Seely a written guarantee that the army would not be used to force Ulster to accept home rule. The Asquith government renounced this agreement, leading to Seely’s resignation.

3Ibid., 6-7. Haldane’s reform reorganized the regular army, set up the Special Reserve to provide drafts for the BEF when it was in its expeditionary role, organized the Territorial Force to protect the shores from Invasion, and created the Officer Training Command to provide commissioned officers for both the Special Reserve and the Territorial Force. The reforms made by Haldane were not simply designed to place a large army in the field in France, although that was one possibility. The other concerns facing the British Army included another war in South Africa against the Boers and a possible war against America in defense of Canada. A fourth concern was a war against Russia in defense of India.


7Simkins, 40-4.


10Beckett, 131.

11Simkins, 40.

12Ibid., 38-40.


15Ibid., 80.


17Samuels, *Command or Control?*, 43.


19Simkins, 51-4.

20Ibid., 81-3.

Hew Strachan, *The Oxford Illustrated History of The First World War* (London: Oxford University Press, 1998), 140-1. Mr. Strachan provides a discussion of the economic mobilization. Peter Simkins has a slightly different take on Britain’s slide into conscription, claiming that it was the Army that really wanted it, attempting to increase the overall numbers of British soldiers in France. See Simkins, 157-8.


Trask, 5.


Pershing, I:31-2.

Ibid., 32-3.

Ibid., 38-9. The issue of amalgamation of American soldiers into British and French formations will be addressed in more detail in chapter 3 of this thesis.

Trask, 12.


Coffman, *The War to End All Wars*, 14-5.


Kreidbert and Henry, 281-3.


Coffman, *The War to End All Wars*, 11-2.

Once recruited, organized, trained, and equipped for war the next logical step was deploying against the enemy. The question for both the British and Americans then became where to send a large ground army? Neither the commander of the BEF or the commander of the AEF made their deployment decisions based on the most tactically or operationally appropriate area. Rather, other considerations decided the deployment of their respective force.

During pre-war staff talks, the British and French high commands had agreed in principle to the deployment of the British strike force formed on the left of the French army. These agreements were not binding upon their respective governments, but they were the only prepared plans available in 1914.¹ The British and French high commands intended this deployment to draw off German forces from the decisive battle that the French army planned for the east. This deployment had the added advantage of maintaining the BEF’s logistic trail short, placing the BEF near to the channel ports. The advantage accrued to the BEF in terms of combat effectiveness by maintaining short lines of communications is obvious, and its comparison with the AEF experience will highlight American adaptability to adversity. BEF replacements and reinforcements from England required only a few days of travel by train and ship to the replacement centers in France.²

The initial deployment of the BEF to France went without interference from the Germans. The transports carrying the BEF sailed independently to France, there was no attempt by the British to provide escorts or convoy the ships. The unarmed and unarmored transports plying the English Channel would have been relatively easy kills.
for the lighter forces of the German High Seas Fleet. Nevertheless, the German Navy neglected to engage them. On the one hand, the German Admiralty was not in a position to risk an engagement with the British Grand Fleet. Naval doctrine held that the weaker fleet must first attrite the stronger fleet before attempting the great fleet action for decisive results. With the full strength of the Grand Fleet available to oppose any surface action, the High Seas Fleet was obliged to allow the deployment to proceed unimpeded. There was also the assessment of the capabilities of the BEF by the German army that it was not worth the risk. The theory being that what a force of only six divisions could hope to accomplish in a short war that already saw the employment of hundreds of divisions organized into multiple field armies on both sides was almost comical. The war would be over quickly and there was little likelihood that the contemptible little army that the British could field would have any impact whatsoever. The Royal Navy did provide protection to the transports crossing the channel. Squadrons of warships steamed at either end of the English Channel providing a covering force for the cross channel traffic. The Grand Fleet itself was at sea, positioned to intercept and decisively engage any major fleet sortie by the German High Seas Fleet against the Channel shipping. This assessment of the deployment of the BEF as no real threat (in 1914) by the Germans would stand in stark contrast to their assessment of the threat posed by the deployment of the AEF (in 1917-18).

What did these transports carry to the continent? Both the AEF and the BEF eventually settled on an organization similar to traditional continental armies, with armies composed of corps and divisions. However, the question of the composition and formation of divisions was different for the British and the Americans. The British had an
approved divisional organization in place in August of 1914. The British also had a designated “strike force” for deployment to the continent to support the French. This initial force consisted of six infantry divisions and one division of cavalry, almost the entirety of the regular British Army stationed in England. However, once this strike force deployed, there was a long lag time before the Territorial divisions or the New Army divisions were ready to deploy as reinforcements.

To cover this approximately six-month gap, the British resorted to several expedients in imperial security. Some of the colonies, notably South Africa, took over their own security, thus freeing their regular army garrisons for service in other theaters. The Australians, Canadians, and Indians sent regular forces to Europe, but the Canadians would not arrive until 1915. Political decisions in London diverted the Australian and New Zealand forces initially to Gallipoli. The Indian Corps was the only dominion troops deployed in time to fight as an integral part of the BEF in 1914. Some of the first regular battalions of the Indian Army arrived in France and were deploying forward via French railways by 18 October 1914.5

The organization of the two Indian divisions dispatched to France was very similarly to regular British divisions, with a much-reduced number of artillery pieces. This difference in division structure was a direct result of the Indian Mutiny of 1857, after which the British did not want the Indian regular army to have large caliber artillery.6 To make up this deficiency in artillery the British assigned Regular British artillery units to the Indian Corps and its subordinate divisions.

Manning the battalions of the Indian Corps presented its own unique challenges. The Indian infantry battalions deployed over manned at 110 percent of authorized
strength. The lines of communication separating the BEF from India stretched through the Suez Canal. Replacements for casualties would not be timely. Organized as a collection of one battalion regiments recruited along ethnic lines, the Indian Army could not quickly supply replacements like British battalions from multi battalion regiments. The theory that the Indian Corps was not capable of modern combat is untrue. The Indian units performed as well as the British units in the BEF. The arrival of the battalions of the Territorial Force and New Armies relieved some of the sense of urgency that drove the requirement for the Indian Corps assignment to the BEF. It made more logistical sense to use the Indian Corps in a theater of operation that resulted in shorter lines of communications with their replacement depots. In addition, replacing subaltern casualties in the Indian Corps presented its own unique problems. The other dominion troops (Australians, Canadians, and New Zealanders) supplied their own subalterns. Junior officers seconded from the British Army lead the Indian formations. The supply of subalterns capable of leading Indians, with their specific cultural and language requirements, was an added complication that the BEF could no longer afford. Of note, each brigade in the Indian divisions was composed to three Indian battalions and one British regular battalion.

One of the first reinforcing formations to reach the BEF on the continent was the Seventh Division. This regular army formation did not exist as a standing division prior to the war. It was scratch built from units not required to fill out the original six-division BEF and battalions returned from various posts and stations empire-wide. Unfortunately, after the arrival of the Seventh Division there was another lengthy gap until the first Territorial Force division deployed to France. The planned six-month
training time for newly raised units gradually grew to almost a year as the haphazard recruiting and training of the Territorials and New Armies continued to take longer than planned. This was due to all manners of logistical challenges as well as the continual draft of trained men either to form cadres for other newly raised formations or to be replacements for BEF divisions already engaged on the continent.

New forces continued to flow into the BEF, with the 1st Line Territorial divisions and the divisions from the first three New Armies deploying from England for Foreign Service by September 1915.\textsuperscript{10} With the old army destroyed, it would be up to the Territorials and the men of the New Armies to take the fight to the enemy.

The divisions of the Territorial Force and the New Armies were not the same structure as the old regular divisions. In addition, the modification of regular divisions took place as they were reconstituted. Over the course of the war, the British repeatedly modified their division structure. There were two primary reasons for these changes. One was the experience gained in modern industrial warfare. The necessary weapons and organization for modern war did not exist in the August 1914 regular army division employed by the British on the Western Front. The fight style brought forth new requirements that previously had not been required. Moreover, the pressure of modern combat served as a catalyst for all sorts of new weapons development. The second reason for the changes in divisional structure throughout the Great War was the serious manpower shortage faced by the British.

Evolutionary change took place in the organization of British divisions. In August of 1914, a British division consisted of three brigades of four infantry battalions each. Every infantry battalion had two Vickers machine guns assigned to it. In the opening
battles, a standard brigade fielded eight Vickers machine guns. By September of 1916, the same brigade had forty-eight Vickers, but organized into separate machine gun companies. The infantry also received additional weapons, each battalion gaining twelve Lewis guns in exchange for their heavier Vickers. Additionally, each brigade was allotted a Trench mortar battery of 3” Stokes Mortars, a weapon that did not exist prior to the war. A division at full strength in 1916 would have had 200 machine guns. By October 1918, the final structure of a British division during the Great War saw a decrease of each Brigade from four to three battalions, but this same division had double the number of machine guns (400, consisting of 64 Vickers and 336 Lewis guns). Even without the proposed amalgamation with American battalions, the British division of 1918 possessed more firepower than that of 1914 or 1916. Overall, the authorized strength of a division increased from 18,179 (1914) to 19,372 (1916) men. The 1916 division also had more artillery than one from 1914. The increased number of “tubes” was primarily restricted to mortars. This is not, however, an accurate picture of the artillery situation. Prior to 1914, corps artillery was limited to a few batteries of heavy artillery. As the war progressed, the British formed corps and army heavy artillery units, greatly increasing the number and throw weight of artillery the corps and army commanders could put behind a major effort.

Evolutionary change in the division was expected. General Sir Henry Rawlinson wrote of his experience observing the Japanese Army years prior to the outbreak of the Great War:

The Japs have six machine-guns per regiment, and nearly always employ them massed. This is practically the same as the machine-gun company which I have been advocating for our infantry brigades. The result, in the Japanese Army, is
that their machine-guns are far better handled than are ours, better use is made of ground, and there is more initiative in their machine-gun officers, because they feel they are of importance, and are understood.\textsuperscript{14}

The idea to increase the number of machineguns in British infantry battalions and provide separate machine gun companies predated the experience of the Great War. Unfortunately for the army, the British government did not support the cost associated with procuring additional weapons prior to the Great War. Moreover, the defensive tactics that seemed to support an increase in the number of machine-guns did not lend itself to the theory of an imperial striking force and offensive action.

Unlike the American experience, the British did not face powerful requests for amalgamation of their soldiers into foreign units. The French still had massive amounts of manpower under arms, and did not require nor request more soldiers for their own formations. What the French did want is for the BEF to take over more of the front line in order to relieve French troops. With the extra units available, the French could afford to press on offensives, always aiming to liberate French territory from the Germans. The French Army held the majority of the Western Front trench line throughout the Great War. It was French territory that the Germans held (in addition to Belgium). The French Army wanted to be the one to throw the invaders out of their homeland.\textsuperscript{15}

Shifting to the American experience, the organization of the American divisions also evolved over the course of the Great War. Like the British, the Americans did not have an active division upon their entrance into the Great War. The first planned division proposed by Pershing was only a 12,000 man strong organization. This was much smaller than the American division structure that existed on paper; a triangular division of three brigades of three infantry regiments.\textsuperscript{16} Nevertheless, both the designated commander-in-
chief of the AEF and the staff at the American War College continued to update their
estimates and requirements for the AEF’s divisions. Pershing specifically wanted a large
organization with increased firepower and staying power.\textsuperscript{17} Pershing’s desire seems at
odds with his tactical pronouncements on the desirability of a return to open warfare.
Pershing saw trench warfare as not a new form of warfare, but a subset of current military
theory. He defined trench warfare as set piece attacks behind rolling barrages to suppress
the defenders until troops can arrive in the trenches. Once this is accomplished, the
attackers should revert to open warfare to counter the enemy’s elastic defense. The large
divisions were perfect for trench warfare, but too large and unwieldy for open warfare.
To get to open warfare, one had to first engage and defeat the enemy’s elastic defense.
This required the large division. Especially in areas were the Germans had built multiple
defensive lines, as they had in the Meuse-Argonne region of France.

John A. English proposed a solution to a similar issue. He questioned, in light of
the increase in firepower of modern weapons, why most of the Great Powers prior to the
Great War had infantry company strengths of greater than 200 men. He suggests that the
reason for the large companies was due to the increase in firepower technology. He
believes that this large mob of men, which he doubted that a company commander could
effectively control in the field, was so large precisely because it expected to take
enormous casualties as it crossed the beaten zone of fire in the decisive assault. The extra
men were there so that the troops available could either consolidate on the objective or
continue with the exploitation phase.\textsuperscript{18} Extrapolating from this theory, it appears that
General Pershing built the AEF divisions intentionally large to be able to successfully
fight a set piece trench warfare assault, yet still have enough combat power left to
transition to open warfare in exploitation. Pershing’s major disagreement with British and French military thought was over this concept of open warfare. By the start of 1918, both the British and French thought that open warfare was outdated. The methodical battle doctrine, with artillery as the primary arm, was the tactically correct method of modern warfare. The methodical battle doctrine is very effective in trench warfare but completely unsuited to open warfare (at least until the advent of self-propelled artillery).

General Pershing believed that the purpose of trench warfare was to set the stage for a return to open warfare. Of the two forms of tactical combat, open warfare required the most individual initiative and training. He never neglected training his troops in trench warfare, but did not want their training to consist solely of trench warfare techniques either. The idea that British and French junior officers would serve as “mentors” for American junior officers was also particularly troubling to senior staff officers of the AEF. The impression was that the current crop of British subalterns was not regulars and the sum total of their military experience was in trench warfare. This massive structure would be capable of staying in the line and eventually breaking through, while still possessing the combat power to conduct exploitation and shift to combat on open warfare principles. The standard infantry division finally evolved into an organization of approximately 1,000 officers and 27,000 enlisted men. This organization was a bludgeon, not designed for agility and maneuver but to rupture the enemy lines through sheer cran or “guts” and still have combat power left for consolidation and exploitation.

There were advantages and disadvantages to a formation of this size. On the one hand, it maximized the combat power that the AEF could wield with a minimum amount
of senior officers. It also limited the number of company commanders required for each division. It was not a shortage of infantry officers at the source, but rather at the front, that was an issue. The problem was higher than expected casualties added to the disjointed shipping schedules. The solution was either to increase the number of junior officers sent over as replacements or to set up some type of officer training command in France. Due to the persistent shortage of time, Pershing chose to do both.22 If the AEF had organized its divisions along the lines of the BEF, the Americans would have had to double the number of senior officers, and quadruple the number of company grade officers. However, the strain on officers’ ability to control these large forces was questionable. It was also very challenging for the Service of Supply (SOS) to keep this monstrosity supplied when in the advance, however that would have been a problem regardless of the size of the division employed.

When not offensively engaged at the front the SOS kept the divisions adequately supplied, the real challenge was in equipment. American industry, like the American military, was not prepared to provide the required arms and equipment for an army engaged in modern war. The French manufactured and supplied all of the artillery in the divisional field artillery brigades, and the majority of the other artillery pieces as well.23 The challenge to the SOS was keeping the troops supplied in the advance. This entailed building and improving roads and rail lines up to the front and then crossing no man’s land, with the intention of connecting with still existing roads to the rear of the German positions. This involved detailed staff work, especially with respect to planning assumptions. The size of the American division meant that a staff officer could not assume that a road or rail network that was adequate for the support of a British or French
division would be adequate to support an American division. The pragmatic solution was to have an American unit relieve a French unit in name one echelon larger than the American unit when turning over sections of the front line.24

The divisions of the AEF sailed to Europe in ships. Convoys of troop transports from North America to Europe typically traveled under naval escort. The first convoy, carrying elements of the First Division, were escorted by no less than four American cruisers and a squadron of destroyers. The threat from German U-boats was very real, but the naval escort was up to the task, and the convoy arrived in Europe without incident.25 The American naval liaison in England, Admiral William Sowden Sims, had commented to General Pershing his concerns about the ability of the US Navy to provide adequate antisubmarine protection to the AEF’s troop convoys. Admiral Sims had repeatedly requested additional destroyers to ensure the safety of American troopships. This conversation lead General Pershing to push even harder to get the AEF into Europe as fast as possible and engaged in the decisive theater. This method of deployment, while unavoidable, was detrimental to the tactical combat effectiveness of the AEF, at least as it compares to the BEF experience. Gen Pershing felt that “[T]he war could not be ended until the German land forces were beaten.”26 Until the AEF had built up and sustained combat power in France the ability of Allied forces to defeat German land forces was questionable. A negative factor in the development of a combat effective AEF was the long time it took to deploy troops from the US to the decisive theater especially when to the BEFs experience. Forcing the troops to sail in convoy under naval escort increased the amount of time it took to assemble, load, and sail from the US. It also put additional strain on the port facilities in France. Instead of a steady “stream” of ships to unload,
large convoys would arrive all together, which quickly saturated the handling capabilities of the ports.

Once offloaded from the transports, where did the AEF send its troops? Logistics determined the final choice of sector for the AEF. By April of 1917, the BEF had exclusive rights to the channel ports, and the U-boats threatened the Mediterranean ports too much to be of service.\textsuperscript{27} The British were willing to share their ports and lines of communications with the AEF. However, General Pershing did not want to rely on lines of communication already fully employed by other forces. Additionally, deploying through the channel ports would have meant that the AEF would occupy the sector of the Front covering the approaches to Paris, a politically unfeasible suggestion from the French point of view. Finally, if the AEF had been reliant upon the British lines of communication the pressure for amalgamation would have increased.\textsuperscript{28} With these restrictions in place, the AEF had to look to the limited French Atlantic coast ports for possible points of debarkation. Lieuentnat Colonel William J. Wilgus, the Deputy Director General of Transportation for the AEF, highlighted the issue of ports of debarkation when he said:

\begin{quote}
From the outset, it was realized that no problem of the War would press upon us more heavily than the one that had to do with the ports of France through which our Army must enter the theater of operations.\textsuperscript{29}
\end{quote}

He understood that the physical infrastructure of the available ports were poor. Moreover, that these would be the choke points for the flow of troops and all manner of supplies.

After the ports, the AEF SOS had to deal with the problems of the French rail system. After almost three years of a planned “short” war, the French railway system was in very poor physical condition. Deferred routine maintenance to the locomotives and
rolling stock took its toll in the deteriorated condition of the railroads. The operating hours were much higher than normal. In addition, in many cases the railroads were crewed by replacements with less skill and experience. French Army Higher Command did not recognize the lack of a rationalized system of supply until after the French Army mutinies of 1917. The individual French soldiers (poilu) did recognize this shortcoming, and even gave the lack of a system a name: “System D.” System D was an expression derived from the verb se debrouiller; “to muddle through.”

The French seaports suffered from similar neglect and lack of planning that affected the rail system infrastructure. Ports assigned to the AEF did not necessarily have the correct cranes for offloading cargo ships, or the necessary warehouses for initial storage of all types of material. The global shortage of shipping, caused by the resumption of the U-boat campaigns, meant that port operations had to be efficient. The quicker the turn around time for a ship the more surface tonnage the AEF could have transported to Europe in a set amount of time.30 This same issue affected the support of the BEF, but the geographic realities did much to mitigate any adverse impacts. Already configured for cross-channel traffic the ports on both sides of the English Channel only required expansion and maintenance to maintain their efficient throughput. And the shorter sea leg meant that ships could make multiple sorties on a single load of fuel. Also employing more of a variety of ships in supply operations was possible; open ocean steamers were not required to make the run from England to France.

As already mentioned, the French railroad was in very poor material condition. With the initial ports assigned to the AEF all on the Atlantic Coast, the distances from the ports to the front lines were the longest possible. The British did not face such long lines
of communication, with their channel ports at the most 175 miles from the front. The AEF faced a 600-mile one-way distance from their ports. Every additional mile of rail line was that much more of a burden placed on the SOS. Additionally, time was also a factor in addition to space. The AEF built massive depots close to the front line to ensure continuous supply. One train hauling one load of ammunition from the AEF’s ports to its depots and back again for a second load could have made over three and a half trips from the BEF’s ports.

The main rail lines that serviced the Atlantic ports ran through Tours and eventually on to Toul and Nancy. Toul was directly south of the Saint Mihiel salient, and an excellent position for a supply center. This is one of the reasons that the AEF took the Saint Mihiel sector as its first operational area as an army.

A final aspect of the selection of operational theater for the AEF was locating it in a region were it would be effective, in this case were it could apply its combat power most directly against the enemy in a manner that directly threatened some vital position for the Germans. The portion of the line from the Argonne forest to the Vosges Mountains gave the AEF such an opportunity. As already discussed, supplying this region via rail lines running from the Atlantic coast ports was an attractive option. Additionally, immediately behind the German front lines in this sector was the city of Metz, a major railroad hub. If the AEF could take Metz, then the AEF could interdict this German supply route, jeopardizing the German ability to move forces and supplies laterally along the entire front. From Metz, the AEF would be in a position to threaten Germany itself via a crossing of the Saar River. The AEF could have chosen other fronts with shorter lines of communication, which would contribute to an increase in their

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effectiveness in the front lines. But if this was not at a decisive point or worse if its sector was under the command of the BEF, then the AEF would not have achieved its mission as assigned by President Wilson.

Another issue that negatively affected the AEF’s ability to achieve its desired goals was the constant pressure from the allies for amalgamation. The pressure for manpower from the Entente had a negative impact on the formation of the AEF. The Entente understood the condition of their lines of communication, thus the initial request for railroad engineering units that the Americans fulfilled. The staff officers of the SOS understood the need for line of communication troops, portraying their requirements to General Pershing in the form of the various programs. But the manpower shortages faced by the British and the French brought political pressure on General Pershing to authorize the deployment of combatant troops at a higher priority than line of communication troops. This conflict contributed to the chaos experienced in the rear areas, as an SOS staff officer identified:

> Despite this vivid picturing of the urgent needs of the Transportation Service for an army then expected to read a total of 900,000 men in the following autumn, the Allied governments . . . were soon successful in persuading the American government to give preference to the conveyance overseas of combatant troops on a vastly increased scale, utterly out of all proportion to the means provided for sending over transportation men and materials that the French themselves stated were essential for the support of the enlarged Army program.34

This was an additional challenge faced by the AEF. They never had enough combat support or combat service support troops, so many routine tasks for combat support or combat service support forces devolved upon the infantry to accomplish. The percentage of the total planned manpower of the AEF designated for use by the SOS was 25 percent. However, due to the factors discussed above, on 16 February 1918 the actual breakdown
was 34 percent of all American Forces in France were in the SOS. This was due to the requirement to build up the SOS prior to the arrival of the majority of the combat divisions. Divisions that were not in the line (committed to the front line, support, or reserve) conducted one of two tasks, training or rest. The importance attached to training was high. Divisions were not dual tasked when their primary mission was training. This was not the case with a resting Division. A Division at rest was viewed as a source of untapped manpower for other fatigues. This was detrimental to combat effectiveness.

Another facet of the amalgamation issue was the constant push for the AEF to commit forces into combat. From the time of his arrival in France to the start of the German April 1918 offensive, the Entente powers kept steady pressure on General Pershing for American manpower. One of the earliest incidents occurred when Georges Clemenceau, the French President of the Council and Minister of War, inspected the US First Division undergoing training with the French Army. He demanded that American troops go up to the line and relieve French troops to show American support for the war. General Pershing recalled this incident by stating that Clemenceau “insisted then, as he did with even greater vehemence later in an official capacity, that it was not so much a question of troops being ready as it was of giving relief to the Allies.” This was one side of the political pressure put on the AEF for amalgamation.

The political issues surrounding the question of amalgamation, and the different possible solutions created unnecessary stress on the AEF. The French political concerns were the morale of their civilian population and army. General Henri Philippe Pétain had promised the soldiers of the French Army that he would not waste their blood on fruitless offenses, but rather wait for the Americans to come in force. So the question on the lips
of the French soldiers and civilians was when would the Americans take their place in the line? This public outcry was the pressure that Clemenceau was reacting to when he tried to order the US First Division forward into the lines, and his continual demands for American manpower. General Pershing noted, “The French continually argued that we would contribute more to the Allied cause by helping to strengthen French and British units than by building up an independent army of our own, and the British were not far behind in their efforts along this line.”

This constant pressure for amalgamation was detrimental to the establishment of a combat effective AEF.

The British desire for amalgamation contained both military and political aspects. Some historians believe that by throttling the flow of replacements to Haig, Lloyd George was attempting to assert control over the BEF. Irrespective of ones views on the BEF’s controversy over replacements, the fact remained that by 1918 a British manpower shortage existed. Haig was feeling this shortage, leading him to reduce the BEF divisions from twelve to nine battalions each. Haig first wanted to take raw American troops and train them as replacements for his depleted battalions. During the initial visit of the Military missions immediately upon America’s entry into the war, this idea was unacceptable to the Americans. Haig’s next line of attack was to request to brigade individual units with his forces. Eventually, Haig was willing to conduct the training of US divisions, with the understanding that he would be able to employ them.

The BEF had very little leverage to force the AEF to accept amalgamation. The one trump card that the British held was their almost monopoly on shipping. In order for Pershing to get his AEF to France, he had to rely upon a majority of British hulls to transport them. General Pershing laid out his plan for the AEF in his “General
Organization Project.” This document laid out the planning assumptions and shipping priorities to deploy an American Army into France. The original document involved the planning for a 1,000,000 man American Army, deployed to France and ready for an offensive in late 1918. Not drafted as a force limiter, this document served rather as a starting point for planning purposes. Even during the summer of 1917, General Pershing believed that more forces that are American would be required to defeat the German Army in the field. In this planning document, the deployment of the AEF developed into six phases of shipping. Each phase would carry all the troops and material required for a Corps to conduct combat. An organized corps consisted of four combat divisions, one depot and one replacement division. The last phase of the deployment would include SOS personnel and other such requirements for lines of communication duties. This document, while prepared by the new AEF headquarters, was prepared with extensive input from the British and French. Nevertheless, the entire plan rested on the availability of adequate shipping.

To convince the British to free more hulls for shipping AEF units, in January 1918 Pershing negotiated a six-division deal with the British. In this agreement, the British agreed to ship at least six-divisions of Americans to France with the understanding that divisions shipped in British hulls served their training tours in the British sector of the line. While in the British sector, the American divisions would be trained and equipped by the British and available to man defensive positions in an emergency. Under this scheme, ten American divisions received at least part of their training at the hands of the British. This neatly solved most of the amalgamation issues,
by keeping the Americans under their own flag and commanders while still providing visible support to the BEF.40

From the American side, the political issues rested on nationalistic sentiment. Americans did not want their sons to serve under a foreign flag, but instead wanted their own forces under their own flag. A large proportion of Americans were immigrants or sons of immigrants from the major combatants, and the idea of an Irish-American being drafted into the British Army was against every principle that America stood for.

Pershing did not want to allow amalgamation of his forces for many reasons. One reason was the political realities of American participation in the Great War. The cause of the Entente and that of the Americans did not completely match across the board. The British and French did not buy into Presidents Wilson’s call for a “war to end all wars.” The idea that war would no longer be a legitimate method of solving international disputes appeared naïve and foolish. In order to secure his President a seat at the peace table, Pershing would have to field and effectively employ an American army. This is different from just providing President Wilson with a large casualty list. For example, if the German Navy had succeeded in sinking a sufficient number of troop transports then President Wilson would have had a large casualty list. However, if the AEF was not yet combat effective and engaged on the Western Front when the Germans requested peace it is doubtful that the British or French would have seen the same political capital accrued to the American President. President Wilson understood this, but also understood that if the Entente lost the war, then the Americans would be in an even worse position. Therefore, he wavered from his stand, and delegated the amalgamation question to Pershing in case of great need. Pershing needed a force under an American flag that he
could use effectively in battle. He did hold out the possibility that in an emergency he would consider temporarily allowing units under his command to serve with the French or British in the field. The training plan, which had at least six American divisions training with the BEF and several more with the French, was as far as Pershing was willing to go towards the Entente’s desires for amalgamation. The initial AEF was unprepared because of America’s overall military unpreparedness for war and it required equipment and training, both of which required time. Time was a luxury that the coalition partners could not and would not grant to the AEF without significant remuneration in return.


6Ibid., 3.

7Ibid., 236-7.

8Ibid., 24-6.


Another addition to the divisions TO&E was the pioneer battalion, which possessed eight Lewis guns, forty-eight Vickers in machine gun companies, 144 Lewis guns in the line infantry battalions, and an additional eight in the pioneer battalion equals 200 per division.


Coffman, *The War to End All Wars*, 47.

Braim, 40.


Pershing, I:151-3.


Ayres, 35. For the makeup of units see Pershing, I:101.

Kreidbert and Henry, 218-3. See also USAWW, 12:21, for General Pershing’s comments on officer candidate schools in France.

*USAWW*, 14:60. The artillery was primarily equipped with French 75mm guns and 155mm howitzers, and the trench mortar batteries relied on British stokes mortars.

Ibid., 6:31. General Penet (General Officer Commanding French XXX Corps) notes that because the French units are much smaller than the American units the relief of the 127th Infantry Division will not be unit by unit. Again on page 83 of the same volume is an extract from an order from III US Corps relieving the French 164th Division with a part of the US 28th Division.

Pershing, I:87.

Ibid., 48-9.

The challenge with the Mediterranean is that normal port operations have one “choke-point” or area of maximum danger from U-boat attack, whereas to get into the Mediterranean ships would have to pass thru the Straits of Gibraltar (STROG), which adds two choke points onto the journey (the exit and entrance to the straights). Both the entrance and exit of the Straits would be excellent hunting grounds for U-boats in
addition to the approaches to the designated port of debarkation. Additionally, the proximate to land increases the potential for accident among convoys of dissimilar ships and unevenly trained civilian crews. Even today running the STROG is a challenging navigation detail without the threat of submarine attack.

28 Ibid., 81.


30 Turn around time is the total elapsed time from a ships arrival in a port to its departure to sea. In smaller ports, or ports with all berths filled with other ships, a newly arrived cargo ship would anchor out in the harbor and wait for pier space to open up in order to discharge her cargo. And for some deep draft (greater than 28 feet) ships, if the port does not have a berth with enough depth of water for the ship to moor, then lighters would have to be used to offload the ship at anchor. Additionally, the ship would require fuel and fresh food for her crew before departing, all adding to the length of her turn around time.

31 Ibid., 313-4.

32 However, others would disagree. The alternative is that the BEF would maintain their section of the line as it is convenient to the channel ports used for its resupply. The French would maintain the sectors covering the approaches to Paris. This left the AEF with the choice of Meuse-Argonne and the operational objectives of cutting the Metz rail lines. United States Army War College, The Genesis of the American First Army, 3.

33 Pershing, I:83, and United States Army War College, 3.

34 Wilgus, 50.

35 USAWW, 1:147.

36 Pershing, 158.

37 Ibid., 165.

38 Coffman, The War to End All Wars, 168-71.

39 USAWW, 1:91-4.

40 Ibid., 2:2-3.
CHAPTER 4

IN FRANCE

Once Britain and the US had created and deployed large armies to France, how successful were they at employment? What was their first offensive combat experience in modern war? Did they have the correct training and doctrine to conduct successful combat operations? How did they adapt the training they had received to the realities that they faced?

For the BEF, the first major battle with participation by all the various types of units was the Battle of Loos (21 September to 4 November 1915). This was the first major engagement of Kitchener's New Armies. General Haig, then General Officer Commanding First Army, planned on using at least one New Army division (the 14th) in the battle of Festubert (15 to 27 May 1915), but that division was held in Britain due to a shortage of small arms munitions. Prior to the battle, the leadership of the BEF had already learned some lessons with respect to trench warfare. One was the absolute requirement for a long preparatory artillery bombardment. In the BEF’s eyes, the only way to seize enemy held trenches was with high explosives. Three sub issues come out of this simple statement; the shortage of high explosive shells in the BEF artillery, the substitution of gas for high explosives in the bombardment, and the countermoves conducted by the Germans to mitigate the risk to their defensive positions caused by extensive artillery preparation prior to any assault.

The first issue was the lack of high explosives. The plan for Loos called for the wire to be the target of the field guns. To cut wire effectively, large amounts of high explosive shells were required. The BEF did not have sufficient quantities of shells on
hand to meet this requirement; the British munitions industry had not yet caught up to the
demands of modern warfare. Its prewar planning assumptions had always followed the
traditional assumptions of a short war. Heavy artillery had counter-battery missions to
protect the attacking infantry by destroying the hostile German artillery. Due to the
overall length of the assault (six divisions attacking in line) and the shortage of artillery
tubes and ammunition, the BEF realized that the destruction of the enemy trenches by
artillery fire alone was unrealistic. Rather, the BEF hoped that the artillery fire would be
enough to keep the German defenders down in their dugouts long enough for the
attacking infantry to reach the enemy trenches.3

The second issue is the substitution of gas for high explosives. The Germans had
first used poison gas (in that case, chlorine) at the Second Battle of Ypres on 22 April
1915.4 The British considered this a ghastly weapon; still they developed not only
countermeasures but also an offensive chemical capability. Lord Kitchener authorized the
use of gas specifically in retaliation for the action at Ypres. For Loos waves of chlorine
gas delivered by gas cylinders brought up to the assault trenches would precede the
assaulting infantry. These gas clouds were supposed to make up the difference in the lack
of high explosive artillery shells in the BEF.5 Additionally, captured German gas masks
were in poor condition. Some German troops were equipped with a separate supply of
oxygen however; this supply only consisted of thirty minutes worth of oxygen. General
Haig thus theorized that if the BEF could maintain a gas cloud for forty minutes this
would overcome all the Germans’ manning defensive positions and a true breakthrough
achieved.6
The third issue is the countermoves by the Germans to mitigate the risk to their defensive positions caused by extensive artillery preparation. One must never forget that in battle one is facing an intelligent, thinking, and adapting enemy. The Germans had seen and experienced first hand the destructive power of sustained artillery fire upon their defensive positions, especially at Festubert. The Germans started on their evolutionary development of the defense in depth, which would culminate in the Great War in the elastic defense. They realized, along with the British, that enough heavy artillery fire would destroy a single trench line. Therefore, the Germans built a second trench line beyond the effective wire-cutting range of British field artillery. Additionally, they placed this second line where possible on the reverse slope to prevent British forward observers from calling effective fire upon it. The plan was to hold the first line with as few troops as possible, thus risking the minimum amount of casualties for the long preparatory bombardment the BEF would execute prior to any major assault. If the BEF were able to penetrate the first line, the second would be able to stop the advance. The BEF infantry would not be able to advance through uncut wire and into unsuppressed machineguns and rifles in entrenched positions, forcing a tactical pause on the BEF. The BEF would then have to move their field artillery forward, across the torn-up ground of the previous engagement, stockpile munitions, and prepare to attack yet again. But while all this was going on, the Germans would have ample time to shift their reserves to the threatened sector, and even to build another defensive line sited similarly to the old second line position. The BEF hoped and wished that their plans would succeed while the Germans thought and planned how to ensure that they did not. Real analytical staff work did not yet exist in the BEF.
The genesis of the BEF’s battle of Loos rested with the French Commander-in-Chief, General Joffre. The French plan called for two coordinated attacks against the Germans along a significant portion of the front line. General Joffre’s plan for the BEF had two elements. The first was for the BEF to assume responsibility for the defense of more frontline trenches, thus freeing the Second French Army for the planned offensives. Additionally, General Joffre proposed that the BEF attack in support of the Tenth French Army toward the town of Loos.\(^{10}\) This continual pressure by the French on the BEF to assume responsibility for more of the front line is the closest that the BEF came to the kind of pressure for amalgamation that the AEF received throughout its experience in the Great War. The BEF failed in their attempts to hold to their own planning, and allowed the pressure of the French high command to dictate when and where the British offensive would take place up to and including the level of effort. However, an even greater failure was the BEF’s inability to learn from French experiences in the war.\(^{11}\) This unwillingness to look to any experience for knowledge would cause the BEF’s learning curve in the Great War to resemble a very gradual curve, and translate directly into very large casualties.

An example of the BEF’s inability to learn from others experience was the plight of the 21st and 24th Divisions during the Battle of Loos. Both divisions were part of Kitchener’s New Armies, and both had recently arrived in France. Neither one had experienced any frontline service prior to their commitment on the second day of the battle. Sent forward to follow-up the suspected success of the initial assault and pierce the German second line the two divisions spent most of their energy simply reaching the frontlines. Grossly incompetent staff work contributed to the failure of these green units.
The orders were unclear—both divisional commanders thought that they were pursuing a beaten enemy. In addition, the route from the rear areas to the front line filled with wounded going back towards casualty evacuation points and supplies moving forward. There was no visible traffic control, and the four brigades of the two divisions spent most of the night marching toward the front lines. They were not effective. Next, the two divisions were to assault and pierce the second line of the German defenses. These positions were as strong as the original first line, in terms of concrete bunkers, wire entanglements and emplaced machineguns. The divisional artillery remained in the rear attempting to reach battery positions to support its advancing infantry, but the confused traffic situation slowed their progress toward the front. The infantry assaulted the hostile defensive position, without the benefit of artillery preparation or chemical attack, at 1100 hours. As expected, they did not make much progress. Worse, the Germans in accordance with their tactical doctrine conducted a counter attack. The green troops, already exhausted from their approach march, hungry from no food reaching them, dejected from the lack of artillery support and their own failure to take the German position, retreated when the Germans assaulted. Attempts to halt the rearward movement resulted in the death of the General Officer Commanding 63rd Brigade. This was not an auspicious start for new divisions.

The terrain chosen for the BEF’s subsidiary attack was very strange. Why would the BEF attempt an all out offensive at Loos, when the commander of the First Army (then General Haig) thought the enemy defenses too difficult and the terrain itself not good for an attack? The answer falls again to the peculiar arrangement of coalition warfare. After the battle of the frontiers and the “race to the sea” at the end of 1914, the
frontline stabilized from the channel coast to the Swiss border. The constant shift of troops toward the left, while still holding the line, left the BEF on the right of several French Armies. General French arranged with General Joffre to shift the BEF’s sector of responsibility closer to the channel ports. This assisted the BEF in several ways. It put the BEF in a position to protect the channel ports from any German attack. These ports were the strategic position for the BEF. If disaster fell, Haig assumed the BEF would conduct a fighting retreat to the ports and evacuate itself to Great Britain. This realignment also rationalized the lines of communication for the BEF. Now the British divisions deployed could rely on supply and sustainment that traveled directly from ships via rail to their own country specific depots without having to cross paths with similar French schemes of supply.

Shifting to the AEF, the Americans were also limited in their choice of sector by concerns over lines of communication. Pershing decided on the eastern portion of the German front primarily because of logistical concerns. Additionally, by separating the AEF from the primary theaters of the BEF and the French reduced the threat of amalgamation. On 3 September 1917, General Pershing directed his staff to study “the German Front from the Verdun front to the Switzerland frontier.” The idea was to develop plans for the possible operations of an American field army against the Germans. Additionally, he established AEF GHQ at Chaumont on 4 September 1917. Pershing chose this location because of its position on the rail lines of communication and its proximity to the planned American sector.

After deciding where the AEF would deploy, General Pershing next turned to the training it required. The most significant change that General Pershing made during the
creation of his headquarters was the institution of a general staff section responsible for training. General Pershing identified training as the contentious point in the formation of the AEF. He removed the training function from the old operations and training section and added a section to the AEF’s general staff, the G-5. The first head of the G-5 section in the AEF was Colonel Paul B. Malone. His assistant, Colonel (later Brigadier General) H. B. Fiske, upon Colonel Malone’s appointment as commander 23rd Infantry Regiment, replaced him as the head of the G-5 section for the remainder of the war.16 Both men readily supported General Pershing’s view of open warfare training. This simple move was vital to establishing and maintaining an American identity among the American divisions in France.

From Pershing’s point of view, the training of divisions in the US was inadequate. Training in France was sufficient to imbue the divisions with the fundamentals of trench warfare, but not on the doctrine of open warfare. Pershing was adamant that open warfare training must take place in the continental US, away from the influence of allied instructors. The stated training period for new divisions in France was three months. One month of basic training with either the British or French behind the lines, followed by one month in relatively quiet defensive sectors of the line, again alongside either British or French troops. Then finally, the units would undergo one month in training areas behind the American lines to hone divisional level attack tactics of both trench warfare and open warfare style.17

The BEF also had a central tactical doctrine. However, BEF General Headquarters (GHQ) did not centrally control the application or training of doctrine nor did it systematically evaluate lessons from battlefield experiences, rather BEF GHQ put
out very broad policy guidelines. It was up to each individual Army to determine the best way to execute them tactically. This lead to each Army having its own way to prepare for major battles, and each Corps of Dominion troops also developed their own style of tactical combat.\textsuperscript{18}

Conversely, the AEF centralized all training at the AEF HQ level. The officers of the G-5 section oversaw the training of all units in the AEF. Even while attached to British or French commands for training the G-5 continued oversight on the training of American divisions. While conducting training under the tutelage of the allied forces the AEF G-5 staff directed additional training requirements, notably on the concept of open warfare. This oversight went so far as to result in the AEF G-5 giving direction to the 27th division, via the II Corp commanding general, for the specific weekly training requirements of his regiments and brigades while undergoing training under British tutelage.\textsuperscript{19} This was not an isolated occurrence. There was concern in AEF GHQ that if left to develop their own training schemes division commanders would diverge too much in method and substance. Consequently, the G-5 section of the AEF GHQ drafted all training plans for divisions even when said divisions were being training by either the British or the French.\textsuperscript{20} The G-5 was the source and keeper for the canonical doctrine of the AEF. In addition to the duties of oversight of training, the G-5 sent its officers out with units in battle to observe and report on their conduct under fire. Not only did the G-5 promulgate what to teach, but they also provided the feedback loop from actual engagements. At the early stages of the AEF’s existence this was a rather ad hoc arraignment, however with the publication of the AEF’s \textit{Notes on Recent Operations} the
concept of constant training even while in battle was already evolving. The G-5 took as the cornerstone of all AEF doctrine the IDR and the FSR.

The IDR of 1911 and the FSR of 1914 were the starting ground for AEF doctrine. The IDR limited itself to infantry tactics, with combined tactics covered in the FSR. Considered “modern” by military standards prior to the Great War, both doctrines consisted of the open war concepts that General Pershing desired for the AEF to execute. They neglected modern trench warfare, primarily because the situation had not existed prior to the Great War. The IDR did discuss entrenchment, and the necessity for defensive positions. However, this was in the vein of isolated positions, not the North Sea to Swiss Alps kilometers deep defensive positions that the AEF faced in France. Also not addressed were the defensive positions in depth. This caused some problems, as the IDR discounted the effectiveness of enemy artillery “except when the enemy’s artillery is able to effect an unusual concentration of fire . . . ” This was not the situation on the Western Front by 1917, in fact large concentrations of enemy artillery was the norm. The general thrust of the IDR was to execute successfully an attack; one first seized and maintained fire superiority. To conduct an assault without first obtaining fire superiority led to heavy losses and the failure of the assault. The IDR further directed not to attempt double envelopments unless the attacker vastly outnumbers the defender. The approved method for overcoming enemy positions was the frontal attack if the firing line was able to gain and maintain fire superiority. This meant that the reduction of the enemy’s fire in volume and accuracy to the point that a final rush could succeed. The other option was a flanking maneuver. If the firing line was unable to achieve fire superiority, it could fix the enemy to a forward orientation with rifle fire, allowing
another unit or a portion of the original attacking unit to use available cover to maneuver
to a position that establishes a firing line that enfilades the enemy’s position.\textsuperscript{26}

COLONEL Robert Hirst conducted a contemporary analysis of the IDR for the readers of
the \textit{Infantry Journal}. While providing an overall positive critique of the new doctrine,
COLONEL Hirst did point out that the IDR assumed its readers possessed in depth
knowledge of other military manuals. It was definitely not a starting point for newly
commissioned officers to use as a guide, but rather more of an intermediate text on
military art and science.\textsuperscript{27} The FSR treats entrenchments as temporary expedients
especially in the offensive. The best way to prevent casualties in the offensive is to
continue forward movement. Only if continued forward movement proves impossible
should troops entrench, and then only to hold the ground taken in preparation for the next
assault.\textsuperscript{28} The FSR portrayed defensive combat as a temporary form of warfare. The
purpose of the defense was either negative or positive. It was negative when the task was
to hold simply on to terrain. It was negative because it decided nothing by this action
alone. The assumption was that the decisive action was conducted somewhere else.

Defensive combat was positive when the troops assigned were defending only to husband
their strength in preparation for a counterattack.\textsuperscript{29} A key takeaway, when comparing the
IDR and the FSR with AEF doctrine, is that the IDR and FSR dealt with only a theoretical
enemy.

After grounding in the IDR and FSR, the AEF turned to foreign experience to
expand their doctrinal understanding of modern warfare. Filling the pages of the
professional journals, for example the \textit{Infantry Journal}, are personal observations of the
fighting in Europe prior to the formation of the AEF. One of the earliest and most
comprehensive is *The Attack in Trench Warfare* by Captain Andre Laffargue. In the introduction to the American edition, the editor of the *Infantry Journal* displays a marked bias against the American mobilization scheme. While commending Laffargue on identifying the importance of specific training for success in trench warfare, the editor continues to point out “[T]he difference between real infantry and the cannon-fodder variety which is too often considered adequate for war purposes.” This is additional evidence of the regular army backlash against the citizen soldier derived from the mobilization experiences of the Spanish-American War. Issues raised by this document included the requirement for machine guns and light guns (37 millimeter) to accompany the advancing infantry, placed in the rear of the first wave. These heavier weapons were to deal with enemy machineguns overlooked by the artillery preparation, and provide covering fire from the first objective for the advance of the second wave. His proposed methods of attack were not cheap with respect to loss of life. “[I] have set about to consider the means of saving . . . comrades, or least to figure out how the sacrifice of their lives may result in victory.” He advocated infiltrating machine gun teams forward of the most advanced line, ready to engage enemy machineguns in the assault. This allowed the guns a greater field of fire, with no friendly troops in front of or on their flanks. He summarily dismissed the risk of loss of the machine gun: “If it is taken, what does it matter--we will take ten from the enemy.” A key issue with Laffargue’s work was that it was not approved doctrine in the French army, nor did the British even bother to translate it into English. The Germans, however, did translate it, and used its experience and observations in their own tactical developments. That the Americans
translated and published it by the open source professional society clearly demonstrates the strong desire for experiences and observations regardless of the source.

Another foreign manual translated into English was the French *Instructions on the Offensive Conduct of Small Units*.35 This differs slightly from Laffargue’s work in that the War Department published it, and placed its official stamp of approval as opposed to an anonymous “Officer of Infantry.” In the translators notice the author identified the steady evolution of military tactics, especially in the attack. It also identified the massive use of entrenchments on a scale never before contemplated. Some key thoughts are that infantry alone could not capture enemy trenches they must have artillery support. In an attack upon trenches, a preplanned portion of the assaulting party deals with enemy forces emerging from dugouts while the remainders press on to the objective. The French term *nettoyage* describes this “mopping-up” action. *Nettoyage* consisted of more than the modern term mopping-up implies. Special equipment and tactics were used to *nettoyage*-captured positions, for example trench shotguns and large quantities of hand grenades. Teams of dedicated snipers and observers also were assigned *nettoyage* duties, watching especially for German machine gun crews that crawled out of the rubble of destroyed positions and set-up their gun in shell holes. Liaison between units in line and supporting artillery was essential to success in the attack. Recognition of the high importance of the machinegun in all aspects of battle contrasts with the *FSR* characterization of the machinegun as a weapon of emergency use. The *FSR* took this tack because of the theory that as soon as the machinegun fired it became a primary target for hostile artillery, which concentrated to put it out of action. The *IDR* held a similar assessment of the value of machineguns, considering them “critical” at “infrequent” times of battle.36 *Instructions*
for the Offensive Combat of Small Units was an excellent manual, but it comes across as very prescriptive in nature and presupposes a level of professional expertise that men newly commissioned into the infantry clearly did not posses.

Document number 802, also titled Instructions for the Offensive Combat of Small Units, superseded the War Department documents of the same name, numbered 583 and 711 respectively. It is also a translation of a French document. The first portion of Instructions for the Offensive Combat of Small Units discussed the German defensive doctrine. It accurately described elastic defense while not naming it as such. It further prescribes methods to defeat this threat, specifically maintain contact with the creeping barrage, even in the face of casualties from friendly fire. It identifies a reliance on small units conducting fire and movement to overcome hostile machine gun positions once assaulting infantry enter the hostile position. The point is that once the assault force enters the enemy positions, a shift to open warfare tactics is required. The French understood that troops would require an understanding of open warfare. British training manuals also acknowledged the continuing relevance of open warfare doctrine; even if their commanders did not. For example, the first page of one British training manual started with the following:

The following instructions apply specially to training for methodical attacks on prepared positions. Training for open warfare will be carried out on the principles laid down in Field Service Regulations and the Training Manuals.

The British had developed their own subset of trench warfare often called the methodical attack. While never, in writing, discounting open warfare principles, the British reliance on the methodical attack was a logical step in their evolutionary move to combined arms tactics.
Other documents published by the War Department during the Great War designed to impart knowledge and to benefit from the experience of the combatants was the Notes on Recent Operations series. These publications were translations of French and British documents and captured German documents. This was very similar to the documents routinely published in the Infantry Journal before and during the Great War. What was missing was the analysis. In the pages of the Infantry Journal, serving officers would take foreign military manuals, translate them, and write papers for publication identifying strengths and weaknesses with the foreign manual and corresponding American military manuals. In the Infantry Journal, it was a robust and lively debate, which went far in the professional education of the regular officer. During time of war, however, is different from peace. The regular officers are not sitting out in some isolated garrison post with the time to think deeply upon the problems and solutions for their profession. Nor did the majority of the officers, by 1918, have the technical background or years of practical experience possessed by the long service regular officer corps. Moreover, for the small number of regular officers who did possess the requisite knowledge and experience, they did not have the leisure time to devote to detailed analysis of the documents. It was unrealistic to believe that an infantry Captain could spend the time required to read and contemplate the enemy’s tactical doctrine and develop

The War Department saw its function as generating the forces for the defeat of Germany. With a limited staff, they developed policy they thought was appropriate. This was one of the areas that saw friction between General Pershing and the Chief of Staff of the Army, General Peyton C. March. The differences between the War Department and
the AEF all boil down to the differences between these two men. General March was working to make the Chief of Staff the powerful centerpiece of the army, limiting the powers of the various army bureaus in an attempt to make the army bureaucracy work more smoothly. General Pershing felt that General March was interfering with the organization of the AEF, specifically in the naming of General Officers and the ultimate size and composition of the fielded forces. General March took the advice and assistance of the military missions from the allies, and directed the general staff to develop plans for trench warfare, which was attrition warfare. As previously mentioned the *Notes on Recent Operations* published by the War Department were translations of British, German, and French tactical documents without analysis. This demonstrated that the war department was unable to adjust mentally to the new circumstances of modern war. The documents, while potentially useful, require thoughtful critique and analysis. Then package the whole in a manner that can be absorbed by the mass of new officers attempting to lead the AEF in battle. The General Staff should have known better, and it is possible that they did. But the small size of the General Staff at the outbreak of war, and the mass of regular officers that made every attempt to transfer to line units going to France crippled any thoughtful or logical planning at home. For example, General Pershing’s own G-5, when asked by the General what he wanted to do, requested to lead a unit in combat. In defense of General March, the challenge of determining the ultimate size of the AEF was an impossible task. He did provide accurate assessments as to the capability of the US to raise troops and equipment. The confusion over the size of the AEF, whether one is talking about the sixty, eighty, or one hundred division proposal, is easy to see. No one person used the same numbers of personnel per division when
calculating requirements. Additionally, when the AEF talked about the sixty-division plan, it was estimating sixty combat divisions and not counting the required depot divisions. One recommendation that would have paid great dividends the General Staff made was the recommendation that the regular army stays in the US and train the National Guard and National Army. This would have allowed better-trained formations to deploy to France, but taking a lot longer to field the army. Politically this delay was unfeasible.

Time was not on the side of the AEF. The fall of the Russian empire and the separate peace gave the German army a short window of opportunity recognized by the British and French alike. The German combat divisions that had been fighting on the Eastern Front were going to be redeployed somewhere, either to the Western Front or the Italian Front. This increase in combat power came at a time when the BEF reduced its divisions from twelve battalions down to nine because of manpower shortages. General Sir William Robertson, the Chief of Imperial General Staff, directly asked General Pershing to provide individual American battalions to bring the BEF’s divisions back up to twelve battalion formations. General Pershing’s response was to continue with the formation of American divisions and use them to replace the British divisions in the line, leaving the British divisions in their nine-battalion formations. The French manpower shortage was similar if not even worse than the British. In the face of these manpower shortages, the British expected the Germans to attack in order to end the war favorably before the AEF could enter the conflict as a decisive force. This logic lead the British Prime Minister, David Lloyd George, to request again amalgamation of American units with British units. His proposal was to ship additional American rifle companies to
France and place one company in each British battalion. If that proposal was not sound, then the request was for battalions with one each assigned to British brigades. The other advantage to this form of amalgamation, in British eyes, was the American Army formed up on the right of the BEF, trained in British methods of warfare, and prepared for the great offensive.

The leaders of both sides saw the coming crisis of 1918. If allowed to progress unhindered, the AEF would be ready in crushing numerical strength in 1919. However, would the British and the French be able to last out 1918? Moreover, what form does just “holding out” take? To General Petain the plan should have been to stay completely on the defensive and await the completion of the AEF’s training. General Foch arrived at a diametrically opposite solution. He held a firm belief that the great German assault of 1916 (Verdun) had been stopped by the British counterattack on the Somme. General Foch called for the allies to prepare for the expected German attack of 1918 by planning and assembling a force to conduct an offensive of their own. When, in January of 1918, the Secretary of War delegated the authority for amalgamation directly to General Pershing this only served to embolden the British and French to press General Pershing more directly for forces. General Pershing stuck to his temporary amalgamation only for training plan, but again promised that in an emergency he would do what was necessary.

In response to Lloyd George’s previous proposals on amalgamation, General Pershing agreed to a six-division plan in January 1918. In it, the British would continue providing all the shipping that they had previously agreed upon for transporting a balanced American Army to France. Above this total, the British would also provide
shipping for six complete divisions of American troops. The artillery would then train with the French, while the remainder of the division would train for at least ten weeks with the BEF, broken up into battalions and temporarily amalgamated with the British.\textsuperscript{45} This assisted the British and French in their defensive battles of the spring and summer of 1918, but it was detrimental to the effectiveness of the AEF.

The twin issues of American amalgamation with the British and French and an independent American army operating defensively and offensively in its own sector of the line collided over the issue of shipping space. The German U-boat offensive had a crippling effect on worldwide shipping. The allies did not possess an unlimited number of ocean going vessels, and every ship that carried American soldiers to France did not carry something else like food or fuel for the civilian populations of England and France. As early as November 1917, General Pershing was advising the Secretary of War to purchase every possible ship from every possible source. He continued by turning the normal shipping question around, arguing that, “It should be no longer a question of how much tonnage can be spared for military purposes, but only the most imperative necessity should permit its use for any other purpose.”\textsuperscript{46} The British apparently controlled even neutral shipping through the actions of the British Admiralty. On paper, an inter-allied committee met to decide priorities on neutral shipping contracts. Realistically the British Admiralty was the decisive voice. If a neutral ship attempted to carry a cargo that the Admiralty did not approve, the Admiralty would withhold its approval for the neutral ship to purchase coal at a bunkering station. This control of fuel gave the British de facto control of shipping worldwide.\textsuperscript{47} In December 1917, the shipping schedule previously agreed upon was not working. The first four combat divisions projected for the I Corps
had arrived in France, but neither the depot nor the replacement division had arrived by
the end of the year. General Pershing stressed to the War Department that they must
follow the priority of shipping schedule that his staff had developed; any deviation would
only decrease the effectiveness of the yet virgin AEF.

The initial German successes in the spring offensive lead to another fundamental
rearrangement of priorities. General Pershing agreed with the Supreme War Council that
in the face of the emergency that shipping would only carry infantry and machinegun
troops to France. The British and French once again took this opportunity to press for
direct amalgamation. General Pershing stood firm against any form of amalgamation
other than those he had already agreed to, namely temporary amalgamation for training,
with the units available for defensive tasks. For Pershing this was the gamble of the war.
General Foch highlighted the risk when he said:

But do not forget that we are in the midst of a hard battle. If we do not take steps
to prevent the disaster which is threatened at present the American Army may
arrive in France to find the British pushed into the sea and the French driven back
behind the Loire, while it tries in vain to organized on lost battlefields over the
graves of allied soldiers.

This was a dramatic risk, but one that eventually proved correct. For the Allies did hold
or at least did not break. In addition, additional units of the AEF continued to arrive in
France, commenced their training for modern war, albeit out of the logical order, and
often separated from their parent organizations.

The AEF G-5 section was completely in control of the training schedules for all
units of the AEF. Even when assigned to the British or French Armies for training
American divisions were still required to conduct training specified by the AEF. The
premise was that the British and French instruction was limited to trench warfare. The
additional training was primarily in open warfare. Route marches of at least ten miles with appropriate security and multiple terrain exercises with stress placed on all manner of command and communication on the move. The planned three months of training, with the middle month in a quiet sector of the line amalgamated with a British or French division no longer executed as planned once the threat of major German offensive action materialized. Pershing sent units into the line as required to either shore up weak portions or relieve French divisions from quiet sectors to allow them to concentrate against the threat.

The driving factors behind both the BEF and AEF operational sectors were national requirements, rather than tactical feasibility. The AEF used the Atlantic ports because of circumstances beyond their control. This lead to a dissipation of combat power, as greater than projected numbers of soldiers and material were required to make the SOS operational.

Training was the key to unlock military effectiveness. The nation (either the United Kingdom or the US) was providing men and equipment. To provide effective training requires knowledgeable instructors. Sending ill trained and inexperienced troops into an offensive would not result in favorable results, like the 21st and 24th Divisions of the BEF. The AEF did not have enough officers ready to instruct the mass army on open and trench warfare techniques. Therefore, the AEF used British and French instructors to teach their troops the basics of trench warfare. The AEF also used a type of training amalgamation with American units entering the line with similar British and French units. This was effective to a point, as the American units that had the time to complete the training regime came out proficient in trench warfare. It never served to provide the
open warfare training desired, which encompassed another month of training behind the line with solely American instructors. Additionally, the concern surface very early that not only was the allies’ methods and national character different from American, but that their moral was shaken. The perception was that the offensive spirit had left the allied armies, and that this pessimism would infect the young American soldiers.53

The ability to learn from others experiences was a subset of training that the BEF never understood. The centralized training apparatus of the AEF was important in the acquisition and dissemination of appropriate experiences of modern war regardless of the source of the experiences. The basic doctrine that the AEF took with it to war was a good starting point, if a little to ephemeral. The FSR and IDR were for the long service professional officer, which rapidly fell into short supply in France. Straight translation, without significant analysis was a net negative, but this was a necessary evil if the officer corps was to quickly assimilate the mass of experience that over three years of modern warfare had given (not without cost) to all participants in the Great War. This was especially true of French documents that were prescriptive in nature. Most were outdated by the time of their publication by either the War Department or the AEF by either improvements in technology or adaptation by the enemy or both.

1Niall Cherry, Most Unfavorable Ground: The Battle of Loos 1915 (West Midlands, UK: Helion & Company Ltd., 2005), 23. The Canadian division had already been in battle on 25 May 1915, participating in the Battle of Festubert, and previously having held the line at Ypres when the Germans had almost accomplished a breakthrough with poison gas.

2Edmonds, History of the Great War, 1915, 2:45.

3Ibid., 2:136

5Cherry, 40-1.


9And would not until 1918. But this exceeds the scope of this thesis. If we compare the effectiveness of the BEF in 1918, we would have to compare it against the AEF of the summer of 1919 or 1920 which does not work.

10Cherry, 24-5; and Edmonds, *History of the Great War, 1915*, 2:113-4. One minor difference between the two is that Cherry claims the BEF took over 20 miles of front, whereas Edmonds reports 22 miles in the official history.


12Edmonds, *History of the Great War, 1915*, 2:284-95. Both divisions were organized with three infantry brigades. For this assault, one brigade from each division was detached as reserve.

13Ibid., 315-21.

14Ibid., 114.

15*USAWW*, 2:38; and Pershing, I:80-6.

16Pershing, I:150-1.

17*USAWW*, 14:299.


20Ibid., 14:299.

21Both the War Department and the AEF published pamphlets with the title *Notes on Recent Operations*. And to add to the confusion, the War Department republished the
AEF’s documents. The AEF Notes were observations from battle, primitive lessons learned, but primarily focused on the correct application in battle of AEF tactical doctrine. The War Department version consisted of translations of German, French, and British documents with no analysis.

22War Department, War Department Document 394, Corrected to 15 April 1917, Infantry Drill Regulations, United States Army, 1911 (Washington, DC: GPO, 1917), 95.

23Ibid., 84. Note, in the IDR entrenchment is spelled “Intrenchment.”

24Or even by 1915. Once a continuous line of entrenched positions was held, the idea of ignoring hostile artillery fire was no longer valid.

25Ibid., 115.

26Ibid., 113.


29Ibid., 89-90.


31Ibid., 26-7.

32Ibid., 6.

33Ibid., 27.

34Lupfer, 38-9.

35War Department, War Department Document 583, Instructions on the Offensive Conduct of Small Units (Washington, DC: GPO, 1917); and War Department, War Department Document 711, Supplement to Instructions on the Offensive Conduct of Small Units (Washington, DC: GPO, 1918).

36War Department, Instructions on the Offensive Conduct of Small Units, 5-6; Field Service Regulations, 72; and Infantry Drill Regulations, 127.
37 War Department, *Instructions for the Offensive Combat Operations of Small Units*, 10.


39 The British documents required translation because of differing technical terms and definitions; for example the use of the section in the British Army as opposed to the squad in the American Army.

40 Coffman, *The War to End All Wars*, 176-86.

41 USAWW, 3:10.

42 Ibid., 4.

43 Trask, 34-5.

44 United States Army War College, 10-1.


46 Pershing, I:238.

47 Ibid., I:239-41.


49 Ibid., 12:27.

50 Pershing, II:13.

51 USAWW, 3:192-3).

52 In the case of the AEF, a large portion of the equipment came from the French, but it was US dollars paying the way.

53 USAWW, 14:303.
CHAPTER 5
THE BIG SHOW

How well did the AEF do in extended offensive operations when directly compared to the BEF? Limiting the scope of this comparison to the Somme campaign of 1916 for the BEF and the Meuse-Argonne campaign for the AEF, it seems that the two experiences are remarkably similar.

The BEF went into the Somme offensive originally in support of a much larger French offensive. The German assault on Verdun changed the scope of French participation, making it more of a BEF show than originally planned. There was still French involvement in the attack, but not at the level Haig desired. The BEF’s Third Army relieved the French Tenth Army of its portion of the line, allowing the French to concentrate more troops in the defense of Verdun.

Similar to the BEF, the AEF in 1918 accepted the task of offensive operations in the Meuse-Argonne region as a part of the general Allied offensive along the Western front. Unlike the BEF’s experience, the Germans were not conducting any offensive operations, but were strictly on the defensive. Pershing believed that the Meuse-Argonne region was the key part of the enemy line, with the German lines of communication passing through Sedan the key to the whole front. It appeared to Pershing that the lines of communication running from occupied Belgium and northwestern France back to Germany were incapable of sustaining a major German retreat without the use of the lateral line through Sedan. To force the Germans to withdraw from the occupied portions of France and Belgium, Pershing believed that all that was required was an AEF
offensive that captured Sedan, which would cut off vital sustainment and limit the
Germans available lines of retreat.³

The Argonne is the term used to describe the whole of the region bounded by the
Aisne and Meuse rivers. On the extreme left of the AEF sector there was also a dense and
heavily overgrown wilderness called the Argonne forest. This area used to be a royal
hunting preserve.⁴ Four years of static trench warfare reduced the woods to a shambles of
old barbed wire and shell torn trees and underbrush. It was in this forest that the 77th US
Division made its initial assault on 26 September 1918.⁵ General Pershing described the
tactical problem he faced and his intentions best when he said:

The region involved in the Meuse-Argonne operation was ideal for defensive
fighting. . . . The narrow front of this natural defile, with its excellent observation
stations, and the depth of the hostile organization, averaging 22 kilometers, from
the first line to the fourth position, prepared throughout as a defensive zone, made
the task of an assailant extremely hard. To drive salients into this defensive zone
by frontal attacks and follow by attacks against the flanks thus created was the
only feasible method of assault.⁶

The AEF conducted frontal attacks into the teeth of a fortified zone with the intention of
forcing open flanks by pushing salients into the line. This was strictly trench warfare with
a view to forcing the enemy to accept open warfare by expending American flesh.

The AEF attacked on a three-corps front, with each corps placing three divisions
in the assault.⁷ In the right-hand corps (III Corps), the middle division was the 80th US
Division, a national army division. It attacked with one brigade (160th Brigade). The
160th Brigade went forward with one assault battalion and one support battalion for each
regiment, with the two remaining battalions in brigade reserve. Each assault battalion had
a battery of artillery directed attached to go forward as accompanying guns.⁸ The plan of
attack called for the infantry to closely follow a rolling barrage, 100 meters every four
minutes, through the enemy positions identified as “first” and “intermediate” to the “second” hostile position. There the assaulting infantry would halt behind a protective barrage for thirty minutes to reorganize and consolidate the position for defense. The course of the Meuse river pinches out the sector of the right hand division (33rd US) which also provides protection for the 80th US Division’s right flank. The key to continuing on to the Corps and Army objectives was the progress of the left flank division of III Corps (4th US). As soon as this unit continued to advance toward the Corps objectives, the assault battalions of the 80th US Division were to continue toward the Corps objectives.9

It was not only in the assault divisions of the three corps that were in the attack on 26 September 1918. On the far right flank of the AEF, the divisions of the US IV Corps conducted independent raids on 26 September 1918 to distract the Germans from the main effort in the Meuse Argonne.

The mission of the US IV Corps was similar to that conducted by the BEF’s VII Corps on 1 July 1916. The BEF launched a two-division assault against the German held village of Gommecourt, with the intention of drawing reserves toward this portion of the line and keeping the German artillery from focusing on VIII Corps assault to the south. Interestingly, if the intention was to keep the German artillery from firing on the left-flank of the VIII Corps, then why did the VII Corps artillery not conduct more extensive counter battery fires?10 In this subsidiary attack, the BEF demonstrate all the same errors that played out on the rest of the Somme. Continuously employed in working parties up to the day of the assault the troops of the two assault divisions (46th and 56th) did not receive any rest prior to their assault. No use was made of a rolling barrage; rather the
artillery fired upon the German front line trenches, and lifted at zero-hour to the
communication trenches and other points to the rear of the first line trenches. The 56th
succeeded in taking the first line trenches, the 46th only partially so. The difference
between the two initial outcomes was the successful use of smoke in the case of the 56th.
The smoke was enough to delay the Germans from coming out of their dugouts and
manning machine guns and calling for artillery fire until after the men of the 56th had
already reached the front line trenches. On the front of the 46th, the smoke did not
obscure the assault, which gave the Germans time to come out of their dugouts and alert
their artillery to commence the shelling of no mans land. This small difference in time
was enough to catch the leading waves of the 46th out in no mans land with artillery fire
and direct fire from machine guns. Even though the 56th succeeded in taking the first line
of trenches, however, it could not hold. The immediate cause was the immediate
counterattack conducted by the German units in this sector. However, the main
contributing factor was the failure of the BEF to conduct effective counter battery fire.
The follow-on waves crossing no mans land took heavy casualties because of the severity
of the German shelling, and effective artillery preparation preceded the German
counterattacks. So the men of the 56th were never able to consolidate and hold their gains
of the morning.¹¹

On 26 September 1918, in the US IV Corps sector the 90th US Division launched
two raids totaling six companies of infantry at the Hindenburg line after six-hours of
preparatory fire by divisional artillery. The plan was for the raiders to advance behind a
rolling barrage, enter the enemy trenches, and then withdraw. A contingency plan was
prepared for a general advance if the raids were successful and the Germans withdrew,
but this did not occur. German artillery fire rained down on the infantry in their
trenches, and machinegun fire engaged them as they struggled to keep up with the rolling
barrage that moved too fast across no mans land. The few who reached the enemy
positions could not penetrate due to losses sustained and the intact wire and fortified
obstacles blocking the route. Tactically the raid was a failure, but operationally it
succeeded in holding German attention to this front.

The AEF made the same tactical errors that the BEF had on the Somme. Counter
battery fire was not able to suppress the German artillery, which led to large casualty
figures in the assault. In addition, a rolling barrage that separated from the infantry it was
covering was worse than no rolling barrage because field artillery firing a barrage
mission was not available for other missions. How the separation of the infantry from the
rolling barrage occurred was irrelevant.

Another reason for the operational success was that the Germans did not believe
the AEF would attempt an assault along the Meuse-Argonne front. That sector was, from
the German point of view, too well fortified with multiple strong points. Also, the
Germans did not believe that there were enough American forces in France to start
another major offensive so soon after the reduction of the Saint Mihiel salient.

On the far left of the AEF’s line the 77th US Division conducted a deliberate
attack as the left of three assault divisions in the US I Corps. In the 77th US Division, the
assault took place with both brigades in line. Each brigade had two regiments in line.
Each regiment had one battalion in line, one in support. The third battalion was in either
brigade or divisional reserve. Each assaulting battalion went forward on a two-company
front, with additional support and followed by the other two companies of the battalion.
The additional support consisted of two accompanying seventy-five-millimeter field guns, a company of machine guns, one thirty-seven-millimeter gun, and three Stokes mortars. Each of the other eight assault divisions on the AEF front conducted the assault with similar formations and attachments.

The assault of 1 July 1916, by the BEF was only successful in one corps area. On the extreme right of the Somme battlefield, the XIII Corps did succeed in obtaining its first day’s objectives. XIII Corps assault troops consisted of two divisions from Kitchener’s Army (18th and 30th). The reason for this success is the effectiveness of the creeping barrage in protecting the initial assault waves, the successful suppression of the majority of the German artillery by both the British and French artillery, and the extensive training the divisions received, most notably that received by the 18th Division. The men had practice the assault on mock-ups of the actual trench system and thus could successfully consolidate the fortified zone. In the center of the Somme battlefield, the III Corps did not reach its first day’s objectives. The heavy artillery lifted off of the front line German trenches thirty minutes prior to the advance of the British infantry. Even with individual battalion expedients, such as laying down in no man’s land prior to zero hour and advancing in small groups rather than the proscribed linear waves, III Corps failed to allow the infantry to traverse no man’s land in numbers that would be effective.

On the extreme left of the Somme battlefield, the VIII Corps artillery planned a rudimentary creeping barrage based on six lifts starting at the German frontline trench and proceeding to the rearward position. Theorizing that the infantry would advance at fifty-yards a minute, the artillery planned to lift its fire at the same rate. Also provisions
contained in the artillery plan for the assault included moving field artillery forward with each assaulting division tasked to push forward two batteries of artillery each “at short notice.”^19 The overall preparation for VIII Corps assault telegraphed the commencement of the assault to the defending Germans. The Hawthorn Redoubt mine was fired, the heavy artillery shifted to the reserve trenches, half of the divisional field artillery shifted fires to the reserve trenches, and the trench mortars laid down fire upon the German frontline trenches all at or slightly prior to zero hour.^20 Lessons that the BEF should have already learned and absorbed apparently were not. Suppression of the enemy artillery was required. Cutting the wire obstacles was essential. Killing or suppressing the German machine gunners manning the first line of defense until the assaulting infantry reached their position had to take place.^21 Where the artillery succeeded in cutting the German wire, small elements of VIII Corps did succeed in making it into the German position, notably at the defensive position known as the Quadrilateral Redoubt. Due to previous fighting, this position was a salient into no mans land, and the Germans realized that they could not hold the position in the event of a serious attack. The Germans planned on blowing the position and retreating if attacked.^22 The losses taken by these formations in making this advance were such that they could not hold unless substantially reinforced.

Returning to the Meuse-Argonne, an assault on 29 September 1918, by the 35th US Division was typical for the numerous tactical errors committed. Corps headquarters ordered the 35th US Division to launch an assault at 0530 hours, but the assault order did not reach the relevant regiment until 0525 hours. Promptly at 0530 hours, the rolling barrage started, but no infantry followed. The barrage rolled forward, past the first enemy position and stopped, forming a protective barrage just beyond the position. The Germans
pushed machine gun teams forward into shell holes and waited. When the infantry finally
did advance, it was into the teeth of direct machinegun fire. The 140th Infantry Regiment,
after three days of continuous combat, mustered around 1,000 men (they started with
3,000). The objective was the village of Exermont. A little over one hundred men
eventually reached this village.23

In five days of fighting straight ahead, the AEF was still shy of its limited
objectives. The cost was very heavy. Three of the nine assault divisions had to be sent out
of the battle zone, and a fourth was moved back to be the corps reserve. Why did this
happen? The single most important factor in the failure of the AEF in the initial assault
was a lack of time. The divisions employed as assault divisions were inexperienced. They
did not have enough training time or experience to successfully engage in modern
combat. The more experienced divisions of the AEF had not yet disengaged from the
Saint Mihiel sector. In their defense, the units were committed to a frontal assault straight
against heavily fortified positions. This would have been a costly endeavor for even the
most experienced combat division. General Pershing clearly identified why the AEF was
not more successful in September when he said:

    The vast network of uncut barbwire, the deep ravines, dense woods, myriads of
shell craters, and a heavy fog made it extremely difficult to coordinate the
movements of the advancing infantry, especially in the less experienced
divisions.24

Added to this very serious terrain problem facing the attacking divisions was their
relative inexperience and poor coordination with supporting artillery. Even here the
challenges continued. Most divisions did not have their divisional artillery with them for
the battle; they went in with field artillery brigades from other divisions. This ad hoc use
of divisional artillery again was an outgrowth of the lack of time, in this case the artillery
brigades that had found shipping space to come over to France were still in the training and equipping phase of their formation.

The BEF did not apply many of the lessons from the first day of the Somme offensive until much later in the war. After the massive bloodletting of the first day, General Haig strove to continue the offensive. In his mind, it was logical. One third of his assault front had at least partially succeeded, gaining the first line of the German trenches. Haig assumed that the German defenders were as disorganized, bruised, and battered as his own BEF, and extrapolated out that one more push would lead to a breakthrough and a return to open warfare. This did not occur. Robin Prior and Trevor Wilson refer to the two-weeks after 1 July as “Ill-Considered attacks on a Small Front.” The BEF did manage to take some additional ground, but again at an enormous cost in casualties and only because the German defenders were disorganized.

The Germans, at least, took the massive casualties and the disorganization that they suffered as a tactical problem that they then commenced to solve. From this engagement, Tim Lupfer drew a direct link to the development of the German doctrine of elastic defense, theorizing that the Germans had to find some way to absorb the weight of artillery fire and still maintain an effective defense.

For example, on 3 July 1916, III Corps conducted a divisional assault. Four battalions attacked after an artillery bombardment. The first waves succeeded in reaching the German trenches, but supporting companies could not cross no mans land due to the heavy German barrage and machinegun fire. From Edmonds, comes the following:

Of the men of the five battalions (two companies of the 6/Buffs in support had reached the trenches behind the 6/R. West Kent battalion) who had entered the German position very few returned: they fought until their supply of bombs ran
out and were then gradually overwhelmed. By 9 A.M. the 12th Division reported
total failure with the exception of a footing gained on the outskirts of Ovillers,
and, in the end, this was lost. The action, which cost nearly 2,400 officers and
men, was another reminder that an assault upon a narrow front, without adequate
flank protection and lacking the element of surprise, was bound to result in a
useless waste of life.28

What Edmonds left out was even with surprise and effective flank protection if one fails
to suppress the enemy artillery with effective counter battery fire losses will be extensive
and possibly lead to failure.

The second phase of the Meuse-Argonne found the Americans still short of their
first day objectives especially in the center sector, primarily the V Corps zone. The 90th
US Division relieved the 5th US Division in III Corps sector starting on 21 October 1918.
The objective for First US Army was the Freya Stellung, the last of the four prepared
defensive positions in the German lines. The task for the 90th US Division was to
complete the occupation of the third line and consolidation in preparation for the planned
deliberate assault upon the fourth line. The command of the 90th US Division preferred
this type of operation. Instead of being limited to frontal attacks, they could use fire and
maneuver to flank German machinegun nests left behind to delay the American advance.
This was by no means cheap in terms of life, and the Germans maintained air superiority
and effective artillery. This translated into high casualties for the attacking Americans.
Especially effective against the Americans was the heavy use of chemical warfare by the
Germans. Because the Germans were standing on the defensive, they could afford to use
persistent agents such as mustard gas liberally, greatly reducing the effectiveness of
American artillery and causing heavy casualties among infantry in their own trenches.29
An additional factor is the detachment of the division’s artillery and its replacement by
the divisional artillery of the 80th US Division.30 During this portion of the battle, the
German defenders consisted of the 123rd Division and later the 28th Reserve Division. The AEF intelligence section rated the 123rd Division as third class, and the 28th Reserve Division as first class, further categorizing it as an assault division.\(^{31}\)

Most of the divisions ordered to conduct a major methodical assault against prepared defensive positions in this phase had by now suffered horrendous casualties in that same type of assault. Major General Cronkhite’s guidance to his division contains some horrific guidance “Continue to smother his machine gunners by skillful maneuvering; hit his line hard and push through.”\(^{32}\) This is still trench warfare.

Shifting to the final phase of the Meuse-Argonne, the AEF finally demonstrated some tangible improvement in their tactical combat effectiveness. The G-5 section was anything but idle during the Meuse-Argonne operations. The G-5 had published its *Notes on Recent Operations No. 3* that covered the Saint Mihiel operation and the first five days of the Meuse-Argonne operation. Specifically giving advice to the artillery commanders as early as 27 October 1918, in First Armies Field Order No. 88, *Notes* identified numerous areas in the correct use of artillery.\(^{33}\) The main lesson that the G-5 attempted to impart was that artillery must move forward more quickly than had been the case. The artillery barrage was set by each Corps, and for the 26 September assault is was set at 400 feet per minute for I Corps, much too fast for the infantry to keep up. The AEF corrected this for the 1 November assault, with the result that the assaulting infantry were able to reach the hostile positions while the stunned German troops were still emerging from their protective dugouts.\(^{34}\)

During this final phase of the Meuse-Argonne, the 90th US Division finally participated in a general attack. The morning of 1 November 1918, the division attacked
behind a rolling barrage with one brigade. For this assault, corps headquarters attached an additional regiment of artillery to the division. The artillery preparatory fire failed to destroy all the German machine guns. The advance of the 360th Infantry Regiment almost stopped there, but one platoon flanked and then overran the hostile position, allowing the regiment to continue its advance. The regiment advanced on a one-battalion front, with the third battalion in the lead. Once it took the enemy positions on the hills in front of the regiment (Hills 300 and 278), the regimental commander pushed the second battalion forward. This battalion advanced using fire and maneuver to take the next group of German machineguns in the flank and capture the woods. Once the second battalion had captured the woods, the first battalion continued the attack. This battalion captured the next major hill (Cote 243) and quickly prepared it for defense from German counterattacks. The casualties in this regiment, and its sister (359th Infantry Regiment), while relatively light in relation to the numbers of enemy engaged and the terrain captured, still meant that the brigade was no longer combat effective. It could not continue the advance. With the Germans in retreat, the divisional commander ordered his second brigade (179th Brigade) into the fight to continue the exploitation. The 90th US Division continued on to clear the Meuse River of all remaining German resistance, not allowing the enemy to establish new defensive positions.

The 80th US Division was the right flank division for the left flank corps (I Corps) for the final assault. Its assault was more in line with the tenets of open warfare than the trench warfare it had practiced to date. In the face of a retreating enemy, the infantry had difficulty maintaining contact, with only intermittent attempts by German rearguards to slow or stop the advance.
The 89th US Division attacked on 1 November 1918. Its task was to “gain the Barricourt Heights the first day, which would break the German hold in the entire sector of the First Army AEF. This would force the Germans back to the line of the Meuse, inflicting not merely a major but probably a decisive defeat.” The 89th US Division, like several other divisions in the AEF, did not have its organic field artillery brigade. For this phase of the operation, the 89th US Division had attached or in support, two complete field artillery brigades as well as two additional regiments of field artillery. The assault consisted of two-hours of artillery preparation with the infantry following a rolling barrage. Each assault battalion had an attached company of machine gunners and two accompanying guns, while each battalion in support had an attached company of machine gunners. On 2 November 1918, the 89th US Division shifted from trench warfare to open warfare. The plan had the infantry following a rolling barrage, but the artillery coordination was so poor that the infantry did not follow the weak fire of the field artillery. Other tactical errors included the failure of the 89th US Division to conduct effective liaison with adjacent units. It was successful in tying in with the 2nd US Division on its left, but it had no contact with the 90th US Division on its right until 3 November 1918. Nevertheless, the infantry of the 89th US Division advanced behind an organic machine gun barrage. If the Germans had put up a strong line of resistance then this assault would have probably failed. Then the 89th US Division would have simply stopped and reverted to the tenants of trench warfare and planned a methodical assault behind an effective rolling barrage.
What the BEF learned on the Somme in 1916? The key to successful assault of fortified positions lay in complete cooperation of the artillery with the assaulting infantry. Artillery cannot destroy defending forces alone.

An effective rolling barrage is vital for a successful assault on fortified positions. The assaulting infantry must advance so close behind the barrage that they suffer casualties from the friendly fire. This did not lessen the importance of the preliminary barrage on the enemy positions.

Before the actual infantry assault, the artillery has to accomplish four distinct tasks. The first is to prevent the enemy’s front line troops from engaging the assaulting infantry with direct fire or calling for indirect fire. The second is to clear successfully at least lanes through all obstacles. The third task is to suppress enemy artillery. Finally, the fourth task for the preparatory artillery is to deny the free movement of supplies, reserves, and reinforcements to the enemy’s main battle line.

Ideally, a heavy preliminary barrage would destroy the defending troops, but usually this was an impossible task. Even in the face of the heaviest bombardment over a long period, some of the front line troops would survive. It was possible to destroy fortified battle positions, but the extensive shelling would so turn up the ground that a machine gun and crew could set up in the numerous shell-holes and engage an assaulting force. Long bombardments did have an effect on enemy effectiveness over time both physically and psychologically. Lack of sleep was a real threat, with the continuous thunder of the shelling making sleep in the front lines difficult if not impossible for the troops even under shelter. In addition, the feeling of helplessness and isolation with communications cut and decimated ration parties and reinforcements when they even
arrive. The real objective of the preliminary barrage is to force the enemy to take shelter and to prevent him from manning his machine guns until after the assaulting infantry has entered the hostile trench.42

The preparatory phase had to include successful neutralization of enemy obstacles. The use of the word “neutralization” is deliberate. The point is that the wire could not be in a condition that would slow or stop the assaulting infantry. Once the assaulting infantry stopped to clear lanes through wire the protective creeping barrage would continue on its way, leaving the assaulting infantry uncovered. Then surviving hostile machine gunners would climb out of their shelter, concentrate on this area, and decimate the assaulting infantry. The most obvious method to neutralize wire was to destroy it all along the line. This required a huge amount of high explosive shells and the time of the artillery batteries to conduct the fire missions. While the artillery was conducting obstacle destruction fire missions it was not conducting other required fire missions. Observation of the condition of the wire and the fall of shot were also required. Once the Germans’ defensive position theory had progressed to sighting trenches and wires behind a reverse slope this became much more problematic.

Suppression of enemy artillery was required during the infantry assault phase. Assault troops had to leave their trenches, had to cross no mans land, were canalized in front of obstacles, and had to pass other geographic features that all caused the assaulting infantry to bunch up into groups that were perfect targets for artillery. If the enemy artillery was not at least suppressed it could fire a devastating barrage upon assaulting infantry. This counter-barrage could break up an assault or at least force it to ground. By
forcing an assaulting infantry formation to ground, enemy artillery often succeeded in separating the troops from their protective barrage.

A final task for the preparatory artillery fire is to deny free passage of supplies, reserves, and reinforcements to the planned objective area. This also effects the physiological preparation of the defending forces. Artillery fire alone cannot destroy all supplies and reserves attempting to reach the front lines, but it can severely attrite them.

Another lesson the BEF derived from the Somme was the absolute requirement for careful preparation and detailed staff work prior to an assault. Resting and feeding assault troops prior to an assault were essential. Failing this rather obvious preparation would reduce their effectiveness. Detailed planning and adequate rehearsal of the plan by the assault troops in the rear was required. Once they were intimately familiar with their role and that of the men and units to their right and left, the troops rested prior to the actual assault. This rarely happened. The front had to be prepared for the assault. This meant digging assembly and assault trenches. It also included laying and burying miles of cable for communication. Building and improving narrow gauge rail and roads for movement to and from the front was required.43 The shortage of labor troops meant that the task of accomplishing these preliminary steps fell to the assault troops.

After the initial assault on 1 July 1916, the BEF had not reached its objectives. Rather than consolidate what they had, the BEF continued to attack where they were able to in a series of small assaults. These initial assaults did not have the advantage of meticulous preplanning or training of the units involved. In fact, most of the divisions were new to the terrain, and did not know there own positions much less those of the enemy.
An analysis of the fighting taken after the fact could have led to significant tactical changes. For example, the following waves of an assault were often taking heavy casualties from German artillery regardless of the success or failure of the initial assault. The inability of artillery to cut off communication completely between the enemy front line positions and their supporting artillery allowed German front line troops to call for fire almost as soon as the British infantry left their assault trenches. The enemy would call for an emergency artillery barrage via flares, which would fall onto the British frontline trenches and no mans land.44

Tim Travers has even gone so far as to claim if the British artillery had not lifted at zero from the enemy trenches to the support trenches in the rear, the assault on 1 July 1916 could have met with better success.45 He claims there were three lessons that the BEF learned on the Somme. The first, artillery preparation and counter battery requirements, has been addressed previously. However, he identified two other lessons the BEF should have learned. One is the tactical handling of the assault. The third lesson is on the BEF’s command structure and attitudes.46

General Haig’s conduct provides an illustration of this third lesson. Haig left the planning of the tactical fight to his subordinate commanders. For the 1916 Somme offensive, this meant that General Sir Henry Rawlinson’s ideas on the correct method of assault were preeminent. Rawlinson based his tactical philosophy on the methodical attack in the vein of trench warfare. Caught up in this approach Rawlinson stressed discipline, weight, and mass. He identified two critical points. The first was the initial capture of the enemy front line trenches. This portion of the fight seemed to be relatively easy, and it should have been. Unfortunately, it required detailed planning and execution
of an artillery plan. Once Haig changed the plan, no one went back and looked at the planning assumptions. By increasing the depth of the artillery preparation, General Haig spread the artillery out further without anyone checking to see if it was still adequate to complete all the tasks assigned. As Sir Edmonds puts it in the official history, “No number of waves, as it proved, were of any avail against the actual unshaken defence.”

The second critical point was the retention of the captured enemy trenches. Again, here the fault lies squarely with the inadequate counter battery program. The support and reinforcements were available on the Somme, but crossing no man’s land after the German artillery came into action was often impossible.

The key difference, with respect to training, between the AEF and the BEF is the concept of “battalion culture.” The officer commanding the battalion in the BEF was responsible for the training of his unit. Regimental loyalty was the point. Every battalion in the BEF, including the Territorials and the New Armies, were a part of a recognized regiment, each with its own proud heritage, customs, and traditions.

Professor Sheffield noted the prevalence of the “public schools ethic,” a highly paternalistic view of ones position in society, in the junior officers of the BEF. This tied to the continuation of the Regimental System ensured that replacement officers, even when they were not public school graduates continued to possess this public school ethos. The British institutionalized the public school ethos by placing its officer candidate battalions at prominent colleges and universities. This public school ethos consisted of a strong cult of team sports, a heavy intellectual grounding in the classics, and a view of the world that saw natural leaders leading, and others automatically were following without question.
If the above is true, then how does one account for the relatively high effectiveness of the Australian Imperial Forces and the Canadian Expeditionary Force? The Australian system of recruiting, training, and commissioning junior officers was remarkably similar to that of the BEF. The main difference was that the new officers went back to their original unit, with the men they had served as enlisted soldiers. Newly commissioned officers of the Canadian Expeditionary Force also returned to their previous battalions. Additionally, there was no regimental lineage or battalion culture present in either the Australian Imperial Forces or the Canadian Expeditionary Force. The public school ethos did not take root in these formations at the same level as it did in the rest of the BEF. Additionally, the BEF did not have a training section at GHQ until 1917. This oversight cost the BEF heavily in lives. The point behind a central training establishment is not only to publish training schedules but also to seek out the best way to solve the problems that faced the troops in the field. In the words of Tim Lupfer:

A greater service can be rendered by the higher headquarters that earnestly solicits opinions and experiences from units in the field, evaluates and distills the information, and disseminates the findings back to the field units.

This was the key behind the evolution of German tactics, which the BEF did not apply until at least 1917 whereas Pershing understood the necessity of centralized training and battlefield analysis before the first division of the AEF arrived in France.

For the BEF on the Somme, the infantry attempted to try to follow the artillery’s rigid program. If it failed to take a trench in the time allotted, there was no way to stop the next lift from occurring. The idea of a creeping barrage to provide protection for the assault infantry developed among several units individually, but without a central training establishment to collect and analyze these ideas and then disseminate them back down,
advances in artillery-infantry cooperation came to the BEF in fits and starts. Some units made the leap and planned effective creeping barrages. Some were still ordering the barrage to start on the enemy trenches and to lift at zero regardless of the width of no mans land or the ability of the assaulting infantry to reach the enemy trenches before the Germans could man them.

The real adaptive force on the Somme turned out to be the Germans. Both sides took massive casualties in the month of July, but the Germans took a systematic look at how artillery caused the casualties. This systematic evaluation led eventually to the German development of the elastic defense.

What did the AEF learn in the Meuse-Argonne? Again, the key to successfully taking a strongly fortified defensive position lay in complete cooperation of the artillery with the assaulting infantry. Artillery cannot destroy defending forces alone, and unsupported infantry cannot take and hold an enemy position in the face of determined counterattacks.

Artillery doctrine was not yet mature enough to make the shift from trench to open warfare in a seamless fashion. Doctrine existed, for example in *Combat Instructions*, for designating the amount and distribution of artillery in infantry batteries and accompanying guns. *Combat Instructions* recommended designating two batteries of light (seventy-five millimeter) field artillery as infantry batteries per infantry brigade, with the remaining battery of the artillery battalion broken up into individual gun sections called “accompanying guns.” Neither infantry batteries nor accompanying guns fired in the preparatory phase or the rolling barrage. The accompanying guns went forward with the assault battalions, available for immediate direct artillery fire to neutralize or destroy
individual enemy strong points. The infantry batteries went forward with the support battalions. The AEF recognized that accompanying guns are capable of smashing isolated strong points. If the defensive position is more extensive, then the infantry batteries can provide the fire support. If the position is strong enough to require more firepower than the infantry batteries could provide, the infantry would call for fire from divisional artillery. This entailed a long amount of time, and usually resulted in the end of forward movement. By implication, this also resulted in a return to trench warfare methods.

Command and control was a key lesson identified in the first part of the Meuse-Argonne. Headquarters had to be far enough forward so the commander can receive and react to information in a timely fashion. If too far removed from the battle, the commander could not influence its course of action. Conversely, if the headquarters was too far forward the commander devolves to command of a single battalion or regiment, with the other units in line thus out of the effective reach of his command. The guidance from G-5 for these situations was clear; “In every case there is a reasonable compromise between a location too far forward and one too far back.”

Another challenge to command and control was operations at night. Night turns open terrain into cover, but it turns broken or wooded terrain into a void. The challenge of maintaining liaison in broken terrain during the hours of darkness proved almost insurmountable. The night attack was effective in continuing an assault, but usually led to a lot of confusion and mixing of assault units especially if the units were not thoroughly familiar with the ground and the mission.
The limited numbers of compasses and maps was a hindrance, especially in the face of heavy junior officer casualties. The old method of navigating by landmarks proved impractical with the geography of the battlefield changed by the extensive use of high explosives. A better method of land navigation was to identify axis of advance by magnetic heading. Then as long as the troops had a map and a compass, they could continue in generally the correct direction even in the face of smoke, gas, and terrain that resembled the moon.

The conflict between trench warfare and open warfare was the most apparent in the infantry. In units filled with hastily trained and newly drafted men, the level of cohesion was very low. Consequently, the level of importance to the individual of self-preservation was very high. This led to a desire to assault with the fewest casualties possible. From the infantry's point of view the enemy artillery and machine guns were the big threat. The infantry desired its artillery to shell enemy artillery and machine guns whenever possible. The infantry wanted to advance behind the protection of a rolling barrage whenever possible. However, this desire for continual trench warfare was exactly the heresy that General Pershing was fighting. Methodical trench warfare was required to break into continuous fortified zones, but once breached, reliance on trench warfare methods led to higher casualties. This was a direct result of the German practice of leaving machine gunners as rear guards. Even with a rolling barrage, it was often impossible to kill all the enemy machine gunners. The assaulting infantry rolling forward in waves were the perfect target for individual machine guns to fire. Rather than wait for a rolling barrage the G-5 section recommended in their Notes on Recent Operations No. 3 a different approach:
The infantry sometimes seemed more concerned with the avoidance of loss than with a desire to close with the enemy. Companies, battalions, and regiments occasionally remained inactive in the presence of relatively small hostile forces while waiting for orders, or for artillery support, or for machine guns, or missing grenades, etc., etc. Troops have been taught not to make frontal attacks against machine guns. It may be that such instructions have over-emphasized the conservation of men until timidity has been produced. To maneuver is desirable. But it must be remembered that maneuvering is only in order to place the enemy at a disadvantage, and that the final aim is to close with him in personal combat. . . commanders, when confronted by a situation, must not vacillate between conflicting solutions while searching for the ideal, but promptly determine upon a reasonable procedure and ACT. In case of doubt, adopt the bolder solution. It is seldom wrong to go forward. It is seldom wrong to attack. The best way to clear up a doubtful situation is to advance. In the attack it is much better to lose many men than to fail to gain ground. Inaction is the worst military crime.60

This advice also addressed one of the other shortcomings of the AEF, the relative inexperience of its officer corps. The AEF had a training plan, but like other initiatives, it suffered from a lack of time to complete its execution. This guidance also addresses some of Mr. Nenninger concerning with respect to the tactical confusion in the AEF. Trench warfare was methodical, controlled, and completely defined on paper. Open warfare was defined negatively, with the absence of the rolling barrage being the main differentiation between the two.61 Open warfare relied on individual initiative. Combining these two completely divergent styles of warfare with amateur officers and gross mistakes will occur. What the AEF was attempting to do was to break the junior officers of the habit of trying to look for a book solution to a tactical problem in open warfare.

No one will claim that the AEF by November 1918 was completely tactically combat effective. Nevertheless, they had improved dramatically over what General Pershing started with, and the potential existed for even greater effectiveness. Artillery support, while not perfect, had improved and if time permitted, the reunification of the
infantry with their divisional artillery the habitual employment of the two may have led to
even better effectiveness.

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2 Prior and Wilson, *Command on the Western Front*, 139.

3 Pershing and Liggett, 35.


7 Ibid., 68. The Meuse-Argonne operation was under the control of the First Army AEF, which General Pershing directly commanded in addition to his command of the AEF as a whole. The staffs were different, but the commander was the same until Lieutenant General Hunter Liggett took command of the First Army on 16 October 1918. The Second Army AEF was officially formed on October 10, 1918 with Lieutenant General R.L. Bullard as its commander.


11 James E. Edmonds, *History of the Great War, Based on Official Documents; Military Operations; France and Belgium, 1916: 2nd July 1916 to the end of the Battles of the Somme*, vol 2 (London: Macmillan and Co., Limited, 1932), 453-76. Robin Prior and Trevor Wilson dispense with this portion of the Somme assault with one paragraph, ending with “a feint attack was probably all that was required at Gommecourt…” Prior and Wilson, *The Somme*, 71. However in their earlier work, they point out that providing smoke was not necessarily the key to a successful assault. If the infantry had followed a rolling barrage, and if the BEF had an effective counter battery program then the outcome
might have been different. As it was smoke could have been used to lesson the casualties suffered by the infantry crossing no man's land. But without effectively suppressing the German artillery batteries the outcome would have still been similar. More troops conceivable would have made it into the German frontline trenches, but the follow-on waves would have still suffered from the German barrage. Prior and Wilson, *Command On The Western Front*, 162.


14 Rush S. Young, *Over the Top With the 80th: By a Buck Private* (Privately published, 1933).

15 The 3rd battalion 305th Infantry was the reserve for the 153rd Brigade. The 3rd battalion 308th Infantry was the reserve for the 154th Brigade. The 77th US Divisions reserve was the 1st battalion from the 306th and 307th Infantry, respectively.

16 Ochsdler, 64-5.


18 Ibid., 93-7.


20 Ibid., 431.


24 Pershing and Liggett, 50.


27 Lupfer, 7.


29 White, 113-5.
American Battle Monuments Commission, *90th Division*, 24. The 165th Field Artillery Brigade was detached and assigned as a reserve unit for III Corps, the 155th Field Artillery Brigade, already in place, assumed the role of divisional artillery.


320th Infantry Association, 22.

*USA WW*, 9:335.

Ferrell, 29.

American Battle Monuments Commission. *90th Division*, 32. The 90th Division thus had control of the 155th Field Artillery Brigade (from the 80th Division) and the 16th Field Artillery Regiment (from the 4th Division).

White, 130-3.

320th Infantry Association, 15.


Ibid., 31-2.


Griffith, *Battle Tactics on the Western Front*, 75.

Travers, *The Killing Ground*, 156.

Ibid., 154.


50 Ibid., 43-5.

51 Ibid., 55, 59.

52 Ibid., 168.


54 Lupfer, 7.


56 Lupfer, 7.

57 Headquarters, American Expeditionary Forces *Combat Instructions*, 7-8; and Grotelueschen, 80.


60 Ibid., 14.

CHAPTER 6

CONCLUSION

The AEF did not win the Great War, but they did ensure that the British and French did not lose it. Its ability to achieve a basic level of tactical combat effectiveness did contribute to the allied victory in 1918, as opposed to the planned 1919 or 1920 decisive offensives. The AEF deployed to France and conducted sustained modern offensive operations against one of the toughest land armies in the world. In addition, at the strategic level they met all of President Wilson’s requirements, including a large enough American casualty list to get him a seat at the peace table with some influence.

Comparing the relative effectiveness in combat of two different military forces is fraught with inconsistencies, the most obvious being that each faces a different tactical problem in the face of the enemy and the terrain. The German Army was the primary opponent of both the BEF and the AEF, but it was a different army each engagement, let alone the over two years that separate the BEF’s operations on the Somme from the AEF’s Meuse-Argonne campaign.

This thesis does not suppose to compare the AEF with the BEF of 1918. By 1918, the BEF was the only army, with the possible exception of the German Army, which had developed a good enough understanding of combined arms warfare within the limits of the existing technology. As previously stated, the Great War was not renowned for its high level of tactical expertise, but improvement did occur in every army. The BEF had improved by 1918 into an effective force for its time. The AEF was on the same learning curve, but by its actions, it was climbing the curve at a faster rate than the BEF had.
Three factors led to this American superiority in combat adaptability during the Great War. The first was the creation of a G-5 for training at AEF GHQ. Another factor was President Wilson’s initial decision to go with conscription from America’s active entry into the Great War. Finally, the culture of the American Army made it better suited to adapt to the pressures of modern war. To look at this factor from another angle the military culture of the British Army was not suited toward rapid change especially when the geniuses for that change came from junior officers.

The first factor that helped the AEF was training. The establishment of a separate training section by General Pershing was the key factor in the rapid growth of the AEF from a mob of hastily raised citizen soldiers into the basic shape of a modern field army. The centralization of all aspects of training in the G-5 section of AEF GHQ was the important point. Pershing assigned the G-5 section the task of providing directed training, organizing and staffing schools, preparing and publishing manuals and pamphlets for the overall tactical improvement of the AEF. Included in its prerogative was the prescription for tactical inspections and the designation of specific observers to accompany the AEF into battle and capture and analyze that battlefield experience for appropriate lessons. These lessons went back into all the AEF’s divisions through the various schoolhouses and the *Notes on Recent Operations* series of pamphlets. The open question is did the observations of the G-5 observers led to units adapting to the more flexible open warfare style of battle successfully? Is there any direct linkage between the G-5’s *Notes on Recent Operations* No. 3 and specific battlefield tactical successes? More research in the archives is required to prove or disprove this assertion.
The BEF of 1916 was clearly behind the AEF with respect to adapting battlefield experience to actionable changes in training and doctrine. Until the creation of a training directorate back in England, the BEF did not have a central repository for training and doctrine. Each Army developed its own ideas for warfare without any real directive input from higher headquarters. Paddy Griffith believes that this was ultimately a positive way for the BEF to develop new tactical doctrine quickly, and that after the creation of the Directorate of Training the BEF did have a more centrally controlled doctrinal clearinghouse than other historians allow. M. A. Ramsay also identified this lack of a central training directorate as a failure in the BEF of 1916. He claimed that the reason for the tardiness of the BEF in taking the experiences and lessons of the field and converting them into useful doctrine and training was due to a shortage of trained staff officers. That the BEF was gaining experience in 1916 is without question. Numerous officers in the BEF were drawing lessons from their combat experiences. Nevertheless, the lack of a central arbitrator slowed the leap to doctrine, a lack of “peer review” to use a modern scholarly term. Drawing the wrong lesson from experience occurred. A centralized training organization can make these same mistakes, however if that same organization stays tied to the fielded forces via direct input from units shortly out of battle and trained observers during battle, the ability of the whole army to adapt to radical changes should be greatly increased. Some have portrayed this lack of centralized training as an outgrowth of the short war concept. However, this was not the impression that Lord Kitchener held. Once proven false, the assumption that the war would be short should have driving the General Staff to conduct an overhaul of the training system. This overhaul did not occur until 1917.
Another area where the AEF was able to adapt more quickly than the BEF derived from manpower utilization. When President Wilson finally went to war, he quickly advocated conscription. This was a political landmine that could have destroyed his administration, but an excellent propaganda campaign coupled with dramatic German miscalculations, specifically their handling of the Zimmermann affair, allowed him to push through the Congress a conscription bill. Even with conscription, as opposed to traditional methods of force generation, a long lead-time was required. The added benefit provided by conscription was the rationalization of the nation’s manpower.

The BEF was behind the AEF experience concerning logical manpower utilization in a total war by about two years. For the BEF the one factor that assisted the most in its force generation was the appointment of Lord Kitchener as Secretary of State for War. He understood that the war was not going to be a short one, but long and involve the total effort of the empire to fight it successfully to its conclusion. However, he failed the BEF in a number of ways. His reliance on volunteers, while initially successful was an incredibly inefficient use of manpower. Many of the men who volunteered for service and died as riflemen would have potentially contributed much more to the BEF’s combat effectiveness if instead they had entered officer candidate school. Additionally, Lord Kitchener should have eliminated the distinction between the various divisions from the start, rather than let them slowly wither away through casualties and wastage.

The final area that allowed the AEF to adapt to modern warfare quicker than the BEF was the more open and democratic culture of the Americans. In the American Army prior to the Great War there was no stigma associated with attendance at Staff College; rather the opposite was the case. General Pershing actively sought out graduates of the
Leavenworth schools for employment as Chiefs of Staff of the newly forming divisions. Even before exhausting the existing supply of trained staff officers General Pershing realized that the AEF would eventually require more than were available. He authorized the creation of a Staff College course in Langres France in late November of 1917.6

The same democratic principles did not apply to the British experience. The BEF had to overcome its Edwardian heritage and its strongly held belief that the only good officer was a gentleman, even though the term “gentlemen” was not precisely defined.7 In the British Army, the assumption was that officers had to come from certain high social and educational backgrounds in order to be effective. There was no challenging of seniors views even if the situation had changed. The socialization of the regular officer corps that took place via family, public school, and the regimental mess was so complete that Keith Simpson identifies a return to a very similar social structure even after the Great War. It took severe casualties among infantry subalterns to force the BEF to open up officer training to promising enlisted. Even this shift in social makeup is more dramatic than the reality. This was not truly a major shift in the social makeup of the officer class, because the majority of the enlisted men who took temporary commissions were volunteers from the middle class.8 The adjutant held Robert Graves in the Regimental Depot of the Royal Welch Fusiliers while sending his contemporaries to France. Graves related that the reason was the adjutant did not think him a proper gentleman because he volunteered for duty so the other officers could watch the Grand National, which implied that Graves was not a “sportsman.” Part of the deliberately vague definition of a gentleman included the idea that gentleman was a sportsman. What eventually brought about a change of the adjutants opinion of Graves was when Graves
entered the boxing ring with an enlisted man and, successfully going a couple of rounds with the man proved that he was a sportsman. This strong regimental culture, which served the British Empire in her small wars of the Victorian age, was precisely the wrong sort of ethic required to support modern industrial warfare.

Masking these three trends that demonstrated clearly the ability of the AEF to accept fundamental change in warfare rapidly were several factors. Again, these limits to combat effectiveness were present for both the BEF and the AEF to overcome, and by the end of 1918, the BEF had successfully overcome most of them while the AEF was in the process of tackling them. The limiting factors faced by both the BEF and the AEF were legion, but the three primary ones that surface during this study were a lack of time, a lack of preparedness to field a large modern army, and the nature of coalition warfare.

The first and most obvious was the lack of time. Upon mobilization, both the BEF and the AEF suffered from similar problems that retarded there crawl toward combat effectiveness. For the AEF the long sea lines and a lack of shipping hulls limited their ability to bring forces into France. The BEF had the advantage over the AEF with respect to lines of communication. Recruitment, training, and equipping of new formations took place within one day’s sailing time of the theater of operations. But in the face of a German invader on French soil and the insistent demands of the French ally to contribute, the BEF was consistently called upon to shoulder more of the burden of war, often before they were completely ready for that responsibility. The Americans build cantonments across the US for the consolidation and training of the citizens selected for service. The AEF also suffered from this lack of time with the loss of Russia and the German spring
offenses swinging the balance of forces on the Western Front decidedly in the German’s favor until and unless the Americans committed their forces to combat.

Another counter to combat effectiveness was prewar unpreparedness. The lack of military preparedness in both Britain and the US prior to the Great War is a common theme in almost every history of the period. There existed in both countries a complete disconnect between the political policies and the military realities. The effect on both the AEF and the BEF was remarkably similar. The Americans and the British did not have a comprehensive plan for a massive expansion of the army. There was no central reserve of war material to equip a large force, nor was coordination accomplished with industry to gear up to supply this equipment. The effect on the newly raised armies was obvious, with new recruits drilling in civilian clothes with wooden rifles. Notice that the previous example does not identify a country for the troops; it easily could be a description of a British or an American training camp albeit at different times in the Great War.

The final limiting factor to combat effectiveness was the very nature of coalition warfare. Coalition warfare is difficult under ideal circumstances. In modern times, the US is normally the dominant power, but during the Great War, the US was the junior partner, even when the combatant strength of the AEF exceeded the BEF. If the national objective of the US was the defeat of the Imperial German Army in the field, then the most efficient way to place American manpower in the field was to draft the citizen soldiers of the US and ship them to France for amalgamation into existing British and French military formations. This was politically unfeasible for President Wilson. By 1918 by the British and the French were at the end of their manpower pool, both desperately needed either more troops or someone else to shoulder the burden of large portions of the front
line. The BEF faced similar problems with coalition warfare in 1916, with the French
pushing for the BEF to take more of the line first to relieve French units for proposed
offensive action, and then later to allow the French to reinforce Verdun.

Ultimately, the AEF was able to adapt to modern warfare at a faster pace than the
BEF accomplished in 1916. So how can one take the AEF’s experience and transfer it
into the modern military? Some of the lessons from the AEF’s experience are directly
transferable to the modern day military and some require an understanding of the
problem to solve with more means that are relevant.

One primary lesson that is as valuable today as it was in the Great War is the
value of effective military preparation: If one is not prepared in peacetime, it will take
time to generate forces, and as has been demonstrated in war, one will never have enough
time. The price of a lack of time is blood, if one does not have the time, it will cost more
in blood. Also, force generation during a war is the most difficult, as passions run high,
and political and military decisions that could have been made rationally during peace
suddenly take on political dimensions that force incorrect analysis. Another issue is the
challenge of taking battlefield lessons and applying them back to the force while force
generation is in progress.

Another lesson of the Great War is force generation. Will the American Army
ever again face the requirement to conduct a massive mobilization of draftee civilians on
the scale of the Great War? Probably not. Part of the challenge of the Great War was its
revolutionary character. Will the American Army ever face another Military Revolution,
a change in society and the basic concept of warfare that would render current tactics and
document obsolete? It is possible, and some believe inevitable. Taking aside the idea of
Military Revolutions, and returning to war in general, if the American Army is engaged in war with a thinking opponent, that opponent will learn and adapt from its experiences in combating the American Army. Will the American Army do the same?

To accomplish this one must have a robust, easily understood, and flexible system of doctrine fully incorporated into unit training. Once that unit is certified and deploys, there must be multiple feedback mechanisms in place to check on the quality of the training. It must be a flat organization, streamlined along the lines of Pershing’s G-5. Feedback from each deployed unit, rating and cataloging its experiences while deployed to include the relative value and shortcomings of training and doctrine, must be routine enough for all soldiers to participate. In addition, designated observers must deploy with the unit, observing the unit's execution of their wartime missions. The timely feedback of actual experience into the training cycle is the real lesson from the AEF’s experience in the Great War.

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3 Ramsay, 163-4.
6 *USAWW*, 12:20-1.
8 Simpson, 65-71, 82-4.
9 Graves, 74-5.
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