THE DEVELOPMENT OF COMBAT EFFECTIVE DIVISIONS
IN THE UNITED STATES ARMY DURING WORLD WAR II

A Thesis

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by

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* * * * *

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INTRODUCTION

The United States mobilized eighty-nine divisions during World War II, and by the end of the war all but two of these divisions had engaged in combat with the enemy. The official historians of the Army of the United States believe that the performance of its combat divisions on the field of battle in 1944-1945 "vindicated the bold calculation in Washington" not to produce more units.¹ I disagree. One should not underestimate the achievement of the Army of the United States during World War II; the Army, in conjunction with its sister services, did after all fulfill its mission of defeating the forces of Nazi Germany, Italy, and the Empire of Japan on the battlefields of Africa, Italy, France, Germany, and the Pacific. That achievement, however, should not blind one from observing that the victories won did not come cheaply, and the provision of more combat divisions to the overseas theaters would have resulted in fewer casualties over the course of the war.

The decision to cap the Army at ninety divisions had ramifications beyond whether or not the United States and its allies would win the war. The limitation on the number of divisions, when combined with the inability of President

¹
Franklin D. Roosevelt and his chiefs of staff to adhere to the "Germany first" strategy, resulted in a shortage of divisions when the western allies conducted their crucial campaign in France in 1944. This situation forced General Dwight D. Eisenhower and General Omar N. Bradley to keep their divisions engaged in battle more or less continuously during the campaign. As weeks and then months passed, the combat effectiveness of American divisions declined as they lost men to enemy fire, disease, cold weather injuries, and exhaustion. A greater number of divisions would have enabled American commanders to rotate units more frequently for periods of rest, refitting, and retraining, thereby reducing the rate of casualties. Due to the ninety division gamble and the employment of one-quarter to one-third of the Army in the Pacific, however, systematic unit rotation was impossible in the European Theater of Operations. American soldiers paid the price for the ninety division gamble from Normandy to the Huertgen Forest, the Ardennes, and the Rhineland.

Besides the numerical shortage of divisions, the performance of many American divisions, especially in their initial battles, left much to be desired. There were many reasons for the poor performance of these divisions, and high on the list is the quality of the personnel that the Army assigned to its combat forces. Until 1944, the Army Air Forces and Army Service Forces had first priority on draftees with high Army General Classification Test (AGCT) scores or
who had civilian skills that matched the needs of the service forces. The result of this system was the siphoning off of the most qualified inductees into almost any type of organization other than infantry, armor, and field artillery units. Combat soldiers in the Army Ground Forces were not only less educated than their service support counterparts, but less physically qualified as well.² By the time the War Department fixed the personnel selection system (if indeed it ever did), the Army Ground Forces had already mobilized and trained the majority of its combat divisions.

Training was another weakness in many American divisions, especially those mobilized after Pearl Harbor (with a couple of notable exceptions). These divisions suffered from high personnel turnover as the War Department shuffled soldiers around from one unit to another to meet the needs of the moment. Without personnel stability, training of divisions to combat readiness was difficult, if not impossible. Other factors also accounted for poor training. Due to the huge expansion of the Army, most divisions lacked adequate leadership, particularly at the junior officer and noncommissioned officer level. Many field grade officers were incompetent or past their prime, a result of the slow promotion system during the 1920s and 1930s. In time new leaders emerged, but in the short run the newly formed divisions muddled through training as best they could.
Shortages of equipment also plagued the Army in 1942 and early 1943, and many units trained with equipment different from that with which they went into combat. Training facilities were initially inadequate, but expanded rapidly as the Army mobilized. On the whole, however, the Army Ground Forces did not meet the goal of its commander, Lieutenant General Lesley J. McNair, of sending fully trained and combat ready divisions into combat. The certification of many divisions as combat ready was a paper drill that masked their inadequacies. Not that the War Department had much choice in the matter; by the end of 1944 the need for divisions in Europe was so great that the Chief of Staff, General George C. Marshall, sent Eisenhower every division left in the strategic reserve, regardless of their state of readiness. Had the Germans won the Battle of the Bulge, the allies would have been hard-pressed to recover their position in France, for no divisions remained uncommitted to battle.

With so few divisions in the line, the War Department worked hard to keep them at full strength. The replacement system largely achieved this goal, but at a high cost in casualties. Replacements can keep a division numerically at the correct strength, but the proportion of well-trained and combat experienced soldiers declines as minimally qualified replacements take their place. This causes the overall quality of the division to wane, and it will not perform as well in combat. As a result the division suffers a higher
percentage of casualties in subsequent battles, and requires still more replacements to keep it at full strength. This vicious cycle is not the best way to manage the manpower of a nation, but given the decision by the War Department to cap the number of divisions at ninety, there was no other choice.

Army Ground Forces worked instead to improve the training and quality of the replacements sent overseas, with mixed results. How replacements fared depended to a great extent on how receiving divisions treated them. Men who had time to train with their units, learn survival skills from combat experienced veterans, understand their role in the team, and get to know their leaders had a better chance of surviving than those men who were thrust into the front line immediately upon arrival. The best divisions in the Army learned this lesson early and treated replacements accordingly.

The Army trained approximately 2,670,000 enlisted men as replacements from 1941 to 1945, more than twice the number of men assigned to the eighty-nine combat divisions in 1945. The Army used all but two of its divisions in combat before the end of the war, and avoided the breakup of divisions that occurred during World War I. The War Department kept committed divisions nearly at full strength with a continuous stream of replacements. These were no small accomplishments. Unfortunately, the system also caused many unnecessary casualties. Although the Army attempted to improve the quality and training of individual replacements, the problem
of maintaining a high state of effectiveness in committed divisions remained. The only complete remedy was the provision of more divisions to overseas theaters to enable commanders to rotate divisions into and out of combat. Self-imposed manpower limitations and the inability or unwillingness of American policy makers to delay the counteroffensive in the Pacific made the application of this remedy impossible.

Compounding the difficulties many divisions faced in mobilization and training was the fact that only a few of them received any combat experience before wading ashore across UTAH or OMAHA Beach on or after D-Day. The fierce battles of attrition in Normandy pitted mostly untested Allied divisions, backed by a healthy superiority of artillery and airpower, against understrength German units leavened with combat experienced leaders and possessing many technologically superior weapons, particularly tanks. The Allies prevailed by wearing down the German army in bloody fighting among the hedgerows, and then penetrating through the weakened German line with American armored and infantry divisions. The campaign was not pretty, but it was decisive. It was also costly, a fact which has led to some revisionist thinking about the relative merits of the German and American forces that faced each other on the battlefield in 1944.

A few historians in recent years have analyzed the differences between the Army of the United States and the Wehrmacht during World War II, and nearly all of them extol
the virtues of the German army as a fighting organization when compared to the American forces. While useful, these comparisons are to some extent misleading. Germany began its rearmament program in 1933 when Hitler came to power, and enjoyed six years of peace in which to expand the 100,000 man Reichswehr without diminishing the competence or professionalism of the force. The Wehrmacht seasoned its divisions in campaigns in Poland, Norway, France, the Balkans, Africa, and Russia prior to D-Day. The Germans suffered many casualties, but by June 1944 the Wehrmacht had weeded out the incompetent leaders and put combat veterans in command of its units. The Germans had an established, combat-tested tactical doctrine. Most German units had solid noncommissioned officer leaders and well-trained soldiers. German equipment was among the most technologically advanced in the world, especially tanks and machine guns.

The Army of the United States lacked most of these advantages when compared to the Wehrmacht. American rearmament began in June 1940 after the fall of France, and within two and a half years the first American divisions engaged in combat in North Africa against an experienced enemy. One wonders how the German army would have fared if forced into combat in 1936 under similar circumstances. Likewise, few American divisions had received a baptism of fire before D-Day. Significantly, of those that had been in combat before (the 1st and 9th Infantry Divisions, the 82d
Airborne Division, and the 2d Armored Division), all performed well in Normandy. The Army still had to work out critical elements of its doctrine, such as antiarmor defense, at the unit level. American divisions lacked combat tested leadership, had not weeded out all of the incompetent leaders, and found training difficult due to the shortage of training areas in England.

Given these difficulties, the achievements of the American combat divisions appear in a different light. By the spring of 1945 the Army had largely overcome its handicaps and reached a high level of military effectiveness, superior to that of its enemies. A more balanced comparison of German and American forces would compare each organization at its zenith, say, the German army in 1941 and the American army in April 1945. I submit that one would be hard pressed to choose between the two forces on the basis of technical or tactical proficiency. Given the pernicious ideological bias of many German units, however, the choice would in fact be easy to make for the people of a democratic society.

The foregoing discussion does not exonerate the Army of the United States from its faults, and it had many. My intention is to bring some balance back into the debate about the combat effectiveness of American combat divisions in World War II. Despite the problems that the Army faced during its greatest period of expansion and the self-imposed handicap of the ninety division gamble, some divisions developed into
superb fighting organizations. Historians have yet to explore fully this development, although John Sloan Brown has taken a healthy step forward with his study of the Eighty-eighth Infantry Division. An examination of other successful divisions will help to isolate those factors which proved critical to the development of military effectiveness in the Army between 1940 and 1945, and put the achievements of the American soldier back into their rightful place in history.

The best divisions of the Army of the United States were equal to or superior than their opponents on battlefields across the world. When American divisions that had good leadership, quality personnel, vigorous training, and combat experience faced German, Italian, or Japanese divisions in battle, the American divisions rarely lost. The next two chapters discuss why so many American divisions entered combat unprepared for the challenges of war. The following chapters examine some of the divisions that developed into superb fighting organizations, despite the flaws in the mobilization system during World War II. Historians have rightly pinpointed the abundance of American industrial resources as the primary reason for the victories of the Allied armies in battle. Yet one may tend to forget that the United States had a number of divisions that outclassed their opponents on the battlefield. I hope this study will provide not only a reinterpretation of past events, but a useful guide for military leaders attempting to build the units of the future.
ENDNOTES


5. Ibid., p. 177.

6. Ibid., p. 238.


CHAPTER I
THE MOBILIZATION OF THE ARMY OF THE UNITED STATES, 1940-1945

The manner in which the War Department manned, organized, and trained combat divisions was critical to the development of military effectiveness in the Army of the United States during World War II, mainly in the negative sense. Due to the chaotic mobilization of the Army for war, many American combat divisions did not reach a high level of military effectiveness until after they had taken large losses in combat. This situation forced the Army to rely heavily on other sources of strength, such as the industrial capacity of the United States, technological capabilities of certain weapons (especially artillery), airpower, and the national characteristics of the American soldier. Certain divisions excelled in combat, however, and I hope to make the reasons for this phenomenon clear in later chapters. The purpose of this chapter is to focus on the mobilization system within the United States during World War II, and to explain why so many divisions entered the combat arena deficient in the cohesiveness, teamwork, and skills that make a unit successful in battle.
THE FALL OF FRANCE AND THE EXPANSION OF THE ARMY

The quick and decisive German victory over France in May-June 1940 shook the United States out of its peacetime complacency. In the summer of 1940 the tactical units of the Army of the United States existed largely on paper. The Regular Army consisted of eight understrength infantry divisions, one cavalry division, and one mechanized cavalry brigade. The eighteen divisions of the National Guard were poorly trained and manned. Field training of larger units, such as corps and armies, consisted of command post exercises and map drills. The Louisiana maneuvers of 1940, which took place during the fall of France, were the first large scale field exercises held in the United States, but they served mainly to highlight the weaknesses of the army. In 1940 the Army had a long way to go before it could match the awesome combat power of its potential adversaries.

After the fall of France the War Department and the Roosevelt administration took several steps to improve the military readiness of the United States. On 10 July the War Department created a separate Armored Force in order to free the development of armored units and doctrine from the shackles of branch parochialism. On 26 July the War Department activated a General Headquarters (GHQ) under the command of the Army Chief of Staff, General George C. Marshall. GHQ controlled the four armies in the continental United States, GHQ Aviation, harbor defense troops, and the
newly created Armored Force. GHQ was responsible for training field forces for combat. General Marshall chose the Commandant of the Command and General Staff School, Brigadier General Lesley J. McNair, as the chief of staff for GHQ. Since Marshall's duties as the Army Chief of Staff precluded his constant supervision of training, he gave McNair almost total control over GHQ. The establishment of GHQ was another step in transforming the peacetime army into an effective wartime force.²

The Selective Service Act of 1940 provided large numbers of men for the Army, but magnified the already troublesome problem of creating combat effective units. The authorized strength of the regular army increased from 227,000 men on 13 June to 375,000 men on 26 June. The President brought the National Guard into federal service on 16 September. By 1 July 1941, the Army had reached a strength of 1,326,577 men. GHQ consisted of twenty-seven infantry divisions, four armored divisions, and two cavalry divisions, divided into nine corps and four armies.³ The army held the first maneuvers pitting two armies against each other in Louisiana and the Carolinas in the summer and autumn of 1941.⁴

This expansion did not come without a price. One of the fundamental problems GHQ faced was the dichotomy of its mission, which entailed both readying existing forces for combat and creating new forces from scratch. Training had to take place simultaneously with the vast expansion of the Army,
which led to inevitable turmoil. Newly activated units drew much of their cadre from existing divisions, and the loss of these men lowered the readiness of the veteran units. Nearly every division sent overseas in 1942 had experienced significant personnel turnover in the months prior to deployment, and thus entered combat with a less cohesive organization. Given the huge expansion of the Army, there was no immediate solution to this personnel turbulence. The Army had to spread its scarce professional, Regular Army officers and noncommissioned officers around to take the lead in organizing and training new units. 5

The largest single problem the Army faced in its expansion was the lack of adequate officer and noncommissioned officer leaders. Many junior officers and noncommissioned officers lacked confidence; senior officers lacked experience in handling large units. A large proportion of National Guard officers (and many Regular Army officers as well) were overage or unqualified for the positions they held. The problem boiled down to the dual and contradictory need to provide adequate leaders for the force while at the same time eliminating those leaders unfit for their positions of responsibility. The lack of adequate leadership explains the reason why GHQ decided upon a centralized training process which took many of the decisions on training out of the hands of small unit leaders. "To put it another way, new officers had to be trained along with the new troops whom they were
eventually to lead in battle, but meanwhile they could not exercise mature leadership in training."

To add to the turmoil, the Army changed the organization of every type of division in the force at least once after 1940. The Army converted infantry divisions from a "square" structure, with two brigades of infantry (each containing two regiments), to a "triangular" structure, which eliminated the brigade headquarters and grouped three infantry regiments directly under division headquarters. The intention of the Army was to add flexibility to the infantry division by reducing a step in the chain of command, but it did so at the expense of staying power (due to the reduction by 25 percent of the number of riflemen in the division). The nine Regular Army infantry divisions converted to the triangular structure on 1 October 1940, but the eighteen National Guard divisions retained the square structure until early 1942.

By late 1941 the Army had come a long way since the fall of France, but its divisions were still incompletely trained and equipped. The Louisiana and Carolina maneuvers showed the weakness of tactics, techniques, and leadership at the small unit level. They also displayed the weakness of many senior officers in controlling large units on the battlefield. GHQ ordered remedial training for all units after the conclusion of the maneuvers, especially on unit skills below battalion level. Unfortunately, the expansion of the Army after Pearl Harbor made small unit training a priority behind the
mobilization of new units. The result was constant turmoil at the small unit level that had an adverse impact on the performance of the Army of the United States in its first battles overseas.9

**AMERICA GOES TO WAR: THE CREATION OF THE DRAFFTEE DIVISIONS**

The entry of the United States into the war on 7 December 1941 forced the War Department to accelerate an already rapid expansion of its strength. On 9 March 1942 the War Department reorganized itself for a multi-front war. The War Plans Division of the War Department assumed the planning and operational functions of GHQ. The reorganization dissolved GHQ, and created the Army Ground Forces (AGF) and Services of Supply (later redesignated as the Army Service Forces). AGF, under Lieutenant General McNair, continued the training function of GHQ, and became the agency responsible for the organization and training of units for deployment overseas.10

The War Department planned to activate three to four divisions per month beginning in March 1942 until it met the desired end-strength, although at this stage in the war no one was certain how many divisions the United States needed to defeat its enemies. To speed up the process of mobilization of new units, the War Department bypassed the centralized replacement training centers for the basic training of draftees. Instead, inductees reported directly to their new divisions, where officer and noncommissioned officer cadre trained them under the guidelines of the Mobilization Training
Plan (MTP). The goal was to prepare a new division for combat within ten to twelve months of activation.\textsuperscript{11}

In January 1942 GHQ published a plan for the creation of new divisions, and AGF largely followed this plan throughout the war. The plan was a flowchart that guided the organization and training of divisions from their activation until their deployment to a port of embarkation. The initial step was the designation of the cadre for the new division. The War Department (in effect, General Marshall) designated the commander, assistant commander, and the artillery commander from a list of nominations submitted by Lieutenant General McNair. McNair chose the general staff section heads and key infantry and artillery officers. The Services of Supply (later Army Service Forces) chose special staff officers and commanders of special units (medical, quartermaster, ordnance, transportation, signal, etc.). Army and corps commanders chose other officer cadre. The bulk of the junior officers for the new unit came from the officer replacement pool, which by 1942 consisted mostly of graduates from officer candidate schools. A "parent" division provided trained enlisted cadre for the new division. The quality of the enlisted cadre depended on the professionalism of the commander of the parent division, who was supposed to give up his best men, but who often used the assignment of cadre as an opportunity to "clean house" and eliminate undesirable men from his unit. The total cadre numbered 172 officers and
1,190 enlisted men, but by August 1942 the War Department increased the number of cadre to 216 officers and 1,460 enlisted men to provide more specialists to the new division (especially motor transport officers and mechanics).\textsuperscript{12}

The cadre received two to three months of training prior to the activation of the division. The division commander and his general and special staff officers attended a month-long course at the Command and General Staff School at Fort Leavenworth, Kansas. The assistant division commander attended a special course at the Infantry School at Fort Benning, Georgia, and the artillery commander attended a special course at the Field Artillery School at Fort Sill, Oklahoma. Separate unit commanders went to the appropriate branch school (infantry, artillery, engineer, quartermaster, medical, signal, cavalry). After this initial schooling, the cadre traveled to their new duty station, where the enlisted cadre and the remainder of the officer cadre joined them about three weeks prior to the arrival of the draftees.\textsuperscript{13}

The new division spent the first two weeks organizing units and arranging the divisional living area. By then, hopefully, a complement of training equipment comprising 50 percent of the Table of Basic Allowance had arrived so the division could begin basic training. The division used the War Department Mobilization Training Programs (MTP's) as guides to provide a weekly breakdown of training. The division spent the first seventeen weeks in basic and advanced
individual training, followed by a test conducted by the army or corps staff. The division spent the next thirteen weeks in unit training, from squad through regimental level. The army or corps would test selected units at the completion of this phase. During the next fourteen weeks, the division conducted combined arms training, in which regimental combat teams or the entire division would train in large-scale exercises. The army or corps would again test selected units at the completion of this training. The plan devoted the final eight weeks of training to coordination with aircraft and mechanized forces, and a review of selected topics. Training was progressive, and units were to repeat any training found wanting by the army or corps staffs. If all went well, by the end of the first year the division was ready to participate in large scale, multi-division maneuvers, after which the War Department would designate the division as combat ready.¹⁴

Unfortunately, divisions rarely met this optimistic timetable. Personnel turbulence severely disrupted the training of divisions. The War Department decision to have divisions, rather than replacement training centers, train draftees in basic skills meant that the process of selecting the best of these new men to attend officer candidate schools, specialist schools, the Army Specialized Training Program (ASTP), or to transfer to the Army Air Forces occurred during the middle of the division's training cycle. As the best of the new soldiers departed, the recently formed division lost
a valuable source of noncommissioned officers, and the unit gradually became understrength. The provision of new, untrained personnel who arrived at spasmodic intervals to fill the division's shortages disrupted the training cycle. The War Department many times waited until the division prepared for overseas deployment before filling it to full strength. Divisions in training also lost men to provide cadres for newly activated units, or to fill the need for replacements overseas. As a result, many divisions had to repeat training or deployed with a significant percentage of men who had not trained with their comrades, who did not recognize their leaders, and who did not identify with their new unit.\textsuperscript{15}

Lack of equipment and ammunition also hampered the training of new divisions. American industry produced limited quantities of new weapons as it geared up for war. The provision of equipment to Great Britain and the Soviet Union under the Lend-Lease act siphoned off much of the modern equipment that was available.\textsuperscript{16} Ammunition was in especially short supply, which limited the amount of live fire training that units could conduct. Many divisions lacked adequate training facilities, or units had to spend time building facilities before they could begin training.

Equipment and ammunition shortages eased somewhat by 1943, and training improved. The combat experience gained by the army in North Africa had a positive effect on training, and the AGF attempted to make training more realistic. In
February 1943, AGF mandated training courses in infiltration, close-combat firing, and combat in cities. These courses featured movement over realistic, war-scarred terrain, the use of live ammunition (both by the men in training and around them to provide realism--machinegun bullets whistling overhead, explosives set off nearby, etc.), and a variety of surprise and moving targets at varying distances.\textsuperscript{17} The AGF further improved maneuver training by converting the California-Arizona maneuver area into a model theater of operations for corps level exercises. The AGF cycled twenty divisions through the area in 1943 for thirteen weeks of intensive training under realistic combat conditions.\textsuperscript{18} Fortunate indeed were those divisions, such as the Fourth Armored Division, that went to the Desert Training Center in California for this training, as their performance in combat attests.

Unfortunately, conditions in 1944 relapsed into the confusion of 1942. The AGF had to close the California-Arizona maneuver area in April 1944 due to the lack of service units to support divisions in training. The AGF also cancelled large-scale maneuvers due to the accelerated shipment of divisions overseas as the crisis of 1944 hit the European Theater of Operations. Thirteen divisions never participated in division level maneuvers; as a result, the first time the commanders of those units had a chance to maneuver their force as a whole was in combat.\textsuperscript{19} Of even greater concern was the
stripping of divisions for replacements, an issue explored more fully below. The experience of the 260th Infantry Regiment of the 65th Infantry Division was not atypical of the personnel turbulence many units experienced in training:

The turnover of commissioned personnel in this regiment since activation has been about 150 percent. The turnover has been heaviest among junior officers, principally among the lieutenants. Some companies have had as many as seven commanders and some platoons have had sixteen leaders. Battalions have had as high [sic] as five commanders. The regiment has had two commanding officers.20

The results of all the efforts of AGF over the three years of mobilization were disappointing. While all divisions received a year or more of training, many had turned into nothing more than training establishments for replacements. By the time these divisions deployed overseas, they "were to a regrettable extent crazy-quilt conglomerations hastily assembled from sundry sources, given only a minimum of training, and loaded on transports."21 They suffered in combat accordingly.

THE NINETY DIVISION GAMBLE

The ninety division gamble was a decision that cost the lives of numerous servicemen--primarily infantry replacements--in Europe in 1944 and 1945. Divisions were so scarce that American commanders routinely employed them at the front long past the point when they should have been withdrawn to retrain and integrate new replacements. The lack of divisions meant that units had to accomplish these tasks at or
near the front, which resulted in a high rate of casualties among the new personnel. Some divisions literally fought themselves out in constant operations; even the best American divisions, such as the 1st and 9th Infantry Divisions, suffered from collective exhaustion when they had been in the line too long. Additional divisions would have enabled Eisenhower and Bradley to rotate units more frequently, but due to a series of crucial decisions made by the War Department in 1943, by the end of 1944 no more divisions were available.

The "Victory Program" in the fall of 1941 projected an army of 213 divisions and over 10,500,000 men at full strength. War Department planners assumed that the United States and Great Britain would have to defeat Germany without the help of the Soviet Union, which was on the verge of collapse at the time. When the Soviet Union proved its ability to remain in the war and tie down large numbers of German divisions, the Secretary of War Henry L. Stimson and General Marshall decided that the War Department could safely reduce the number of divisions in the wartime army.

Other factors also influenced the decision to cut back on the ultimate end-strength of the Army. The War Department estimated that there were 25 million American men fit for military service, of which the military could use 10.5 million, or 7.8 percent of the American population, without disrupting the needs of the wartime economy. The Roosevelt
administration had to divide this pool of manpower among the Army, Army Air Force, Navy, and Marine Corps. Furthermore, the decision to postpone the invasion of Europe until 1944 and to begin the Combined Bomber Offensive in 1943 (Operation POINTBLANK) meant that the Army needed fewer combat divisions and more air wings overseas in the early stages of the war. Combat divisions stacked up in the United States in 1943 and training space was at a premium.

On 25 January 1943 the War Department established the troop basis for that year at 8,208,000 men and one hundred divisions. Army planners felt the Allies could get by with fewer divisions for several reasons: Allied air superiority, the contemplated reduction of German production from the bomber offensive, superior American war production, and the diversion of large numbers of German divisions to fight the Soviets on the Eastern Front. Instead of estimating the number of divisions needed to overcome enemy opposition, the planners agreed to cap the Army's end strength at the maximum number that the Army could use without impairing the war economy, and to work within that figure to produce what forces they could.

In June 1943 a committee headed by Colonel Ray T. Maddocks of the Operations Division of the War Department General Staff submitted a report to General Marshall that recommended a reduction in the troop basis for 1943. Due to Soviet resistance and the Combined Bomber Offensive, the
committee argued that the Army could get by with 7,657,000 men and eighty-eight divisions for 1943, and an eventual total of one hundred divisions. Secretary of War Stimson and General Marshall approved the report in mid-June, and the War Department published a new troop basis on 1 July. The troop basis authorized a total of ninety divisions for 1943, with the activation of another twelve divisions deferred until 1944.27

The difficulties experienced by the AGF in completing the training of those divisions already activated, the increased tempo of operations in the Pacific, the formation of B-29 squadrons, and the shortage of replacements combined to doom the activation of any new combat divisions in 1944. Many divisions in training were short of personnel as they lost men to officer candidate schools, the Army Specialized Training Program, aviation training, and replacement quotas. Operations in the Pacific required large numbers of service troops to sustain even a few combat divisions in the Southwest and Central Pacific Theaters. The Army Air Forces requested 130,000 men for its B-29 program (which the AAF intended for use against Japan).28 After the Allies invaded Normandy, the shortage of infantry replacements further reduced the pool of available manpower. General Marshall did what he could to remedy the shortage of troops. In February 1944 he cut back the ASTP to 30,000 men, and thereby released 120,000 high quality men for the Army. Marshall persuaded President
Roosevelt to pressure the War Manpower Commission and Selective Service to reduce the induction backlog. Even then, the new personnel only backfilled vacancies in existing units; the Army ended the war with eighty-nine divisions (Table 1). As a result, the Allies faced the German army in France in 1944 with only a 1:1 ratio of combat divisions.

**TABLE 1**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>INFANTRY</th>
<th>CAVALRY</th>
<th>ARMOR</th>
<th>AIRBORNE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1917-1940</td>
<td>20</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>1941</td>
<td>9</td>
<td>0*</td>
<td>3</td>
<td>0</td>
<td>13*</td>
</tr>
<tr>
<td>1942</td>
<td>27</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td>38</td>
</tr>
<tr>
<td>1943</td>
<td>11</td>
<td>0*</td>
<td>2</td>
<td>3</td>
<td>17*</td>
</tr>
<tr>
<td>1944-1945</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>67</td>
<td>1*</td>
<td>16</td>
<td>5</td>
<td>89*</td>
</tr>
</tbody>
</table>

*Does not include the Second Cavalry Division, which the War Department activated and deactivated twice.


Industrial might in the form of airpower, massive amounts of artillery, and large numbers of technologically inferior tanks would give the Army of the United States an advantage over the Wehrmacht in Europe, but only enough to secure victory at high cost. An official historian of the Army of the United States concludes:
It will long be a question whether the photofinish in World War II reflected an uncommonly lucky gamble or a surprisingly accurate forecast. But few would deny that, in their performance on the field of battle in the critical campaigns of 1944-45, the hitherto still largely untested divisions of the U.S. Army, so largely a product of General Marshall's own faith and struggles, vindicated the bold calculation in Washington.30

More than one historian disagrees with that conclusion. The formation of another fifteen to twenty combat divisions would have been a small price to pay to provide not just sufficiency, but overwhelming power in the most crucial military campaign in the history of the United States. Even without an increase in the end strength of the Army, the Joint Chiefs of Staff could have found these divisions had they been willing to delay the American counteroffensive in the Pacific. One must agree with the statement by one prominent historian that the creation of "a ninety-division army for the Second World War was not an altogether impressive performance for a superpower."31

TOOTH VERSUS TAIL

The requirement to support an early invasion of Europe in 1942 (Operation SLEDGEHAMMER) or 1943 (Operation ROUNDUP) caused the War Department to activate a large number of combat divisions in 1942. After the Combined Chiefs of Staff made the decision to invade North Africa (Operation TORCH), execute the Combined Bomber Offensive against Germany, and to postpone the invasion of Europe until 1944, the need for ground combat forces decreased in the short term. The extended Allied line
of communication into the Mediterranean Theater of Operations (MTO) required a large number of service units to support a relatively small number of combat divisions in the theater. At the same time, the increased tempo of operations in the Southwest Pacific also required the activation of a large number of service units to support a small number of combat divisions. By the time the Allies invaded Normandy on 6 June 1944, the United States Army had to provide service forces for five major theaters of operation: Europe, the Mediterranean, China-Burma-India, the Southwest Pacific, and the Central Pacific. Three of these theaters had little connection with the war against Nazi Germany. The inability of the United States to adhere to the "Germany first" strategy created a shortage of ground combat forces in 1944, when the United States committed its forces to the decisive campaign in western Europe.

In nearly every personnel decision made during the crucial months of mobilization after Pearl Harbor, the War Department cut the Army Ground Forces in favor of more service forces and air units. The total manpower of the Army grew much faster than the total number of divisions in the force (Table 2). Part of the explanation is the pooling of combat and combat support units above division level, but of even greater significance was the growth of the Army's service establishment. On 31 March 1945 the strength of the Army reached 8,157,386 officers and enlisted men. Subtracting
### TABLE 2

**INCREASE IN ARMY PERSONNEL AND DIVISION STRENGTH, 1941-1945**

<table>
<thead>
<tr>
<th></th>
<th>31 Dec 1941</th>
<th>31 Dec 1942</th>
<th>31 Dec 1943</th>
<th>31 Mar 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel*</td>
<td>1,303,231</td>
<td>3,796,959</td>
<td>5,186,083</td>
<td>5,848,573</td>
</tr>
<tr>
<td>% increase</td>
<td></td>
<td>191%</td>
<td>37%</td>
<td>13%</td>
</tr>
<tr>
<td>Divisions</td>
<td>36</td>
<td>73</td>
<td>90</td>
<td>89</td>
</tr>
<tr>
<td>% increase</td>
<td></td>
<td>103%</td>
<td>23%</td>
<td>-1%</td>
</tr>
<tr>
<td>Percentage of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army manpower</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in combat divisions</td>
<td>41%</td>
<td>29%</td>
<td>26%</td>
<td>23%</td>
</tr>
</tbody>
</table>

*Does not include the Army Air Forces.


The 2,308,849 men and women in the Army Air Forces and the Women's Army Corps, 5,848,573 men were serving in the Army at that time. Of these soldiers, only 2,711,969 (46 percent) served with combat, combat support, or combat service support units; the remainder belonged to service forces, training establishments, replacement depots, and other miscellaneous functions. The number of enlisted men assigned to the eighty-nine combat divisions did not differ significantly from the number of men assigned to the seventy-three combat divisions in existence in December 1942 (1,125,000 versus 1,056,000); the War Department had increased the number of divisions by reducing their authorized strengths. To put it another way, of the 1,966,000 men added to the authorized strength of the Army after 1942, only 124,000 ended up in
combat units. The percentage of men assigned to combat divisions dropped from 41 percent in 1941 to 23 percent in 1945.

The War Department abandoned the attempt to raise twelve more divisions for 1944 above the eighty-nine already authorized due to the increasing demands of the service forces and air forces for personnel. The War Department activated the last division (the 65th Infantry Division) in August 1943, and the Army had to make do with what it had from that point on. Even then the Army Ground Forces had difficulty in filling its units to full strength. Part of the problem was the sheer magnitude of the wartime undertaking; the War Department never could manage to reduce the amount of people listed as "overhead" and "miscellaneous." I doubt," wrote Lieutenant General McNair in February 1944, "that the troop basis can be balanced because there is an insufficient allowance for the pipeline--the invisible horde of people going here and there but seemingly never arriving." On 30 June 1944, in fact, 456,032 enlisted men served in Zone of the Interior jobs within the United States, a number that exceeded the 445,007 men assigned as infantry soldiers in the Mediterranean and European Theaters at the time. The War Department had added men to the air forces, service forces, replacement organizations, training establishments, and the hospital population, but combat divisions received little of the three million man increase in end strength after 1942.
THE REORGANIZATION OF COMBAT DIVISIONS, 1943

The organization of Army ground combat forces in World War II was largely a product of the ideas of Lieutenant General McNair. He had been instrumental in the testing and adoption of the triangular divisional structure between 1937-1940. McNair emphasized offensive capability and flexibility; small, efficient staffs; the assignment of only those types of units that a division needed at all times, with all other types pooled at corps or army level; and as few links in the chain-of-command as possible. The overall impact of these ideas made American combat divisions in World War II flexible and mobile, but less resilient and more reliant on outside support.

Army divisions needed many attachments to function effectively in combat. By the end of 1944, 1,541,667 men served in nondivisional combat and combat support units (separate tank battalions, tank destroyer battalions, artillery battalions, engineer battalions, etc.) as compared to 1,174,972 men serving with combat divisions. One drawback to the pooling of nondivisional units at higher headquarters was the lack of unit cohesion that it engendered, since nondivisional units did not always train or operate with the same division. Corps and armies attempted to compensate for this by habitually assigning the same nondivisional units to support a specific division, but this was not always possible. McNair pooled nondivisional units because he did
not think that every division needed these types of units at all times. The Army Ground Forces could therefore save manpower by creating fewer of them. During the campaign in France, however, commanders found out that every infantry division required the support of a nondivisional (GHQ) tank battalion and tank destroyer battalion at all times, but there were not enough of these units to go around. The infantry divisions muddled through as best they could with what they got.

To squeeze the last ounce of manpower from the Army, the War Department on 2 October 1942 ordered the Army Ground Forces to streamline the tables of organization of the various types of divisions in the force. The goal was to cut the manpower of each division by 15 percent and the number of vehicles by 20 percent, without cutting combat power or forcing an alteration in doctrine for the employment of the Army in combat. McNair directed the work of the AGF Reduction Board, and the revised divisional structures bore the imprint of his ideas on combat organization.

The AGF Reduction Board sat from November 1942 to June 1943 and largely achieved its goals. The board cut personnel from the service and support echelons of the force and trimmed headquarters personnel. Despite the goal not to cut combat power, the board cut the number of tank battalions in the armored division from six to three. The board cut vehicles by providing more trailers for hauling bulk supplies. Complaints
from the field about the severity of the reductions caused the
War Department to restore some of the proposed cuts, but in
July 1943 the War Department issued revised tables of
organization for most units in the Army.41

The cuts of the AGF Reduction Board, as modified by the
War Department, reduced the strength of the infantry division
by 1,261 men (Table 3). The board slightly reduced the
strength of the twenty-seven rifle companies that formed the
heart of the division, but compensated by adding a fourth
artillery battalion to the division. Since there were sixty-
three infantry divisions in the force at the time the War
Department issued the revised tables of organization, the
total savings was 78,750 men, or enough to fill another five
and a half infantry divisions. The board was less successful

<table>
<thead>
<tr>
<th>TABLE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTHORIZED STRENGTH OF THE INFANTRY DIVISION, 1941-1945</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1 Jun 1941</th>
<th>1 Aug 1942</th>
<th>15 Jul 1943</th>
<th>24 Jan 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength</td>
<td>15,245</td>
<td>15,514</td>
<td>14,253</td>
<td>14,037</td>
</tr>
<tr>
<td>Rifle Co. Strength (27 Total)</td>
<td>6,021</td>
<td>5,346</td>
<td>5,211</td>
<td>5,211</td>
</tr>
<tr>
<td>Howitzers, 105mm</td>
<td>36</td>
<td>36</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Howitzers, 155mm</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Vehicles</td>
<td>1,834</td>
<td>2,149</td>
<td>2,012</td>
<td>2,114</td>
</tr>
</tbody>
</table>

in cutting the number of vehicles in the division, which was not necessarily a drawback. The large number of vehicles enabled American infantry divisions to dispense with horses, which the German army still used in great quantity. American infantry divisions could conduct rapid, mobile operations when necessary through the attachment of six truck companies. Even without attachments, infantry divisions could move quickly by shuttling their infantry forward in trucks taken from within the division organization (usually from the artillery). The infantry division as organized on 15 July 1943 remained basically unchanged until the end of the war.

Between 1940 and 1943, the changes in the organization of armored divisions generally followed the reorganization of German panzer divisions. Initially, the armored divisions were large units, composed of all arms, but with a large tank component in proportion to the other combat elements in the division. The Germans reduced the tank strength in their panzer divisions prior to the invasion of Russia, primarily because the lack of adequate tank production forced them to redistribute existing tanks among more units in order to increase the total number of divisions. American officers misread this move towards smaller divisions with fewer tanks, but the changes mirrored McNair's ideas on division organization.
The AGF Reduction Board followed suit by eliminating the regimental organization within the armored division (reducing overhead and eliminating a link in the chain-of-command) and cutting the number of tank battalions in the division from six to three. The board made the organization of GHQ tank battalions (separate, nondivisional tank battalions directly under the control of the army commander) identical to that of tank battalions organic to armored divisions, so that theoretically commanders could use them interchangeably. In practice, the shortage of GHQ tank battalions for the support of infantry divisions meant that commanders almost never reinforced armored divisions with separate tank battalions. They were at the same time loath to take tank battalions away from armored divisions, since they had so few of them.

If the AGF Reduction Board trimmed mostly fat from the infantry division, one cannot say the same about its treatment of the armored division (Table 4). The board reduced the four medium tank battalions and the two light tank battalions to three composite tank battalions, which had three medium tank companies and one light tank company each. The reduction of light tank companies was not a serious loss, given the vulnerability of the light tank on the battlefield. More serious was the reduction in the number of medium tanks from 232 to 186. On the positive side, the board increased the number of riflemen in the standard armored infantry company from 178 to 251, which redressed a serious weakness in
### Table 4

**AUTHORIZED STRENGTH OF THE ARMORED DIVISION, 1942-1945**

<table>
<thead>
<tr>
<th>Date</th>
<th>Strength</th>
<th>Tank Companies</th>
<th>Infantry Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 1942</td>
<td>14,620</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep 1942</td>
<td>10,937</td>
<td>12, 9</td>
<td>2,259</td>
</tr>
<tr>
<td>Jan 1945</td>
<td>10,670</td>
<td>6, 3</td>
<td>2,259</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,448</td>
<td>1,389</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,335</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,602</td>
<td>2,259</td>
</tr>
</tbody>
</table>

**Equipment:**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Mar 1942</th>
<th>Sep 1942</th>
<th>Jan 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Tanks</td>
<td>232</td>
<td>186</td>
<td>195</td>
</tr>
<tr>
<td>Light Tanks</td>
<td>158</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Half-Tracks</td>
<td>733</td>
<td>501</td>
<td>466</td>
</tr>
<tr>
<td>Howitzers, 105mm</td>
<td>54</td>
<td>36</td>
<td>54</td>
</tr>
<tr>
<td>Vehicles (total)</td>
<td>3,630</td>
<td>2,653</td>
<td>2,276</td>
</tr>
</tbody>
</table>


...
elastic. Each battalion was self-contained, since it needed its own supply and service organization for attachment and detachment outside the division. The two combat commands and the reserve command (CCA, CCB, and CCR), headquarters with officers and supporting staff but no organic combat elements, allowed the division commander to task organize as the situation dictated. The new armored division, however, was more suited for exploitation and pursuit than for constant commitment in its own sector on the front. McNair intended commanders to use armored divisions almost exclusively in bold offensive action, a view echoed in the Army's Field Service Regulations, Operations, FM 100-5. Unfortunately, the shortage of divisions in Europe forced American commanders to employ armored divisions in the front more or less continuously, where they wore down through attrition of their small stock of combat resources.

The War Department did not use these economies in 1943 to activate new divisions. Instead, the Army used the manpower saved to redress existing shortages within divisions already activated and to create nondivisional and service units. The tanks and personnel released by the reorganization of the armored divisions, for example, ended up in independent tank battalions. These battalions finally became available in large enough numbers by early 1944 to allow some infantry divisions to begin combined arms training with tanks. Unfortunately, the training was too little and too late. The
First United States Army would invade Normandy woefully unprepared to fight a combined arms battle.47

ALTERNATIVE STRATEGIES

In World War I the United States opted to create large divisions and to keep them on the front for extended periods of time. Under the square structure, these large divisions had plenty of internal resources from which to draw in order to rotate men out of the trenches at regular intervals. In World War II the War Department, specifically Lieutenant General Lesley J. McNair, decided to create smaller divisions in order to increase their flexibility and mobility on the battlefield. The new division was not a bad organization, as long as the commander had enough divisions to rotate them out of the line at regular intervals for rest, retraining, and refitting. American commanders in Europe never had enough divisions for this purpose, and ended up keeping their divisions in the front too long. They took solace in the fact that the replacement system could keep the divisions at full strength, but this was of small comfort to the men who fought, suffered, and sometimes died at the sharp end of combat.

There were two ways the War Department could create more combat forces. The first was to get the President to increase the share of national manpower allocated to the Army. General Marshall and Secretary of War Stimson did not do this, for they realized that an upper limit of about eight million men was all they could expect without disrupting the wartime
economy. The second way was to economize within the Army structure to use manpower more efficiently. This was the purpose behind the AGF Reduction Board of 1943. The changes in the unit tables of organization did save manpower, but at the expense of combat divisions, not the fast-growing service establishment.

In the final analysis, the most logical way to provide more combat divisions to Europe would have been to curtail operations in the Pacific; in other words, to abide by the "Germany first" strategy as agreed to by the Combined Chiefs of Staff at the ARCADIA Conference in December 1941. In the long run the defeat of Japan in 1946 instead of 1945 would not have made a great deal of difference in the strategic situation, but the provision of more divisions to Europe would have proved instrumental in reducing the casualties suffered by Americans in Europe. The United States could have conducted a scaled-back counteroffensive in the Pacific with four Marine divisions and the nine Army divisions stationed in the Pacific at the end of 1942. This would have released at least twelve divisions for use in Europe, since by September 1944 the various Pacific theaters of operation had laid claim to twenty-one divisions. The curtailment of the dual-offensive in the Pacific would also have released large numbers of service troops for conversion to combat units.

A decision to curtail operations in the Far East would have been in keeping with the intention of the Combined Chiefs
of Staff to stabilize the situation in the Pacific, defeat Germany, and then turn the combined resources of the Allies towards the defeat of Japan. The ambitious dual-drive in the Southwest and Central Pacific theaters in 1944 ran counter to this strategy; in effect, what the United States did was to defeat Japan and Germany at the same time. As a result, Americans sustained more casualties on the battlefield in Europe than they would have suffered with the Pacific divisions at Eisenhower's disposal. As usual, the fighting soldier paid the price.
ENDNOTES


2. Ibid., pp. 6-7.

3. Ibid., p. 10.


5. Greenfield et al., *The Organization of Ground Combat Troops*, p. 11.

6. Ibid., p. 50.

7. Ibid., p. 12.


11. Ibid., pp. 52-54.


13. Ibid., pp. 435-436.


18. Ibid., p. 450.
19. Ibid., p. 471.
20. Ibid., p. 474.
21. Ibid., p. 482.


24. Ibid., p. 367.
25. Ibid., p. 368.
26. Ibid., p. 369.
27. Ibid., pp. 373-374.
28. Ibid., p. 375.
29. Ibid., p. 376.
30. Ibid., p. 381.


33. Ibid., p. 203.
34. Ibid., p. 170.
35. Ibid., p. 176.
36. Ibid., p. 175.
37. Ibid., pp. 235-236.
40. Ibid., p. 278.
41. Ibid., pp. 297-299.

42. Ibid., p. 311.


44. The 2d and 3d Armored Divisions retained the old organization until the end of the war.

45. Greenfield et al., p. 333.


47. For an examination of the problems in combined arms training in the First U.S. Army in Normandy and the solutions to them, see Michael D. Doubler, *Busting the Bocage: American Combined Arms Operations in France, 6 June-31 July 1944* (Fort Leavenworth: Combat Studies Institute, 1988).


50. Ibid., p. 519.
CHAPTER II
THE VIEW FROM THE CUTTING EDGE

The War Department had to mobilize enough combat divisions to ensure victory, but it also had to ensure that those divisions were competent enough to win battles. Unfortunately, many of the national manpower policies worked against the effort of the Army Ground Forces to improve the combat effectiveness of American ground combat units. Problems with the Selective Service System worked against the Army and in favor of the other services. Furthermore, in allocating the best portions of the nation's manpower that it received, the War Department consistently shortchanged ground combat divisions in favor of the Army Air Forces and Army Service Forces. Even for properly formed and trained units, flaws in the procedure for moving them overseas caused numerous problems for divisions about to enter combat. To maintain those divisions over extended periods of combat, the War Department operated a flawed replacement system that kept American units numerically at the correct strength, but which inhibited them from achieving and maintaining a high degree of combat effectiveness.
THE PROBLEM OF QUALITY MANPOWER

While the Selective Service Act of 1940 provided the required numbers of men for the military forces, not all arms and services fared equally in the distribution of the nation's manpower. In particular, the Army received a lower proportion of the high quality manpower than other services, and the combat divisions fared worse than the rest of the Army. Part of the problem was that until the end of 1942, many men evaded the Selective Service System by volunteering for assignments with the Navy, Marine Corps, and Army Air Forces. Most volunteers were of above average intelligence, and their absence from the draft lowered the overall quality of the pool from which the Army drew its manpower. ¹ Until 1944 the Army Air Forces received a higher percentage of inductees in Army General Classification Test (AGCT) categories I, II, and III than the rest of the Army. The non-combat branches of the Army Service Forces siphoned off those draftees who had established trades or skills in civilian life, and whose experience was useful to quartermaster, transportation, signal, military police, engineer, medical, and other types of units. These personnel were also mostly of high caliber, as their success in civilian life showed. ²

In 1942 and 1943 another 150,000 of the brightest inductees participated in the Army Specialized Training Program, which allowed them to begin or continue their college studies. Of those high quality men that remained, many left
their units after a few weeks or months to volunteer for officer candidate school or aviation cadet training. During the most critical period of mobilization, therefore, the combat divisions drew their manpower from a pool already largely reduced at the top end (Table 5). Since officer candidates had to come from AGCT categories I or II, and most NCO candidates came from AGCT category II, the Army Ground Forces suffered from a shortage of qualified officer and noncommissioned officer candidates as the force expanded.

TABLE 5
DISTRIBUTION OF DRAFTEES BY AGCT SCORE, 1943

<table>
<thead>
<tr>
<th>Category</th>
<th>I/II</th>
<th>III</th>
<th>IV/V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Combat Arms</td>
<td>29.7%</td>
<td>33.3%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Army Service Forces</td>
<td>36.5%</td>
<td>28.5%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Army Air Forces</td>
<td>41.7%</td>
<td>31.3%</td>
<td>27.0%</td>
</tr>
</tbody>
</table>


Certain divisions fared better than others. Those divisions mobilized before Pearl Harbor, such as the Ninth Infantry Division, did not suffer the problems of manpower quality to the extent that many draftee divisions did after March 1942. In addition, the newly created airborne divisions received permission on 18 September 1942 to reduce the number of AGCT Category IV and V men in their units to the Army average. Since the Army average included the Army Air
Forces and Army Service Forces, the airborne divisions ended up with a higher quality force than other divisions in the Army Ground Forces. All replacements for the airborne divisions were volunteers with better than average physical qualifications. The 10th Mountain Division, activated in 1943, also had a high number of intelligent and physically superior men. It drew the bulk of its manpower from the skiers and mountaineers of the Mountain Training Center, which had called for (and received) experienced outdoorsman-volunteers upon its formation in 1941.

Nevertheless, many divisions suffered from an acute shortage of leadership, a problem directly attributable to the inequitable division of the more intelligent and skilled portions of the nation's manpower pool. One of the Army official historians states:

From an initially limited and constantly depleted stock of men in the higher AGCT grades the Army Ground Forces had to meet its own requirements for officer candidates, for men to be sent to enlisted specialist courses at the service schools, for parachute volunteers, and for cadremen for new units. Men remaining with their organizations were a very much picked-over lot. One commander observed in a moment of extreme discouragement that his hardest problem was to find competent enlisted men to act as instructors, because "everybody higher than a moron" had been pulled out for one reason or another.\(^5\)

The inability or unwillingness of the War Department to fill its combat divisions with quality manpower reduced the effectiveness of the Army of the United States in its battles overseas. Only belatedly did the War Department come to this
conclusion, and by that time there was little it could do to rectify the situation.

The War Department did what it could in 1944 to improve the quality of the manpower funneled into the Army's combat divisions. In February 1944 the War Department developed the "Physical Profile Plan," which classified soldiers on the basis of general stamina, upper extremities, lower extremities, hearing, vision, and emotional stability. Physicians graded soldiers from one (highest) to four (lowest) in each area. A one or two in all categories qualified the soldier for combat duty, a three limited the positions he could fill, and a four disqualified him from service. By June 1944 all reception centers, hospitals, and redistribution stations used the physical profile system in an attempt to send the fittest soldiers into the combat arms. Even so, the pool of available manpower had shrunk so much by this time that even with the physical profile system in place, the Army received five percent fewer men in AGCT Categories I and II than in 1943.6

The War Department further nullified the effects of the system by prohibiting eighteen year old inductees from serving overseas. Only half the inductees at this stage of the war were over nineteen years old, and since the need for replacements was so great, nearly all of the men in this age group found themselves trained as combat soldiers, regardless of physical ability. The War Department reversed its policy
on the use of eighteen year old soldiers in combat on 1 November 1944, when the need for replacements became so great that it could not keep this age group out of the replacement stream. The physical profile system made little difference by then, since the War Department had to funnel 90 percent of inductees into the Army Ground Forces anyway, to make up for the casualties sustained by combat divisions--particularly infantrymen--overseas.\(^7\)

In 1944 the War Department also finally realized that such programs as the Army Specialized Training Program had become a luxury. In response to a memo from General Marshall, in February 1944 Secretary of War Stimson reduced the number of men in the ASTP from 150,000 to 30,000, and thus a high number of young, intelligent men became available to fill combat divisions that the War Department had gutted to send replacements overseas.\(^8\) With the invasion of France approaching, the War Department also reduced the aviation cadet training program to provide more manpower for the ground forces. The transfer of these men had an immediate impact on the Army Ground Forces. Thirty-five divisions benefited from an infusion of an average of 1,500 ASTP students each and twenty-two divisions each received an average of 1,000 aviation cadets.\(^9\) The divisions assigned the bulk of these men to the infantry, and training and morale--by no coincidence--soon improved. The War Department also combed out about 200,000 enlisted men from the Army Service Forces
and Army Air Forces in the Zone of the Interior in 1944 and 1945, and transferred them to the Army Ground Forces. ¹⁰

Unfortunately, the War Department had taken these actions too late. The transfer of men from the ASTP, aviation cadet program, and the Zone of the Interior service establishments improved the quality of the personnel in the divisions still in the United States, but these men had only a limited amount of time to train with their new units before deployment overseas. If the War Department had assigned these men to combat divisions in the first place, many of them would already have filled positions of leadership in their units. By 1944, the soldiers released from ASTP and other programs were just more "warm bodies" needed to fill gaps in the ranks. As matters stood, many qualified leaders ended up serving in their new units under less-qualified officers and noncommissioned officers. ¹¹ Had the quality and quantity of men that became available to the Army Ground Forces in 1944 and 1945 been available in 1942 and 1943, the combat divisions deployed overseas would have been more effective than they were. The inability of the War Department to focus its efforts on ensuring that the best men fought at the tip of the spear resulted in a higher number of casualties and poorer performance on the battlefield than the nation had a right to expect from its army.
THE MOVEMENT OF DIVISIONS OVERSEAS

Even the best units suffered a degradation in combat readiness while moving overseas. "Preparation for overseas movement," or POM, was the Army's term for bringing units to a final state of combat readiness, moving them to a port, and loading them on transports for shipment overseas. The system, especially in 1942 and early 1943, was chaotic. Due to chronic shortages of personnel and equipment, most units received a healthy slice of both men and equipment only after they reached their port of embarkation. Most of the new men were only partially trained, and units had to integrate them as best they could. 12 The equipment delivered to the port at the last moment was often of a different type than the division had used in training. As a result, men trained in the use of carbines sometimes found themselves with 1903 Springfield rifles, and when the Services of Supply issued the new anti-tank rocket launcher to the troops in Task Force A participating in the invasion of North Africa, no one had ever seen the weapon before or knew how to use one. 13

Due to the provision of new personnel and equipment at staging areas near the ports, divisions turned these areas into training establishments to acquaint men with new equipment, put replacements through firing courses, and to maintain the training of units. Because of lack of shipping or poor scheduling, some divisions spent months in staging areas that the War Department had designed to hold units for
a few weeks at most. The training facilities were inferior to those at divisional home stations. The situation got worse when units embarked, for there was little space or opportunity to conduct training aboard the crowded transports. As a result, combat readiness of most divisions deteriorated between the time they left their home stations and the time they arrived overseas. Overseas theater commanders tried to give newly arrived divisions time to train for a few weeks before occupying a sector of the front. If a division was really fortunate, it occupied a quiet part of the line, where the soldiers could gradually adjust to the rigors of combat. Some divisions, like the 106th Infantry Division which the Germans destroyed during the Battle of the Bulge, were not so fortunate.

The situation improved somewhat after the publication of a War Department directive on 5 January 1943 dealing with the organization, training, and equipment of units deploying overseas. Only replacements who had completed basic training and marksmanship courses could join divisions once they had left their home station. The Army Service Forces could not equip deploying units with new or different weapons from the ones the unit had used in training. The division was to spend no longer than two weeks in a staging area before embarkation. In practice, the Army did not always observe these restrictions, but the situation improved in relation to the earlier chaotic conditions.
The War Department never solved the problem of personnel turnover. Too many units deployed to staging areas with large numbers of partially trained men. The result was a frenzied effort, largely on paper, to qualify the men for overseas service at the last minute. The system sacrificed team building, cohesion, and effective training to bureaucratic requirements:

A common sight in almost any AGF camp in the spring and summer of 1944 was a group of lieutenants herding a batch of recent arrivals from the Army Specialized Training Program, low-priority units, or converted organizations through weapons-firing and combat courses so that they might be put down as 'qualified' and taken to port with the unit. Frequently these newcomers were so ignorant of tactics and so unaccustomed to firearms that the lieutenants dared not permit freedom of maneuver, but felt constrained instead to coach them through the exercises, with frequent admonitions to 'get back in line' and 'don't fire till I tell you.' Circumscribed to this extent, the well-conceived processing became an empty ritual.¹⁶

One does not have to look much further to understand why many American infantrymen lacked initiative in combat, or failed to execute aggressive fire-and-maneuver when faced with opposition in battle.

**INDIVIDUAL REPLACEMENTS**

The quality and training of replacements was an acute problem for the Army Ground Forces throughout the war. Replacements received thirteen weeks of basic and specialized training at a replacement training center (RTC), then moved to a replacement depot for shipment overseas. Upon arrival in theater, the men stayed in another replacement depot until
assigned to a unit. The amount of time spent at replacement depots and in transit after the conclusion of training was variable, but could amount to several months. By the time a replacement soldier arrived on the front line, he usually forgot at least a portion of his training, which a unit could only inculcate by repeated drill. Some replacement soldiers did not even know how to fire their weapons,\footnote{17} one factor that helps to explain S.L.A. Marshall's contention that only a small fraction of American soldiers fired their weapons in battle.\footnote{18} If a unit immediately assigned a replacement soldier to a unit engaged in combat, as many divisions did, he was likely to become a casualty before he proved of any value to the unit.\footnote{19}

Another problem was the type of replacements that AGF replacement training centers produced. Until early 1944, the RTCs geared the rate at which they produced soldiers with different skills to the needs of mobilization, not losses in combat. Since combat losses overwhelmingly involved infantrymen, the result of this system was an oversupply of technical specialists and an undersupply of infantrymen. By late 1943 the lack of infantry replacements created a crisis overseas, which the War Department temporarily solved by stripping infantrymen from divisions still training in the United States. This action disrupted the divisions in training. The situation got worse before it got better. Between April and September 1944, the War Department stripped
91,747 men from twenty-two combat divisions still in the United States, an average of 4,170 men per division (or nearly two-thirds of the complement of infantry in each division).20

After the pursuit across France ended in the fall of 1944, casualties rose, and the ETO soon used up the available pool of in-theater replacements. The European Theater of Operations battled the War Department to increase the rate of infantry replacements. The War Department responded by culling men from the Zone of the Interior, eliminating the ban on the use of eighteen year old soldiers in combat, and urging the ETO to cull out its communications zone personnel for retraining as infantrymen. The ETO also converted some anti-aircraft artillery units to infantry as the need for anti-aircraft defense dwindled.21

The replacement system slowly adjusted to the need to produce more infantrymen (Table 6). As the war progressed the authorized percentage of infantry replacement capacity in RTC's rose from 46 percent in October 1940 to a high of 86.7 percent in January 1945. The figures for replacement capacity by the latter date took into account the results of combat experience in Europe, and were a rough indication of how casualties were distributed among the various arms during the war. By the end of the war the United States had committed all but two of its ground divisions in combat. In Europe, commanders had kept most of them at the front without relief for extended periods of time. Extended fronts, continuous
TABLE 6
PERCENTAGE TRAINEE CAPACITY OF RTC'S, 1940-1945

<table>
<thead>
<tr>
<th>DATE</th>
<th>AAA</th>
<th>ARMOR</th>
<th>CAV</th>
<th>FA</th>
<th>INF</th>
<th>TD</th>
<th>IMMATERIAL</th>
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<td>OCT 40</td>
<td>21.1</td>
<td>6.4</td>
<td>4.9</td>
<td>21.6</td>
<td>46.0</td>
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<td>--</td>
</tr>
<tr>
<td>AUG 42</td>
<td>16.0</td>
<td>9.6</td>
<td>2.1</td>
<td>14.6</td>
<td>37.5</td>
<td>7.0</td>
<td>13.2</td>
</tr>
<tr>
<td>SEP 43</td>
<td>8.6</td>
<td>6.1</td>
<td>2.3</td>
<td>11.9</td>
<td>67.4</td>
<td>3.7</td>
<td>--</td>
</tr>
<tr>
<td>FEB 44</td>
<td>6.6</td>
<td>4.6</td>
<td>2.5</td>
<td>9.6</td>
<td>74.2</td>
<td>2.5</td>
<td>--</td>
</tr>
<tr>
<td>AUG 44</td>
<td>5.5</td>
<td>4.9</td>
<td>2.4</td>
<td>9.0</td>
<td>76.1</td>
<td>2.1</td>
<td>--</td>
</tr>
<tr>
<td>OCT 44</td>
<td>2.5</td>
<td>6.3</td>
<td>3.1</td>
<td>6.8</td>
<td>80.0</td>
<td>1.3</td>
<td>--</td>
</tr>
<tr>
<td>JAN 45</td>
<td>1.0</td>
<td>5.1</td>
<td>2.1</td>
<td>4.3</td>
<td>86.7</td>
<td>.8</td>
<td>--</td>
</tr>
</tbody>
</table>


combat, and the lack of an organized system of relief or rotation strained the scarce combat resources of the triangular infantry divisions and small armored divisions. To make up for the lack of divisions, the War Department counted on the replacement system to keep American divisions at full strength. "The replacement stream became in effect the reserve of the ground combat forces."22

The individual replacement system had its drawbacks. A study conducted by the Surgeon General in the Mediterranean Theater in the spring and summer of 1944 concluded that the psychiatric casualty rate of men in infantry battalions could reach as high as 120 to 150 percent annually, compared with less than 3 percent in units of other arms.23 Prolonged exposure to the stress of combat, relieved only by death or
wounds, cracked even the hardiest soldier, usually weakened by fatigue and nagging illnesses, if kept in the line for too long. Individual replacement of casualties as opposed to rotation of units aggravated this situation. Newly assigned replacements did not have an attachment to their units, did not know their leaders, and made many basic errors in combat that usually led to their early demise. Individual replacements were much more effective if integrated into their units behind the front, put through a period of training, and given an opportunity to get to know their leaders and comrades before going into combat. The most effective way to accomplish these goals is to rotate units periodically out of the line. Only in the Pacific theaters did the Army achieve this optimum rotation system, and then only by coincidence.
ENDNOTES


2. Ibid., pp. 10-11.


4. Ibid., p. 20.

5. Ibid., p. 19.

6. Ibid., p. 74.

7. Ibid., pp. 72-74.


9. Ibid., pp. 77-78.

10. Ibid., p. 84.


15. Ibid., pp. 582-593.

16. Ibid., pp. 596-597.

17. Ibid., p. 188.


23. Ibid., p. 228.
CHAPTER III

THE LONG ROAD TO GERMANY

"No history can ever fully recapture the grim and bitter hours through which a division on the line must live, nor can it describe adequately the many factors which go into the makeup of good fighting men and good fighting divisions."

General Omar N. Bradley

ACTIVATION AND TRAINING OF THE 9TH INFANTRY DIVISION

The War Department activated the 9th Infantry Division on 1 August 1940 at Fort Bragg, North Carolina as part of the expansion of the Regular Army to 375,000 men. The newly created division received a strong group of cadre who formed a solid basis upon which to build a quality unit. A total of 1,881 officers and men arrived from posts in twenty-four different states, to include many noncommissioned officers who were technical specialists in various fields. Volunteer recruits followed shortly to flesh out the cadre for the new division. The cadre's first task was to convert a pine covered wilderness into a military camp. The men lived in a tent city until Christmas, when they moved into new, wooden barracks. The engineers built numerous roads and training facilities. Morale was excellent, and units vied with one another to beautify their areas. The experienced cadre
trained the new recruits on fundamental soldier skills. The division devoted the bulk of each weekday to training, but left time for organized athletics and other recreation activities.\(^4\)

The division suffered a tragic loss on 20 September 1940 when its commander, Brigadier General Francis W. Honeycutt, died in an airplane crash en route from Fort Bragg to corps headquarters in Atlanta. To replace him, the War Department assigned Major General Jacob L. Devers as the commanding general of the division. Devers was a 1909 graduate of the United States Military Academy at West Point. He had missed combat in World War I and spent the war at Fort Sill, Oklahoma. Between the wars, Devers commanded several field artillery units and had a normal range of staff assignments. He was a distinguished graduate of the Command and General Staff School (1925) and a graduate of the Army War College (1933). Prior to his assignment as the commander of the 9th Infantry Division, Devers had been the Chief of Staff in the Panama Canal Department. Devers would remain with the division for a little less than one year, but he gave the unit strong leadership and a good start in its formative months.

On 16 January 1941 the first group of draftees arrived to bring the division to full strength. Unlike the draftee divisions activated in 1942 and 1943, draftees composed less than half of the 9th Infantry Division.\(^5\) The cadre trained the new inductees in basic and advanced soldier skills. Within
a few months the division had assimilated the draftees, and began to grow into a cohesive and capable organization. Training activities included road marches, rifle marksmanship, grenade exercises, calisthenics, close-order drill, bayonet training, and numerous inspections. The division spent the summer of 1941 in extensive field training exercises, to include regimental level maneuvers against the 44th Infantry Division near Bowling Green, Virginia. Despite shortages of modern equipment, the division developed tactics and techniques in accordance with the latest tactical doctrine.7

Major General Devers left the division on 31 July to assume command of the Armored Force at Fort Knox, Kentucky. Major General Rene E. DeRussey Hoyle, the commander of the division artillery, took command of the division and led it through the Carolina maneuvers.8

The 9th Infantry Division finished its mobilization training by participating in the Carolina maneuvers, one of the two great General Headquarters (GHQ) maneuvers held in the summer and fall of 1941. The maneuvers began with division versus division and corps versus corps exercises in October and early November, followed by army maneuvers from 16-28 November. The 9th Infantry Division was part of Lieutenant General Hugh A. Drum's First Army, a traditional infantry-heavy force of eight infantry divisions and six regimental-size antitank groups.9 "These were the days of simulated artillery fire, flour-sack bombs, broomstick guns and beer-can
mortar shells," a divisional history pamphlet relates. The army level maneuvers were somewhat anti-climactic for the 9th Infantry Division. Drum kept the division in army reserve during the first phase of the maneuvers. In the second phase, the division attacked as part of Major General Lloyd R. Fredendall's II Corps. After two days the advance of the corps to Chesterfield, South Carolina and its link-up with I Corps pinched the division out of the line and Drum again pulled it into army reserve. Drum used the division to defend against an armored breakthrough and temporarily motorized it to conduct another attack. The maneuvers did little to improve the state of training or readiness of the average soldier. More important was the staff practice gained in the coordination of larger combat units in battle.

At the conclusion of the Carolina maneuvers, the 9th Infantry Division returned to Fort Bragg. On 3 December 1941 Major General Hoyle congratulated the division on its performance. "We have fought a good fight," Hoyle stated, "the 9th Infantry Division is ready for anything." It would have to be, for four days later the Japanese attacked Pearl Harbor, and the United States was at war. In the frenzied atmosphere, the 9th Infantry Division dispersed units throughout North Carolina to guard power plants, dams, and bridges. As ridiculous as this measure seems to us today, it gives a good indication of the initial confusion of the nation
in the wake of the surprise attack on Pearl Harbor.

THE HECTIC DAYS OF 1942

The 9th Infantry Division was a victim of the dichotomy of the mission of GHQ in early 1942. The division not only had to train for war, but it lost many valuable men to provide cadres for newly activated units. GHQ planned to use the 9th Infantry Division as one of the first assault elements in any expeditionary force operation, so in January 1942 it assigned the division to the Amphibious Force, Atlantic, for amphibious assault training. The division began training in loading and unloading from ships with mockups, rope ladders, and small boats representing transport vessels and landing craft. Until the late spring the division trained on dry ground or on McFayden's Pond on the Fort Bragg reservation. The division also continued routine garrison and field training to maintain its proficiency as a fighting organization. Due to personnel turnover, however, the division found it difficult to sustain its training level of the previous year.

The experience of the 9th Infantry Division was representative of the turmoil that many units suffered in the hectic months of mobilization that followed Pearl Harbor. In January 1942 the War Department ordered the 9th Infantry Division to prepare and train a cadre for the 82d Infantry Division, which the War Department would soon activate at Camp Claiborne, Louisiana. Unlike some divisions, the 9th Infantry Division took its role as a "parent" unit seriously. "This
cadre consisted of some of our most experienced noncommissioned officers and a thorough program of training was prepared for them," records one unit history in 1942. The quality of the 82d Infantry Division, soon to provide the basis for both the 82d and 101st Airborne Divisions, attests to the abilities of the cadre provided by the 9th Infantry Division.

The provision of cadre for the 82d Infantry Division in February 1942 did not end the exodus of trained personnel from the 9th Infantry Division. As soon as the cadre for the 82d Infantry Division had departed, the War Department ordered the 9th Infantry Division to prepare another group of cadre for the 88th Infantry Division, which the War Department planned to activate in the summer at Camp Gruber, Oklahoma. The 9th Infantry Division again sent some of its best personnel to the new division. The fact that Major General John E. Sloan, commander of the 88th Infantry Division, and Brigadier General Stonewall Jackson, the assistant division commander, were friends with many senior officers in the 9th Infantry Division helped to expedite the cadre selection process. The 88th Infantry Division went on to establish a reputation in Italy as one of the best American infantry divisions in World War II, another indication of the high quality of cadre provided by the 9th Infantry Division in 1942.

The 9th Infantry Division provided numerous cadre for nondivisional units and replacements to fill units deploying
to the Pacific to stem the Japanese advance, and also trained a group of cadre for the newly activated 78th Infantry Division. The drain of trained manpower from the division degraded its overall readiness, even with the increased tempo of training now that the nation was at war. One battalion described the impact of personnel losses for the month of June 1942 as follows:

During the middle of this month this Battalion sent sixty-three enlisted men as a cadre to activate the 313th Medical Battalion of the 88th Division, Camp Gruber, Oklahoma. This loss of trained non-commissioned officers and the selection of a large number of our men for Officers' Candidate Schools severely drained the Battalion of its trained personnel. It required intensive training to replace the losses and return the Battalion to its former efficiency.¹⁹

Another unit also painted a grim picture of the personnel losses the 9th Infantry Division sustained in 1942:

When the 9th Signal Company returned to Ft. Bragg, N.C. on Dec. 1, 1941 from the Carolina Maneuvers, it was an experienced signal unit. During the first half of 1942, the company was almost bled white by continually furnishing cadres to other divisions and sending candidates to the Signal Corps Officer Training School at Fort Monmouth, N.J. In February, the company furnished the Signal Corps cadre personnel for the 82nd Division at Camp Claiborne, La. In March, it sent eight radio operators to Alaska and fifteen more radio men to Fort Ord, Cal. Smaller groups were furnished for various secret mission cadres. During April and May, the company trained the signal cadre for the 78th Division, later activated at Camp Butner, N.C. On June 12, 21 men left as a cadre to join the new 88th Division at Camp Gruber, Okla. During the same six months, the company sent 65 men to OCS.²⁰

As the division's amphibious training reached a peak during the summer of 1942, there was little the units could do about
the personnel turnover except train the new inductees they received in exchange for the experienced personnel they lost. The trade was not fair, but it was necessary if the Army were to expand into the huge force envisioned by the Victory Program.

In the summer the 9th Infantry Division began full scale amphibious exercises off Solomon's Island in Chesapeake Bay and New River, North Carolina. The amphibious training ended in early September, when the units prepared for deployment overseas. By September the division was at full strength, but the training of the soldiers varied widely. The War Department had filled the division with personnel to prepare it for Operation TORCH, the invasion of North Africa. The 9th Infantry Division was more fortunate than those divisions left behind in the United States. The demands of the TORCH forces caused the War Department to strip men and equipment from many divisions left behind.21

The 9th Infantry Division would enter combat with a new commander. On 24 July Brigadier General Manton S. Eddy assumed command of the division.22 Eddy had received a direct commission into the Army in 1916, and fought with the 39th Infantry Regiment, then part of the 4th Division, in France during World War I. He served with a machine gun detachment and was wounded, but decided to continue in the service after the war. During the interwar years, Eddy served in various assignments as a ROTC instructor, assistant
operations officer in the Hawaiian Department, and spent six years in Fort Leavenworth as both a student and instructor. On 16 March 1942 he had reported to Fort Bragg as the assistant division commander of the 9th Infantry Division. On 9 August the War Department promoted Eddy to major general. Major General Eddy proved to be an outstanding divisional commander during the war. His leadership was a key factor in the success of the 9th Infantry Division in combat.

**OPERATION TORCH: BAPTISM BY FIRE**

The plan for Operation TORCH did not envision the use of the 9th Infantry Division as an integral unit. Instead, the plan broke the division into regimental combat teams (RCTs). The division standard operating procedure (SOP) stated that the normal composition of these combat teams would combine an infantry regiment with a field artillery battalion, engineer platoon, and a medical collecting company. To promote standardization and cohesion, the SOP established habitual relationships among units:

<table>
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<tr>
<th>RCT 39</th>
<th>RCT 47</th>
<th>RCT 60</th>
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<tr>
<td>39th Inf Regt</td>
<td>47th Inf Regt</td>
<td>60th Inf Regt</td>
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<td>26th FA Bn</td>
<td>84th FA Bn</td>
<td>60th FA Bn</td>
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<tr>
<td>1st Plt, Co A, 15th Eng Bn</td>
<td>1st Plt, Co B, 15th Eng Bn</td>
<td>1st Plt, Co C, 15th Eng Bn</td>
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These regimental combat teams would invade North Africa under the command of task force commanders: RCT 39 would form part of the force gathered to invade Algiers in the Mediterranean Sea, while RCT 47 and RCT 60 were both part of the Western
Task Force that would invade French Morocco from the Atlantic Ocean.

The 39th RCT was the first portion of the division to deploy overseas. On 18 September the combat team departed Fort Bragg to a staging area in Fort Dix, New Jersey, where the units received last-minute replacements of officers and enlisted men. "Both officers and men who joined this organization at [the] port of embarkation have had to adjust themselves to the way we do things," stated Captain W.G. Stevens. "The officers had no chance to gain the confidence of the men who they were to lead, had we met any resistance in landing." The combat team then traveled to Staten Island, New York, where it loaded aboard transports on 26 September. The transports reached Belfast, Northern Ireland, on 5 October, but departed again on 15 October for Scotland. The combat team stayed in Scotland for ten days. The training in Ireland and Scotland consisted of foot marches and practice landings, and the physical training was especially good after the cramped life aboard ship. The combat team departed Scotland for Algiers on 26 October.

The other two combat teams formed part of the Western Task Force under the command of Major General George S. Patton, Jr. In typical fashion, Patton delivered an "earranging" speech to the assembled troops on the parade ground at Fort Bragg in mid-September. The two combat teams left their barracks at Fort Bragg for the last time in late
September and moved to an assembly area on the reservation. There, the men reviewed training and checked clothing and equipment. Commanders weeded unfit men from their units and accepted replacements to fill their organizations to full strength. American planners provided substantial reinforcements to strengthen the standard combat teams with tanks, antiaircraft guns, signal units, aviation, military intelligence, and civil affairs personnel. The combat teams departed for Norfolk, Virginia in mid-October, loaded aboard transports, and sailed for a convoy rendezvous in Chesapeake Bay.

The 47th RCT formed part of Sub-Task Force BLACKSTONE, with the mission of seizing the port of Safi, French Morocco. The 60th RCT formed part of Sub-Task Force GOALPOST, under the command of Brigadier General Lucian K. Truscott, Jr. Truscott's force had the mission of seizing Port Lyautey, French Morocco. Upon reaching Solomon's Island in Chesapeake Bay, Truscott had his men rehearse the landing operation in conjunction with the crews of the transport vessels. The rehearsals exposed many faults in the organization and training of the transport crews and assault force, and commanders were able to make some corrections prior to sailing overseas. On 23 October the Western Task Force departed from the United States in convoy, bound for North Africa.

The Allied invasion of North Africa uncovered serious weaknesses in joint and combined operations, combined arms
training, and small unit leadership. Had the French army put up more serious resistance, American forces would have been hard-pressed to establish themselves ashore. Fortunately, resistance was for the most part light, and the French quickly agreed to an armistice. For the men of the 9th Infantry Division, however, the invasion gave them valuable if limited experience, and the success of the operation engendered some confidence in their abilities. Nevertheless, the invasion hardly went smoothly for the American forces, whose weaknesses became all too apparent in the first battles in Tunisia several months later.

The 39th RCT had a rough voyage to Algiers. On 7 November a German airplane bombed and damaged the USS Thomas Stone, which carried the 2d Battalion, 39th Infantry Regiment. The battalion commander, Major Walter M. Oakes, decided to continue the mission to Algiers, 140 miles distant, in the ship's landing craft. After a miserable night on the cramped boats, the craft proved too light for the ocean and the corvette HMS Spey took the men of the battalion the remainder of the way to Algiers. They arrived on 9 November, twenty-four hours late.29

The remainder of the combat team landed on the beaches at Ain-Taya, 15 miles east of Algiers, on 8 November. The boat waves lost all semblance of organization. The commander of the team, Colonel Benjamin F. Caffey, Jr., described the lack of coordination in the landing:
...this combat team had been trained to land personnel and vehicles of a battalion landing team in a certain sequence on one beach. In this operation it was necessary to land personnel on two beaches and all vehicles on a third beach...The result was that a system or plan of landing was used in which this organization had no practical experience. Officers and men had not had sufficient amphibious training to assimilate this new plan without practice.30

The further down the chain-of-command one went, the more critical were the officers of the results of the operation. Second Lieutenant G.B. Beasley stated, "There was too much confusion and congestion when we first got on the beach. There were too many men giving orders which confused the soldiers and they didn't know who to follow."31 Many units spent several hours just sorting themselves out after the Navy landed them haphazardly on the beaches.

Even after the battalions established themselves ashore, their performance was far from sparkling. A few French soldiers held up 3d Battalion for several hours, and when the battalion attempted to bypass the resistance at night, it got lost.32 Captain William L. Lockett reflected the feelings of many officers when he wrote:

In summing up the activities of this C.T. [Combat Team] during the period of Nov. 7th to 10th inclusive, it is clearly evident that we as officers must get down to serious business of working plans, thinking and organizing our thoughts and efforts and giving our men the best that is in us.33

The success of the operation, however, boosted morale. Second Lieutenant Bernie L. Bogue summed up his feelings at the moment: "Morale is still high. We are very thankful and
pleased that we are here, that we are alive, that we are Americans." 34

The 47th RCT, under the command of Colonel Edwin H. Randle, conducted the smoothest landing in the invasion at Safi, French Morocco. The only serious problem the combat team encountered was the late distribution of cryptographic material, which caused some confusion among units. Companies K and L landed between 0435 and 0445 hours directly in the harbor of Safi from the decks of the destroyers Bernadou and Cole, surprised the French defenders, and quickly took possession of the harbor facilities. The remainder of the regiment landed behind schedule during the morning hours. By mid-afternoon the 47th RCT had subdued all organized French resistance in Safi. The tanks of the 2d Armored Division began to unload, and reconnoitered east towards Marrekech. On 11 November the French agreed to an armistice, and the fighting ended. 35

The 60th RCT met the toughest resistance of any unit in the 9th Infantry Division during Operation TORCH. Like the other units in the division, the 60th RCT landed late on its beaches west of Port Lyautey, French Morocco. The assault ships had lost formation at night, and consequently the Navy had difficulty forming the correct landing waves according to the invasion plan. Wave commanders had problems finding the correct beaches. Instead of advancing towards their objectives in darkness, the disorganized American forces ended
up conducting a daylight assault. "This loss of direction and control by assault waves made the whole landing operation a hit or miss affair that would certainly have spelled disaster against an alert and well armed enemy." The combat team encountered severe resistance from French infantry and tanks, and did not secure its objectives until 10 November.

Perhaps because the 60th RCT had the toughest combat, it learned the most from its experience. Communications from ship to shore were inadequate, radios drenched by salt water worked poorly or not at all, and commanders had to exercise personal control on shore to be effective. The combat team learned the value of close cooperation between tanks and infantry and the armor of the 70th Tank Battalion proved its worth in many actions. The units began to appreciate the destructive firepower of artillery, self-propelled guns, naval gunfire, and aircraft. The 2.75 inch rocket launcher was a welcome addition to infantry squads, since it provided a lightweight, mobile source of fire support for small units. Support troops learned the importance of infantry training, as commanders often used them as reserves during critical points in the fighting.

The combat team also learned a great many lessons about amphibious operations, although the division did not participate in another seaborne assault during the war. One of the critical lessons was the impact of unit cohesion on an amphibious landing. "When a soldier lands," the sub-task
force after-action report stated, "after a long sea voyage, on a strange beach, in utter darkness, he should be surrounded by men he knows and under leaders he has learned to respect and trust. Leaders of all ranks should know their personnel from long association and training." As discussed earlier, the American system for mobilization precluded many divisions from achieving a period of "long association and training" which the 9th Infantry Division found so helpful in combat.

The most important lessons learned by the 60th RCT concerned leadership in battle. The commander of the 60th Infantry, Colonel Frederick J. de Rohan, wrote in the unit's after-action report:

Aggressive leadership of officers must be developed in training at home. Very few of the officers who showed aggressiveness at home in training failed to prove the same in battle. The failure of units to advance after the first and second day of battle was not due to physical exhaustion, but to lack of aggressive leadership...It is believed that simplicity, the concentrated employment of all means upon the enemy, and courageous and vigorous leadership are the outstanding lessons learned in this action, for whenever they were employed, success resulted.

The experience gained by the officers and men of the 60th RCT proved of great value in months to come. Despite the tough resistance, losses had been remarkably light (53 men killed or wounded). The success of the operation bolstered confidence. The three day battle, however, did not transform the unit into a fully combat effective organization; it only began the process that during the next several months brought the 60th Infantry to its peak efficiency.
As other Allied forces advanced into Tunisia, the 9th Infantry Division settled down in Morocco and Algeria to guard lines of communication and train. The 39th RCT had the least opportunity to train, since the Allied command kept it spread out over hundreds of miles guarding lines of communication and supply installations. Not surprisingly, the 39th Infantry Regiment suffered during its next battle in Tunisia. The 47th and 60th RCT's consolidated at Port Lyautey and conducted training which consisted of physical conditioning, weapons firing, and short field exercises. Division headquarters arrived in Morocco in December after an uneventful voyage. The division also rotated battalions north to guard the frontier between French and Spanish Morocco, and held a review for President Franklin D. Roosevelt on 21 January 1943.

TUNISIA: THE HIGH PRICE OF LESSONS LEARNED

In early February the division moved by train and truck to Tlemcen, Algeria. When the German forces attacked and overran several American units in the battle of Kasserine Pass, the Allied command ordered the artillery of the 9th Infantry Division to march to Tunisia to reinforce the line. The artillery began its movement on 17 February and arrived at Tebessa four days later after a march of 735 miles over mountainous terrain in a raging snowstorm. The artillery reinforced British forces near Thala and fired 1,906 rounds in support of the 26th Rifle Brigade. The engagement was the first for the 9th Infantry Division Artillery, and its
successful execution raised morale. The men gained experience in moving and shooting under combat conditions. The artillery took few casualties in comparison to the infantry regiments it supported. The artillery battalions, therefore, retained the lessons they learned in battle. As the division gained more combat experience, its artillery became extremely proficient, while infantry regiments that took large numbers of casualties were hard-pressed to retain basic lessons. This factor partially explains why American units became so dependent on artillery during the war.

The other elements of the 9th Infantry Division moved to Tunisia in the wake of the artillery. The division became part of II Corps, under the command of Lieutenant General George S. Patton, Jr. II Corps' mission was to attack the German positions near El Guettar in conjunction with an attack by the British Eighth Army against the Mareth Line in southern Tunisia. Patton detached the 60th RCT from the 9th Infantry Division and ordered it to support the 1st Armored Division in its attack on the German positions east of Maknassy. The remainder of the 9th Infantry Division was in reserve behind the 1st Infantry Division. When the Big Red One ran into stiff resistance along the high ground east of El Guettar, Patton committed the 9th Infantry Division to the attack on 28 March 1943 (Figure 1). For the next ten days the division fought for control of the high ground against well-fortified German resistance. Only the success of the British Eighth
Army finally forced the Germans to retreat from their positions.42

The division's performance in the battle of El Guettar left much to be desired. The 39th RCT had recently rejoined the division after an absence of nearly six months. The employment of the 39th RCT as a guard force in the two months
after TORCH did nothing to develop the combat effectiveness of the organization. The 39th Infantry could not even train to assimilate the lessons learned from the brief period of combat it had witnessed. The division also lacked adequate maps for the El Guettar area, and the maps that were available contained many inaccuracies. On the first morning of the attack the lead battalion of the 47th Infantry Regiment reported inaccurately that it had reached its objective. When the Germans on the objective halted its progress, the 3d and 2d Battalions maneuvered to outflank the enemy from the south. 3d Battalion captured the ridge, but elements of the 10th Panzer Division caught the 2d Battalion in an engagement area and destroyed E Company. The remainder of the battalion lost contact with the division for 36 hours. When Major General Eddy committed the 1st Battalion, 39th Infantry to extend the envelopment even further to the south, it too became lost. 43

The next day, 29 March, the situation became even worse. The Germans ambushed the 2d Battalion, 39th Infantry as it moved forward along the El Guettar-Gabes road in trucks. The battalion sustained heavy losses and became badly demoralized. The 1st and 3d Battalions, 47th Infantry Regiment could not dislodge the German defenders from their positions. The 1st Battalion, 39th Infantry, and the 2d Battalion, 47th Infantry, remained out of contact. The division regrouped during the night and finally made contact with the two "lost" battalions. On 30 and 31 March the division made little progress. II
Corps was out of touch with the situation, for on 1 April Patton ordered the 9th Infantry Division to proceed with the second phase of the corps plan, which called for the 1st Armored Division to pass through the 9th Infantry Division after the latter had opened a hole wide enough for exploitation. But until the Americans controlled the high ground around Hills 369 and 772, the armor would go nowhere.44

On 3 April II Corps placed the entire artillery complement of the corps under the control of the 9th Infantry Division. A massive barrage hit the German positions on Hill 369, but the 47th Infantry Regiment was slow to follow the artillery preparation and failed to take the hill. The next day the 47th Infantry tried to infiltrate the German positions under cover of darkness, but again failed to dislodge the defenders. Only after the Germans withdrew from their positions on 6 April did the division make any progress. By 7 April the division reached its objectives, and the 1st Infantry Division began to relieve the 9th Infantry Division in place. The 9th Infantry Division moved to assemble near Bou Chebka. The division received replacements of men and equipment in preparation for a move to the north for the next operation, an attack towards Bizerte.45

The 9th Infantry Division's introduction to combat was neither easy nor cheap. Not counting the casualties suffered by the 60th RCT, the division lost 120 killed, 872 wounded,
316 missing, 186 injured, 207 exhaustion cases, and 111 non-battle casualties. Since 425 men returned to duty within 30 days, the net loss for the division was about 10 percent of its strength. The 39th and 47th Infantry Regiments sustained 98 percent of these losses. Five out of six infantry battalion commanders in these two regiments were out of action (two wounded, one case of combat fatigue, one captured, and one missing). Of 207 cases of combat fatigue, only about 40 percent returned to their units after the battle.\(^{46}\)

The division learned basic, but crucial, lessons in the battle of El Guettar. Commanders need to perform reconnaissance early and then take the time to perfect their plans and issue orders. II Corps rushed the 9th Infantry Division into battle, and the division had to rely on intelligence gathered by the 1st Infantry Division, most of which was incorrect. During its attack the 9th Infantry Division failed to take the dominating high ground. As a result, German artillery observers poured fire onto the attackers and the division ended up assaulting enemy positions frontally. Artillery fire alone could not dislodge the defenders from their well-fortified positions (some of which the Germans had blasted into solid rock). Infantry needs to follow closely behind its artillery preparation, a basic lesson from World War I that American soldiers unfortunately had to relearn in World War II. The division after-action report ended on a positive note. "Opposing crafty and veteran
soldiers, our troops showed courage and ability. With one battle behind them, they were now ready to enter the next operation a wiser and more able fighting unit." The battle was a costly lesson in the basics of modern warfare.

After El Guettar, II Corps moved into northern Tunisia. The 9th Infantry Division relieved the British 46th Infantry Division and prepared for the upcoming attack towards Bizerte. The 9th Infantry Division faced fortified German positions on two hill masses (nicknamed Green and Bald Hills) that dominated the road leading to Mateur and Bizerte. The British had unsuccessfully attempted to assault these hill positions three times already. Major General Eddy had learned enough from El Guettar not to make a fourth effort. Instead, he planned to hold the Germans in place with the 47th Infantry Regiment, while maneuvering the 39th and 60th Infantry Regiments through the extremely rough terrain of the Sedjenane Valley to the north of the German positions. Eddy decided that the potential benefits of the operation were worth the risk of moving the division out of communications with its supply and service organizations. He felt that the division could surprise the German defenders with the unexpected maneuver through "impassable" terrain.

The 9th Infantry Division and its commander had learned their lessons well. The division made a meticulous study of the terrain and the enemy, and then completed a comprehensive plan which commanders thoroughly briefed to their men. The
division obtained three hundred mules for supply and evacuation in the mountainous terrain. Between 19 and 21 April, the 60th RCT moved during hours of darkness north into the Sedjenane Valley, unobserved by German forces. The attack began on 23 April (Figure 2). The 47th and 60th Infantry Regiments reached their initial objectives with little opposition, but the 39th Infantry Regiment met stiff resistance. The commander of the 39th Infantry Regiment lost control of his forces and Eddy relieved him. Brigadier General Donald A. Stroh, the assistant division commander, temporarily assumed command of the regiment and got it moving again. During the next several days, the division advanced to the east, slowed by steep hills, thick vegetation, and enemy resistance. Supply difficulties were acute.49

On 30 April the 39th Infantry took Hill 406, which overlooked the head of the Sedjenane Valley. Before the regiment lay a variety of German supply dumps and command and control installations. The 26th Field Artillery fired over four thousand rounds in a single day with devastating effect on the German rear area. Outflanked, the Germans pulled off the Green-Bald Hill positions and began to retreat. During the next several days the division reached the final German positions in the hills west of Bizerte. The 1st Battalion, 60th Infantry forced the Germans off the Djebel Cheniti on 6 May by attacking with bayonets one hundred meters behind a rolling artillery barrage and opened the way to Bizerte. On
FIGURE 2

THE 9TH INFANTRY DIVISION IN THE SEJENANE VALLEY, APRIL-MAY 1943

Source: George F. Howe, Northwest Africa: Seizing the Initiative in the West (Washington: Office of the Chief of Military History, 1957), Map XI.
7 May the first American units entered Bizerte, only to withdraw again to allow French units to claim the liberation of the city. On 8 May French forces entered Bizerte and the North African campaign came to a close.\textsuperscript{50}

The Sedjenane Valley campaign was a brilliant success for the 9th Infantry Division. The division suffered a net loss of 1,114 men, fewer than at El Guettar, and had accomplished all of its missions in outstanding fashion. The division's after-action report stated:

The 9th Division had demonstrated that it was able to take advantage of the lessons learned at El Guettar. It had substituted sweat for blood. It had maneuvered the Germans out of one position after another. The wide envelopment to the north undoubtedly came as a complete surprise to the enemy...commanders were given ample time to make detailed plans and reconnaissances...Finally, the infantry had learned the important lesson of following artillery concentrations closely as was exemplified in the capture of Cheniti, the last remaining German defensive position west of Bizerte.\textsuperscript{51}

The division used ample amounts of firepower; the artillery expended a total of 47,000 rounds of 105mm and 155mm artillery shells during the operation.\textsuperscript{52} Staff sections improvised as necessary to make the plan work. The quartermaster foraged for 22,977 pounds of hay and 85,416 pounds of barley for the mules.\textsuperscript{53} The signal battalion laid huge amounts of wire, which was essential because radio communications were spotty at best due to the terrain. At one point, the circuit from division headquarters to the 60th Infantry Regiment in the far north was 32 miles long, while the circuit to the 47th
Infantry Regiment in the south was 26 miles long. At times there were 1,200 miles of wire on the ground. Engineers built seventy miles of roads for the artillery and supply vehicles. The medical battalion used mules to evacuate casualties and improvised a "casualty train" along a railroad track by removing the tires from a truck and placing the truck on the rails. The medical battalion also began to use combat fatigue cases for limited duty in the division area as stretcher bearers or truck drivers, and found that 80 to 90 percent of these cases could to return to some type of duty within five days. In short, the division was learning its business.

The division remained near Bizerte until 17 May, when it began a six day road march west to Magenta, Algeria. Magenta was hardly the garden spot of the world, located inland near Sidi bel Abbes, the desert home of the French Foreign Legion. The soldiers may have been disappointed, but the training program benefitted since there was little else to do. In a training memorandum, Major General Eddy laid out a one month program designed to correct the division's deficiencies in its recent battles. Eddy gave high priority to physical conditioning, and calisthenics and organized athletics were mandatory daily activities. At least half the scheduled time went to night training. Foot marches, weapons firing, tactics, maintenance of weapons and equipment, command post exercises, chemical warfare defense, first aid training, crew
drills, and other tasks all formed a part of the training program. 58 For rest and recreation, the division gave passes to Magenta and Sidi bel Abbes and battalions rotated to Oran for three days of relaxation along the beach.

While the soldiers trained, the commanders analyzed the recent battles. In response to a directive from Allied Force Headquarters, the 9th Infantry Division prepared a report on its combat experiences and lessons learned for training purposes. This after-action review was useful in shaping the division's training and improving future operations. The first lesson listed was the importance of seizing the high ground:

We learned that to live we must take to the ridges and advance along them, avoiding the natural 'avenues of approach' up the valleys...Taking to the ridges was tedious, strenuous business but it saved hundreds of lives and gave physical possession of the high ground. 59

The report also stressed the need for accurate intelligence to allow the commander to make a sound decision and plan. The division showered praise on the artillery, which "was greatly feared by the enemy and paid for itself many times over in results obtained." 60 Commanders stressed the need for infantry to follow artillery fire closely in the assault. When fired on, infantry units from the squad to the battalion must advance by fire and movement, maneuvering to a flank whenever possible. Patrolling is crucial in a static situation, to enable a unit to hold the initiative. Security is paramount at all times.
The division again learned that good leadership was a key to victory, and that commanders had to remove unsatisfactory officers and noncommissioned officers as soon as they found them to lack initiative and ability:

To have only one Officer or NCO who can lead a group of men is fatal. The loss of such a leader will come at a critical time in most instances, and the burden will then fall upon a subordinate who must be dependable.61

Staff officers also had to be capable. Eddy stressed the need for the G-2 and G-3 to collocate and work together. The staff must be capable of twenty-four hour operations, but all personnel have to take some time off to prevent exhaustion. The division command post must be capable of rapid movement and set up.

According to the report, close air support was "not close enough." There was an excessive delay between request and execution of air missions, which caused the support to be ineffective. "The Air Corps complained on several occasions that there were no enemy where we reported them, yet their planes flew over the indicated target two or three hours after the request was made--Enemy troops move," the report stated.62 The 9th Infantry Division had pinpointed a crucial problem, but unfortunately the Army Air Forces did nothing to correct the close air support system until the Sicilian and Italian campaigns again highlighted its faults. Not until the breakout from Normandy in late July 1944 did the close air support system become responsive to the needs of the ground
forces.

As much as combat itself, the digestion of the combat experience during a period of training afterwards and the internalization of lessons learned through a thorough after-action review made the 9th Infantry Division into one of the best units in the Army. The capable leadership of Major General Eddy had much to do with the division's success in developing combat effectiveness. In his memoirs, Omar Bradley showered praise on Eddy:

...there are few distinguishing characteristics of a successful division commander. Success comes instead from a well-balanced combination of good judgement, self-confidence, leadership, and boldness...of all these commanders, none was better balanced nor more cooperative than Manton Eddy. Tactically he performed with classical maneuvers such as the one he employed at Jefna [Sedjenane Valley]. Yet though not timid, neither was he bold; Manton liked to count his steps carefully before he took them.63

Eddy did not hesitate to act when necessary, as his relief of the commander of the 39th Infantry Regiment demonstrates. His success depended as much on his ability as a trainer and administrator as it did on his competence as a tactician. Eddy was a well-balanced general officer, the perfect choice to lead a division in combat.

**OPERATION HUSKY**

The 39th Infantry Regiment had a disappointing war to this point, but it was about to get some additional combat experience. In early July the 39th RCT and the division artillery moved to Bizerte and loaded on transports for
Operation HUSKY, the invasion of Sicily. The 39th RCT landed at Licata, Sicily on 15 July, and helped to clear the western portion of the island in conjunction with the 82d Airborne Division. On 29 July Patton attached the 39th RCT to the 1st Infantry Division, which fought a bitter week-long battle for the town of Troina on the mountain approaches to Messina. The 39th Infantry Regiment also received a new commander in Sicily, Colonel Harry A. "Paddy" Flint, a 1912 graduate of West Point and an old-time crony of Patton from his days in the cavalry. Flint was the perfect choice to lead the 39th Infantry Regiment, for he added character to what had been an otherwise colorless outfit. He got the most from his men, and soon convinced them to change their regimental motto to "AAA-0" (anything, anytime, anywhere, bar none).64 Paddy Flint would live by this motto up until his death at the hands of a sniper in Normandy while leading his troops from the front. By that time, the 39th Infantry Regiment had become a confident, veteran organization and one of the better regiments in the Army.

The remainder of the division marched to Oran in mid-July, where it rested and trained for two weeks prior to moving to Sicily. The movement to Sicily was a model of how a military force should conduct an amphibious transport. The division combat loaded onto five passenger and seven Liberty ships and maintained unit integrity of both personnel and equipment. The units disembarked in Sicily on 1 August, and
by 5 August the 9th Infantry Division, with the 39th RCT and its division artillery back in the fold, was ready to enter the battle of Troina.\textsuperscript{65}

Troina was a key road center in the mountains of northeast Sicily. If II Corps could seize it, then Bradley's forces would be in a position to outflank the enemy resistance along the coastal road to Messina. The 1st Infantry Division, reinforced by the 39th RCT, began the battle for Troina on 1 August against bitter German resistance, and finally took the town on 6 August. Bradley then passed the 9th Infantry Division through the exhausted Big Red One to continue the attack.

Based upon two excellent tactical terrain studies and intelligence reports, Major General Eddy decided to repeat the tactics used successfully in the Sedjenane Valley. The 47th Infantry Regiment would pin the Germans from the front, while the 60th Infantry Regiment maneuvered through the mountains around the German northern flank (Figure 3).\textsuperscript{66} Once again, the substitution of sweat for blood saved men and gained ground. In a nine day operation, the 9th Infantry Division advanced to Floresta and Randazzo, the last German positions before Messina. There the 3d Infantry Division and the British 78th Division pinched the 9th Infantry Division out of the line.

The terrain was again the biggest obstacle, but the engineers, medics, and quartermaster units overcame severe
FIGURE 3
THE 9TH INFANTRY DIVISION IN SICILY

Source: Army Map Service, Naso, Castroreale, Bronte, and Monte Etna, (Italy, 1:100,000), Sheets 252, 253, 261, and 262 (Washington: 1943); 9th Infantry Division, "Report of Operations, 5-14 August 1943 (Troina-Randazzo)," 15 August 1943, NARA, MMRB, RG 407, Box 7326, 309-0.3.
handicaps to keep the 60th Infantry supplied and on the move. The 60th Infantry had become proficient in infiltrating enemy positions through mountainous terrain. The unit marched one hundred hours, mostly at night, over mountain slopes with minimal supplies, with only the light of a full moon to show the way. 67 The division lost 1,201 men, but again proved that the best way through enemy positions is to go around them, no matter how difficult the terrain. 68

The 9th Infantry Division continued to draw lessons from its experiences, and these lessons became more sophisticated as the units mastered the basics of combat. The division learned the need to maintain contact with retreating enemy forces at all costs, to prevent them from reestablishing a coherent defense. The 9th Infantry Division would put this lesson to good use in the Cotentin Peninsula the following June. Infantry units recognized the need to keep troops moving through artillery fire, rather than halting and giving the enemy artillery a fixed target on which to shoot. The division recommended a rotation of troops under fire every three days to maintain their efficiency. Other lessons dealt with training on the enemy order of battle, the use of heavy weapons, the need for reconnaissance troops to dismount from their vehicles in rough terrain, and the use of pack mules in mountain operations. 69

The Allied command did not heed one of the most important lessons learned by the 9th Infantry Division. The movement of
the division from North Africa to Sicily went smoothly because
the division received its own ships and loaded them as it saw
fit. The division combat loaded on transports and put first
priority on keeping unit integrity intact. Vehicles carried
their full combat loads; the division did not crate any
equipment. This allowed for rapid unloading in Palermo, and
the division was ready for combat quickly after arrival. The
division's after-action report stated:

It is strongly recommended that in all overseas
shipments of large units, shipping be allotted to
the unit and all equipment be loaded in the
vehicles, except that needed on shipboard or
immediately on landing...  

Unfortunately, the logisticians gained the upper hand in
planning the use of shipping space for the Normandy invasion.
The result was the sacrifice of unit integrity for
maximization of the use of cargo space on the transport
vessels. This literally caused chaos on the beaches, as uni ts
searched for men and pieces of equipment for days after
arrival. Invasion planners never learned the lesson that what
really matters is not the number of units transported to the
beachhead, but the number of combat ready units available to
the field commander upon debarkation.

For two months after the Sicilian campaign ended, the 9th
Infantry Division occupied a rest and training area near the
town of Cefalu. In September the 1st and 9th Infantry
Divisions together gave up two thousand men to fill the 3d
Infantry Division to full strength for the Italian
campaign. This was not a serious loss, since the division would get nine months to train replacements prior to the invasion of France. Life in Sicily was good, with frequent passes to Cefalu and Palermo, the availability of nearby beaches, and a fairly light training schedule. In November the division embarked on transports and sailed to Great Britain. It arrived in late November, and moved to its new home vicinity Winchester, 50 miles southwest of London.

REST AND REFIT IN GREAT BRITAIN

In Great Britain the 9th Infantry Division rested, integrated new replacements, and trained for the upcoming invasion of France. Bradley and Eisenhower did not designate the 9th Infantry Division as one of the units to participate in the invasion itself, a decision that seems perplexing at best. The division, after all, had gone through amphibious training, the invasion of North Africa, and another transport mission from North Africa to Sicily. It had learned valuable lessons in these operations about amphibious warfare. The 9th Infantry Division was also one of the two combat experienced divisions available to the American commanders for the Normandy invasion (the other was the 1st Infantry Division, which did land on D-Day).

The Allied planners scheduled the 29th Infantry Division to participate in the D-Day assault by virtue of its early arrival in the United Kingdom (October 1942). When the planners expanded the invasion force from three to five
divisions, they added the 4th Infantry Division to land on UTAH beach. Bradley wanted at least one experienced division in the assault, and so chose the 1st Infantry Division to land on OMAHA Beach with elements of the 29th Infantry Division attached, despite the feelings of many veterans that they had done more than their fair share of the fighting since the war began. The logical course of action would have been to go one step further and use the 9th Infantry Division in the assault, too. Regardless of the feelings of the soldiers that others should carry the burden for awhile, the 9th Infantry Division, like the Big Red One, was at the peak of its combat efficiency. War is not fair. As Bradley stated, "Whatever the injustice, it is better that war heap its burdens unfairly than that victory be jeopardized in an effort to equalize the ordeal." 

**NORMANDY: ORDEAL IN THE HEDGEROWS**

On 3 June 1944 the 9th Infantry Division moved to a marshalling area near Southampton, and embarked on 6 June. Contrary to its Sicilian experience, the division moved across the Channel in small loads distributed among forty-seven Liberty ships; eight landing ship, tanks (LSTs); and twelve landing craft, tanks (LCTs), mixed in with units from four other divisions and miscellaneous corps units. As a result, the division took four days to disembark. Even then, small detachments continued to come ashore for several days to come. A less ambitious loading plan emphasizing unit
integrity would have brought more useful combat power ashore in less time than the actual plan. The turnaround time to England was short; the transports could have made a few more trips to compensate for the fact that a specific unit could not use every last nook and cranny on its assigned ship.

The 39th RCT was the first unit into action, attached to the 4th Infantry Division from 11 to 15 June. The regiment cleared a portion of the coast on the division's right flank and captured Quineville.

The rest of the division prepared to pass through the 90th Infantry Division, which had a horrible time in its first combat experience. At 1000 hours on 14 June, the 60th Infantry Regiment passed through the 90th Infantry Division and attacked west to begin the campaign to cut the Cotentin Peninsula in two (Figure 4). By 15 June Eddy had his entire division back under his control, and the 47th and 60th Infantry Regiments attacked on line. The next day the 2d Battalion, 60th Infantry captured a bridgehead over the Douve River. On 17 June the 47th Infantry Regiment moved southwest and passed through the positions held by the 82d Airborne Division at St. Sauveur Le Vicomte. By 2200 hours the 1st Battalion had severed the last German held road leading to Cherbourg. The next day the 9th Infantry Division reached the sea on the western side of the Cotentin Peninsula, thereby isolating Cherbourg.
FIGURE 4
THE 9TH INFANTRY DIVISION CUTS THE COTENTIN PENINSULA

Source: Gordon A. Harrison, Cross-Channel Attack (Washington: Office of the Chief of Military History, 1951), Map XXII.
The trapped German 77th Division attempted to break out, but the 9th Infantry Division destroyed the enemy force:

A column of vehicles, infantry and artillery attacked the 1st and 2nd Battalions, 60th Infantry. A fierce artillery concentration from all available guns [known in the division as a ZOMBIE] was brought down by Division Artillery on the head of this column...The concentration then was adjusted so as to creep up the congested road inch by inch from the crossroads to a point 5 miles to the northwest. The infantry completed the devastation with small arms and anti-tank fire. 75

Destroyed German vehicles and dead bodies littered a five mile stretch of road. The division parried other breakout attempts during the day, even while Major General Eddy wheeled his unit ninety degrees to face north in preparation for an attack on Cherbourg. Only a handful of divisions on either side could have performed this feat; the 9th Infantry Division was one of the best.

At 0500 hours on 19 June the division attacked north towards Cherbourg, and reached the outer perimeter of the port defenses the next day (Figure 5). The division used the 21st of June to reconnoiter and plan an assault, which began the next day with a massive aerial bombardment on the fortifications of the city. Despite the bombing, German resistance was stiff. Infantry followed closely behind artillery concentrations, but tank destroyers and artillery fire were necessary to reduce individual strongpoints. The fighting continued in the city until 26 June, when the 39th Infantry Regiment captured the German fortress commander and his staff. The 4th Infantry Division took charge of the city.
FIGURE 5
THE ATTACK ON CHERBOURG

Source: Adapted from Gordon A. Harrison, Cross-Channel Attack (Washington: Office of the Chief of Military History, 1951), Map XXIII.
on 27 June, and the 9th Infantry Division moved to clear enemy forces from the Cap de la Hague peninsula. By mid-day on 1 July, the division had completed its mission, and moved to an assembly area to integrate replacements, train, and take a well-deserved rest.76

Between 14 June and 1 July the 9th Infantry Division took 18,490 German prisoners, more than half of the 32,018 prisoners taken by VII Corps between D-Day and 1 July.77 The division suffered 390 killed, 1,851 wounded, 148 cases of exhaustion, and 922 non-battle casualties, of which a total of 616 men returned to duty by 1 July. The division thus suffered a net loss of 2,305 men.78 First Army fed in enough replacements to fill the division back to full strength, but nothing could replace the combat experience lost with the casualties. As usual, the infantry suffered the heaviest losses. The three infantry regiments lost a total of 1,844 men, 105 of whom were officers.79

The nature of the terrain favored the defense, and increased the number of casualties within the division. The bocage of Normandy is a mass of small farm fields separated by hedgerows that have grown over the centuries into quite formidable barriers. The division after-action report stated:

In effect, hedgerows subdivide the terrain into small rectangular compartments which favor the defense and necessitate their reduction individually by the attacker. Each compartment thus constitutes a problem in itself...The entire operation resolved itself into a species of jungle or Indian fighting, in which the individual soldier or small groups of soldiers play a dominant part.
Success comes to the offensive force which employs the maximum initiative by individuals and small groups. The 9th Infantry Division had discovered the key to hedgerow fighting from the infantryman's viewpoint. Only a few American units, however, possessed the experience and leadership at the small unit level to achieve the "maximum initiative by individuals and small groups" called for by the division's after-action report. Instead, First Army turned to technological (hedgerow cutting devices) and organizational (improved combined arms operations) solutions. In the meantime, most infantry units relied heavily on increased artillery firepower, as usual.

The 9th Infantry Division performed like the experienced, veteran division that it was during the operations in the Cotentin Peninsula. Ernie Pyle wrote:

The Ninth was good. In the Cherbourg campaign, it performed like a beautiful machine. Its previous battle experience paid off. Not only in individual fighting but in the perfect way the whole organization clicked...The Ninth did something in that campaign that we hadn't always done in the past. It kept tenaciously on the enemy's neck. When the Germans would withdraw a little the Ninth was right on top of them. It never gave them a chance to reassemble or get their balance.

Pyle's observation is not hard to explain. The 9th Infantry Division had merely applied the lessons it had learned in Africa, Sicily, and in training. Other divisions, with the exception of the 1st Infantry Division, learned through on-the-job experience. Given enough time, most would become as proficient as the veteran divisions.
The 9th Infantry Division's respite from combat was all too brief. The inability of First Army to break out of the bocage forced Bradley to commit more divisions to the attack. By 10 July the 9th Infantry Division was back in the line in the Le Desert region between Carentan and Isigny. Progress was slow. On the night of 10-11 July, the German Panzer Lehr Division attacked into the gap between the 39th and 47th Infantry Regiments (Figure 6). The 9th Infantry Division refused to panic. Instead, Major General Eddy ordered the 47th Infantry Regiment to seal the hole in the line, and then counterattacked the enemy force with infantry supported by tanks. By mid-afternoon the 9th Infantry Division had destroyed the enemy force, to include over twenty enemy tanks. The action was a convincing demonstration that an experienced, well-trained, and well-led American division was as good as any other division in Normandy, regardless of nationality.

The 9th Infantry Division took a week to reach its objectives along the St. Lo-Periers road. The advance was a slow, painstaking crawl through the worst of the bocage. Casualties were heavy. The 9th Infantry Division faced elements of some of the best units in the German armed forces, to include the 2d SS Panzer Division, the 17th Panzer Division, the Panzer Lehr Division, the 5th Parachute Division, the 275th Infantry Division, and the 352d Infantry Division. On 19 July the division ceased its attack and
PANZER LEHR ATTACK
11 JULY 1944

- U.S. POSITIONS, MIDNIGHT 10 JULY
- AXIS OF GERMAN ATTACKS

Contour interval 10 meters
100 0 1000 YARS 1000 METERS

FIGURE 6
PANZER LEHR ATTACKS, 11 JULY 1944

prepared for Operation COBRA, an attempt to break through the German front lines. Bradley postponed the operation for three days due to heavy rain that grounded air support. On 24 July Bradley again postponed the offensive because of poor weather, but some flights of bombers did not receive the message in time and dropped their bombs anyway. Overcast obscured the targets, and some bombs dropped into friendly lines. Contrary to Bradley's wishes, the bombers came in perpendicular to the front line, thereby increasing the chances of an error in target identification. Bradley was furious, but there was little he could do to change the plan at this late stage.85

The next day the weather cleared sufficiently for the bombers to attack their targets south of the St. Lo-Periers road. Again some bombs fell short, and the 9th Infantry Division did not escape unscathed. Bombs hit the 3d Battalion, 47th Infantry; the fire direction center of the attached 957th Field Artillery Battalion; the 60th Field Artillery Battalion; and the 690th Field Artillery Battalion. In the 3d Battalion, 47th Infantry, bombs killed the entire command group with the exception of the battalion commander and executive officer.86 This caused Major General Eddy to delay the attack of the 47th Infantry while he replaced its 3d Battalion with the 1st Battalion, 39th Infantry Regiment. The 60th Infantry Regiment attacking alone made an advance of about two miles, and created enough of a flank in the enemy lines for the 47th Infantry to exploit when it finally
advanced. The 47th Infantry maneuvered around the German positions and reached La Chapelle by 2200 hours. The shallow wedge driven into the German lines was deep enough to give the 1st Infantry Division and the 3d Armored Division the room they needed to exploit the penetration. 87

The 9th Infantry Division continued the attack until 28 July, when the 83d Infantry Division crossed its front and the division lost contact with the enemy. The 9th Infantry Division entered corps reserve. Five days later the division was back at the front, and took more casualties in hedgerow fighting north of Mortain until it entered corps reserve once again on 12 August. On 13 August the division moved by truck fifty miles to the southeast to the new VII Corps zone, and the next day attacked north towards Briouze. The Germans were on the run. "Numerous targets of all descriptions were available...5,829 rounds [expended]...Considerable destruction of enemy equipment...Streams of fighter-bombers attacked retreating enemy columns from 0500 until dark. Numerous fires from burning vehicles and tanks were observed in the target area." 88 On 18 August units of the British Second Army crossed the division's front and the division lost contact with the enemy. The pursuit across France began.

PURSUIT ACROSS FRANCE

On 19 August Major General Eddy moved up to take command of XII Corps, and Major General Louis A. Craig took command of the division. One week later the 9th Infantry Division made
an uneventful crossing of the Seine River at Melun, and continued to advance unopposed in the wake of the 3d Armored Division (Figure 7). On 2 September the 9th Reconnaissance Troop crossed into Belgium at Momignies. The division then shifted its advance east towards the Meuse River. On 4 September the division reached the banks of the Meuse near Dinant, and immediately made preparations for a crossing that night.

The crossing did not go smoothly. The German I SS Panzer Corps, with elements of the 2d SS and 12th SS Panzer Divisions, held the eastern bank of the river. The 39th and 60th Infantry Regiments, which were to make the crossing, did not have enough time to conduct a proper reconnaissance. The river banks were too steep to launch boats in places, which delayed the crossing until the troops could move to new sites. In the 39th Infantry Regiment's zone north of Dinant, B Company lost all but three boats, and only twenty men from A Company reached the far shore. The 3d Battalion reached the eastern bank unscathed, but could not advance due to heavy German opposition. South of Dinant, the 60th Infantry had an even rougher time. The 2d and 3d Battalions crossed to the far side of the river, but the Germans counterattacked and nearly destroyed the 2d Battalion. The 1st Battalion crossed the river to restore the situation, but for all intents and purposes, the 2d Battalion had ceased to exist as a fighting unit.
The 9th Infantry Division clung to its foothold across the Meuse until tanks of the 3d Armored Division, which had crossed further north, reinforced the 39th Infantry Regiment and helped to take Dinant on 7 September. The engineers finally completed a treadway bridge under fire, and the division began to move its heavy support elements across the river. The Germans once again retreated, this time all the way to the West Wall. The 9th Infantry Division pursued through the Ardennes Forest, until it ran into the fortifications of the West Wall on 14 September in the vicinity of Lammersdorf and Monschau. The 39th Infantry Regiment penetrated the first belt of German fortifications near Lammersdorf after a difficult, three-day battle, but could advance no further. The days of glory were over.

DEATH IN THE HUERTGEN FOREST

The VII Corps commander, Major General J. Lawton Collins, redirected the 9th Infantry Division further north to attack through the Huertgen Forest and seize Huertgen and Kleinhaus, six miles east of Zweifall. While the 47th Infantry Regiment guarded the corps southern flank, the 39th and 60th Infantry Regiments attacked through the difficult forest terrain studded with enemy mines, barbed wire, anti-tank obstacles, and pillboxes. The division measured progress pillbox-by-pillbox. The weather turned wet and cold, thereby increasing incidents of trenchfoot and other diseases. Artillery shells exploded in the trees and sent thousands of
lethal metal and wood splinters flying through the air. Land navigation in the dark forest was difficult if not impossible. Engineers found the only sure way to penetrate the six to eight foot thick reinforced concrete walls of enemy pillboxes was to attack through the roof with beehive charges and two hundred pound blocks of TNT. "It was a wearying and frustrating experience: counterattack following every attack; Germans infiltrating in the night into defensive perimeters; enemy patrols ambushing supply parties; mortar and artillery shells snapping branches and tops from the thick furs as if they were toothpicks and killing or maiming the men underneath."

On 6 October the 9th Infantry Division made one final attack in an attempt to take Schmidt and clear the Huertgen Forest, but could not do so after a brutal, ten-day battle in the dense foliage (Figure 8). The battle was an unnecessary waste of manpower. American corps and army commanders had not learned the lesson that the 9th Infantry Division had learned in Africa: that the best way through a difficult enemy position is to go around. By ordering the 9th Infantry Division to make a frontal attack through the Huertgen Forest, the First Army commander, Lieutenant General Courtney Hodges, and the VII Corps commander, Major General Collins, nearly succeeded in destroying the 9th Infantry Division as a fighting organization. When the 28th Division relieved the 39th and 60th Infantry Regiments in the Huertgen Forest on 25
THE FIRST ATTACK ON SCHMIDT
9TH DIVISION
6-16 October 1944

U.S. POSITIONS, 6 OCT
ROADBLOCK
U.S. AXIS OF ADVANCE
GERMAN COUNTERATTACK
U.S. POSITIONS, 16 OCT
WEST WALL PUllBOKES

Contour interval 50 meters

FIGURE 8
THE 9TH INFANTRY DIVISION IN THE
HUERTGEN FOREST, 6-16 OCTOBER 1944

Source: Charles B. MacDonald, The Siegfried
Line Campaign (Washington: Office of the Chief
of Military History, 1963), Map 6, p. 329.
October, the 9th Infantry Division was a shell of its former self and badly needed an extended period of rehabilitation. The division moved to Camp Elsenborn to integrate replacements, train, conduct maintenance on men and equipment, and rest.

An examination of the casualty statistics between 1 July and 31 October highlights the problem that faced the 9th Infantry Division after its battles in the Huertgen Forest (Table 7). The 9th Infantry Division lost 17,974 men in just four months. Of these men, 3,235 returned to duty within 30 days. The net loss for the division was therefore 14,739 men, or over 100 percent of its organic strength. The situation in the three infantry regiments was even bleaker. In these four months the infantry regiments, which accounted for only half of the division's strength, suffered over 85 percent of the division's casualties. Not even counting non-battle

<table>
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<th>Month</th>
<th>KILLED</th>
<th>WOUNDED</th>
<th>EXHAUSTION</th>
<th>NON-BATTLE</th>
<th>TOTAL</th>
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<td>384</td>
<td>2224</td>
<td>280</td>
<td>2158</td>
<td>5046</td>
</tr>
</tbody>
</table>

| TOTALS    | 1690   | 8573    | 1241       | 5155       | 17974  |

SOURCE: HQ, 9th Infantry Division, Report of Operations, July-October 1944, NARA, MMRB, RG 407, Box 7326, File 309-0.3.
casualties, the three regiments had 1,651 men killed and 7,072 men wounded, more than the total organic strength of the twenty-seven infantry companies in the division. Constant battle and continuous casualties had depleted the stock of trained and experienced men with which the 9th Infantry Division had entered the continent of Europe.

Officer casualties were particularly severe. Between 10 June and 30 September, the 47th Infantry Regiment lost 163 officers in combat. Every infantry company had lost at least six officers in combat, the average loss per company was eleven, and one company had lost eighteen officers. Since the authorized officer strength of an infantry company was six, the impact of these losses on the leadership of the unit is not hard to imagine. As the campaign progressed, the average experience level of the company-grade officers declined.

The impact of continuous combat on the soldiers took a tremendous toll. "No one was enamored of constantly being in the line," one veteran wrote. "There was no out except KIA [killed in action], WIA [wounded in action], captured, or war over." The 60th Infantry Regiment's history explained the burden of the infantryman in combat:

You were generally tired. Fighting and moving on foot for weeks on end--sleeping out on the ground, wet most of the time, always tense, eating cold rations, seeing buddies die--you just never seemed able to really rest. You seldom had your raincoat, and it never failed to rain--rain until there wasn't a dry stitch on your body.
The infantryman had to wage a war against two enemies: the Germans and nature. If the enemy did not kill, wound, or capture him, there was a good chance that the infantry soldier would succumb to trenchfoot, hypothermia, illness, or disease.

As First Army sent in more and more individual replacements to fill the depleted ranks of the infantry companies, the character of the division changed. Many of these men became casualties within a week of arrival. The 60th Infantry Regiment warned:

Never send replacements to a company in the heat of battle. It has been found from experience that new men arriving during a fight are bewildered by lack of knowledge of the situation and not knowing their leaders they are in many cases more hindrance than help. We have had several new men become casualties almost immediately after being assigned because of this. We have found it a good policy to wait for a slight lull in the battle so the replacements have a chance to get oriented.  

To integrate new men into their units, most companies teamed up replacements with veteran soldiers to teach the new men how to stay alive in combat. As time progressed, however, veterans became an endangered breed. "At one point [in the] Huertgen Forest," one veteran stated, "a vet was 2 weeks old." If a replacement survived a week or two in combat, he usually became a capable part of the team. Many did not live that long. Like most infantry divisions in Europe, the 9th Infantry Division suffered during its extended periods in the line, and paid the price of the ninety division gamble in blood.
RECOVERY

The 9th Infantry Division was fortunate that it received enough time out of the line or in light combat to recover from its ordeal in Normandy and the Huertgen Forest. The division spent the bulk of November in the rest area at Camp Elsenborn. From 10 to 15 December the division attacked towards the Roer River dams, but Hodges halted the offensive when the Germans launched their winter counteroffensive in the Ardennes. The 9th Infantry Division hustled south to hold the northern shoulder of Elsenborn Ridge, but the Germans did not attack in its area in strength. The division easily held its sector, and used the time to season the large numbers of new men in the unit. The men spent a white Christmas in the line.

During January the division learned a great deal about operations in deep snow and cold weather, but only patrols met the enemy. Regiments rotated battalions into reserve at frequent intervals, to give the men much needed rest. When the division attacked again on 30 January in blizzard conditions, it was once again an experienced, confident organization.101

In February a sudden thaw melted the snow and lessened the problems of cold weather operations. The 9th Infantry Division attacked towards the Roer River, and captured the Schwammenauel Dam on 10 February. Morale improved. "Our section of the 'Bulge' is vanishing before us," wrote one company clerk. "The boys are now thinking about the
Rhine. A week later the division relieved the 82d Airborne Division in the Huertgen Forest, and conducted preparations and training for an assault crossing of the Roer River. On 26 February the men of the division breathed a collective sigh of relief when they crossed the Roer River on bridges in the zone of the 1st Infantry Division, which spared them the need to cross the swollen river in rubber boats under fire.

**FINAL TEST: THE REMAGEN BRIDGEHEAD**

On 7 March 1945 troops from Combat Command B of the 9th Armored Division seized intact the Ludendorff railway bridge over the Rhine River at Remagen. Bradley and Hodges immediately decided to reinforce the 9th Armored Division, and Major General John Milliken of III Corps sent the 9th Infantry Division and 78th Infantry Division to Remagen to hold and expand the bridgehead there (Figure 9). Less than three years previously, the 9th Infantry Division had trained the cadre for the 78th Infantry Division. Now the two divisions were to serve together in combat. The battle of the Remagen bridgehead was the supreme test for the 9th Infantry Division, the culmination of all its training and combat experiences during the war.

On 9 March the 9th Infantry Division assumed control over the entire bridgehead east of the Rhine River, and for several days the division staff acted as a corps headquarters to control the operations of the three divisions in the
FIGURE 9
THE REMAGEN BRIDGEHEAD, 7-24 MARCH 1945

Source: Charles B. MacDonald, The Last Offensive
(Washington: Office of the Chief of Military
bridgehead. The division G-4 became the coordinating agency for the movement of supplies across the Rhine River. The G-4 traffic section controlled all movement within the bridgehead, and established traffic control points on the western approaches to Remagen. The military police platoon controlled movement over the Ludendorff bridge and the pontoon bridges that the engineers built. The division marshalled units that crossed the river into an assembly area on the east bank until they received a more permanent destination in the bridgehead. The division artillery controlled all indirect fires to the east of the Rhine River. At one point Brigadier General Reese M. Howell, the artillery commander, had seventeen battalions of artillery firing under his command. Only an experienced division staff could handle these assignments, and the staff of the 9th Infantry Division stood up to the test.\textsuperscript{105}

In bitter fighting, the infantry regiments attacked to expand the bridgehead. Casualties in the division again rose to the levels of Normandy and the Huertgen Forest. The training and combat experience of the past four months now paid off:

The losses of the 47th [Infantry Regiment] in the Remagen Bridgehead were appalling, and none but a veteran organization could have taken them and gone on fighting. Platoon leaders saw entire platoons annihilated in pushing up to the high, commanding ground on the east bank. Company commanders saw entire companies dissolve right before their eyes. Battalion commanders began to consider themselves lucky if they could muster one good company out of an entire battalion.

After the first couple of days in this almost suicidal-type battle, the sight of an officer in a
rifle company was rare, because most of them were gone. It was the same with the noncoms who led their squads into the fight...and the chain of command was exercised as it never was before.\footnote{106}

The Germans suffered more than the Americans, however, and they soon ran out of reserves to throw into the fight. The German line sagged, then broke altogether. The pursuit into German began.

Fortunately for the men in the division, the expansion of the Remagen bridgehead was the last major battle that they fought. After First Army broke out of the bridgehead in late-March, the 9th Infantry Division participated in the encirclement of the Ruhr industrial area, and defeated an enemy attempt to break out of the pocket in early April. The division broke up German resistance in the Harz mountains in mid-April, and finished the war along the Mulde River in the vicinity of Dessau.\footnote{107}

**CONCLUSION**

The 9th Infantry Division had come a long way since its battles in North Africa when it learned to "take the high ground." The lessons-learned sections of its after-action reports in the final months of the war contain sophisticated techniques for conducting night attacks, the use of split fire direction centers and artillery batteries during pursuits, the coordination of a cavalry-infantry combined arms team in mountain operations, and other advanced tactics and techniques. The division mastered the basics of combat in its
first battles, but had to reabsorb those lessons after each period of heavy fighting brought large numbers of new men into the unit. After a period of training and some combat experience, however, the division was able to reach—and perhaps exceed—its previous peak of combat efficiency. By the final months of the war, the 9th Infantry Division, like many divisions in the United States Army, was operating at a high degree of combat effectiveness.

The success of the 9th Infantry Division was a product of its solid cadre foundation, training, leadership, combat experience, its attention to inculcating lessons learned in battle into the organization, and the ability of veteran units to integrate replacements on a continual basis under less than optimum conditions. This last point is extremely important. Between June 1944 and April 1945, the 9th Infantry Division suffered over two thousand casualties every month except one (Figure 10). In four months (July 1944, August 1944, October 1944, and March 1945) the division's losses exceeded four thousand men, over 28 percent of the division's TO&E strength, per month. In each of these months, the division went through a crisis—fighting in the hedgerows, the Huertgen Forest, the Remagen bridgehead—that tested its skill and sapped its strength and effectiveness. The three infantry regiments felt the full impact of these battles (Figure 11). They suffered 96.2 percent of combat losses (killed in action, wounded in action, missing or captured), which constituted over fifty
Losts (Thousands)

![Bar chart showing Battle and Non-Battle Losses for 9th Infantry Division, 1944-1945](image)

**FIGURE 10**

9TH INFANTRY DIVISION LOSSES, 1944-1945

Source: 9th Infantry Division, Report of Operations, June 1944 - May 1945, NARA, MMRB, RG 407, 309-0.3.
FIGURE 11
9TH INFANTRY DIVISION CASUALTY BREAKDOWN

Source: 9th Infantry Division, Report of Operations, March 1943 - May 1945, NARA, MMRB, RG 407, 309-0.3.
percent of the division's total casualties, plus they accounted for a share of the non-battle casualties as well. If the infantry regiments were to remain effective, they had to be able to integrate replacements on a continuous basis, even when engaged in combat.

Initially, the division's combat was episodic (Figure 12). The long periods between campaigns in 1943 allowed the division time to reconstitute as a fighting force after taking losses, study the lessons of combat, and train to a peak before entering combat again. After D-Day, however, the division received little time out of the line. Only in November 1944, after the battles in Normandy and the Huertgen Forest had nearly destroyed the infantry regiments, did the division receive a large block of time to reconstitute its fighting strength while not engaged with the enemy. Under the circumstances, the 9th Infantry Division maintained its fighting power reasonably well, given the replacement system under which it had to operate.

Like all military units, the 9th Infantry Division was not a static organization. It changed over time as leaders changed, casualties left and replacements arrived, combat taught new lessons, and units trained to new standards. The division arrived in North Africa as an untested organization and showed its weaknesses in its first battles. Under Major General Eddy's leadership, the division learned from its mistakes and became a veteran outfit. The division reached a
FIGURE 12
9TH INFANTRY DIVISION, DAYS IN COMBAT

Source: 9th Infantry Division, Report of Operations, March 1943 - May 1945, NARA, MMRB, RG 407, 309-0.3.
peak of effectiveness during the campaign in the Cotentin Peninsula, before the huge losses of the hedgerow fighting and the Huertgen Forest depleted its ranks. After integrating replacements in November 1944, the division spent three months on relatively quiet sectors of the front, which kept losses low (Figure 1). By the time it underwent its next crisis at the Remagen Bridge, the division was once again at a peak of effectiveness.

The cyclical nature of combat effectiveness in the 9th Infantry Division is common to many of the divisions that fought in the European Theater of Operations. Without a system of unit rotation, too many units spent too much time in combat. The dips in combat effectiveness were unavoidable, but the costs of the system of individual replacements were high. Between June 1944 and May 1945, the 9th Infantry Division suffered 20,445 battle and 20,091 non-battle casualties, nearly three times the division's TO&E strength. Many of these casualties returned to the division after a stay in the hospital; many did not. The soldiers of the 9th Infantry Division earned their place in the Great Crusade through a great deal of effort and an enormous expenditure of blood.
ENDNOTES


2. After reorganization on 1 October 1940, the organic units of the division included the Headquarters and Headquarters Company, Division Band, Military Police Platoon, 9th Signal Company, 9th Reconnaissance Troop (Mechanized), 9th Quartermaster Company, 9th Medical Battalion, 709th Ordnance Company (Light Maintenance), 15th Engineer Battalion (Combat), 39th Infantry Regiment, 47th Infantry Regiment, 60th Infantry Regiment, Headquarters and Headquarters Battery (Division Artillery), 26th Field Artillery Battalion, 34th Field Artillery Battalion, 60th Field Artillery Battalion, and the 84th Field Artillery Battalion.

3. The cadre come from a variety of old army posts: Camp Custer, Michigan; Fort Thomas, Kentucky; Fort Benjamin Harrison, Indiana; Fort Sam Houston, Texas; Fort Warren, Wyoming; Fort Snelling Minnesota; Fort DuPont, Delaware; Fort Moultrie, South Carolina; Fort Devens, Massachusetts; Madison Barracks, New York; and Fort D.A. Russell, Texas, to name a few. "Activation and Reorganization Information," NARA, MMRB, RG 407, Box 7327, File 309-0.19, pp. 1-2.

4. Ibid., pp. 3-4.

5. The 60th Infantry Regiment, for example, trained 1800 volunteer recruits and 1807 draftees. "Regimental History, Sixtieth Infantry, 1940-1942," NARA, MMRB, RG 407, Box 7535, File 309-INF(60)-0.1, pp. 1-2.


7. W.F. Damon and Claud P. Brownley, "9th Reconnaissance Troop on Maneuvers," *Cavalry Journal* 50, no. 5 (Sep.–Oct. 1941): 86-88. The recon troop trained with only four of 16 authorized radios, and no .50 caliber machine guns were available to the unit for the first year of its existence.

8. Major General Rene E. DeRussy Hoyle was a member of the United States Military Academy class of 1906. His father and grandfather were both graduates of West Point, in 1875 and 1812, respectively.


15. 9th Infantry Division, "General Order 31," 3 December 1941, NARA, MMRB, RG 407, Box 7329, File 309-1.13.


17. Ninth Medical Battalion, "Battalion History," 1942, NARA, MMRB, RG 407, Box 7544, File 309-MED-0.1, p. 3.


22. Major General R.E.D. Hoyle went on to finish his career in command of a field artillery replacement training center.

23. 9th Infantry Division, "Standard Operating Procedure," 1941, NARA, MMRB, RG 407, Box 7327, File 309-0.24, p. 2.


25. Ibid.


30. Ibid.

31. Ibid.


33. Ibid.


35. HQ, 47th RCT, "Final Report on Operation of 47CT at SAFI for period 2400Z 7 Nov. '42 to 0730Z 11 Nov. '42," 2 Dec 1942, NARA, MMRB, RG 407, Box 7515, File 309-IN(47)-0.3.


37. Truscott has a good account of this operation, and his problems as the commander, in Command Missions, pp. 108-123.


40. HQ, 60th Combat Team, "Comments upon the Operations in the Vicinity of Port Lyautey, Africa," 15 November 1942, NARA, MMRB, RG 407, Box 7535, File 309-INF(60)-3.0, p. 4.


44. Ibid., pp. 5-6.

45. Ibid., pp. 8-9.

46. Ibid., pp. 10-11. The medics treated cases of combat fatigue with heavy sedation, a practice contrary to modern techniques of treating combat exhaustion. This probably accounts for the low return to duty rate.

47. Ibid., pp. 14-15.


49. Ibid., pp. 4-12.

50. Ibid., pp. 12-16.

51. Ibid., p. 17.

52. Ibid., p. 18.

53. Ibid., p. 19.

54. Ibid., p. 20.

55. Ibid., pp. 21-22.

56. Ibid., p. 22.

57. Ibid., p. 23.


60. Ibid., p. 3.

61. Ibid., p. 4.
62. Ibid., p. 7.


66. Ibid., p. 4.


69. Ibid., Annex 2.

70. Ibid., Annex 2, p. 5.

71. Truscott, Command Missions, pp. 253-254.


73. Ibid., p. 237.

74. HQ, 9th Infantry Division, "Report of Operations, 14 June - 1 July 1944, Cotentin Peninsula," 14 July 1944, NARA, MMRB, RG 407, Box 7326, File 309-0.3, p. 3.

75. Ibid., p. 8.

76. Ibid., pp. 9-18.

77. Ibid., pp. 18-19.

78. Ibid., p. 20.


82. Quoted in Joseph B. Mittelman, Hold Fast!, p. 44.

84. HQ, 47th Infantry Regiment, "History of the Forty-Seventh Infantry Regiment, 1 January 1944–31 December 1944," NARA, MMRB, RG 407, Box 7514, File 309-1INF(47)-0.1.


86. Lieutenant General Lesley J. McNair, commander of Army Ground Forces, was another casualty. He was in Normandy to observe the operation as commander of the fictitious 1st Army Group.


89. Blumenson, Breakout and Pursuit, p. 694.

90. Lieutenant Colonel Walter O. Beets, "History of the 60th Field Artillery Battalion, (105mm How., T.D.) for the Year 1944," 1 January 1945, NARA, MMRB, RG 407, Box 7471, File 309-FA(60)-0.1, p. 35.


96. HQ, 47th Infantry Regiment, "Report of Operations, 10 June - 30 September 1944," 9 October 1944, NARA, MMRB, RG 407, Box 7515, File 309-INF(47)-0.3.


98. 60th: Follow Thru (Stuttgart: 1945), p. 92.


100. Leo C. Williamson, K Company, 3d Battalion, 60th Infantry Regiment, 9th Infantry Division World War II Survey, USAMHI, Carlisle Barracks, Pennsylvania.


103. HQ, 9th Infantry Division, "Report of Operations, 1-28 February 1945," 5 March 1945, NARA, MMRB, RG 407, Box 7326, File 309-0.3.


108. Based on casualty statistics in 9th Infantry Division reports of operation, NARA, MMRB, RG 407, File 309-0.3, Box 7326, June 1944 to May 1945.
CHAPTER IV
THEIR DEEDS ALONE

"They shall be known by their deeds alone."¹

Major General John S. Wood

"The tanks stopped where the fields and orchards slope down to the Rhine's edge, then rise sharply in steep gray bluffs on the other side. Abrams picked up his radio transmitter and held it close to his mouth. 'We are on our objective,' he said."²

THE CREATION OF THE ARMORED FORCE

The development of the Armored Force is a story of the dogged determination of a few forward looking officers in the face of resistance from entrenched bureaucracy in both Washington and the field. During the "lean years" of the Great Depression, the officers and men of the 7th Cavalry Brigade (Mechanized) worked to create the tactics and techniques essential to the new form of warfare they envisioned.³ Competition for resources and divergence of thought on doctrine slowed the development of the mechanized force. The debate over mechanization sundered the ranks of the cavalry branch between supporters of the horse regiments and those who saw the potential of mechanized cavalry. The infantry branch, the legal proponent of tank units, viewed

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tanks as an adjunct to infantry operations. Development of armored vehicles proceeded at a crawl; between 1925 and 1939 the average annual budget for tank development was about sixty thousand dollars, enough to produce only a handful of tanks.\(^4\) That the small brigade at Fort Knox achieved so much during the 1930s is a credit to the men who served in the 7th Cavalry Brigade (Mechanized) and to the intellectual flexibility of its officers.

The German blitzkrieg in Poland began to convince some doubters of the capabilities of independent armored forces on the battlefield. The performance of the 7th Cavalry Brigade (Mechanized) in the Louisiana maneuvers of May 1940 also impressed the observers. Finally, the triumph of German armored formations in France in May and June 1940 shattered the resistance to mechanization in the War Department. The Chief of Staff, General George C. Marshall, decided that the development of mechanized units had to proceed independently of branch parochialism. On 10 July 1940 the War Department established the Armored Force with its headquarters at Fort Knox. Its first chief was Brigadier General Adna R. Chaffee, who had done more than any other officer to mold the force in the previous twelve years.\(^5\) The Armored Force was initially short of men and machines, but the experimentation of the previous decade had laid the groundwork for the armored tactics and mechanized doctrine used by the American Army in World War II.
Within a year of the creation of the Armored Force, the Army revised Field Manual (FM) 100-5, *Operations*, to place more emphasis on mechanized operations. The major thrust of the manual was on combining arms and services to achieve a decisive effect on the battlefield. The integration of infantry, armor, artillery, combat aviation, and other arms was essential to success. In the offense, armored units would mass to exploit penetrations or envelop the enemy. In the defense, armored units would mass as counterattack forces. The Armored Force reinforced the tenets of FM 100-5 by publishing FM 17-10, *Armored Force Field Manual: Tactics and Techniques*, on 7 March 1942. "The most decisive results will be gained from the grouping of overpowering masses of armored units and launching them against vital objectives deep in the hostile rear," the manual stated. FM 100-5 and FM 17-10 provided the doctrinal basis for American armored operations, the development of armored vehicles, and the organization of armored divisions.

While Ordnance designers worked on a new medium tank model for the Army, one more suited to exploitation than close combat on the front line, the Armored Force expanded from an embryonic brigade to several divisions. The 7th Cavalry Brigade (Mechanized) formed the nucleus of the 1st Armored Division at Fort Knox, Kentucky, while the Infantry Provisional Tank Brigade formed the nucleus of the 2d Armored Division at Fort Benning, Georgia. The Army would need more
than two armored divisions to engage in combat with a European
enemy, so the War Department created new armored divisions as
soon as enough trained cadre were available. On 15 April 1941
the War Department activated the 3d and 4th Armored Divisions,
once again effectively doubling the size of the Armored Force.
As America's entry into war loomed, Army leaders hoped the new
divisions would quickly ready themselves for the missions
ahead.

THE LONG PREPARATION

The 4th Armored Division received what many units did
not—adequate time to prepare for battle. The division was
too new to deploy for Operation TORCH and was not needed in
mountainous Sicily. Armored divisions were unsuitable for
operations on the jungles and small islands of the Pacific
Ocean area. By virtue of its activation in 1941, the 4th
Armored Division was fortunate to receive three years of
training under good leadership before deploying to France in
July 1944. This long period of preparation enabled the units
of the division to form cohesive teams and receive solid
training in tactics, techniques, and the maintenance and
handling of complicated equipment. The division's leadership,
especially the many young battalion commanders, developed
effective command and control techniques for fast-moving
mobile operations. The division had a chance to remove
incompetent leaders from their positions before engaging in
combat. The record of the 4th Armored Division in combat
would prove the worth of the long preparation.

The 4th Armored Division spent the first year and a half of its existence at Pine Camp, New York. Its cadre of six hundred officers and 3,200 enlisted men, under the command of Brigadier General Henry W. Baird, came from the 1st Armored Division at Fort Knox. The cadre spent the first several weeks in refresher training on methods of instruction and administrative organization. On 12 May 1941 the first group of draftees reported and within two weeks a total of 7,300 had arrived. The thirteen week basic training period began on 26 May. The division devoted the first four weeks to common subjects, such as military discipline, physical training, and close order drill. The units then began to train their soldiers in more specialized subjects, such as vehicle driving, radio operation, and marksmanship.

As the basic and individual training progressed during the summer, groups of men left to attend specialist schools—such as radio electrician, radio operator, auto mechanic, tank mechanic, and gunnery courses—at Fort Knox. Combat support and service support units sent small groups of men to courses at the Ordnance Field Service School, Quartermaster Motor Transport School, and the Engineer School. Equipment slowly arrived. In August units sent convoys of men to Fort Wayne, Michigan, to obtain new trucks for the division. The first fourteen light tanks arrived on 12 August. Field artillery units trained on 75mm guns, since no 105mm howitzers were
available.\textsuperscript{11} Road marches, overnight bivouacs, and marksmanship training became more frequent as basic training ended on 21 August and the next phase of mobilization training began.\textsuperscript{12}

The 4th Armored Division was only two months old when it received orders to train a group of cadre to form the 5th Armored Division. Units selected the cadre from within their ranks by the end of June and gave them extra training to prepare the men for their upcoming duties. On 7 September 1941 the group of 154 officers and 858 enlisted cadre left Pine Camp for Fort Knox. Three days later a group of 860 draftees arrived from the Armored Force Replacement Center to fill the division's depleted ranks, but the division remained short of officers. On 19 September the division began to release about 1,700 draftees who had reached the age of twenty-eight, but would soon receive these men back after the Japanese attack on Pearl Harbor.\textsuperscript{13}

As units became more proficient in the basics, they began to execute road marches and overnight bivouacs of extended length off the Pine Camp reservation. From 13 to 15 October the entire division took to the road in a march of 1,600 vehicles and over nine thousand men. In late October the division received its first medium tanks, the twenty-eight ton M3 Grant/Lee, which the 80th Armored Regiment (Medium) quickly put into service. The 24th Engineer Battalion (Armored), under the command of Major Bruce C. Clarke, built new ranges
and other training facilities for the division throughout the summer and fall. Training progressed to battalion, regimental, and division field exercises.\textsuperscript{14}

Within three months of the outbreak of war on 7 December 1941, several important changes occurred which proved of major importance to the continued development of the 4th Armored Division. The first change took place when Major General Baird made the newly promoted Lieutenant Colonel Clarke the Division Chief of Staff. Clarke brought a superb managerial and organizational ability to the division staff, which he soon had functioning smoothly. He complemented the sixty-one year old division commander. In 1972 Clarke said of his old boss:

Baird was an old Indian fighter. He was appointed from the ranks. He was a man with a very meager formal education, but he understood soldiers. He was a good leader and above all, he was a good trainer.\textsuperscript{15}

Baird represented an older generation of Army leaders. He had enlisted in the 15th Cavalry in 1904 and received his commission in cavalry in 1907. Clarke represented a younger generation of officers who would come to the fore during the war. He served with the Coast artillery during World War I and graduated in the top 15 percent of the West Point Class of 1925, received a civil engineering degree from Cornell University in 1927, and a bachelor of laws degree from La Salle University in 1936. Clarke was an engineer, but he understood the importance of combined arms operations, good
staff work, and leadership.

The second change occurred on 5 January 1942 when the division reorganized in accordance with upcoming changes to the table of organization and equipment for armored divisions. The War Department deactivated the 4th Armored Brigade. The 80th Armored Regiment disappeared and its medium tank battalions became part of the 35th and 37th Armored Regiments, each of which now contained one light and two medium tank battalions. Combat Command A (CCA) and Combat Command B (CCB), two headquarters without permanently assigned units, came into being. The division could now task organize its armor, infantry, and field artillery battalions in combat, which made the new organization more flexible than the old one. This change left the regimental headquarters with only training and administrative functions, a fact noted by the Army Ground Forces when it again reorganized armored divisions in 1943.

The 66th Field Artillery Regiment became the 66th Field Artillery Battalion and provided personnel to form the 94th Armored Field Artillery Battalion and the 704th Tank Destroyer Battalion. The division now had three separate field artillery battalions without a controlling regimental headquarters. The 18th Quartermaster Battalion and the 20th Ordnance Battalion became the 4th Armored Supply Battalion and the 4th Armored Maintenance Battalion. All other units added "armored" to their titles and the armored regiments dropped
the designation "light." On the whole, the changes created a division better capable of executing combined arms operations in a fluid environment.

The third change came about when Colonel Clarke approached Major General Baird a few months after assuming duties as the Chief of Staff. Clarke did not believe the division's battalion commanders, many of whom were older officers, were competent or young enough to stand up to the rigors of combat. Clarke recommended their relief and handed Baird a list of captains whom Clarke believed would grow into their new positions. Baird agreed. He sent fourteen lieutenant colonels to Fort Knox and put the division's battalions under the command of the most capable captains. Clarke relates:

Well, we called in this list of captains and General Baird talked to them and told them he had personally selected them. He said 'I think you're comers. If you know the job, I'm going to promote you. When we hit the Germans, you'll be lieutenant colonels. You'll have a couple years under your belt and I would like to turn over to you the training of your battalions. You're going to fight them...That's your team. You're going to fight for them. Now, let's go out with that basis and let's go to work.' Well, you know, that was the smartest damn thing I've ever seen done.

Among that group of captains was Creighton W. Abrams, a 1936 graduate of West Point who would prove to be one of the most outstanding American armor leaders to emerge from World War II. Abrams would go on to become the commander of American forces in Vietnam from 1968 to 1972 and Chief of Staff of the Army from 1972 to 1974.
The division spent the winter months training in deep snow and cold weather operations in temperatures as low as eighteen below zero. Photographs from that period show 4th Armored Division tanks moving through snow up to the top of their tracks. The division conducted a series of command post exercises to improve its command and control abilities. The division began another session of basic training for 1,100 draftees who reported to Pine Camp in February. Small unit training continued to meld the newly reorganized battalions into teams.

In April 1942 the division again suffered a loss of experienced cadre to form the 9th Armored Division. The turmoil in the division during this early period of the war is evident in the comments of the S-2 (intelligence officer) of the 66th Armored Field Artillery Battalion at the time:

With this entry into the historical record we find the 66th Armored Field Artillery Battalion greatly decimated of officers and men. We have been required to form a Training Company under the command of Lieut. J. H. Howard to train recruits. At present we are also vainly trying to prepare a cadre for a new Armored Division. Lieuts. Glenny, Shanklin and Meeder have just left the Battalion to join the 6th Armored Division. Our batteries have only, at the most, 2 officers in them. The strength of the batteries total not more than 85 men each. Because of the current war situation officers are being required to live on Post and attend classes nightly. The N.C.O.s are also going to school each night. A 7 day week for the Division has been prescribed. Things are in a turmoil because of the mad preparations for war.

An additional influx of replacements and officer candidate school graduates filled the division to full strength in the
spring, as the division once again worked to rebuild its units with extensive field training and range firing practice.

The bleeding of personnel from the 4th Armored Division did not stop in April. In June the division provided a portion of the cadre for the newly activated 10th Armored Division at Fort Benning. The division had difficulty training replacements, since a gasoline shortage curtailed mounted training from May to July. Units conducted extensive physical training during this period of enforced dismounted training.

On 18 June 1942 General George C. Marshall relieved Major General Baird from command of the 4th Armored Division and replaced him with Brigadier General John S. Wood. Baird was an excellent trainer, but he was too old to command the division in combat. The relief came as a blow to Baird, who soon retired from the Army. Wood, who pinned on his second star on 26 June, was different from Baird in many respects. A member of the West Point Class of 1912, Wood joined the coast artillery upon graduation. He served with the 3d Division and 96th Division in France during World War I. In 1920 Wood transferred to the field artillery. He was a distinguished graduate of the Command and General Staff School in 1924 and spent two years at the Ecole Superieure de Guerre in Paris between 1929 and 1931. After a year as assistant to the Commandant of the United States Military Academy, Wood spent five years as Professor of Military Science and Tactics.
at the Culver Military Academy. In 1939 and 1940 Wood served as Chief of Staff of the Third Army in Atlanta. After brief periods of duty as artillery officer of the 1st Infantry Division and commander of the artillery of the 2d Armored Division, Wood went to California to join the 5th Armored Division on 23 June 1941. Wood served as commander of CCA, 5th Armored Division before taking command of the 4th Armored Division at Pine Camp.27

Training continued during the summer to integrate new personnel and prepare units for the upcoming maneuvers in Tennessee. The exodus of cadre ended and the resulting stabilization of personnel was an important factor in the success of the training program.28 During the evenings, officers and noncommissioned officers continued to hold classes for professional development and the enlisted men watched training films. The lifting of the gasoline shortage enabled units to conduct extensive road marches, field exercises, weapons firing, and training tests. The combat commands trained extensively in the field during August. By the end of summer the division was at full strength. The entire division participated in a field exercise between 15 and 18 September as a warm up for the Tennessee maneuvers, after which the division prepared to depart Pine Camp permanently.29

The first trains bearing soldiers and equipment of the 4th Armored Division departed Pine Camp on 24 September 1942
for the maneuver area in middle Tennessee. By 5 October the division was assembled in the vicinity of Shelbyville and prepared for the first of the five maneuver exercises. The maneuver director was Lieutenant General Ben Lear, the commander of the Second Army. Along with the 4th Armored Division, troop units included the 6th and 8th Motorized Infantry Divisions and other units of XII Corps. The Tennessee maneuvers were the first real opportunity for Major General Wood to maneuver the 4th Armored Division as an entity. The division attacked in all five exercises; the battles raged around Lebanon, Carthage, and across the Stones and Cumberland Rivers. Engineers played a major role, since the vehicles were mostly roadbound and dependent on engineers for bridges across the large rivers.

The training proved of great value. Most of the division's vehicles traveled over six hundred miles in Tennessee. Commanders learned the importance of communications and supply in extended operations. Even the individual soldiers benefitted from the experience: "Not only did the platoons and sections have an opportunity for the exercise of their specialties, but each individual learned to take care of himself in the field; to handle his individual vehicle and arm; and to put into practical usage over a period of time the security and protective measures which he had been taught." Several training accidents, to include some fatalities, marred an otherwise excellent training exercise.
The fatalities occurred in vehicle accidents on the dusty roads and when two tanks overturned on a treadmill pontoon bridge and sank in the Cumberland River.\(^34\)

Lieutenant General Lear conducted after-action reviews for senior officers on weekends between the maneuver phases. In one meeting Lear castigated the officers of the 4th Armored Division for employing what he considered to be poor tactics, for violating the rigid maneuver plan, and for "being an undisciplined rabble."\(^35\) Wood almost ended his career when he angrily jumped up on the stage to defend his men from the unfair accusations. Only the quick intervention of Colonel Clarke between the two generals kept them apart. Clarke rapidly hustled Wood out of the auditorium, but word of the incident spread like wildfire among the officers and men of the division. Major General Wood had become their champion. From that day forward, the men of the division gave their undying loyalty to the man that they still refer to as "The Division Commander."\(^36\)

The maneuvers ended on 5 November and the division went into an administrative bivouac near Manchester, Tennessee. There the division conducted maintenance on vehicles and equipment. Prior to entraining for the Desert Training Center in California, the division turned-in its M-3 Grant/Lee medium tanks. The 4th Armored Division would begin the most crucial portion of its training with new M-4 Sherman medium tanks.\(^37\)
Good leadership, personnel stability, and extensive training had started to transform the 4th Armored Division into a good unit, but the division's six months of training in the California desert turned it into an outstanding combat organization. This period was by far the most important part of the division's training prior to its entry into combat in July 1944. Between 5 and 27 November 1942, trains carried the men and machines of the 4th Armored Division west to the barren Mohave Desert in southern California. The division established its tent base camp eleven miles west of Freda. Soldiers cursed the sweltering heat of day, chilly nights, and the blowing sand that permeated everything, but the training was exceptional. Training focused on gunnery and tactics at the small unit level and on combined arms operations at the combat command and division level. The desert, with its lack of maneuver restrictions and wide open spaces, proved a perfect place to train.  

Training began with individual and small unit training and progressed through combat command and division exercises to corps level maneuvers. Ammunition was abundant and the units continuously practiced gunnery on nearby firing ranges. The division drew new M-4 Sherman tanks and immediately put them through their paces.

In the desert the division developed an innovative form of training that undoubtedly saved many lives later on in combat. Crews loaded their tanks with machine gun ammunition,
"buttoned up" (i.e., closed the hatches), and stalked each other in the open desert under the control of officer evaluators. To score a "kill," a crew had to hit the enemy's tank with a machine gun burst. A thorough after-action review, in which the participants evaluated their performances, followed each iteration of the exercise. Except for an occasional shattered periscope, the live fire training caused little damage and no casualties. This training kept the soldiers interested, for it was more than just another "dry run." The training was realistic. There was no argument over whether or not a tank had been hit. The enemy could appear from any direction. After a few weeks the division progressed from tank versus tank duels to platoon versus platoon and company versus company exercises. In the absence of modern training devices such as the multiple integrated laser engagement system (MILES), the 4th Armored Division had developed a simple method to achieve the same amount of realism (perhaps a greater amount) on the training battlefield. 40

The division and its combat commands trained through January 1943 in preparation for corps level maneuvers. A typical exercise, to include marches under blackout conditions, could cover as many as sixty miles. 41 Units integrated live fire into their maneuvers whenever possible. Staffs participated in command post exercises by IV Armored Corps and map problems conducted by instructors from the
Command and General Staff School, Fort Leavenworth, Kansas. The division staff also produced a new standard operating procedure (SOP) under the direction of Colonel Clarke. The SOP stressed quick, mission-type orders in combat, the use of oral fragmentary orders in fast moving situations, and the habitual use of warning orders to notify units of impending missions. There were occasional breaks from the rigorous training schedule, like the time when the 84th Armored Reconnaissance Battalion provided the enemy troops for the movie "Sahara," starring Humphrey Bogart.

Between 6 and 9 February the division moved to Camp Ibis, about twenty miles north of Needles, California. On 14 February corps level maneuvers began. The three weeks of maneuvers by the IV Armored Corps came as close to actual large-scale combat as the division would get until it entered France. The units involved were the 4th Armored Division, the 6th Armored Division, and the 6th Motorized Infantry Division. The maneuvers included three exercises, each of four to five days duration. Problems included meeting engagements, attack of fortified positions, and hasty defense.

The exercises extended over the length and breadth of the Desert Training Center in California, Nevada, and Arizona. Hard surfaced roads were off-limits and the units gained considerable experience in maneuvering in difficult terrain. The division also learned valuable techniques in preparing for combat:
At the beginning of the second problem it was thought that the 4th Armored Division would assault Styx Pass, which consisted of mine fields, wire barriers, tank ditches and concrete pill boxes. The day before this assignment was to be carried out, a rehearsal was held about 10 miles south of new Highway 66 on Power Line road. A replica of the position at Styx Pass was built and the assault parties of the Engineer Companies executed the assignment very satisfactorily.47

The maneuvers were as realistic as possible. In one attack, artillery fired over six hundred rounds and dive bombers dropped one hundred pound bombs on a vacant fortified position.48 Realism had its drawbacks, however, for safety problems again plagued the division. In one accident, a half-track ran over a sleeping soldier in bivouac.49

The maneuvers ended on 4 March and the division returned to Camp Ibis to conduct maintenance and rehabilitation of men and equipment. Maintenance was sorely needed; during the maneuvers the number of deadlined vehicles reached 571, over 15 percent of the division's authorized strength.50 After a week of rest, the rigorous field training and gunnery schedule resumed. Between training periods, soldiers took advantage of opportunities to tour Boulder Dam and the Grand Canyon.

By the second anniversary of its activation, the 4th Armored Division was ready for combat. It had learned the three fundamentals of armored warfare—to shoot, move, and communicate. The most important factors in the division's development were good leadership, personnel stability (after the summer of 1942), and excellent training, especially at the
Desert Training Center in California. The desert prepared the division for wide ranging movements. The 4th Armored Division's initial combat mission would be pursuit of a broken enemy force across France. The division's success in this mission was no accident, for Major General Wood and his men merely applied the training they had received in the open expanses of the desert to their situation in Europe. The results were stunning.

In mid-May the 4th Armored Division began to prepare its vehicles for transfer to the 9th Armored Division. Soldiers assumed this was a prelude to transfer overseas, since units deploying to England received new equipment from stocks upon arrival. Instead, the men of the 4th Armored Division learned that they were headed for Camp Bowie near Brownwood, Texas.

While the division turned its vehicles over to the 9th Armored Division, all units took turns running through a battle inoculation course set up by the 51st Armored Infantry Regiment. Squads ran through the course controlled by their own leadership. During the first part of the course, squads attacked a small village. They next went through an obstacle course, at the end of which they fired their weapons on a combat firing range. The next hurdle was an infiltration course. The squads advanced for seventy-five yards under wire entanglements with live .30 caliber machine gun bullets fired overhead, while TNT explosions simulated artillery fire.
This type of realistic training exemplified the spirit of the 4th Armored Division and was a major factor in the division's success in combat.

The division completed its move to Texas by the end of June. Soldiers took advantage of a liberal leave policy until 5 July, when the furloughs ended and the division embarked on a program of intense physical conditioning. The division received another complement of vehicles at Camp Bowie, which the Army had shipped from the previous station of the 9th Armored Division at Fort Riley, Kansas (in effect, the two divisions traded vehicles). After nine months in the field, the division once again slept under solid roofs, a fact much appreciated by the soldiers.

Training at Camp Bowie included small unit tactics, short maneuvers, gunnery exercises, anti-aircraft firing at Fort Bliss, individual weapons qualification, intensive physical conditioning, and individual and unit combat proficiency tests administered by VIII Corps and Third Army. The division established infiltration, close combat, and village assault courses to make the training as strenuous and realistic as possible. The division expected every soldier to qualify with his individual weapon, pass the physical fitness test, and to learn how to swim. Officers and noncommissioned officers attended night school three times each week. Topics included conduct of ranges, training management, reports, reconnaissance, combat actions in Russia, and command post
The 4th Armored Division went through its final major reorganization on 10 September 1943. The changes lessened the division's combat power, but did not alter its method of operation. The 35th and 37th Armored Regiments became the 35th and 37th Tank Battalions. Excess personnel and equipment formed the 8th Tank Battalion. Instead of separate light and medium tank battalions, each armor battalion had three companies of medium tanks and one light tank company. The 51st Armored Infantry Regiment broke down into three separate battalions: the 51st Armored Infantry Battalion, the 53d Armored Infantry Battalion, and the 10th Armored Infantry Battalion. The infantry battalions gained strength from transfers of men from units within the division, such as field artillery battalions, that had their strength cut. The 84th Armored Reconnaissance Squadron became the 25th Cavalry Squadron (Mechanized), and the 4th Armored Maintenance Battalion became the 126th Armored Ordnance Maintenance Battalion.

The division also formed a Reserve Command to control those combat elements not otherwise assigned to CCA or CCB (in the old organization, the regimental headquarters would control these elements). The Reserve Command was not a tactical grouping, but the division could use it as such in emergencies. The elimination of regimental headquarters did not change the division's combat methods, for the combat
commands continued to control task organized battalions as they had in the past. The change removed headquarters overhead and reduced the division's combat power, but not excessively. 58

On 1 November, Brigadier General Roderick R. Allen departed from CCA to take command of the 20th Armored Division. Major General Wood put Colonel Clarke in command of CCA and replaced him as chief of staff with Colonel Walter A. Bigby, the division G-4 (supply officer). Brigadier General Holmes A. Dager remained in command of CCB. Dager was an infantry officer who enlisted in the New Jersey National Guard in 1916. He received a regular commission the next year, fought in the Meuse-Argonne offensive during World War I with the 51st Infantry Regiment, and earned a silver star for gallantry in action. He was a graduate of the Command and General Staff School (1931) and the Army War College (1936). 59

This arrangement of the division's leadership would remain in effect for twelve months. Although this combination of leaders proved effective in combat, Clarke and Dager disliked each other intensely, which made for a great deal of competition between the two combat commands. 60 "He rose on our reputation and we were good in spite of him," Clarke would say of Dager in later years. 61 Although unfair to Dager, who proved a capable combat leader, this comment shows that there was a power struggle within the division between Dager's
"infantry crowd" and Clarke's "armored force crowd," presided over by Wood, who had a "hands-off" command style. 62

The growing buildup of American units in England in preparation for the invasion of France kept the remainder of the 4th Armored Division's stay in Texas short. Units of the division continued to train hard, passed the Army Ground Forces individual and unit proficiency tests, and prepared for overseas movement. In mid-November the War Department alerted the 4th Armored Division for deployment. The division turned over its organizational equipment to the 13th Armored Division in early December and began its movement by train to Camp Myles Standish, Massachusetts. In the staging area troops received immunizations, drew clothing and equipment, had their personnel records checked for accuracy and completeness, and trained in transport procedures, chemical defense, and "abandon ship" drills. On 29 December the bulk of the division loaded on the transports Santa Paula, Santa Rosa, Thomas A. Barry, and Exchange, and sailed out of the port of Boston. 63 Ahead lay the war.

**TRAINING IN GREAT BRITAIN**

The convoy overseas was uneventful. "No record exists of anyone greeting the New Year," wrote an officer in the diary of the 37th Tank Battalion. 64 The convoy reached Great Britain after a ten day journey and the soldiers disembarked at Avonmouth, Newport, Swansea, and Cardiff. They then boarded trains to reach their permanent stations in Wiltshire.
County vicinity Chippenham, Devizes, and Trowbridge. The division organized its billeting area and resumed its physical fitness program, which continued up to the time the division deployed to France. During the rest of the month of January 1944 the division drew new vehicles, to include 168 M4 medium and 83 M5A1 light tanks, from stocks prepositioned in Great Britain.\(^6\) Shakedown road marches and training kept the men busy.\(^6\) Units granted furloughs to nearby towns as time permitted. On 1 February, Third Army assumed command over the 4th Armored Division and Lieutenant General George S. Patton, Jr. arrived for a two day inspection.\(^6\)

From 22 to 29 February the division moved to Salisbury Plain for gunnery and maneuver training. Individuals and crews fired their weapons on Imber range. CCA held several one-day live fire maneuver exercises near Imber village. Combined arms task forces from all the division's battalions took part. "As part of the problem, the artillery threw an air burst salvo on our tanks after they had passed through the infantry which made the initial assault..."\(^6\) Exercises such as this one on Salisbury Plain made the men of the 4th Armored Division used to realistic training, which would lessen the shock of their first combat.

The division conducted three field exercises in March, each of two days duration, and one three day exercise in April. CCA practiced breakthrough and exploitation techniques, which would prove of great value in the future.\(^6\)
Limited training space in England precluded more numerous large scale maneuvers, but companies and platoons trained in the field for short periods on their own. Units conducted gunnery as often as range availability permitted. Morale remained high. Major General Wood authorized crews to paint cartoons on their vehicles to emphasize their names. Officers and soldiers enjoyed their leaves and furloughs until the European Theater of Operations headquarters ordered all passes, leaves, and furloughs canceled on 5 April.

Individual and platoon training continued into May as D-Day approached. Units conducted short field training exercises and gunnery exercises as time and space permitted. Reserve Command, with hundreds of soldiers attached from different units in the division, acted as the reception party for the 35th Infantry Division, which arrived in Great Britain during the month. This mission lasted from 16 to 28 May, an example of the necessary but distracting tasks that a unit about to enter combat must sometimes perform.

In June the division learned how to waterproof its vehicles and followed the events in Normandy with great interest. The division vacated its permanent area during the first week of the month and established a tent camp north of Marlborough. Units cycled through Imber Range to conduct gunnery exercises. The division again stressed realism. "On return to the bivouac area," wrote an officer in the diary of the 37th Tank Battalion, "it was discovered that several tanks
and one 1/4 ton truck had been hit by small arms fire during the last attack."\textsuperscript{73}

Short maneuvers and simulated loading exercises kept the units busy until mid-June, when the crews prepared their vehicles for overseas movement and received their basic load of ammunition. Not everything went smoothly. The division's assault gun platoons finally received their vehicles, but they were M4(105mm) medium tanks, which none of the crews had seen before. Units quickly readied the assault guns, test fired them, and put their crews through a short, intensive period of training.\textsuperscript{74} At higher levels, the division held a command post exercise from 26 to 28 June to orient the commanders with the situation in Normandy, refine command and control procedures, and to practice those missions that the division might have to perform soon.\textsuperscript{75}

\textbf{BREAKOUT FROM NORMANDY}

Between 7 and 9 July 1944 the 4th Armored Division moved to its marshalling area near Dorchester. After two days in the marshalling area, units moved to their ports of embarkation (Weymouth and Portland). The convoys departed at night for the beaches of Normandy. Rough seas made for a tough crossing, but by daylight on 11 July the first units began to debark onto UTAH Beach. Since the Navy split units into numerous loads, battalions spent the better part of a day (in some cases two or three days) locating and organizing all of their elements. After organizing themselves, battalions
moved to a division assembly area southeast of Barneville and went into bivouac until 17 July.  

Lieutenant General Omar N. Bradley assigned the 4th Armored Division to VIII Corps of the First United States Army. The assignment was temporary; American planners had already assigned the division to the Third United States Army, but Third Army was not operational yet. VIII Corps ordered the 4th Armored Division to take over the portion of the front near Carentan currently held by the 4th Infantry Division, to release the latter unit for Operation COBRA. Between 17 and 27 July the 4th Armored Division held a quiet, narrow sector of the front between the 83d Infantry Division and the 90th Infantry Division, which gave the three armored infantry battalions a gradual introduction into combat.  

The success of Operation COBRA opened a hole in the German lines through which the 4th Armored Division began to penetrate on 28 July. CCB passed through the 90th Infantry Division and attacked south towards Coutances. CCB reached the city by noon, but mines and demolitions held it up for several hours. By 1800 hours, CCB had taken Coutances and linked up with the 3d Armored Division.  

The drive south now made rapid progress. The three columns of the division reached the high ground north of the key city of Avranches on 30 July. The division diary captured the incredible scene:

The enemy is retreating so rapidly that large quantities of vehicles, guns, and stores are being
left by the sides of the road in their flight. Horses of horse-drawn units are either dead by the side of the road or wandering loose over the countryside...Prisoners streamed to the rear by truck and on foot, some without guards, others being marched back by armed Frenchmen.79

On 31 July the 4th Armored Division seized Avranches after a fierce battle and opened up the gateway to the Brittany Peninsula and the interior of France.

The next day, 1 August 1944, the Third United States Army became operational under the command of Lieutenant General George S. Patton, Jr. Patton ordered the 4th Armored Division to continue its attack towards Rennes in the Brittany Peninsula (Figure 13). CCA moved fifty-four miles in twenty-four hours and reached the outskirts of the city on the morning of 2 August. CCA and CCB encircled the city to the west while the 2d Cavalry Group, attached to the 4th Armored Division, bypassed the city to the east. The 13th Regimental Combat Team of the 8th Infantry Division pressured Rennes from the north. "No resistance was met for six miles and after that only scattered groups of Jerries," wrote an officer in the diary of the 37th Tank Battalion. "These were speedily dispatched in accordance with the VOCO [vocal order of the commanding officer] 'Kill every God damned one of them'."80 All units reached their objectives by the afternoon of 3 August and began a coordinated assault on the city. The attack continued through the night and the 13th Regimental Combat Team occupied Rennes the next morning after the Germans abandoned the city.81
BREAKOUT INTO BRITTANY

Source: Martin Blumenson, Breakout and Pursuit (Washington: Office of the Chief of Military History, 1961), Map VII.
By now it was clear to Major General Wood that COBRA had broken the German defense beyond repair. He chafed at orders pulling his division into the Brittany Peninsula in accordance with an operations plan written in England before the D-Day invasion. The success of Operation COBRA, Wood correctly reasoned, now made that plan irrelevant. If the American Army were to swing east, it could cut off the German forces in Normandy and France would then belong to the Allies. The VIII Corps commander, Major General Troy H. Middleton, drove to the 4th Armored Division headquarters on 4 August to confer with Wood. Middleton later recalled:

“We got to Wood’s headquarters about daylight. Wood was stripped to his waist, near a little trailer with his maps all out on the ground. He came over and threw his arms around me. I said, ‘What’s the matter, John, you lost your division?’ He said, ‘Heck no, we're winning this war the wrong way, we ought to be going toward Paris.’”

Wood’s instincts were correct, but Patton was not about to disobey orders now that he had an operational command again. Patton sent Wood’s division into the heart of the Brittany Peninsula to seize Lorient. For the moment, the 4th Armored Division stepped out of the spotlight as the crucial battle developed in the Falaise Gap.

At 1400 hours on 5 August CCA began an advance towards Lorient and by 2100 hours had advanced seventy miles to take the city of Vannes. Units moved faster than their supplies; shortages of gasoline did more to halt the American advance than German resistance. By late afternoon on 7 August, CCB
had invested Lorient. The division lacked the infantry strength to take the city by assault and settled into siege positions. While CCB stayed at Lorient, CCA moved on 10 August eighty miles east to Nantes. By 12 August CCA had taken the portion of the city north of the Loire River.\textsuperscript{84}

On 13 August Patton reassigned the 4th Armored Division to XII Corps and ordered the division to concentrate at Vendome for an attack towards Orleans. Wood was about to get his wish, albeit somewhat late. Crews concentrated on maintenance of their vehicles as the division awaited its relief, but the long supply lines limited the availability of spare parts. On 14 August the 2d Cavalry Group relieved CCA at Nantes and the 6th Armored Division began the relief of CCB at Lorient. Units of the 4th Armored Division moved east and ran off their maps. CCA drove 167 miles overnight to reach St. Calais and was immediately ordered to proceed towards Orleans in conjunction with the 35th Infantry Division. The men were tired and the vehicles in need of maintenance, but the combat command moved out as soon as it had refueled. CCB followed after completion of its relief.\textsuperscript{85}

Throughout the breakout from Normandy, the 4th Armored Division received superb close air support from the P-47 Thunderbolt fighter-bombers of the XIX Tactical Air Command. Air-ground cooperation was a key to the success of the armored spearheads during Operation COBRA. A flight of four fighter-bombers flew ahead of each armored column, as air support
parties rode in tanks near the front of the columns to direct air strikes and receive reconnaissance information from the planes overhead. By fall 1944 American ground forces received close air support almost as quickly and efficiently as artillery fire. Units used the fighter-bombers to destroy difficult targets, such as enemy tanks. American units in France came to rely on close air support to such an extent that lack of air cover adversely affected the pace of offensive operations.  

The 4th Armored Division performed well in its initial battles. Wood pushed his men aggressively forward to take advantage of the fluid situation after the breakout from the Cotentin Peninsula. These advances were not foreign to the division, however, for they resembled the lengthy maneuvers the division performed in the Desert Training Center in California and the breakout and pursuit operations practiced in England before D-Day. CCA commander Bruce C. Clarke later recalled:

Everything we did in battle we practiced. We practiced on Salisbury Plain. We practiced these breakthroughs. We'd go down and run an operation, breakthrough, and go into exploitation...From then on all I had to do was to say, 'Remember what we did at Salisbury Plain that day?" 

The 4th Armored Division laid the foundation for its success in battle through strenuous training. The hard work would pay off in the months ahead, as more challenges awaited the division. "On the crest of a mounting wave of optimism the 4th Armored Division turned eastward and drove out of Brittany
in search of further opportunities," wrote the official Army historian, "its commander sure at last that he was heading in the right direction."^{88}

**DAYS OF GLORY**

While CCA attacked and took Orleans on 16 August, CCB marched 264 miles in thirty-six hours to catch up with the rest of the division (Figure 14). During the next four days the division performed much needed maintenance on its vehicles. Supplies, especially gasoline and spare parts, were scarce. On 21 August the division attacked and advanced seventy-two miles to Sens. CCA captured a trainload of gasoline and a warehouse full of food, which helped to alleviate some of the shortages within the division.\(^{89}\)

On 25 August one of the most remarkable battles of the war took place when CCA stormed the city of Troyes on the Seine River. CCA moved in two columns. Task Force (TF) ODEN reached the Seine about ten kilometers north of Troyes at noon and began bridging operations. Task Force WEST reached its attack position northwest of Troyes about the same time and waited for TF ODEN to cross the river. Delay in the completion of the bridge caused Colonel Clarke to order TF WEST to attack Troyes at 1700 hours alone.

In Troyes the 51st SS Infantry Brigade defended the city with anti-tank guns, artillery, and automatic weapons sheltered behind an anti-tank ditch. Colonel Clarke and Lieutenant Colonel Arthur L. West came up with a novel
FIGURE 14
4TH ARMORED DIVISION IN THE PURSUIT

Source: Adapted from G-3, 4th Armored Division, Route of the 4th Armored Division (Map), 1945, NARA, MMRB, RG 407, 604-0.
approach in their plan of attack, as described in the division's after-action report:

The attacking force, using desert tactics, attacked on a wide front with vehicles approximately 100 yards apart, all weapons firing continuously and all men mounted. The audacity and speed of the attack carried the force 3 1/2 miles across open ground, through considerable artillery fire, over deep anti-tank ditches, and through the perimeter defenses into the outskirts of the city. Bitter fighting took place throughout the night and until noon of the following day, when the city was cleared of the enemy.90

The most interesting point about the account of the action is the use of the term "desert tactics." These were not the tactics of the war in North Africa that TF WEST used in its assault on Troyes, but the tactics the 4th Armored Division had used in its maneuvers on the sands of the Mohave Desert in California.91 Units fight like they train.

After destroying the 51st SS Infantry Brigade, the 4th Armored Division bounded the Seine River and moved rapidly east. These were days of glory for the division, with advances measured in dozens of miles daily as long as the gasoline supplies held out. The division crossed the Marne River and Meuse River in stride before gasoline supplies dried up on 1 September; Eisenhower had diverted priority to the British 21st Army Group in the north.92 For ten days the 4th Armored Division sat astride the Meuse River and watched the opportunity to reach the German border disappear. Units conducted intensive maintenance on men and machines to prepare them for an advance to the Moselle River when supplies
permitted a resumption of the attack. The vehicles needed the maintenance; most combat vehicles had logged 1,500 miles since landing on UTAH Beach, and supply vehicles had logged over three thousand miles. The division quartermaster did his part in keeping morale high; on 3 September an officer from the quartermaster section picked up five truckloads of cognac from Chartres for general troop distribution, and on 10 September the quartermaster issued two cigars to each man in the division.

The 4th Armored Division renewed its advance on 11 September after the gasoline shortage eased somewhat. CCA and CCB reached the Moselle River and waited for the 35th and 80th Infantry divisions to establish bridgeheads north and south of Nancy. Unfortunately, the pause in the pursuit in early September had allowed the Germans to transfer the 3d and 15th Panzergrenadier divisions from Italy to Lorraine. Those two depleted but still potent divisions now barred the way across the Moselle. XII Corps would have to fight for its bridgeheads.

On 11 September the 35th Infantry Division gained a bridgehead across the Moselle River south of Nancy. CCB crossed the river to the south of the 35th Infantry Division by fording the numerous canals and river channels with its armored vehicles. Without waiting for the construction of a bridge, CCB exploited to the east and north (Figure 15). By 14 September, CCB had reached the Marne-Rhine Canal east of
FIGURE 15
THE ENCIRCLEMENT OF NANCY

Nancy, but could go no further.\textsuperscript{96}

On 12 September the 80th Infantry Division seized a bridgehead north of Nancy at Dieulouard, and CCA of the 4th Armored Division wasted no time in exploiting the opening. CCA armored columns entered the shallow bridgehead at daylight on 13 September, knifed through the German perimeter defenses, and reached the high ground west of Chateau-Salins by nightfall. The logistical tail tucked itself closely behind the combat elements to move in the void created by the violent armored advance. The next day the force attacked south, seized Arracourt, cut the German lines of communication to Nancy, and contacted reconnaissance elements from CCB to the south. By 17 September, the 4th Armored Division was in a strong position east of Nancy, astride the German lines of communication.\textsuperscript{97}

While XII Corps paused to consolidate its gains, the German Fifth Panzer Army prepared to counterattack with the 559th Volksgrenadier Division, the 11th Panzer Division, and the 111th and 113th Panzer Brigades. The Wehrmacht had recently formed the two panzer brigades on Hitler's orders. These two units each contained a battalion of older Mark IV tanks and a battalion of brand new Mark V Panther tanks, which were vastly superior to American armored vehicles. German tank crews in these new brigades, however, were inexperienced and their units lacked the training which is essential to the formation of cohesive and effective combat teams.\textsuperscript{98} In the
two-week battle that ensued, this difference in unit training and cohesiveness tipped the balance in favor of the 4th Armored Division.

The Fifth Panzer Army struck CCA of the 4th Armored Division at Arracourt on the morning of 19 September as the division was preparing to renew its offensive to the northeast. What followed was one of the largest armored battles in France during World War II. The 113th Panzer Brigade attacked in a dense fog to protect itself from American airpower, but the limited visibility denied the Germans the superior range advantage of their high velocity tank guns. Colonel Clarke and the battalion commander of the 37th Tank Battalion, Lieutenant Colonel Creighton W. Abrams, maneuvered their units skillfully around the flanks and rear of the German brigade. By the end of the day CCA had defeated the 113th Panzer Brigade and destroyed forty-three enemy tanks, at a cost of only eight friendly tanks and three tank destroyers.99

For the next six days the Fifth Panzer Army continued to feed more panzer units into the battle around Arracourt, but the 4th Armored Division defeated all assaults with a masterful mobile defense that avoided the German strengths in frontal armor and firepower by maneuvering to the flanks and rear of the enemy units.100 XIX Tactical Air Command contributed to the victory when the weather cooperated. American tank crews improvised to defeat superior enemy
vehicles. One technique was to use white phosphorous rounds against enemy tanks. The burning white phosphorous would blind enemy crews with a dense smoke screen and sometimes forced them to evacuate their vehicles by seeping into cracks in the hatches. American tank crews could then close in for a killing shot with armor piercing ammunition.¹⁰¹

Clarke attributes the victory at Arracourt to good training, fast shooting, and the use of white phosphorous ammunition. "Abrams was the best organizer of a tank battalion that [sic] I've ever known," Clarke stated later. "Abrams was a man whose characteristic was careful planning and violent execution."¹⁰² The tank crew training in the 37th Tank Battalion was the best in the division.¹⁰³ The 4th Armored Division out-maneuvered and out-shot the enemy at Arracourt, but the division had planted the seeds of victory in its three years of training prior to the battle.

Another reason for the victory of the 4th Armored Division at Arracourt was superior command and control. Air superiority enabled American commanders to control their units from the air. "I spent a lot of time moving my columns across France by flying overhead [sic] the column and talking to the leading company commander," recalled Bruce C. Clarke. "I led Abrams into Arracourt at the time when he captured the German Corps [HQ]...I was over his head leading them in."¹⁰⁴ Major General Wood allowed his subordinate commanders a great deal of latitude. His commands were almost always oral, mission-
type orders that allowed Colonel Clarke and Brigadier General Dager to exercise initiative in accomplishing their tasks. German commanders, on the other hand, worked within a rigid framework of orders emanating from Hitler down to the division level. In contrast to the historical stereotypes, at Arracourt the American commanders were more flexible than their German counterparts.

Between 19 and 30 September, the 4th Armored Division destroyed 281 enemy tanks, 67 artillery pieces, 59 other armored vehicles, 514 wheeled vehicles, had taken a total of 3,009 prisoners, and killed an estimated 3,040 enemy soldiers. The division had met and defeated on the field of battle all or portions of the 15th Panzergrenadier Division, 11th Panzer Division, 553d Volksgrenadier Division, 559th Volksgrenadier Division, and the 111th and 113th Panzer Brigades. During the entire month of September, 4th Armored Division casualties numbered 225 killed, 648 wounded, 74 missing, and 48 tanks destroyed. These loss ratios show that the division was operating at a high degree of combat efficiency, but the strain of intense combat, bad weather, little rest, the defensive situation in which men who had been attacking for six weeks suddenly found themselves, and the lack of hot food combined to increase the number of exhaustion cases.

The German counterattack, ineffective as it was, halted the offensive by XII Corps beyond Nancy. This counterattack,
together with the worsening Allied supply situation, allowed the German high command time to piece together a more effective defensive line. The heady pursuit across France was over. On 12 October the 26th Infantry Division went into the line and the 4th Armored Division moved to an assembly area in the vicinity of Nancy to rest and refit for the first time since it entered the Continent.

MUD, MINES, AND FRUSTRATION

The 4th Armored Division used its respite from combat to repair machines and rehabilitate men. The division band toured units and gave concerts. Clothing exchange and bath facilities freshened the men, as did the hot food from company kitchens. Movies, USO shows, Red Cross clubmobiles, furloughs in Nancy, and other recreational opportunities restored the spirits of the tired soldiers. Units also took the time to present awards to those who deserved them. In the awards ceremony of the 37th Tank Battalion, Lieutenant Colonel Abrams told his men that they had earned their awards not only "by brave deeds and bloodshed but also by long months, even years, of training which was not always appreciated, an honor won by the sacrifice of liberties that soldiers prize, such as furloughs and free evenings...our success lay not in the wholesale slaughter of men, not in the needless sacrifice of material, but in a preparedness that avoided suffering and an ability to keep our supply at a superior level."
Training and maintenance also had their place in the division's schedule. The 126th Armored Ordnance Maintenance Battalion worked overtime to repair broken and damaged equipment and to fabricate and install extended end connectors on the tracks of the division's tanks (for better traction in the mud). Replacement vehicles arrived to make good the division's losses in combat. Replacement crews were harder to come by. Many of the replacements lacked training on armored vehicles. Some were combat service support soldiers combed out of rear areas to alleviate the growing shortage of combat soldiers. If the replacements arrived during a lull in combat, units put them through a rigorous course of training to teach them the basic skills they needed to survive in battle. One veteran of the 4th Armored Division recalled:

There were long hours in the turret when I was literally showing men how to feed bullets to the gun right! In the midst of the toughest fighting of the Third Army's campaign...I was teaching men what I had learned in basic training. If replacements arrived during battle, they learned quick or became casualties.

The way that the 4th Armored Division used its Reserve Command helped units to integrate replacements during combat. Instead of using the Reserve Command as a third combat command, the 4th Armored Division rotated its battalions through the Reserve Command for brief periods of rest. While in reserve the battalions could more easily integrate replacements. The division fought its battles with just two
combat commands, except in emergency situations such as the drive to Bastogne in December. This operating procedure sacrificed some immediate combat capability for a more efficient division in the long run. Colonel Bruce C. Clarke, who left on 31 October to command a combat command in the 7th Armored Division, found that his new division did not rotate units through its CCR. "They were fixed just like a regiment," Clarke later stated. "As a result, they wouldn't even lean forward in their foxholes. They were always pooped and always worn out. They never had any time out of the line." In effect, the 4th Armored Division had an internal unit rotation system that many other units—and the Army as a whole—lacked.

On 9 November the 4th Armored Division returned to the attack. CCB attacked in conjunction with the 35th Infantry Division and CCA attacked with the 26th Infantry Division. The initial objective was Morhange, but muddy terrain, mines, roadblocks, and enemy resistance delayed progress considerably. German resistance had stiffened since the battles around Nancy in September. Weather and terrain conditions favored the defense, since they kept American tanks roadbound and air support grounded much of the time. For the remainder of the month, the 4th Armored Division was locked in a battle of attrition that frustrated Major General Wood, who felt that the XII Corps commander, Major General Manton S. Eddy, was misusing his division. Wood's conflict with
his corps commander precipitated a series of bitter exchanges that led to Wood's relief on 3 December.\textsuperscript{116}

The 4th Armored Division, together with elements of the 35th Infantry Division, took Morhange on 16 November. After a three day rest, the advance continued across the Saar River (Figure 16). On 25 November the German 130th Panzer Lehr Division counterattacked, but CCB successfully defended their bridgehead in heavy fighting. By the end of November, the 4th Armored Division had reached positions east of Saar-Union in the vicinity of Rimsdorf and Mackwiller.\textsuperscript{117}

The cost was high. During the month of November the 4th Armored Division suffered 1,063 battle and 1,137 non-battle casualties, to include 425 cases of trenchfoot and 399 cases of exhaustion.\textsuperscript{118} The division destroyed sixty-one enemy tanks, fourteen self-propelled guns, and sixty-three other vehicles, but lost thirty-six medium tanks, ten light tanks, five self-propelled howitzers, two tank destroyers, thirty-three half-tracks, and eighty-five other vehicles.\textsuperscript{119} The division measured its gains in miles or fractions of miles.

One cannot fault Major General Wood for his frustration, but he let it interfere with his professional conduct towards his corps commander. Wood inspired affection in the men he commanded, but like Major General Terry de la Mesa Allen of the 1st Infantry Division, he became too attached to the men of his division, too devoted to their welfare at the expense of his mission. The departure of Colonel Bruce Clarke from
FIGURE 16

THE ADVANCE TO SARRE-UNION, 18-30 NOVEMBER 1944

Source: Hugh M. Cole, The Lorraine Campaign
(Washington: Office of the Chief of Military History, 1950), Map XXXIV.
the division on removed one restraining influence on Wood, one that had saved the division commander from relief during the Tennessee Maneuvers in 1942. When Major General Wood confronted Major General Eddy under similar circumstances at the CCA command post in the railroad station southeast of Mackwiller on 1 December, no one intervened to keep Wood's temper from boiling over.\textsuperscript{120} On 3 December Patton relieved Wood, an old friend who had shared tours with Patton in Hawaii and Fort Leavenworth, from command of the 4th Armored Division and replaced him with Major General Hugh J. Gaffey, the Third Army Chief of Staff.\textsuperscript{121}

Patton was justified in relieving Wood, who had been publicly insubordinate towards Eddy on more than one occasion. Eddy was a competent corps commander, as the record of XII Corps during his tenure shows.\textsuperscript{122} Eddy and Wood had opposing command styles, which undoubtedly caused friction between them. Eddy was a careful planner; Wood rarely produced a written order. In the slugging matches of Lorraine, Eddy's style of command was more effective than Wood's looser style of "tailgate" planning and execution on the run.\textsuperscript{123} If Patton and Eddy misused the 4th Armored Division during the muddy battles in Lorraine, the shortage of infantry divisions in France left them few other choices. If the Third Army were to continue its attack, XII Corps would have to use all of its assets on the front line. There were simply not enough divisions in France at the time to achieve
the kind of mass necessary for a large armored penetration. Wood wanted his division held back to exploit a breakthrough, a doctrinally correct but unrealistic mission given the situation in France in November 1944. Besides the shortage of infantry divisions, supply shortages, poor weather, and stiff German resistance precluded a breakthrough until American forces had destroyed German reserves in the Battle of the Bulge in December.

None of the above discussion should detract from Wood's true accomplishments in crafting one of the finest divisions in World War II. The 4th Armored Division was Wood's division, a fact that his men never forgot. Much of the credit for the subsequent accomplishments of the division in combat, which earned for the unit a Presidential Unit Citation, must go to Major General John S. Wood, a superb motivator, trainer, and warrior.

The division's attack continued until 7 December and ended with an assault on the towns of Singling and Bining, part of the old French Maginot Line. The next day the 12th Armored Division relieved the 4th Armored Division, which moved to an assembly area west of the Saar River for a much needed rest. Between 9 and 19 December the division trained replacements, conducted maintenance on its vehicles, rested, and prepared for future operations.

This period in the 4th Armored Division's history is instructive as an example of what good units do when not
engaged in active operations. In the 37th Tank Battalion, Abrams told his men to take two days to clean up and conduct maintenance. On the third day training began. The battalion staff published a training schedule that included gunnery and drivers training, capped by live fire on an improvised range.\textsuperscript{125} Other units conducted similar training programs. The division also did not neglect the welfare of its men. Medical personnel conducted health and dental examinations. Units held awards ceremonies. Despite its shortage of experienced officers and soldiers, on 10 December the division sent sixty enlisted men and five officers back to the United States for thirty days of leave.\textsuperscript{126} Those who remained prepared themselves for the next mission, whatever it may be.\

\textbf{THE RACE TO BASTOGNE}

The battles in the mud of Lorraine had seriously depleted the fighting strength of the 4th Armored Division. The division lost over one hundred officers between 9 November and 7 December.\textsuperscript{127} The division received ninety-five officer replacements in November, but most were second lieutenants fresh from officer candidate school. Turnover of enlisted personnel due to casualties and disease brought an influx of untrained replacements, most of whom had never seen the inside of a tank before.\textsuperscript{128} Replacement tanks were unavailable; those tanks that remained had landed with the division on UTAH Beach and were badly worn by now.\textsuperscript{129} During the next operation, the critical attack to relieve Bastogne, the
companies of the 37th Tank Battalion averaged 60 percent strength in tanks and 30 percent in officers; in two companies the only officer was the company commander. Those veteran officers, tank crews, and infantrymen who remained with the division, however, were experts in the business of killing enemy soldiers.

On 19 December 1944, Third Army assigned the 4th Armored Division to III Corps for employment against the southern flank of the enemy penetration in the Ardennes Forest. The division moved from its assembly area at 0300 hours and arrived in Arlon, Belgium, at midnight, a march of 160 miles under blackout conditions on icy roads. "And them roads were jammed," one truck driver in the 26th Infantry Division later recalled. "Us and the Fourth Armored and God only knows how many other divisions. We were bumper to bumper all the way. Good thing it was a cloudy day. If the Germans ever had air out, they would have slaughtered us." III Corps ordered the 4th Armored Division, 26th Infantry Division, and 80th Infantry Division to attack to relieve the encircled American forces at Bastogne. The attack commenced at 0600 hours on 22 December with CCA and CCB attacking on line from Arlon towards Martelange (Figure 17). Poor visibility, heavy snow, freezing temperatures, icy roads, and blown bridges hampered the attacking troops, but by 2100 hours the lead elements were nearing Martelange. Patton ordered the attack to continue without halting. During the night the
FIGURE 17

THIRD ARMY COUNTERATTACKS IN THE ARDENNES, 22–26 DECEMBER 1944

division cleared elements of the German 5th Parachute Division from Martelange. The next day sharp enemy counterattacks at Chaumont and Warnach threw CCA and CCB off balance. Major General Gaffey decided to commit the Reserve Command to the attack.\textsuperscript{132} The division now had all of its combat elements committed to the fight.\textsuperscript{133}

On Christmas Day the Reserve Command moved from Bigonville, on the division right (east) flank, behind CCA and CCB, to an assembly area in the vicinity of Bercheux, on the division left (west) flank. After a short period of reorganization, the Reserve Command attacked towards Bastogne in conjunction with CCA and CCB. CCA cleared the woods north of Warnach, while CCB recaptured Chaumont. On 26 December the Reserve Command conducted a non-stop mounted attack through Assenois while a friendly artillery barrage fell on the town—four battalions firing ten volleys each.\textsuperscript{134} A column led by Lieutenant Colonel Abrams stunned the German defenders with the speed and audacity of its attack.\textsuperscript{135} By 1650 hours, tanks of the 37th Tank Battalion had linked up with the 101st Airborne Division at Bastogne. A pencil-thin corridor now connected the beleaguered city with the outside world. On 27 December Reserve Command widened the corridor, which allowed supply columns to move into Bastogne.\textsuperscript{136}

Between 28 and 31 December, the remainder of the 4th Armored Division made contact with the 101st Airborne Division, widened the corridor leading to Bastogne from the
south, and repulsed German counterattacks. From 1 to 9 January 1945 the division remained in position to protect the corridor and assist the 35th Infantry Division to clear enemy forces to the east. On 10 January the division attacked to the north of Bastogne, but at 1350 hours Gaffey received orders to break contact. The strength of the 4th Armored Division had fallen dangerously low after its battles in December. Patton decided to place the division into Third Army reserve and moved it to Luxembourg City to rest and refit. 137

The 4th Armored Division deserved--and needed--the break from combat. During the month of December the division suffered 1,225 battle casualties and 1,419 non-battle casualties--24 percent of division strength. Officer losses were severe. At the end of November officer strength stood at 616, but by the end of December only 575 officers remained in the division (this figure includes thirty-eight officer replacements received by the division). The division lost fifty medium tanks, eleven light tanks, twenty-one half-tracks, and forty-nine other vehicles. On the positive side, the division had accomplished a vital mission that was one of the key events in the American defeat of the German counterattack in the Ardennes. The division could look forward to a period of rest under solid roofs in Luxembourg City. Finally, replacement tanks began to arrive in large numbers. These were M4A3E8 Sherman medium tanks, with 76mm
guns, muzzle brakes, an improved type of suspension, and wider tracks.\textsuperscript{138}

The division finished its move to Luxembourg City on 12 January and settled down for a long respite from combat. For the next five weeks, units trained replacements, maintained their vehicles, received new tanks, conducted rest and rehabilitation programs, and sent some officers and soldiers home to the United States for a period of leave. After a couple of days of rest, regular training according to published training schedules began in earnest. The 126th Armored Ordnance Maintenance Battalion modified many of the division's medium tanks by welding additional armor plate on the hull for extra protection and modifying the turrets to accept .50 caliber machine guns in the coaxial position in place of the .30 caliber machine gun.\textsuperscript{139} The division artillery provided direct support fires for the 2d Cavalry Group, 4th Infantry Division, and 5th Infantry Division, but the sector was quiet and the field artillery battalions rotated for periods of rest. On 29 January the three armored infantry battalions took turns manning defensive positions along the Our River, but made only limited contact with enemy forces.\textsuperscript{140}

\textbf{THE AMERICAN BLITZKRIEG}

The final offensive of the 4th Armored Division into Germany was a fast-paced, hard-hitting attack that carried the division from Bitburg across the Kyll, Moselle, Rhine, Main,
and Werra Rivers into the heart of the Reich. The long period of rest enabled the 4th Armored Division to return to combat at full strength and fully refreshed. On 25 February the division attacked towards the Kyll River and Bitburg, Germany. CCA took Rittersdorf and established a bridgehead across the Prum River, while CCB crossed the Nims River. By 28 February the division had cleared the west bank of the Kyll River and made contact with the 5th Infantry Division near Bitburg.  

On 5 March the 4th Armored Division crossed the Kyll River and attacked through the bridgehead of the 5th Infantry Division towards the Rhine River north of Coblenz (Figure 18). Four days later CCA reached the Rhine River between Urmitz and Coblenz, while CCB reached the Moselle River at Treis. The division had advanced forty-two miles in three days, took 2,855 enemy prisoners, and had destroyed 31 enemy tanks, 17 half tracks, 406 motor vehicles, and 147 guns (20mm or larger). Elements of seven enemy divisions lay wrecked in the division's path of advance. By contrast, the 4th Armored Division had suffered only 111 battle casualties during the attack.  

For three days the 4th Armored Division prepared to continue the attack as soon as the 5th and 90th Infantry Divisions established bridgeheads across the Moselle River. On 15 March CCB, under the command of Lieutenant Colonel Abrams since the departure of Brigadier General Dager to command the 11th Armored Division on 8 March, crossed the
THE ADVANCE TO THE RHINE RIVER

Moselle River through the bridgehead of the 5th Infantry Division. With excellent air support overhead, a quick advance took the combat command to the Nahe River. CCA moved through the bridgehead of the 90th Infantry Division at Hatzenport and also made rapid progress.\textsuperscript{143}

The division's attack gathered momentum as the German defenses disintegrated. An occasional roadblock or stubborn village defense would slow the combat commands, but nothing could stop them except the lack of a bridge across the numerous rivers in the area. "When we go into those pretty little towns in Germany," Abrams told a reporter from Life magazine, "we don't aspire to damage anything. But if there are Germans there we use our violence, everything that can be burned is burned and every building is destroyed."\textsuperscript{144} American armored divisions used both mobility and firepower to defeat their opponents during the last offensive of the war; commanders had learned that in mobile armored warfare, the two are inseparable.

The 4th Armored Division crossed the Nahe River, took Bad Kreuznach, and continued its attack to the Rhine River at Worms, which the division reached on 20 March. The Germans had destroyed all the bridges in the area, so the 4th Armored Division rested while the 5th Infantry Division came up in support. On 23 March Major General Gaffey left the division to assume command of XXIII Corps. Brigadier General William M. Hoge, formerly commander of CCB, 9th Armored Division,
assumed command of the 4th Armored Division. Hoge had shown his aptitude for commanding armored forces when his combat command seized the Ludendorff Railroad Bridge over the Rhine River on 7 March. The 4th Armored Division was Hoge's reward; under his command, the division would make some of the most spectacular advances in its history.

Hoge barely had time to take over the division before the 5th Infantry Division established a bridgehead across the Rhine River at Oppenheim, through which the 4th Armored Division penetrated on 24 March (Figure 19). The entire division crossed the Rhine in eighteen hours. On 25 March the division advanced forty miles against light opposition and seized bridges over the Main River near Hanau and Aschaffenburg. Reserve Command cleared the charred shell of Darmstadt—the victim of a firestorm caused by Allied bombing—in the afternoon. The division repulsed several enemy counterattacks on 26 March and turned the bridgehead over to the 26th Infantry Division the next day.

One of the strangest episodes in the history of the 4th Armored Division occurred during this period. The success of the division in seizing bridgeheads across the Main River excited Lieutenant General Patton, who ordered a deep strike to Hammelburg to deceive the Germans as to the direction of the next attack and to liberate American prisoners held captive there. Among those prisoners was Lieutenant Colonel John K. Waters, Patton's son-in-law (Patton later
FIGURE 19
BREACHING THE RHINE AND MAIN RIVERS

denied that he was aware of Waters' presence at Hammelburg). Major General Eddy, the XII Corps commander, and Brigadier General Hoge attempted to talk Patton out of the effort, but Patton insisted on making the attempt. Eddy decided to send a small battalion-size combined arms task force to minimize his risk, which Hoge and Lieutenant Colonel Abrams, commander of CCB, felt was too small to accomplish the mission.¹⁴⁸

Task Force BAUM consisted of A Company, 10th Armored Infantry Battalion; C Company, 37th Tank Battalion; a platoon of light tanks from D Company, 37th Tank Battalion; and the assault gun platoon of the 10th Armored Infantry Battalion, under the command of the 10th Armored Infantry Battalion S-3, Captain Abraham J. Baum. Task Force BAUM attacked during the night of 26-27 March and managed to reach Hammelburg, thirty-five miles to the east, by the evening of 27 March (Figure 20). The task force released the American prisoners there, but failed to return to friendly lines before the Germans surrounded the depleted survivors and forced them to surrender. Of the 293 men in the task force, only fifteen made it back to friendly lines.¹⁴⁹

Patton did many things right during World War II, but ordering the 4th Armored Division to conduct the raid on Hammelburg was not one of them. Task Force BAUM was an unnecessary waste of combat power on a mission of strictly nominal importance. Hoge and Abrams proved correct in their estimate of the situation, but whether an entire combat
command could have survived will forever remain a mystery.

On 28 March the 4th Armored Division attacked out of the Main River bridgehead towards Giessen (Figure 21). The division advanced forty miles against negligible resistance, then swung east into the Fulda Gap. CCB took Lauterbach on 29 March, while CCA seized Grossenluder against scattered light resistance. The division then advanced towards Hersfeld. The diary of the 37th Tank Battalion describes the scene at the time:

The Battalion moved out at 1000 and proceeded to Hersfeld, arriving at 1900, covering a distance of thirty miles. Three hours of this march was spent sitting along the road. The traffic jam was
FIGURE 21
INTO THE HEART OF GERMANY

Source: Adapted from G-3, 4th Armored Division, Route of the 4th Armored Division (Map), 1945, NARA, MMRB, RG 407, 604-0; Army Map Service, Bruxelles (World, 1:1,000,000), Sheets NM 32 and Pt. 31 (Washington: 1956).
reminiscent of the 1942 Tennessee maneuvers. Several units tried to use the same road space at the same time. None succeeded.150

The attack continued towards the Werra River near Eisenach. CCB took Creuzburg on 1 April and engineers built a pontoon bridge over the Werra River. CCA and CCB crossed the river under severe air attack the next day, bypassed Eisenach to the north, and attacked towards Gotha, which surrendered on 4 April. The division advanced to Ohrdruf before orders from VIII Corps halted the attack. There the 4th Armored Division uncovered a German concentration camp, the first of many horrors discovered by the Allied armies as they dismembered the Reich.151

On 11 April the 4th Armored Division attacked again and reached positions just west of Chemnitz on 15 April, a distance of approximately one hundred miles. Along the way the division liberated the concentration camp at Buchenwald and moved through the Napoleonic battlefield of Jena. From 16 to 23 April the division rested, conducted maintenance on its vehicles, and trained. On 24 and 25 April the 4th Armored Division moved to an assembly area near Bayreuth as XII Corps reserve. Upon reaching their new destination, units began once again to train. The division finished the war with a flourish. On 6 May the 4th Armored Division moved into Czechoslovakia, where thousands of Germans surrendered to the Americans, to include the commander and staff of the German 17th Army.152 For the officers and soldiers of the 4th
Armored Division, the war was over.

CONCLUSION

The 4th Armored Division was one of the few American divisions in World War II that did not require a period of adjustment before performing well in combat. There are several factors that explain this phenomenon. First, the 4th Armored Division received three years of solid training prior to its commitment in battle. Units do not quickly change their habits when they engage in combat. The units of the 4th Armored Division displayed on the battlefield the tactics and techniques they had learned elsewhere, especially in the Desert Training Center in California and on Salisbury Plain in England. They performed well in combat because they trained well before combat. The division's emphasis on training did not stop at the shores of France, as shown by the training schedules units produced and executed during lulls in combat right up to the end of the war.

Second, the division enjoyed personnel stability after the first year of its existence. From the Tennessee maneuvers until its first losses in combat, the 4th Armored Division was a cohesive group that lived and trained together as a team. Personnel stability allowed the division to coalesce as an organization, to develop an implicit trust in its capabilities, and to internalize its standard operating procedures. Colonel Bruce C. Clarke did not have to explain what he meant by "desert tactics" at Troyes, because the task
force leaders had practiced them many times in the past. Major General Wood could use oral, mission-type orders because his subordinate commanders had been with him for two years and understood his intent in shaping the battlefield.

Third, the 4th Armored Division enjoyed a superior level of leadership throughout its existence. Both Major General Baird and Major General Wood cultivated young, energetic leaders who went on to become dynamic commanders. In 1972 Bruce C. Clarke, who had a lot to do with the division's upbringing, stated:

What made the division unique? Pete Wood had something to do with it. Baird had something to do with it. But it was a division that developed itself by using people like Abrams, Graham, and Oden. It was us kids.153

The battalion commanders worked well together. The normal mode of operation was in combined arms task forces consisting of armored infantry, tanks, field artillery, tank destroyers, and engineers. Without the intimate association and trust among the battalion commanders of the division, this method of operation would never have worked. By working together as a team, the division's leaders transformed the "federation of thirteen battalions led by a major general" into something greater than the sum of its parts.

Because the 4th Armored Division did not suffer large losses in combat, it retained a solid core of leaders and soldiers throughout the war (Figure 22). Only in November and December 1944, when losses exceeded two thousand men per
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**FIGURE 22**
4TH ARMORED DIVISION LOSSES, 1944-1945

Source: 4th Armored Division, "Combat History, 17 July 1944 - 9 May 1945, NARA, MMRB, RG 407, Box 15175, 604-0.3."
month, did the division show signs of strain. Because it was an armored division, however, the 4th Armored Division spent more time in reserve than an infantry division. These periods—October 1944 and January/February 1945—gave the division time to rest, refit, and reorganize (Figure 23). The 4th Armored Division had its rough periods, but it never suffered to the extent that the 9th Infantry Division did between Normandy and the Huertgen Forest.

The infantry suffered the most casualties in Europe, and the 4th Armored Division was no exception to the rule. Over 60 percent of the 4th Armored Division's battle casualties came out of its three infantry battalions (Figure 24). The 10th, 51st, and 53d Armored Infantry Battalions lost 4,362 men in battle and had the highest turnover rates in the division (about twice their authorized strength). The three tank battalions came next; they lost 271 tanks and 1,326 men in battle (slightly less than their authorized strength). The combat service and combat service support units of the division took few casualties and retained the bulk of their original personnel, as was the case with most other American divisions.

If these losses seem high, consider what the 4th Armored Division did to the enemy (Figure 25). Between July 1944 and April 1945 (inclusive) the 4th Armored Division destroyed 518 enemy tanks, killed or wounded an estimated 22,485 enemy soldiers, captured 54,629 prisoners, and destroyed numerous
FIGURE 23
4TH ARMORED DIVISION, DAYS IN COMBAT

Source: 4th Armored Division, "Combat History, 17 July 1944 - 9 May 1945, NARA, MMRB, RG 407, Box 15175, 604-0.3."
FIGURE 24
4TH ARMORED DIVISION BATTLE LOSS BREAKDOWN

Source: 4th Armored Division, "B.C.R. by Arm or Service,
27 July 1945, NARA, MMRE, RG 407, Box 15268, 604-ART-0.2.
FIGURE 25

4TH ARMORED DIVISION/GERMAN COMPARATIVE BATTLE LOSSES

German/4th Armd Div Losses (KIA/WIA/POW)

Source: 4th Armored Division After-Action Reports, July 1944 - April 1945, NARA, MMRE, RG 407, Box 15175, 604-0.3.
enemy formations in battle (including panzer, panzergrenadier, and SS units). These loss ratios attest to the superior combat efficiency of the 4th Armored Division over its foes in the Wehrmacht. The 4th Armored Division had nearly a two-to-one kill ratio over technologically superior German tanks (at Arracourt in September, the ratio was over five-to-one in favor of the Americans). Even during the rough months of November and December 1944, the 4th Armored Division performed better than its adversaries. In ten months the division gained over three thousand miles of territory between Normandy and the Czechoslovakian border.

The 4th Armored Division's blend of mobility and firepower proved a winning combination that contributed greatly to the victory of the United Nations over one of the most evil regimes in the history of mankind. The men of the division deserved the Presidential Unit Citation given to them collectively at the end of the war. They had shown, by their deeds alone, what one of the best American divisions in World War II could do to its enemies on the field of battle.
ENDNOTES

1. Major General John S. Wood's answer to a reporter who asked him during the Tennessee maneuvers in 1942 what nickname the 4th Armored Division would adopt.

2. Collie Small, "There Has Never Been Anything Like It," The Saturday Evening Post, March 1945: 32-44, p. 44.


8. Upon activation, the 4th Armored Division consisted of the Headquarters and Headquarters Company, 4th Armored Division; Headquarters and Headquarters Company, 4th Armored Brigade; the 5th, 7th, and 8th Armored Regiments; the 66th Field Artillery Regiment (Armored); the 51st Infantry Regiment (Armored); the 4th Reconnaissance Battalion; the 22d Field Artillery Battalion (Armored); the 24th Engineer Battalion (Armored); the 18th Quartermaster Battalion (Armored); the 20th Ordnance Battalion (Armored); the 46th Medical Battalion (Armored); and the 49th Signal Company.

9. The President promoted Baird to major general on 11 July 1941.

10. On 12 May the division underwent a reorganization. The three armored regiments became the 35th Armored Regiment (Light), the 37th Armored Regiment (Light), and the 80th Armored Regiment (Medium); and the 4th Reconnaissance
Battalion became the 84th Reconnaissance Battalion. On 7 August the 49th Signal Company (Armored) became the 144th Signal Company (Armored).


12. Fourth Armored Division, "Division History," NARA, MMRB, RG 407, File 604-0.1, Box 15175, pp. 1-4.

13. Ibid., p. 5.


16. HQ, 4th Armored Division, "History of the Fourth Armored Division," 15 April 1942, NARA, MMRB, RG 407, Box 15175, File 604-0.1, p. 2.

17. The War Department promoted Clarke to colonel on 3 March 1942. He had been a lieutenant colonel for only fifty-four days.


19. Ibid., p. 23.


27. Biographical data on Major General John S. Wood, 4th Armored Division, NARA, MMRB, RG 407, File 604-0.1, Box 15175.


31. Ibid., p. 2.

32. Ibid., p. 2.


36. Ibid., pp. 120-128.

37. 37th Tank Battalion diary, November 1942, NARA, MMRB, RG 407, Box 15309, File 604-TK(37)-0.2.


47. Donald W. Hatch, Adjutant, 24th Armored Engineer Battalion, "Unit Diary - IV Armored Corps Maneuvers, February 14, 1943 to March 6, 1943," 9 March 1943, NARA, MMRB, RG 407, Box 15285, File 604-ENG-0.2, p. 2.


55. 37th Tank Battalion diary, July through September 1943.

56. HQ, 35th Armored Regiment, "Regimental History for the Month of July, 1943," 3 August 1943, NARA, MMRB, RG 407, Box 15306, File 604-TK(35)-0.2, pp. 1-3.


59. Biographical data on Brigadier General Holmes E. Dager, 4th Armored Division, NARA, MMRB, RG 407, File 604-0.1, Box 15175.

60. Clarke, Oral History, p. 41.

61. Ibid., p. 105.

62. Ibid., p. 119.

63. 37th Tank Battalion diary, November-December 1943; L. E. Roth, Commander, 24th Armored Engineer Battalion, "Unit History, 1 November 1943 to 30 November 1943," 1 December 1943, and "Unit History, 1 December 1943 to 15 January 1944," 20 January 1944, NARA, MMRB, RG 407, Box 15285, File 604-ENG-0.2; John B. Tytus, S-2, 35th Tank Battalion, "Battalion History for December 1st to December 31st, 1943," NARA, MMRB, RG 407, Box 15306, File 604-TK(35)-0.2.

64. 37th Tank Battalion diary, 31 December 1943.


66. Ibid., January 1944.


68. Ibid., p. 1.

70. HQ, 35th Tank Battalion, "Battalion History, 1 March 1944 - 31 March 1944," 1 April 1944, NARA, MMRB, RG 407, Box 15306, File 604-TK(35)-0.2.


72. HQ, Reserve Command, 4th Armored Division, "Unit Diary, 1-31 May 1944," NARA, MMRB, RG 407, Box 15281, File 604-CCR-0.2.

73. 37th Tank Battalion diary, 1-10 June 1944.

74. John B. Tytus, S-2, 35th Tank Battalion, "History of the 35th Tank Battalion, 1 June 44 to 30 June 44," 1 July 1944, NARA, MMRB, RG 407, Box 15306, File 604-TK(35)-0.2, p. 2.

75. Ibid., 1-30 June 1944.


78. Ibid., p. 1.


80. 37th Tank Battalion diary, 3 August 1944.


for 5 to 12 August 1944.


87. Clarke, Oral History, p. 129.

88. Blumenson, Breakout and Pursuit, p. 368.


102. Ibid., p. 86.

103. Ibid., p. 132.

104. Clarke, Oral History, p. 75.


109. Ibid., 27 September 1944.

110. 37th Tank Battalion diary, 14 October 1944.


112. Frankel and Smith, *Patton's Best*, p. 98.

113. Clarke, Oral History, pp. 43-44.
114. One can find details of the operations of the 4th Armored Division during the Lorraine offensive in a study by the U.S. Army Armor School Officer Advance Course, Committee 6, "Armor vs. Mud and Mines" (Fort Knox: 1949/1950), copy located at USAMHI, Carlisle Barracks, PA.

115. Wood was also perhaps jealous of Eddy. Wood had temporarily commanded XII Corps for ten days in August when the health of Major General Gilbert Cook broke down. Bradley gave permanent command of the corps to Major General Manton S. Eddy, who was junior to Wood but a proven combat leader with experience in North Africa, Sicily, and Normandy. See Clarke, Oral History, p. 46 and p. 51.

116. For a complete story of Wood's relief, see A. Harding Ganz, "Patton's Relief of General Wood," Journal of Military History 53, no. 3 (July 1989): 257-273. Ganz is critical of Patton and Eddy's leadership during the Lorraine campaign and sympathetic to Wood. Given the lack of infantry divisions in France, however, Patton and Eddy had little choice but to use all of their assets to continue the attack, to include their armored divisions. Wood was insubordinate towards Eddy and his relief justified.


118. HQ, 4th Armored Division, "Combat History," November 1944.

119. Ibid.


121. Major General Wood returned to the United States to command the Armored Replacement Training Center at Fort Knox, Kentucky.

122. Bruce C. Clarke admired Eddy's leadership and ability as a corps commander and felt that Patton was right to relieve Wood. He believes that Wood could never get used to Eddy's command style, which caused too much friction between them. Clarke, Oral History, p. 49.

123. One searches the 4th Armored Division records in vain for a written order produced during Wood's tenure. "He gave oral orders and held tailgate conferences--not for him the formal briefings, the long written orders." Baldwin, Tiger Jack, p. 41. Wood's style of command was perfectly suited to fast, mobile operations, but he was equally unsuited to the battle of attrition waged by the Third Army in November 1944.
124. TF ABRAMS' fight for Singling was the focus of an intensive study by the ETO historical section and has been used by the U.S. Army Armor School as a case study ever since. See Small Unit Actions: France, 4th Armored Division at Singling (Washington: Historical Division, War Department, 1946).

125. 37th Tank Battalion diary, 9 December 1944.

126. HQ, 4th Armored Division, "Combat History," 10 December 1944.

127. HQ, 4th Armored Division, "Combat History," 9 November - 7 December 1944.


129. For efforts to keep equipment operational, see Robert E. Rystrom, "A Study of Maintenance in the Lorraine Campaign of World War II," in Military History Anthology (Fort Leavenworth: Combat Studies Institute, 1984), pp. 123-137.

130. 37th Tank Battalion diary, 27 December 1944.


132. The Reserve Command at this time consisted of the 37th Tank Battalion, 53d Armored Infantry Battalion, 704th Tank Destroyer Battalion (-), 94th Armored Field Artillery Battalion (105mm SP), one battery of the 177th Field Artillery Battalion (155mm), 24th Engineer Battalion (-), and the 489th Anti-Aircraft Artillery (-).

133. HQ, 4th Armored Division, "After Action Report for Period 1 December to 31 December 1944," 3 May 1945, NARA, MMRB, RG 407, Box 15175, File 604-0.3, p. 2.


135. The action at Assenois is well recorded in Hugh M. Cole, The Ardennes: Battle of the Bulge (Washington: Center of Military History, 1965), pp. 553-55. Abrams was awarded the Distinguished Service Cross for his actions on 26 December 1944, and Staff Sergeant James R. Hendrix won the Medal of Honor for singlehandedly defeating the crews of two 88mm antitank guns in Assenois with only his rifle.

136. HQ, 4th Armored Division, "After Action Report for Period 1 December to 31 December 1944," p. 3.

138. Ibid., p. 2; HQ, 4th Armored Division, "Combat History," December 1944; 126th Armored Ordnance Maintenance Battalion diary, NARA, MMRB, RG 407, Box 15302, File 604-ORD-0.2, 28 December 1944.

139. 126th Armored Ordnance Maintenance Battalion diary, 29 January 1945, 5-7 February 1945, and 1 March 1945.


142. HQ, 4th Armored Division, "Combat History," 8 March 1945; MacDonald, The Last Offensive, p. 205.


149. Ibid., p. 284. For a complete account of Task Force BAUM, see Koyen, The Fourth Armored Division, pp. 117-142.

150. 37th Tank Battalion diary, 31 March 1945.


155. Figures taken from 4th Armored Division After Action reports. Figures cited by Koyen, The Fourth Armored Division, p. 177, are even higher. I have not included any statistics from May 1945 because the dissolution of the German army at the end of the war skewed the data.

156. The only other division to receive a collective Presidential Unit Citation was the 101st Airborne Division for its remarkable stand at Bastogne during the Battle of the Bulge.
"The men look like high school football players, young, tough and remarkably clean-cut. There are only two or three officers over thirty. This is material such as old soldiers used to dream about."¹

VERTICAL ENTRY ONTO THE BATTLEFIELD

During the interwar period of the 1920s and 1930s, several armies, most notably the Red Army of the Soviet Union, tested the feasibility of transporting troops to the battlefield on aircraft and dropping them by parachute or glider. The German army, however, was the first to use airborne forces on a large scale in war. German airborne forces, organized and trained by the Luftwaffe General Karl Student, contributed to victory in Norway, the Netherlands, and Belgium in 1940. The surprise German glider assault on the strong Belgian fortress of Eben Emael was especially impressive. The success of German airborne operations early in World War II convinced the United States War Department that this new means of transporting troops to the battlefield had potential for further development. Prodded by Lieutenant Colonel William C. Lee, the War Department established a test platoon of fifty parachute volunteers at Fort Benning on 25
June 1940. On 16 September 1940 the War Department expanded this small force into the 501st Parachute Battalion. All of the soldiers in the unit were volunteers, and this method of manning airborne units did not change during the war.\(^2\)

In May 1941 Student's airborne forces assaulted the British-held island of Crete. Although the assault successfully ejected Commonwealth forces from the island, the cost in casualties was prohibitive, and Hitler never again authorized an airborne assault. The German assault on Crete had the opposite effect in the United States. Impressed by the German victory, Army Chief of Staff General George C. Marshall ordered an expansion of airborne forces. By the end of 1941 the Army had four parachute infantry battalions in various stages of training, grouped under the Provisional Parachute Brigade at Fort Benning under Lieutenant Colonel Lee's command. The 502d Parachute Battalion made the first mass unit jump in the United States during the Carolina maneuvers in November 1941.\(^3\)

After Pearl Harbor, Marshall increased the airborne forces even further by authorizing the creation of six parachute infantry regiments, each composed of three parachute infantry battalions. During the summer of 1942 the War Department General Staff took the next logical step and authorized the creation of two airborne divisions. Lieutenant General Lesley J. McNair, commander of Army Ground Forces, picked the 82d Infantry Division at Camp Claiborne, Louisiana,
to provide the bulk of the soldiers for the formation of the
 glider-borne elements of the two divisions, to which he added
two parachute infantry regiments, the 502d and 504th Parachute
Infantry. At this point in time the story of the American
airborne forces and the history of the 82d Infantry Division
intersect.

THE FORMATION OF THE 82D INFANTRY DIVISION

The 82d Infantry Division was one of the first draftee
divisions created in the United States in 1942. The division
had a rich history from World War I. Known as the "All-
American" division because of the heterogeneous nature of its
personnel from all forty-eight states, the division became
famous due to the exploits of one of its members, Sergeant
Alvin C. York from Tennessee. The Army had awarded York the
Medal of Honor for singlehandedly defeating an entire
battalion of German soldiers during the Meuse-Argonne
offensive.

General Marshall chose the Commandant of the Infantry
School, Brigadier General Omar N. Bradley, as the division's
first commander. A soft-spoken Midwesterner from the West
Point class of 1915, Bradley missed combat in World War I, but
had diligently applied himself to his profession between the
wars. Bradley commanded the 82d Infantry Division for only
three months, but would get the unit off to a good start in
its initial training. Bradley's second-in-command was Matthew
B. Ridgway, a member of the West Point class of 1917. Ridgway
had also missed duty overseas during World War I, but made up for his lack of combat experience with ambition and hard work. He graduated from the Command and General Staff School in 1935 and the Army War College in 1937. From 1935 to 1942, Ridgway had served as the G-3 (operations officer) of VI Corps, Second Army, and Fourth Army, and had worked in the War Plans Division of the War Department General Staff. When offered the position as assistant division commander of the 82d Infantry Division, Ridgway lost no time in clearing his desk and leaving Washington.6

The cadre for the 82d Infantry Division came from the 9th Infantry Division, then under the command of Major General Rene E. DeRussy Hoyle. As stated in a previous chapter, the 9th Infantry Division took its role as a "parent" division seriously. "I sincerely hope the cadre will serve you well," wrote Hoyle to Bradley. "I would be willing to have the cadre in the 9th Division as noncommissioned leaders."7 Apparently Bradley agreed with Hoyle's assessment, for he wrote to Brigadier General Mark W. Clark, Chief of Staff of Army Ground Forces, "The affairs of the 82d Division are coming along very nicely. We got a good looking cadre from the Ninth Division and I think we are going to be in good shape to start our training at the proper time."8 After a short period of cadre training, the enlisted draftees began to arrive at Camp Claiborne, near Alexandria, Louisiana on 25 March 1942. The War Department officially activated the division on the same
day.

The 82d Infantry Division began its seventeen week basic training period in mid-April. Bradley and Ridgway worked hard to improve the physical fitness of the draftees, many of whom were overweight and out of shape. They also invited Sergeant York down from Tennessee to talk with the men, and he succeeded in inculcating an esprit in the young men assembled to hear him speak. The division was only two months into its training cycle when General Marshall ordered Major General Bradley to take command of the 28th Infantry Division, a National Guard unit which was having major difficulties readying itself for combat. Ridgway assumed command of the 82d Infantry Division on 26 June. He chose as his chief of staff Colonel Maxwell D. Taylor, a field artillery officer who was a member of the West Point class of 1922. Taylor had graduated from the Command and General Staff School in 1935 and the Army War College in 1940. He was serving as an assistant secretary on the War Department General Staff when Ridgway secured his release.

Ridgway drove his division hard in training. By late July the draftees were well on the way to becoming soldiers and the unit training phase was approaching. The unit had begun its conversion into a motorized division, which the Army at that time intended for use in mobile armored operations. Lieutenant General Lesley J. McNair, commander of Army Ground Forces, however, had other plans for the 82d Infantry
Division.

SKY SOLDIERS

In the spring of 1942 Brigadier General William Lee, commander of American airborne forces, went to Washington to propose the creation of an airborne division. In July the War Department agreed to the formation of two divisions, but stipulated several conditions. First, the War Department would not convert a Regular Army or National Guard division, so the choice had to fall upon a draftee division. Second, the division chosen had to be near the end of its basic training cycle. Third, the division should be located near suitable airfields and in an area with good flying weather. Given these conditions, Lieutenant General McNair chose 82d Infantry Division as the basis for the new airborne divisions.13

On 15 August 1942 the War Department split the 82d Infantry Division into two parts to form the 82d and 101st Airborne Divisions. The 325th and 326th Infantry Regiments each gave up one battalion to form the 401st Glider Infantry Regiment, which together with the 327th Infantry Regiment would form the glider infantry elements of the newly activated 101st Airborne Division. The redesignated 82d Airborne Division received the 325th and 326th Glider Infantry Regiments, each of which now contained only two battalions, a problem that would plague the glider infantry regiments for some time to come.
The 82d Airborne Division also included the Division Headquarters and Headquarters Company, Division Artillery Headquarters and Headquarters Battery, the 504th Parachute Infantry Regiment, 319th and 320th Glider Field Artillery Battalions, the 376th Parachute Field Artillery Battalion, the 307th Airborne Engineer Battalion, the 80th Airborne Anti-Aircraft Battalion, the 82d Airborne Reconnaissance Platoon, the 407th Airborne Quartermaster Company, the 307th Airborne Medical Company, the 82d Airborne Military Police Platoon, the 82d Airborne Signal Company, and the 782d Airborne Ordnance Maintenance Company. The division troops lightened their equipment to make the unit easier to deploy by air. McNair mandated a small division of fewer than nine thousand men.\(^{14}\) The new airborne division thus lacked heavy combat service and combat service support units, which would also prove to be a problem in future operations.

After reorganization, training continued at Camp Claiborne until 1 October 1942, when the 82d Airborne Division moved to Fort Bragg, North Carolina. In its new home the division conducted advanced unit training, to include limited parachute and glider landings. Personnel problems plagued the division to the same extent as other units. The division lost a number of leaders to provide the cadre for the 98th Infantry Division. Thousands of soldiers who could not meet the airborne's high standards also departed.\(^{15}\) On 12 February 1943 the War Department changed the organization of the 82d
Airborne Division to provide it with two parachute infantry regiments and only one glider infantry regiment. The 505th Parachute Infantry Regiment, under the command of Colonel James M. Gavin, replaced the 326th Glider Infantry Regiment on 9 March 1943. The 456th Parachute Field Artillery Battalion joined the division. Company B of the 307th Airborne Engineer Battalion also converted from glider to parachute. This reorganization took place only two months before the division departed for overseas and severely hampered unit training.

Gavin proved to be one of the outstanding combat leaders of the Army in World War II. He was a member of the West Point class of 1929 who had a standard range of infantry assignments during the 1930s. Gavin was an instructor in the Department of Tactics at the United States Military Academy when he volunteered for parachute training with the fledgling airborne force. He served briefly as a company commander and battalion executive officer in the 503d Parachute Infantry Battalion. In early 1942 he went to Fort Bragg as G-3 (operations officer) of the newly established Airborne Command. Gavin attended the abbreviated version of the Command and General Staff School course in 1942 before assuming command of the 505th Parachute Infantry Regiment at Fort Benning in July 1942. In combat Gavin proved to be absolutely fearless and a true warrior. He groomed the 505th Parachute Infantry Regiment in his image; his men were killers.
The training at Fort Bragg was rigorous and intended to weed out the weak and incompetent. Airborne recruits were all volunteers. Recruiters went to training camps across the United States to screen new inductees as they arrived. They invited draftees with superior physical ability and high Army General Classification Test scores to volunteer for airborne training. Many did not make it through airborne training. "It was truly the survival of the fittest," one airborne veteran stated later. "It was rough & tough, both mental as well as physical. It brought together a different kind of soldier, one that [sic] you would entrust your life with and vice versa." Those who survived became elite fighters and their officers treated them as such. To instill individual pride, airborne divisions allowed their soldiers to wear name tags on their uniforms. Airborne soldiers developed great pride in their units and in their ability to accomplish any mission, no matter how arduous. "And we could reject those who wouldn't perform," stated General Gavin, "so it was a very unusual situation."

Because of the scattered nature of airborne landings, airborne divisions trained their soldiers to operate independently and in small groups. Ridgway and his subordinate commanders expected every soldier to display initiative and leadership in order to function effectively when isolated. "It is impossible to appreciate the caliber of the fighting done by airborne troops without knowing the
caliber of the leadership they were given by their battalion, company and platoon leaders," Gavin wrote in 1946. "It is taken for granted in airborne troops that each trooper is a potential leader himself."23 This emphasis on initiative and aggressiveness in accomplishing one's mission helps to explain why the 82d Airborne Division functioned effectively in the bocage of Normandy when other units bogged down in the hedgerows. Other units, however, lacked the same quality of personnel that one could find in the airborne divisions.

The largest gap in the training of the 82d Airborne Division was the lack of aircraft to practice parachute jumps and glider landings. The 325th Glider Infantry Regiment used trucks loaded according to glider manifests to simulate glider flights.24 The division conducted only one regimental parachute jump and limited glider operations to individual battalions, none having more than a single flight.25 When the division made its first combat jump into Sicily in July 1943, the lack of training with pilots of the Troop Carrier Command became all too evident. Problems with joint operations with the Army Air Forces haunted the airborne divisions throughout the war.26

The 82d Airborne Division departed Fort Bragg for Camp Edwards, Massachusetts on 20 April 1943. After a week in the staging area, the division sailed from New York harbor on 29 April. After an uneventful crossing, the division debarked at Casablanca, French Morocco, on 10 May. After four days in
another staging area, the division moved to the Oujda-Mahrnia area, astride the French Moroccan-Algerian border. There the division underwent six weeks of intensive training to prepare the men physically and mentally for their first combat jump. "No one ever did any training like we did in North Africa," stated Teddy H. Sanford, an officer in the 325th Glider Infantry Regiment. "We had a little old hill out there...and I'll swear we must of lowered its altitude by 10 feet 'cause we had to run over it all the time. I got so thin down there, I had to stand twice in the same place to make a shadow."²⁷ The North Africa winds blew faster than safety limits allowed, but Ridgway nonetheless ordered training jumps to continue. After several battalion and regimental jumps, the number of injuries grew too high and Ridgway had to curtail further jump training.²⁸

While the units trained, the division staff completed the plan for the airborne portion of Operation HUSKY, the invasion of Sicily. On 21 June the division began movement by truck, train, plane, and glider from the dusty camps and wheat fields of French Morocco to the cactus-hedged and equally dusty airfields near Kairouan, Tunisia. The nine hundred mile trek took place in temperatures reaching as high as 125 degrees Fahrenheit.²⁹ "The men are looking forward to the day when we will be committed in combat," wrote First Lieutenant Richard M. Janney in a letter home. "Even death is preferable to this stalemate--the dry guilotine [sic] of the African
The men would not have much longer to wait. Their first taste of combat would be a memorable one.

**JUMP INTO MIDNIGHT**

Between 2010 hours and 2116 hours on 9 July 1943, 226 C-47 aircraft of the 52d Troop Carrier Wing took off from ten airfields in Tunisia en route to Sicily. On board were the soldiers of the reinforced 505th Regimental Combat Team (RCT), composed of the 505th Parachute Infantry Regiment, 3d Battalion of the 504th Parachute Infantry Regiment, the 456th Parachute Field Artillery Battalion, and Company B of the 307th Airborne Engineer Battalion, all under the command of Colonel James M. Gavin. Three hours and twenty minutes later, the paratroopers received the green light over Sicily. Their assigned drop zones were located north of the beaches near Gela, but high winds and inaccurate navigation by the pilots caused a wide dispersal of paratroopers over a sixty mile area (Figure 26). Only the 2d Battalion of the 505th Parachute Infantry Regiment dropped relatively intact, and it was over twenty-five miles from its assigned drop zone.

The mission of the 82d Airborne Division was to block roads and prevent enemy troop movements from the north and east to the Gela area, where the 1st Infantry Division was to invade by sea. The scattered airborne soldiers did what they could under the circumstances to accomplish their mission. They fought in small groups and harassed German and Italian forces attempting to reach the invasion beaches.
THE SEVENTH ARMY ASSAULT
10 July 1943

FIGURE 26
D-DAY AT GELA, 10 JULY 1943

Source: Albert N. Garland and Howard McGaw Smyth, Sicily and the Surrender of Italy (Washington: Office of the Chief of Military History, 1965), Map IV.
On 11 July the 3d Battalion, 505th Parachute Infantry Regiment successfully seized Biazzo Ridge on the Vittoria-Gela highway and held it against counterattacks by the Hermann Goering Division. Enemy tanks penetrated to within fifty yards of Gavin's command post, but the tenacious defenders drove the enemy back by using a combination of anti-tank guns, rocket launchers, naval gunfire, small arms, and artillery fire. At 2030 hours the regimental headquarters company counterattacked in conjunction with some engineers of B Company, 307th Airborne Engineer Battalion and a company of M4 Sherman tanks that had arrived over the beaches. The Germans withdrew from the battlefield. The 505th RCT lost forty-three dead and one hundred wounded in the battle, but remained in possession of Biazzo Ridge. The stand by the paratroopers was one of the factors that convinced the Germans to break off their attack towards Gela and ensured the success of the amphibious assault.\textsuperscript{32}

The second lift of paratroopers into Sicily ended in disaster. On the night of 11-12 July the 504th RCT flew to Sicily to reinforce the 505th RCT. As the transport aircraft neared the drop zones, however, friendly forces on the ground and at sea opened fire and downed twenty-three planes. Six planes crashed before the parachutists could jump. The fire caused the formation to scatter. Some soldiers on the ground fired on the parachutists as they descended to the ground. Among the dead was Brigadier General Charles L. Keerans, Jr.,
the assistant division commander. The next day the 15th Army Group canceled all further movement by air. Flights did not resume until 16 July, when the 325th Glider Infantry Regiment flew into the friendly-held Ponte Olivo airfield near Gela.\textsuperscript{33}

Seventh Army had sent a message to II Corps on the morning of 11 July warning all units of the friendly parachute drop that evening, but the staff did not check that the message had reached all units and that friendly forces would hold fire during the specified time period.\textsuperscript{34} German bombers had just finished an attack in the area, so gunners on land and at sea were nervous.\textsuperscript{35} When one gun opened fire, the rest joined in. As a result, good men lost their lives and the 82d Airborne Division remained scattered over a large area of southern Sicily. Ridgway spent several days reorganizing his units and collecting survivors.

Between 17 and 24 July the 82d Airborne Division, with the 39th Infantry Regiment of the 9th Infantry Division attached, cleared the vineyard-studded fields of western Sicily. Defeated Italian forces put up little resistance. The division lost only seven killed and sixteen wounded, while taking over fifteen thousand prisoners. The division continued to police western Sicily until 19 August, when it began movement by air back to its bases near Kairouan in Tunisia to refit.\textsuperscript{36}

Lieutenant General George S. Patton, commander of Seventh Army, Field Marshal Albert Kesselring, commander of German
forces in the Mediterranean, and General Karl Student all claimed that Allied airborne operations contributed significantly to the success of the landings in Sicily.\footnote{37} They were not, however, decisive; the Allied landings would have succeeded even without the airborne operation. Airborne soldiers caused the enemy a great deal of confusion and assisted the landing forces in repelling German attacks, but they lacked the strength on the ground to influence the battle significantly. The major problem, as Ridgway realized, was the inability of his division to deploy on the ground as an entity due to lack of transport aircraft and inaccurate, scattered drops.\footnote{38} The value of harassment caused by small groups of airborne soldiers behind enemy lines did not justify the enormous resources the nation had poured into the creation of these elite units. Casualties were high; in Sicily the 82d Airborne Division lost 148 men killed, 501 wounded, 348 missing, and 290 non-battle casualties.\footnote{39} Airborne leaders hoped their next mission, whatever it may be, would save the airborne division from extinction.\footnote{40}

THE SALERNO BEACHHEAD

"Sicily had been a sobering experience," wrote General James Gavin in his memoirs.\footnote{41} The 82d Airborne Division, however, learned from its mistakes. To improve the accuracy of airborne drops, the division established pathfinder units of specially trained pilots and airborne soldiers to precede the main body of transport aircraft and mark drop zones with
homing devices and lights. Commanders also learned that the first minutes and hours after landing were the most crucial period for the success of an airborne mission. The division had to train its soldiers to move on their objectives immediately upon landing, when enemy forces were confused and scattered. After the enemy had the opportunity to regroup, they would quickly mass superior forces against the lightly-armed paratroopers. Finally, the division learned that for extended operations it required substantial reinforcement with combat support and combat service support units, such as artillery, tank and tank destroyer, transportation, medical, and ordnance units. As established, the airborne division table of organization and equipment was too light, a problem that Major General Ridgway attempted but failed to correct before the Normandy invasion.

In preparation for the invasion of the Italian mainland, Ridgway recommended at least three weeks of combined air-ground training with the Troop Carrier Command. Lack of time precluded any action on this recommendation. Fifth Army changed the airborne plan for Operation AVALANCHE six times before the 82d Airborne Division dropped into the Salerno Beachhead. Ridgway shuttled between division headquarters (forward) at Trapani, Sicily, to his planning staff (headed by Brigadier General Maxwell Taylor) at Algiers (six hundred miles away), and to his rear headquarters at Kairouan, Tunisia (four hundred miles from Algiers, 275 miles from Trapani). By
the time Ridgway secured the release of his division from Sicily on 18 August, only sixteen days remained before D-Day, and the division had to forego any substantial training in conjunction with its next operation. The division had to integrate more than one-thousand replacements into its ranks; therefore, priority went to training these replacements and giving them at least one practice night jump.46

In the midst of frantic preparations for Operation GIANT, the airborne portion of the invasion of Italy, the Troop Carrier Command decided to execute a permanent change of station to Sicily. The 82d Airborne Division had no choice but to move with its air transport to the island. The move commenced on 5 September and the division closed into its new bases two days later. The nine airfields in Sicily stretched one hundred miles across the island and made communications difficult.47

In the meantime, General Dwight D. Eisenhower, commander of Allied forces in the Mediterranean, agreed to a nebulous Italian proposal for an airborne drop into the Rome area to secure the city upon the surrender of Italy to the United Nations on 8 September.48 At 0200 hours on 7 September, Brigadier General Taylor and Colonel W.T. Gardener from the Troop Carrier Command went secretly to Rome to coordinate with Italian authorities. They returned the next day and recommended cancellation of the mission, since the Germans had substantial strength in Rome and the division could expect
little help from the hapless Italian forces in the area.\textsuperscript{49} An airborne drop on Rome would have been an unmitigated military disaster. As the first planes sat on the runways loaded with personnel and with their propellers turning, Eisenhower postponed the mission for twenty-four hours. The division received the postponement orders only five minutes before take-off. The next evening the Allied command abandoned the Rome operation.\textsuperscript{50}

In the early morning hours of 9 September, the Fifth Army under the command of Lieutenant General Mark W. Clark assaulted the beaches in the vicinity of Salerno, Italy. The Germans resisted bitterly. Four days after the initial landings, Allied forces occupied a relatively shallow beachhead that was too long for the forces assigned to it. Dangerous gaps existed in places. On 13 September the Germans counterattacked into the seam between the 45th Infantry Division and the 36th Infantry Division along the Sele River. The 16th Panzer Division and the 29th Panzergrenadier Division made solid progress and endangered the Fifth Army beachhead. Although General Sir Harold Alexander, commander of the 15th Army Group, rushed the 3d Infantry Division to Salerno as fast as possible by sea, the only real hope for a rapid reinforcement of the beachhead lay with the 82d Airborne Division, which could drop at least two regiments in by parachute.\textsuperscript{51}
Ridgway received a letter by air courier from Clark at 1330 hours on 13 September. Clark appealed for immediate help and asked Ridgway to drop a regimental combat team into the beachhead south of the Sele River that night. The division immediately responded by preparing orders and coordinating the transportation and drop within eight hours. The most immediate concern was to prevent a repetition of the disastrous reinforcement in Sicily, where American gunners shot down friendly transport aircraft by the dozen. Clark was not about to let friendly fire shoot down his desperately needed reinforcements. He summoned Admiral H. Kent Hewitt, the naval commander, and Major General Ernest J. Dawley, commander of VI(US) Corps, and personally informed them about the upcoming airborne drops into the beachhead. He also ordered that from 2100 hours onward, all anti-aircraft guns in the area would hold fire and ships would lower barrage balloons. Clark directed two staff officers from Fifth Army to spot check crews of anti-aircraft guns to determine whether their commanders had informed them of the hold fire order. This time, there were no mistakes.52

Ridgway assigned the mission to the 504th Parachute Regiment, under the command of Colonel Reuben Tucker, a member of the West Point class of 1935. Tucker lacked his 3d Battalion, which together with the 325th Glider Infantry Regiment had loaded aboard naval transports at Licata earlier in the day. Ridgway attached C Company, 307th Airborne
Engineer Battalion to Tucker's force for the mission. At 2100 hours the first aircraft left Sicily. They arrived over a well-marked drop zone near Paestum a short time later. Most troops landed within two hundred yards of the drop zone. Other serials dropped more troops later in the night. With the exception of one company that landed eight to ten miles off target, Tucker had nearly 1,300 men assembled by the early morning hours (Figure 27).\textsuperscript{53} He reported into Clark's headquarters. "As soon as assembled you are to be placed in the front lines," Clark told Tucker. "Sir," Tucker replied, "we are assembled and ready now."\textsuperscript{54} By dawn the 504th RCT(--) had moved into the front lines southwest of Albanella.

The airborne reinforcement had a greater moral impact than the physical reinforcement by two battalions would suggest. The German attack had reached its zenith before the paratroopers entered the line on the morning of 14 September, but the 36th Infantry Division and other units on the corps' southern flank received a needed boost at a critical period of the operation.\textsuperscript{55} On the night of 14 September, the 505th Parachute Infantry Regiment dropped into the drop zone near Paestum and moved by truck to positions on the southern flank near Agropoli, where it remained in VI Corps reserve.\textsuperscript{56} With the German counterattack repulsed and additional units at its disposal, VI Corps could resume the offensive.

Major General Fred L. Walker, commander of the 36th Infantry Division, ordered Colonel Tucker to attack in
THE VI CORPS HOLDS
13-14 September 1943

GERMAN ATTACKS

FRONT LINE, 13 SEP

FRONT LINE, 14 SEP

Elevations in meters

1 MILES

5 KILOMETERS

M. C. Boren, Jr.

FIGURE 27
THE SALERNO BEACHHEAD

Source: Martin Blumenson, Salerno to Cassino
conjunction with a company of tank destroyers on the night of 16 September to seized the high ground in the vicinity of Altavilla. After a difficult advance under fire, Tucker's men reached Altavilla on the morning of 17 September and fought a hard, confused battle with German forces in the area. Here the training of the airborne soldier to fight outnumbered and surrounded paid off. When Colonel Tucker contacted VI Corps to request reinforcements, Ridgway suggested that he retreat closer to the beachhead. "Retreat, Hell!" Tucker replied. "Send me my other battalion!" 57 Ridgway, temporarily serving as deputy commander of VI Corps to assist the incompetent Dawley, 58 ordered the 3/504th Parachute Infantry, which had arrived by sea, to reinforce its parent regiment. The 1st and 2d Battalions repulsed the enemy counterattacks and made contact with the 3d Battalion in the afternoon. The Germans withdrew from the area and the next day the 504th Parachute Infantry Regiment entered Altavilla unopposed. 59 Colonel Tucker had proven to be a superb combat leader, a reputation he would improve upon in the months of fighting ahead.

The 505th Parachute Infantry Regiment and the 325th Glider Infantry Regiment saw little combat in Italy. The 325th Glider Infantry Regiment arrived in the evening of 15 September. The regiment supported the Ranger force on the Sorrentine Peninsula north of Salerno for several days and repulsed an enemy counterattack on Mt. San Angelo di Cava. 60 German resistance soon crumbled, however, and on 1 October
1943 the 505th Parachute Infantry Regiment entered Naples unopposed.\textsuperscript{61}

**COMBAT INTERLUDE**

The 82d Airborne Division spent six weeks policing the city of Naples, a task that did little to further the unit's training, but essential nonetheless to the success of the war effort. During this period Ridgway made Gavin his second-in-command. Gavin became one of the youngest generals in the Army when he received his first star on 10 October at the age of thirty-six.\textsuperscript{62} Gavin left the division on 16 November on temporary duty to the Chief of Staff Supreme Allied Command (COSSAC) planning headquarters in England, where he served as airborne advisor for Operation OVERLORD, the upcoming invasion of Normandy.\textsuperscript{63}

Once the pace of operations slowed after the division occupied Naples, Major General Ridgway turned his attention to garnering lessons learned from the recent airborne operations. He was insistent that the two operations in Sicily and Italy had not afforded a true test of the capabilities of the airborne division. "My objection has been and continues to be output in combat efficiency of the airborne division, and the return received by our Government for the time, effort, and cost involved in its creation and training," Ridgway wrote in a memorandum on 25 October.\textsuperscript{64} He went on to point out what he considered to be the two key technical questions for the success of airborne operations. "How to insure that the
transport planes will arrive over the selected drop zones? How to insure that a glider landing zone, apparently good from earlier photograph inspection, is in fact suitable?"\textsuperscript{65} The experience of the 82d Airborne Division in Normandy proves that the Army did not develop adequate solutions to either of these problems before D-Day.

Ridgway was critical of the state of training of the Troop Carrier Command units at this time. In a memo to the Operations Division of the War Department dated 6 November 1943, Ridgway pointed out the problems he had in conducting joint training with the Troop Carrier Command:

Grave deficiencies exist in the present training for airborne operations of this Division and its associated Troop Carrier Command units...We are still far below the airborne training level required to insure reasonable expectation under expected combat conditions that a reinforced parachute battalion combat team can be delivered on a pre-selected drop zone AT NIGHT...The efforts of this Division and of the Troop Carrier Command in this Theater to secure sufficient time, aircraft, and airfields for such training have met with uniform and conspicuous failure.\textsuperscript{66}

The major problem was that theater commanders could always find an operational use for transport aircraft hauling supplies or personnel to the battlefield. Airborne training took second priority to Troop Carrier Command's other missions. The result was that few pilots developed the navigational skills required to locate a precise drop zone at night, a training void that the Army Air Forces never succeeded in filling during the war.
Ridgway was fighting for the existence of his airborne division. Many senior leaders at the time felt that airborne divisions were too large for effective use. Eisenhower advocated the use of regimental combat teams; McNair went even further and believed that parachute operations should be battalion-size or smaller. A couple of airborne operations, such as the attempted reinforcement of the Gela beachhead in Sicily and the drop of the 509th Independent Parachute Battalion at Avellino in Italy, were complete disasters. Ridgway was correct on one point, however. Since the airborne division had never entered combat as an entity, its usefulness was still a question mark. If enough transport aircraft with properly trained pilots could land the entire division on or near its assigned drop zones, the division could generate enough combat power to provide a decisive influence on the battlefield. A test of the airborne division concept at Fort Bragg in December 1943 convinced Lieutenant General McNair to keep airborne divisions intact for the immediate future. The 82d Airborne Division had won a reprieve.

On 26 October the 504th Parachute Infantry Regiment, together with the 376th and 456th Parachute Field Artillery Battalions, came under the control of VI Corps to provide needed reinforcements at a time when casualties caused many divisions to lose strength. The regiment fought in the mountains and hills of Italy until January 1944, when it
landed at the Anzio beachhead in the first wave. There the regiment underwent its most severe combat test of the war and earned for itself a reputation as a superb combat team. Tucker's men finally rejoined the division in England in April 1944, but Ridgway decided that the regiment needed time to rest and integrate replacements, so he omitted it from participation in the Normandy invasion.

The 82d Airborne Division finally left Naples harbor on 18 November 1943 and arrived at Belfast, Northern Ireland on 9 December. The division spent the winter in Northern Ireland, where it conducted small unit training and integrated the 2d Parachute Brigade, composed of the 507th and 508th Parachute Infantry Regiments, into the division structure for the upcoming jump into Normandy. Gavin was in charge of training and he pushed the troopers—especially those without combat experience—hard. Ridgway had some success in augmenting the division for its next mission. The 325th Glider Infantry Regiment received a third battalion, the 2/401st Glider Infantry taken from the 101st Airborne Division. On 14 February 1944 the division moved to Leicester and Nottingham in England, its final staging area for Operation NEPTUNE, the assault portion of Operation OVERLORD. The division opened a parachute school to train reinforcements and conducted a series of unit exercises. Glider personnel trained with the British Horsa and American CG-4A gliders.
While the division trained, senior commanders and staff officers worked on the plan for the airborne drop into Normandy. They had little to go on except theory, since all airborne operations prior to this time had been regimental-size or smaller. The initial objective for the 82d Airborne Division was to land in the western half of the Cotentin Peninsula to the west of St. Sauveur Le Vicomte and cut the route of German reinforcements to Cherbourg. Late in May Lieutenant General Omar N. Bradley, commander of the First United States Army, had to change this plan due to the arrival of the German 91st Infantry Division into the area. On 26 May Bradley changed the orders of the 82d Airborne Division, which would now land astride the Merderet River near Ste. Mere Eglise, create a bridgehead over the river, and hold the town and causeways against enemy counterattacks. Major General Maxwell Taylor's 101st Airborne Division would drop to the south of the 82d Airborne Division. The new drop zones were closer to the invasion beaches and therefore closer to reinforcements and artillery support. After months of planning, however, the division had less than a week to develop and disseminate a new plan.

Ridgway divided his division into three task forces for the operation. Brigadier General Gavin commanded Task Force A, composed of the three parachute infantry regiments and the parachute companies of the 307th Airborne Engineer Battalion. Ridgway personally commanded Task Force B, composed of the
glider infantry regiment, the division artillery, and other airborne and glider support units. Brigadier General George P. Howell, the commander of the 2d Parachute Brigade, commanded Task Force C, the division's support elements that would arrive by sea. With one more parachute infantry regiment and one more glider infantry battalion than authorized in the division's table of organization, the 82d Airborne Division would drop into Normandy with a strength of 11,770 men. The division had plenty of infantry strength, but lacked heavy supporting firepower until seaborne elements could link up with it.75

Prior to the Normandy invasion the 82d Airborne Division was not as experienced a combat unit as one might believe upon casual reflection. Only the 505th Parachute Infantry Regiment had engaged in extensive combat operations, to include two combat parachute drops. The 325th Glider Infantry Regiment had only one week of combat in Italy and had never conducted a glider drop in combat. The 507th and 508th Parachute Infantry Regiments had no combat experience whatsoever. Although most of the division's senior commanders had some combat experience, many battalion commanders did not. Combat experience alone, therefore, does not fully explain why the 82d Airborne Division was so successful in Normandy. The upcoming airborne drop into the Cotentin Peninsula and the subsequent operations on the ground would provide the ultimate test of the quality of the airborne soldier's motivation and
training, and resolve for the Army's senior commanders any doubts about the utility of the airborne division on the battlefield.

**OPERATION NEPTUNE**

The final plan of the 82d Airborne Division scheduled Gavin's paratroopers to approach the Cotentin Peninsula from the west and to land between 0100 hours and 0315 hours on D-Day on three drop zones. The 505th Parachute Infantry Regiment was to land east of the Merderet River about 1000 yards northwest of Ste. Mere Eglise. The 507th and 508th Parachute Infantry Regiments were to land west of the Merderet River to secure the far side of the causeways bridging the flooded terrain in the Merderet basin. Fifty-two gliders from Force B were to land on the 505th Parachute Infantry drop zone shortly after H-Hour; the remainder of Force B was to approach from the east and land later on D-Day and D+1 on landing zones in the vicinity of Ste. Mere Eglise. Force C was to land by sea on UTAH Beach and link-up with the division as soon as the 4th Infantry Division made contact with the paratroopers. In a last minute decision, Ridgway decided to parachute into Normandy with Task Force A, but he kept Gavin in command of the task force. The decision may have saved Ridgway's life, since many of the gliders crashed upon landing.76

All airborne elements closed into special camps at the seven departure airfields used by the division twenty-four hours prior to take-off. Officers briefed the men on their
mission, checked personnel and equipment, and units loaded planes and gliders with equipment. At 2200 hours on 5 June the division's pathfinders departed for Normandy. Most of them survived the trip since they caught the German air defenses unprepared. Upon landing, however, the pathfinders found that what looked like good drop zones from aerial photographs were actually marshes caused by deliberate flooding of the Douve and Merderet Rivers. As a result, few pathfinders were able to mark adequately the drop zones.

Behind the pathfinders, Task Force A would jump into darkness.

Task Force A jumped into Normandy between 0151 hours and 0312 hours. The Germans only shot a few planes down, but wildly inaccurate navigation due to low clouds and the inability of the pathfinders to mark the drop zones with visual aids caused a wide dispersal of the force (Figure 28). Only the 505th Parachute Infantry Regiment, which landed near Ste. Mere Eglise, arrived in something close to good order. The 507th and 508th Parachute Infantry Regiments found themselves hopelessly dispersed in the swamps bordering the Merderet River. Glider elements crash-landed into the hedgerows which broke-up the terrain and limited the landing space. Nevertheless, small groups of men and composite units attacked to secure their objectives. The scattered airborne drop had one salutary side-effect. Reports of airborne activity across the Cotentin Peninsula confused the German command and prevented an effective response, since the enemy
FIGURE 28
82d AIRBORNE DROP PATTERN, 6 JUNE 1944

Source: Gordon A. Harrison, Cross-Channel Attack (Washington: Office of the Chief of Military History, 1951), Map X.
could not identify the objectives and main effort of the paratroopers until the amphibious assault began in the morning.  

The 505th Parachute Infantry Regiment, because it landed relatively intact and fairly close to its assigned area, achieved the most on D-Day. Units assembled rapidly and moved off towards their objectives. After a short, sharp battle, the 3d Battalion seized Ste. Mere Eglise by 0500 hours. While the 2d Battalion took up positions north of the town, the 1st Battalion moved towards the causeway over the Merderet River at La Fiere to secure the eastern end. The 507th and 508th Parachute Infantry Regiments landed widely dispersed, but small groups continued to assemble throughout the day. Composite units had some success in securing the eastern end of the causeways over the Merderet River, but forces on the western side met stiff enemy resistance which they could not overcome. One group, however, scored a minor success when it ambushed and killed Generalleutnant Wilhelm Falley, the commander of the German 91st Infantry Division.

Senior commanders, in many cases out-of-contact with the bulk of their men and with only limited means of communication, could do little to influence the action on D-Day. Ridgway set up his command post in an apple orchard near Ste. Mere Eglise, but he lacked most of his staff, had practically no contact with his units, and none whatsoever with the 101st Airborne Division to his south, the invasion
fleet, or England. 80 "To control the three parachute regiments," Gavin wrote, "I had a radio operator, an aide, and an orderly, and one staff officer..." 81 Gavin also had problems with the inexperienced paratroopers of the 507th Airborne Infantry Regiment on D-Day. The men were disorganized and lacked leadership. 82 Gavin finally waded across the Merderet River to the eastern bank, where he linked-up with the 1/505th Parachute Infantry near La Fiere. The battalion was "organized, under control, and already launching an attack on the La Fiere bridge. It was a most reassuring sight." 83 The fighting was also costly for the battalion, which lost its commander, executive officer, and operations officer in the combat around the causeway.

On 7 June the 82d Airborne Division continued to assemble, reorganize, and secure its area against heavy enemy resistance. The 505th Parachute Infantry Regiment defeated enemy counterattacks aimed at recapturing Ste. Mere Eglise. The remainder of the division focused on the battle for the causeways across the Merderet River at La Fiere and Chef du Pont. German flooding had caused the river to overflow its banks and created a kilometer-wide flood plain. If the invasion of UTAH beach were to succeed, the paratroopers had to seize the causeways across this area to allow ground forces to exit the beach area. During the day Ridgway received some needed reinforcements. The 325th Glider Infantry Regiment arrived during the morning. Although many gliders crashed
into the hedgerows and other obstacles, casualties amounted to only 7.5 percent of the regiment. The 4th Infantry Division also established contact with the 505th Parachute Infantry Regiment during the day, which allowed reinforcement by tanks and artillery. Major General J. Lawton Collins, commander of the VII(US) Corps, arrived at Ridgway's command post at 1500 hours in an M3 armored car. "It was a wonderful moment," records the 505th Parachute Infantry Regiment history. The 82d Airborne Division's lonely isolation was over.

The battles for the causeways climaxed on 8-9 June when the 1/325th Glider Infantry, 3/325th Glider Infantry (the old 2/401st Glider Infantry from the 101st Airborne Division), and paratroopers from the 1/505th Parachute Infantry and 507th Parachute Infantry Regiment succeeded in driving the Germans from the west end of the causeway at La Fiere in a bitter, bloody battle (Figure 29). Units from the 507th and 508th Parachute Infantry Regiment made contact with the 101st Airborne Division to the south and cleared the enemy from the causeway at Chef du Pont. The 2/505th Parachute Infantry, 3/505th Parachute Infantry, and 2/325th Glider Infantry attacked north from Ste. Mere Eglise to widen the beachhead to Le Ham. The seaborne elements of Task Force C linked-up with the division on 8 June. The division made contact with isolated groups of men west of the Merderet River and established a continuous bridgehead from La Fiere to Chef du
THE LA FIERE BRIDGEHEAD
9 JUNE 1944

AXIS OF MOVEMENT

GERMAN RESISTANCE

Contour interval 10 meters

1000 YARDS

FIGURE 29
THE LA FIERE BRIDGEHEAD, 9 JUNE 1944

Pont. The division artillery of the 4th and 90th Infantry Divisions were now in general support, which gave added firepower to the lightly-armed paratroopers and glidermen.86

The 82d Airborne Division made a major contribution to the success of the amphibious landings on UTAH Beach. The airborne soldiers prevented units from the German 91st Infantry Division and 243d Division from interfering with the landings. The division also gained a valuable bridgehead across the Merderet River, through which VII Corps planned to send the 90th Infantry Division to begin the drive to the west coast of the Cotentin Peninsula. "We had been there [in France] only two days," the 505th Infantry Regiment history states, "but it seemed a long, long time. As one paratrooper said, 'Two days ago I was 19 years old; now I feel like I am 40'."87 The ordeal for the 82d Airborne Division was not over, however. Ahead lay nearly a month of bitter fighting in the hedgerows of the Cotentin Peninsula.

"EVERY MISSION ACCOMPLISHED"

Ridgway expected that the Allied command would pull his division out of combat soon after the seaborne divisions had arrived to consolidate and expand the beachhead. Airborne divisions were too valuable for use in extended ground campaigning. The failure of many American infantry divisions during their first experience in combat, however, led Lieutenant General Bradley to use the 82d Airborne Division far longer than expected. Nevertheless, the division
performed well, even though it exited Normandy exhausted from its ordeal. The division spent "33 days of action without relief, without replacements. Every mission accomplished. No ground gained ever relinquished." Few divisions in Normandy could claim such a record.

On 10 June the 90th Infantry Division began a passage of lines through the 82d Airborne Division's bridgehead across the Merderet River. Poorly trained and led, the 90th Infantry Division failed miserably in its first combat. Before even completing the passage of lines, soldiers from the division fired on soldiers of the 1/325th Glider Infantry. Once through friendly lines, the 90th Infantry Division's attack went nowhere. "One of the regiments had a battalion that was out in front of us there, in a clearing--milling around--without any leadership apparently at all," Teddy H. Sanford, the commander of the 1/325th Glider Infantry, stated later. "The damnest situation we had ever seen, a desperate situation. We sent people over there and got them lined up and marched them back through our lines." On 13 June Major General Collins relieved the commander of the 90th Infantry Division along with two of his regimental commanders.

The situation forced Collins to revise his plan of attack. On 14 June the 9th Infantry Division passed through the 90th Infantry Division to assume the main effort in the attack west. Collins ordered Ridgway to attack to the south of the 9th Infantry Division. Both divisions made headway
through the difficult terrain. "The fighting was bitter, hedgerow-to-hedgerow onslaught, but considerable progress was made," the division's operations report stated. The division continued the slugfest in the hedgerows the next day, but shortly after nightfall Ridgway realized that the division had broken through the crust of the German defenses. On 16 June the 505th Parachute Infantry Regiment seized a bridgehead across the Douve River at St. Sauveur Le Vicomte. The 47th Infantry Regiment of the 9th Infantry Division attacked through this bridgehead on 17 June and together with the remainder of its division succeeded in cutting the Cotentin Peninsula in two.

On the night of 18-19 June the 325th Glider Infantry Regiment and the 3/508th Parachute Infantry attacked south across the Douve River at Etienville. The 507th Parachute Infantry Regiment attacked simultaneously west from Cretteville on the south side of the river. The attack drove the Germans south to Pretot and established a bridgehead for future operations. Lieutenant General Bradley transferred the 82d Airborne Division to VIII(US) Corps, which had the mission of defending the southern flank of VII Corps as it drove north to capture the critical port of Cherbourg. Between 20 June and 2 July, the 82d Airborne Division defended its positions and launched aggressive and continuous patrols against enemy positions to the south.
Before departing for England, Major General Troy H. Middleton, commander of VIII Corps, called on the 82d Airborne Division for one final effort. Reinforced by two additional artillery battalions, a chemical mortar company, a tank company, and several tank destroyer companies, the division attacked on 3 July from its bridgehead over the Douve south towards the La Poterie ridge. The 79th Infantry Division was to the west and the 90th Infantry Division to the east. They would converge beyond the 82d Airborne Division's objective and pinch it out of the line, thus allowing the division's return to England for rest and refit. 94

The division attacked on schedule, despite heavy rain which grounded air support. The German 265th and 353d Divisions put up stubborn resistance, but the paratroopers and glidermen attacked aggressively and seized the eastern edge of La Poterie ridge by dark. Division artillery units, reinforced by up to eight battalions of VIII Corps artillery at a time, fired 7,727 rounds in support of the assault. The lavish expenditure of firepower and the aggressive maneuver paid off. By the end of Independence Day, the 82d Airborne Division owned Hill 95 and La Poterie Ridge and held it against repeated enemy counterattacks. The division killed an estimated five hundred enemy soldiers and took seven hundred prisoners in the bitter fighting. The division secured its area and cleared pockets of resistance, secure in the knowledge that relief was imminent. 95
When the 8th Infantry Division passed through the 82d Airborne Division on 8 July, the airborne troopers breathed a collective sigh of relief. The division assembled and reverted to First Army reserve at UTAH Beach. On 12 and 13 July the division traveled by LST back to its bases in England.

In his memoirs, General of the Army Omar N. Bradley makes a poignant comment about the 82d Airborne Division in its attack on La Poterie Ridge. Referring to the success of the division in securing its objectives, Bradley states:

Only the 82d Division had taken its objective but it possessed an uncommon incentive the other units lacked. Upon completion of that mission, Ridgway's troops were to be returned to England. Incentive is not ordinarily part of an infantryman's life. For him there are no 25 or 50 missions to be completed for a ticket home. Instead the rifleman trudges into battle knowing that statistics are stacked against his survival. He fights without promise of either reward or relief. Behind every river, there's another hill--and behind that hill, another river. After weeks or months in the line only a wound can offer him the comfort of safety, shelter, and a bed. Those who are left to fight, fight on, evading death but knowing that with each day of evasion they have exhausted one more chance for survival. Sooner or later, unless victory comes, the chase must end on the litter or in the grave.96

The following excerpt from the operations report of the 505th Parachute Infantry Regiment supports Bradley's assertion:

Of course the troops were not satisfied with the little rest they had got, but everybody liked to move again because they knew that it was a job that had to be done and they wanted to attack--advance and get it finished with. Every man also knew that the sooner the beachhead on the peninsula was secured the sooner we would be back in England again.97
One advantage of the elite airborne divisions was that they were too valuable to be kept in the line for extended operations. To the troopers of the 82d Airborne Division, thirty-three days in Normandy seemed like a long time. Other infantry divisions, however, spent weeks and months at a time in the line without respite. The troopers of the All-American Division earned their rest, but they were members of one of the few divisions that the Allied command pulled out of combat periodically as a matter of policy.

Before the 82d Airborne Division left Normandy, Major General Middleton requested that the division prepare a detailed account of its technique in clearing hedgerows for transmission to his other divisions. The resulting memorandum is instructive for what it tells us about the caliber of soldiers in the airborne divisions:

Instead of waiting and digging as soon as they received shellfire, they attacked to get out of it...Of course, the scout in front of each advancing column would first receive fire from the hedgerow across his front. He would immediately drop and return fire as would all men behind him...The second man in column, armed with BAR or Tommygun, would creep on up the hedgerow past the scout and as far as possible. Here he would open up with automatic fire on the hedgerow to his front...Now another man...crawls all the way up past the first automatic weapon and through the hedge across the platoon front...He merely slips through the hedgerow and is on the flank of the enemy who are necessarily in a straight line before him. He then opens up.

The success of this attack is due in part to heavy, penetrating automatic fire on the enemy, but more so to the aggressiveness and willingness of the individual soldier to advance under fire.
The report noted the key to successful fire and maneuver: the willingness of individual soldiers to advance under fire. This willingness requires discipline, training, and leadership—and the knowledge that a unit will sustain fewer casualties if it moves forward rather than hunker down behind a hedgerow. The troopers of the 82d Airborne Division had the discipline, training, and leadership to conduct effective fire and maneuver in combat. Too many other American divisions, however, lacked the ability to do so.

The campaign in Normandy had been costly, but the results achieved by the airborne divisions justified their commitment to Operation NEPTUNE. Of the 11,770 men the 82d Airborne Division brought into battle, 5,436 became casualties, 46 percent of the division's strength. The 325th Glider Infantry Regiment entered Normandy with 129 officers and 1,841 men, but by 6 July its effective strength was 41 officers and 956 men. Company G had only twelve men left, while the strongest company in the regiment numbered but fifty-seven men. Losses to commanders were particularly severe. Gavin noted that "...we had gone into the battle with four regimental and sixteen battalion commanders, as well as several replacements if they were to be needed. They were. In the course of the Normandy combat, fifteen of these commanders had been killed, wounded, or captured—a striking indication of the leadership given to our parachute commands."
Unlike other divisions in Normandy, the 82d Airborne Division received no replacements during the campaign. This was a conscious decision on the part of the division's leadership:

Although enlisted replacements were in training at base camp, none were brought to Normandy, possibly because it had not been expected that the Division would stay in action so long, possibly because it was felt that so many new men could not be advantageously absorbed.\textsuperscript{102}

The 82d Airborne Division had the advantage of using a system quite similar to that of the German army. The division fought and received no replacements, but then spent several weeks out of action resting, integrating replacements, and training. Besides the airborne divisions, the only other divisions in the American army that approached this ideal rotation system on a continuous basis were the divisions fighting the war against the Japanese in the Pacific.

**RECONSTITUTION**

In a memorandum to Lieutenant General Bradley on 30 June, Ridgway estimated that his division would require seventy-five days from the time it had disengaged from combat to prepare itself for another airborne operation.\textsuperscript{103} Ridgway broke his schedule for reconstitution of the division's combat power as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rearm and reorganize (includes leaves)</td>
<td>12</td>
</tr>
<tr>
<td>Train (individual to battalion level)</td>
<td>28</td>
</tr>
<tr>
<td>Train (battalion/regimental field exercises)</td>
<td>28</td>
</tr>
<tr>
<td>Preparations for next operation</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
</tr>
</tbody>
</table>
In the event, the 82nd Airborne Division received sixty-five days prior to its participation in Operation MARKET-GARDEN. Ridgway and Gavin used the time well.

Upon the division's return to England, every soldier received a ten-day furlough. The division received replacements and began the process of integrating them into units. Ridgway had left a small training cadre behind in England when the division departed for Normandy; these men had organized the volunteer replacements as they arrived and assigned them to regiments and separate battalions. "My purpose was to indoctrinate each new man, not only with the proud spirit of the division as a whole, but with the spirit of each smaller unit which was then in combat." Jump training at the division parachute school was only part of the training program. The key was to take the combat experience gained by the veteran troopers and pass it on to the inexperienced replacements. Like the veteran troopers, the replacements were all volunteers and for the most part highly motivated. As usual, Gavin ensured that the training was tough and demanding to weed out the weak and incompetent. Later he would state: "When we came out of Normandy we worked their tails off...if people are trained properly, combat isn't difficult. And by training properly, I mean very, very arduous training."

One part of the training program the airborne divisions could not execute was mass unit jumps. Supreme Headquarters
Allied Expeditionary Forces (SHAEF) required every available transport aircraft to fly supplies to the fast-moving American armies after they broke out of Normandy in August. Airborne staffs received much practice in planning operations, however, as SHAEF considered and then rejected several proposed airborne operations that events in France soon overtook.106

On 16 August Major General Ridgway left the 82d Airborne Division to take command of the XVIII(US) Airborne Corps, which consisted of the 17th, 82d, and 101st Airborne Divisions. The XVIII Airborne Corps was part of the newly formed First Allied Airborne Army under the command of U.S. Army Air Forces Lieutenant General Lewis H. Brereton. Brereton's other major unit was the British 1st Airborne Corps, under the command of Lieutenant General F.A.M. "Boy" Browning, who doubled as Brereton's deputy commander. Gavin moved up to take command of the 82d Airborne Division. Since Ridgway took much of the divisional staff with him to his new headquarters, Gavin had to build the divisional staff largely from scratch. He chose most of his men from the ranks of his old command, the 505th Parachute Infantry Regiment. "It was unquestionably the youngest division staff in the European Theater of Operations," Gavin wrote later. "It was also a very able, dedicated, hard-working staff."107

The other major issue that Gavin and Ridgway needed to settle was the future composition of the 82d Airborne Division. Now that Colonel Reuben Tucker's 504th Parachute
Infantry Regiment had fully recovered, there was no doubt that it would join the division. The 505th Parachute Infantry Regiment and the 325th Glider Infantry Regiment would definitely remain. As far as the airborne table of organization went, those regiments constituted the infantry strength of the division. The War Department, however, allowed Gavin to keep one of the two parachute infantry regiments of the 2d Parachute Brigade. Gavin, perhaps remembering his experience with the 507th Parachute Infantry Regiment on D-Day, chose to retain the 508th Parachute Infantry Regiment. The 82d Airborne Division would fight its upcoming battles as an old-fashioned "square" division. The airborne division may have lacked firepower, but with four infantry regiments at its disposal it enjoyed an advantage that the regular American infantry divisions in Europe did not. The 82d Airborne Division would need every advantage it could muster to face its next challenge.

"THE FINEST DIVISION IN THE WORLD TODAY"

In early September 1944 British Field Marshal Bernard L. Montgomery devised an ambitious plan to seize a bridgehead across the Rhine River. Montgomery proposed to Eisenhower that the First Allied Airborne Army drop behind enemy lines in Holland to seize a series of bridges across the major rivers and canals that barred the path of the 21st Army Group as it advanced northeast towards Germany. Montgomery wanted Brereton's divisions to lay down an "airborne carpet" from
Eindhoven to Arnhem through which Lieutenant General Brian Horrock's XXX Corps would advance. The keys to the operation were the three major bridges across the Maas, Waal, and Rhine Rivers; the bridge at Arnhem spanning the Rhine River was nearly fifty miles beyond the XXX Corps starting point in its bridgehead north of the Meuse-Escaut Canal. Eisenhower enthusiastically supported Montgomery's plan and diverted the bulk of Allied supplies to support it. After some hedging, Montgomery set D-Day for 17 September, which gave the airborne divisions exactly one week to complete their preparations for the operation. 108

Lieutenant General Brereton gave his deputy, Lieutenant General Browning, operational command of the airborne forces assigned to Operation MARKET, the airborne portion of the plan (Operation GARDEN was the ground forces portion). This proved to be an unfortunate choice. Browning was an ambitious and political general who lacked experience in commanding airborne divisions in combat. Ridgway was a much more able and experienced airborne commander and the majority of the divisions assigned to Operation MARKET were American. His staff consisted mostly of combat experienced veterans of the 82d Airborne Division. But perhaps out of Allied harmony, Brereton chose Browning and his staff at the British 1st Airborne Corps to plan and lead the assault. The result was a plan that had several major flaws in it and a corps headquarters that had almost no impact on the final outcome of
the operation once the airborne divisions hit the ground.\textsuperscript{109}

Browning chose the American 101st Airborne Division to land north of Eindhoven nearest the British XXX Corps. Taylor's men were to seize the stretch of highway and the bridges along it between Eindhoven and Veghel. Next came Gavin's 82d Airborne Division, which had the missions of seizing the major bridges across the Maas River at Grave, the Waal River at Nijmegen, the Maas-Waal Canal in-between, and holding the key terrain between the two rivers along the Groesbeek Heights. Browning chose the British 1st Airborne Division and the 1st Polish Independent Parachute Brigade to seize and hold the bridge across the Rhine River at Arnhem. In reserve was the British 52d (Lowland) Division (Airportable).\textsuperscript{110}

There were three major flaws in the plan for Operation MARKET. First, Brereton sided with the commander of the IX Troop Carrier Command, United States Army Air Forces Major General Paul L. Williams, and denied permission for the airborne divisions to conduct two drops on D-Day. The air transport commanders argued that flying more than one mission per day would not allow enough time for maintenance or crew rest and would possibly result in high losses.\textsuperscript{111} This decision was a grave mistake. Since Allied air superiority allowed a daylight drop and enough daylight existed for two flights to Holland, Brereton should have insisted on two drops. With only one lift at their disposal, the airborne
divisions could only drop about half of their strength into Holland on the first critical day. Subsequent drops were at the mercy of the weather, which is notoriously fickle in Europe. The result was a lack of combat strength to accomplish the missions assigned to the airborne divisions on D-Day, when surprise would be the greatest and German strength lowest.

The second major flaw was in the choice of drop zones for the British 1st Airborne Division, which were six to eight miles from the division's objective in Arnhem. These drop zones were perfect for the air transport command: large, easily identifiable, and free from German anti-aircraft units. They also failed the most crucial test for an airborne drop zone: proximity to the objective. In the event, only one battalion of the British 1st Airborne Division was able to reach its assigned objective before German units in the area sealed the airhead in the suburb of Oosterbeek.

The third major flaw was Browning's insistence that the 82d Airborne Division secure the Groesbeek Heights southeast of Nijmegen before seizing the bridge in Nijmegen itself. Although Gavin approved of the decision, it turned out to be a gross blunder. The best way to take a bridge is to seize both ends at once. The 504th Parachute Infantry Regiment conducted a textbook operation when it seized the highway bridge over the Maas River at Grave on D-Day by dropping one company on the south side and two companies on
the north side of the river. Yet not one soldier from the 82d
Airborne Division dropped on the north side of the Waal River,
which forced the division to attempt to take the bridge at
Nijmegen by advancing through the city itself. Even then the
drop zone of the 508th Parachute Infantry Regiment was several
miles from Nijmegen (Figure 30). The airborne commanders
compounded their error by waiting for several hours after
landing before sending even one battalion into Nijmegen. This
decision gave the Germans time to send the Reconnaissance
Battalion from the 9th SS Panzer Division into the city to
hold the bridge there. The 82d Airborne Division did not take
the bridge until D+3, and then only after a heroic assault
across the Waal River by the 3/504th Parachute Infantry. 114

Gavin received the mission for his division at 1800 hours
on 10 September. His staff spent the first twelve hours
conducting a terrain study of the area of operations. On 11
September Captain "Harry" Besterbreutje, a Dutch commando
officer and a native of Nijmegen, arrived to assist Gavin with
planning. On the same day the division selected its drop
zones in conjunction with representatives from the IX Troop
Carrier Command. On 12 September the division staff presented
a draft plan to subordinate unit commanders. Units then
prepared their plans, issued orders, and prepared unit loads.
On 15 September troops moved to their departure airfields.
Last minute changes, as in Operation NEPTUNE, made definite
planning extremely difficult. 115
FIGURE 30
OPERATION MARKET

Source: Charles B. MacDonald, The Siegfried Line Campaign (Washington: Office of the Chief of Military History, 1963), Map IV.
The airborne drop during the early afternoon of 17 September went smoothly. Only a handful of aircraft failed to drop their loads or were shot down by German anti-aircraft fire. Navigation was accurate for a change, which allowed the airborne commanders to form their units quickly once they reached the ground. Gavin's problem was that he simply had too many missions for the forces at his disposal. Nevertheless, his division accomplished much on D-Day. The 504th Parachute Infantry Regiment seized intact the highway bridge over the Maas River at Grave and the bridge at Heuman across the Maas-Waal Canal. The 505th and 508th Parachute Infantry Regiments occupied their objectives on the Groesbeek heights to defend the division area from any German counterattack out of the Reichswald Forest. Unfortunately, Colonel Roy E. Lindquist of the 508th Parachute Infantry Regiment waited for seven hours before ordering his 1st Battalion into Nijmegen. By that time the 9th SS Panzeraufklärungsbatallion (reconnaissance battalion) had arrived at Nijmegen to defend the southern approaches to the railroad and highway bridges across the Waal River. The element of surprise was gone; the 82d Airborne Division would buy the Nijmegen bridge only after a prodigal expenditure of blood.

On 18 September Gavin's number one priority was to clear the landing zones east of the Groesbeek Heights so that his reinforcements (319th Glider Field Artillery Battalion, 320th
Glider Field Artillery Battalion, 456th Parachute Field Artillery Battalion, an anti-tank battery from the 80th Airborne Anti-Aircraft Battalion, and support units) could land. The 505th and 508th Parachute Infantry Regiments cleared the landing zones by 1400 hours, just as the first gliders arrived. The reinforcements arrived nearly intact, which gave Gavin more firepower. The division also received its first resupply from 135 B-24 bombers. Gavin had a major problem, however. By the time the Guards Armored Division from XXX Corps linked-up with his division at 0820 hours on 19 September, the Germans still held the Nijmegen bridges.¹¹⁷

At 1100 hours on 19 September, Gavin attached the 2/505th Parachute Infantry to the Grenadier Guards to attack the southern approaches of the Nijmegen bridges through the city. The Grenadier Guards and the paratroopers could make little headway against the German forces defending the bridges. The 508th Parachute Infantry Regiment had its hands full repelling German counterattacks against its front from Wyler to Beek along the Groesbeek heights. By the afternoon Gavin decided that he had to try some other way of taking the Nijmegen bridge. In the late afternoon Gavin met with Lieutenant General Browning, Lieutenant General Horrocks, and Major General Allan Adair (commander of the Guards Armored Division). Gavin proposed sending a battalion of the 504th Parachute Infantry Regiment across the Waal River in boats supplied by XXX Corps. Horrocks and Browning agreed to the
On the morning of 20 September, while staff officers from XXX Corps attempted to get the boats through the traffic on the highway leading to Nijmegen, Tucker's 504th Parachute Infantry Regiment cleared the Germans from the southern bank of the Waal River to the west of Nijmegen and prepared for the assault.\textsuperscript{118}

While Tucker's men waited for the boats, the 505th and 508th Parachute Infantry Regiments were busy defending against heavy counterattacks at Mook and Wyler by the German II Parachute Corps. The Germans drove both regiments back approximately one kilometer before the paratroopers held in costly fighting. By skillful maneuvering of his units and use of his artillery, Gavin was able to prevent the Germans from severing the highway between Grave and Nijmegen. During this time the 2/505th Parachute Infantry and the Grenadier Guards continued their assault on the southern end of the bridges at Nijmegen, which took the attention of the Germans away from the impending river crossing downstream.\textsuperscript{119}

At 1500 hours the 3/504th Parachute Infantry, under the command of Major Julian A. Cook, assaulted across Waal River with support from the tanks of the Irish Guards, under the command of Lieutenant Colonel J.O.E. Vandeleur. The veterans of Anzio and engineers from the 307th Airborne Engineer Battalion paddled twenty-six flimsy canvas craft across the swift river under severe fire from enemy troops entrenched behind a dike on the far shore. Half of the boats made it.
The paratroopers who survived literally went berserk, rushed the high dike, and killed every enemy soldier in sight with bayonets, rifles, and grenades. Eleven boats, paddled by engineer crews, returned across the Waal to bring reinforcements across the river. The momentum of the assault carried Cook's men all the way to the north end of the Nijmegen highway bridge by 1900 hours. By that time, the 2/505th Parachute Infantry and the Grenadier Guards had reached the southern end of the highway bridge. At 1910 hours the first British tanks crossed the Waal River. 120

Unfortunately for the paratroopers of the British 1st Airborne Division, the Guards Armored Division did not immediately exploit the situation. The 504th Parachute Infantry Regiment expanded the bridgehead a few kilometers north of the Waal River, but lacked the strength to go further. Tanks of the Grenadier Guards waited for infantry reinforcements before moving out towards Arnhem on the morning of 21 September. The attack came too late to save the remnants of Lieutenant Colonel John D. Frost's 2d Battalion, Parachute Regiment, which succumbed to German attacks that morning. 121 On 22 September British forces relieved Tucker's men, who moved back across the Nijmegen bridge to go into division reserve. 122

On 23 September the weather finally cleared enough to allow the 325th Glider Infantry to land. Had the transport command flown two sorties on D-Day, Gavin would have had this
regiment available to him six days earlier, which would have completely changed the complexion of the battle around Nijmegen. The glider regiment was a welcome reinforcement, but all it could accomplish at this late date was to help the division hold the area between the Maas and Waal Rivers to protect the flank of XXX Corps. The Allies, however, had lost the battle to secure a bridgehead across the Rhine River. On 26 September the shattered remnants of the British 1st Airborne Division withdrew to the southern bank of the Rhine. The 82d Airborne Division remained in defensive positions near Nijmegen until 13 November, when SHAEF finally withdrew it to rest and refit in the vicinity of Reims, France.123

The 82d Airborne Division lost 3,280 men in Holland (535 killed, 1,796 wounded, 327 injured, and 622 missing).124 Fortunately, the division lost few senior leaders in the operation, which kept the leadership stable for the next battle. The division accomplished all of its missions, although the critical delay in taking the Nijmegen bridge was one of the factors that caused Operation MARKET-GARDEN to fail. This was not the fault of the airborne troopers, who put forth a tremendous effort at great cost. When the commander of the British Second Army, Lieutenant General Miles C. Dempsey, met Brigadier General Gavin in late September, he stated, "I'm proud to meet the Commanding General of the finest division in the world today."125 Gavin accepted the compliment with reservations. Later, Gavin would write, "We
never could have fought and won the battle of Nijmegen without all the combat experience from the battles of Sicily, Italy, and Normandy.\textsuperscript{126} Perhaps the highest compliment paid to the airborne soldiers was that of the Dutch people who lined the route of departure from Nijmegen shouting, "September 17! September 17!"\textsuperscript{127}

**FIRE CALL**

When the 82d Airborne Division moved to billets at Sissonne and Suippes, France, in November, Major General Gavin's first order was to distribute ammunition and rations in case the division had to move quickly back into combat.\textsuperscript{128} Next he gave his men furloughs to Paris. Upon their return, units immediately began training the replacements they received to bring the division once again up to full strength. The division opened a jump school. The men did not realize it, but they would not jump into combat again during the war. For four weeks the 82d Airborne Division trained to bring itself into peak condition. By the time the next call-to-arms came, the division was ready for action.

At dawn on 16 December 1944 the German army struck a major blow along a sixty-mile front in the Ardennes Forest held in large part by Major General Troy Middleton's VIII Corps. SHAEF considered the Ardennes to be a "quiet" area, where new divisions could accustom themselves to combat and veteran divisions could rest and refit. Middleton's corps consisted of the untested 106th Infantry Division, the veteran
28th and 4th Infantry Divisions (both resting after taking serious losses in the Huertgen Forest), and the new 9th Armored Division. The Germans hit VIII Corps and the southern portion of VII Corps with four armies: the Fifteenth Army, the Sixth SS Panzer Army, the Fifth Panzer Army, and the Seventh Army, from north to south. Poor weather grounded Allied air support. Surprise was total.\textsuperscript{129}

Against such an overwhelming superiority of combat power, Middleton's forces could only delay the enemy as best they could. Along Elsenborn Ridge, the 2d and 99th Infantry Divisions (part of Major General Joe Collins' VII Corps) held after difficult fighting. This gave the Americans an anchor along the northern shoulder of the German assault. To the south of Elsenborn Ridge, the Germans surrounded two regiments of the 106th Infantry Division in the Schnee Eifel. Two days later they surrendered, which left a gaping hole in American lines that Brigadier General Bruce C. Clarke attempted to fill at St. Vith with his combat command from the 7th Armored Division. The 28th Infantry Division took the brunt of the assault of the Fifth Panzer Army. Troops from the 28th Infantry Division fought hard and imposed critical delays in the timetable of the attacking enemy forces. The 110th Infantry Regiment turned the town of Clervaux into another Alamo, which seriously delayed the 2d Panzer Division in its drive towards Bastogne. Further to the south the 4th Infantry Division jammed the southern shoulder of the German attack.
The heroism and tenacity of the American defenders gave Bradley and Eisenhower critical hours in which to reinforce the rapidly deteriorating front.\textsuperscript{130}

Allied commanders had few reserves to throw into the fray. SHAEF's strategic reserve was Ridgway's XVIII Airborne Corps near Reims. As soon as the magnitude of the German counteroffensive became apparent, U.S. First Army commander Lieutenant General Courtney H. Hodges requested the release of the two airborne divisions to reinforce the Ardennes front. Eisenhower reluctantly agreed and his headquarters alerted the XVIII Airborne Corps on the evening of 17 December.\textsuperscript{131}

The 82d Airborne Division spent the next fifteen hours in more or less organized confusion as units prepared to move. Trucks arrived on the morning of 18 December and the division began its motor march at 0900 hours in heavy rain and sleet driven by a twenty-mile-per-hour wind. "The temperature hovered in the vicinity of freezing, a fine drizzle fell and the GIs who stood in the trucks, because it was too crowded to sit down, cursed," recorded the history of the 504th Parachute Infantry Regiment.\textsuperscript{132} The columns moved towards Bastogne, but at Spirimont, Belgium, the advance party redirected the division towards Werbomont in accordance with orders from Middleton's headquarters. The 101st Airborne Division continued on to Bastogne, where it fought an epic battle to hold the vital crossroads. Refugees and vehicles clogged the roads and information on enemy movements was sketchy at best.
At 1730 hours the lead serial arrived at Werbomont and organized defensive positions. After disentangling march serials on the crowded roads, the remainder of the division closed into Werbomont by 1030 hours on 19 December.\textsuperscript{133}

The next day the division made contact with the lead elements of Sepp Dietrich's Sixth SS Panzer Army (Figure 31). Few events in war can compare in ferocity with what happens when two elite units tangle in a life-or-death struggle. That

\begin{figure}
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\includegraphics[width=\textwidth]{figure31.png}
\caption{The XVIII Airborne Corps Meets Kampfgruppe Peiper}
\end{figure}

\textbf{FIGURE 31}
\textbf{THE 82D AIRBORNE DIVISION MEETS THE 1ST SS PANZER DIVISION}

is exactly what happened when the 1/504th Parachute Infantry attacked a column of the 2d Panzergrenadier Regiment of the 1st SS Panzer Division at Cheneux on 20 December. The battle, which began as a meeting engagement, raged through the night. B Company charged the town in the gathering darkness, but the Germans cut the paratroopers down in droves with fire from machine guns and depressed 20mm anti-aircraft guns. C Company joined the survivors in the attack and finally entered the town. The paratroopers used bayonets and rifle butts to stab and club the SS soldiers and threw grenades into hatches of enemy vehicles. Some men climbed into tanks to slit the throats of the crews. The battle finally ended the next morning after the Lieutenant Colonel Julian Cook's 3/504th Parachute Infantry executed a flanking maneuver to enter Cheneux, now a smoking mass of ruins, from the north.134

An anonymous account in the files of the 504th Parachute Infantry Regiment records the scene in Cheneux after the battle:

The town was still, its street cluttered with the remains of an armored column. A Mark VI Tiger tank—a mammoth piece of machinery—spanned a ditch where it had been stopped while trying to maneuver off the road. Ammunition trucks, personnel carriers, self-propelled anti-tank guns, flak wagons, reconnaissance cars and four of five 105mm field artillery pieces jammed the quarter mile long single winding street of Cheneux...The bodies of SS men lay in the ditches, in the fields, in their vehicles and under them. Some had gashes in their throats. In a ditch, frozen into the ground, was a glob of flesh-streaked mud from which projected a foot. It was German—I could tell by the shoe on the foot.135
One can discern the fierceness of the battle for Cheneux by noting that the 504th Parachute Infantry Regiment suffered 225 casualties, over half the total number suffered by the regiment during the entire Battle of the Bulge. B Company had eighteen men left; C Company numbered only thirty-eight men and three officers. The paratroopers, however, had eliminated *Kampfgruppe* Peiper's only bridgehead across the Ambleve River.

While the 504th Parachute Infantry Regiment fought its battle at Cheneux, the 505th and 508th Parachute Infantry Regiments moved into positions along the Salm River as a backstop for the American units fighting to the east at St. Vith. On 21 December Ridgway ordered Gavin to reconnoiter a position to the rear to which the division would move after the extrication of the forces at St. Vith. The 82d Airborne Division had never retreated before; Gavin was concerned about the effect of the withdrawal on his men, but conceded that the move made tactical sense.

Between 22 and 24 December the 82d Airborne Division held its positions along the Salm River against attacks by the 1st, 2d, and 9th SS Panzer Divisions while the American forces at St. Vith—portions of the 7th Armored Division, 106th Infantry Division, 28th Infantry Division, and 9th Armored Division—passed through the division to take up positions further to the west. The 325th Glider Infantry Regiment took up positions on the division's southern flank to thwart enemy...
efforts to outflank the division by driving northwest towards Manhay. During the night of 24-25 December, the division withdrew to a shorter line running roughly from Trois Ponts to Manhay (Figure 32). Here the division held until ordered to counterattack on 3 January 1945. 138

Between 3 and 10 January 1945, the 82d Airborne Division, with the 517th Parachute Infantry Regiment attached, counterattacked back to the Salm River. With five infantry regiments at his disposal, Gavin was able to rotate units frequently to keep them from getting tired. On 11 January the 75th Infantry Division relieved the 82d Airborne Division in place and the airborne troopers moved into corps reserve near Malmedy. The division remained in reserve until 28 January. Gavin's units used the time to reorganize, replace losses in men and equipment, and train. The airborne soldiers put special emphasis on tank-infantry training and use of the German panzerfaust, a superior anti-tank weapon to the American bazooka. Gavin had outfitted his division with the superior German weapon after Operation MARKET. 139

The 82d Airborne Division made a critical contribution to halting the German counteroffensive in the Ardennes. The division held open the door through which the forces which had so tenaciously fought to hold St. Vith exited. The paratroopers had taken-on the best soldiers the Germans had to offer—the men of the 1st, 2d, and 9th SS Panzer Divisions—and had fought them to a standstill. The division history
FIGURE 32
THE 82D AIRBORNE DIVISION HOLDS, 24-31 DECEMBER 1944

Source: G-3, 82d Airborne Division, Historical Narrative, 24-31 Dec 1944, Plate 4, NARA, MMRB, RG 407, Box 12345, 382-0.3.
states: "The battles of 'The BULGE,' ranking on a par with the brightest victories in the Division's history, also proved again that plans and material are important but the most important essential of all is a fighting heart, a will-to-win." The troopers of the 82d Airborne Division had the will to win in spades.

THE FINAL MONTHS

From 28 January to 3 February 1945 the 82d Airborne Division conducted an attack from the vicinity of St. Vith northeast into the West Wall. The division advanced twelve miles in deep snow and intense cold and penetrated the first belt of the heavy German fortifications. Gavin attacked with two regiments and kept two in reserve, which allowed him to rotate the units and keep his non-battle casualties low. In effect, the "square" structure of the airborne division gave its commander an advantage over the "triangular" structure of a normal infantry division. Between 4-6 February the 99th Infantry Division relieved the 82d Airborne Division, which moved into corps reserve at Vielsalm.

On 8 February the 82d Airborne Division moved into the Huertgen Forest near Schmidthof. Gavin looked over the old battlefield of the 28th Infantry Division in the Kall River Valley. What he saw made a deep impression on him:

The question in my mind was how in the world had they ever gotten involved in attacking across the Kall River Valley?...I asked why in the world they had attacked through the Huertgen Forest in the first place, but apparently that was a 'no-no'
The thought crossed my mind that the disaster that had befallen the 28th Division in the Kall River valley might have had some relationship to the lack of understanding in higher headquarters of what the actual situation on the ground was...It had been our Passchendaele...the more senior officers frequently lacked the firsthand knowledge of the conditions under which the troops were being compelled to fight. They had fought the battle on maps. And battles are not won on maps.\textsuperscript{142}

Gavin's division, more skillfully maneuvered, suffered no such tragedy in the dense woods. The division attacked and quickly gained the high ground overlooking the Roer River and its vital dams. On 18 February the 9th Infantry Division relieved the 82d Airborne Division in place. Gavin's men moved back to their base camp near Reims. Once again, the 82d Airborne Division received a respite from combat denied to ordinary infantry divisions on a regular basis.

The final campaign for the 82d Airborne Division began on 3 April 1945, when the division relieved the 86th Infantry Division along a thirty-two mile front on the west bank of the Rhine River in the vicinity of Cologne. The division held the western part of the Ruhr Pocket until an attack by the remainder of the XVIII Airborne Corps east of the Rhine masked the division's front. From 18 to 25 April the division policed the Cologne area. "For the men who had frozen and fought in the snow and cold of the Belgian winter it was a new, almost enjoyable way of fighting a war," recorded the history of the 325th Glider Infantry Regiment. "They were sleeping in houses in beds. When not on duty they spent their time searching the ruins of Germany's third largest city."
Stores of liquor of all kinds were abundant. One company lived in a candy factory and the whole regiment was supplied with sweets.\textsuperscript{143}

On 26 April the 82d Airborne Division began its move to the west bank of the Elbe River northeast of Hanover to relieve the British 5th Infantry Division (Figure 33). The German transportation network, severely mauled by Allied bombing, slowed the division's move by truck and rail. At 0100 hours in the morning of 30 April, the 505th Parachute
Infantry Regiment crossed the Elbe River near Bleckede, northeast of Luneberg. Gavin crossed with the leading wave of boats. The Germans put up sporadic resistance, but enemy artillery fire was heavy. The 325th Glider Infantry Regiment and the 504th Parachute Infantry moved straight from their railheads to the battle area to exploit from the bridgehead towards Doemitz and Ludwigslust, twenty-five miles away to the east. By mid-day on 2 May, the division, in conjunction with CCB of the 7th Armored Division, had taken the two towns. The advance gutted the rear of the German 21st Army Group, whose commander, General der Infanterie Kurt von Tippelskirch, surrendered unconditionally to Major General Gavin at 2130 hours that evening. On 3 May the division made contact with Russian forces advancing from the east and German resistance ceased.

"We had left in our wake thousands of white crosses from Africa to Berlin," Gavin wrote in his memoirs. "And when it came to an end, there was not a man in the ranks of the 82nd Airborne Division who did not believe that it was a war that had to be fought."

CONCLUSION

The 82d Airborne Division was a superb combat unit, in part because it enjoyed the advantages of the elite. Every paratrooper was a volunteer, picked for his mental and physical abilities. Ridgway, Gavin, and the other airborne commanders drove these men hard in training. Many dropped
out. Those that stayed were without doubt the best of the best—highly motivated killers who believed they could accomplish any mission given to them. The division received just enough combat experience in Sicily and Italy to prepare the men and their leaders for their greatest challenge—the airborne assault into Normandy. After each combat operation, the division received time to reconstitute its fighting strength. The result was a division that showed no major dips in combat effectiveness over time.

Allied commanders knew the airborne divisions were scarce and valuable assets that they could not squander on ordinary objectives. They therefore only committed them to operations vital to the outcome of the war, such as the invasion of France, the attempt to seize a bridgehead over the Rhine River at Arnhem, and the Battle of the Bulge. As a matter of policy, airborne divisions occupied base camps and trained when not needed for these critical operations. The result was that the 82d Airborne Division received regular breaks from the arduous life at the front (Figure 34). The division fought hard when it engaged in combat, but the airborne soldiers could look forward to regular spells from battle upon the completion of their mission. This fact gave them an incentive to perform well that ordinary infantrymen lacked, as General Omar Bradley recognized in Normandy.

The 82d Airborne Division took its share of casualties during World War II, especially in Normandy (Figure 35). The
(more than one regiment employed)

FIGURE 34
82D AIRBORNE DIVISION, DAYS IN COMBAT

Source: 82d Airborne Division, Final After-Action Report, NARA, MMRB, RG 407, Box 12346, 382-0.3.0, Section I.
FIGURE 35
82D AIRBORNE DIVISION LOSSES

Source: 82nd Airborne Division, After-Action Reports, NARA, MMRB, RG 407, Box 12345/6, 382-0.3/0.3.0.
division's total battle casualties, however, ranked only fifteenth among the infantry divisions used in the European Theater of Operations.\textsuperscript{147} Significantly, the non-battle casualties of the division were much lower than normal infantry divisions. The reason for the low number of non-battle losses is the regular breaks the airborne divisions received from combat. Back in their base camps, the airborne soldiers did not suffer greatly from exposure, hypothermia, and disease—the common threats to the infantryman in combat. These statistics suggest that had the United States fielded more divisions in Europe in 1944-1945, commanders could have reduced the total number of losses in the European Theater of Operations through more frequent rotation of units out of the front. Non-battle losses would certainly have declined; the opportunity for additional training and better integration of replacements would have also reduced battle casualties—perhaps significantly.

American airborne leaders in World War II proved that they could produce elite fighting units every bit as good or better than the best divisions in the German army. American paratroopers and glidermen showed that they had a "fighting heart" and the will to win against tough odds. They were a selectively-recruited and intensively-trained elite. Allied commanders hoped that their airborne divisions would provide the decisive edge they needed to win the war in Europe. Perhaps their greatest success was in Normandy, where the
airborne divisions caused confusion and delayed the enemy long enough to ensure the success of the amphibious landings. The airborne divisions proved in Operation MARKET and during the Battle of the Bulge that they could fight and win against the enemy's best divisions, to include the elite SS panzer divisions. The record of the 82d Airborne Division in Europe during World War II suggests that national characteristics do not explain the differences between the German and American armies in battle. The fact remains that when properly trained and led, Americans could kill as efficiently and effectively as any other soldiers on the modern battlefield.
ENDNOTES

1. First Lieutenant Richard M. Janney in a letter to his mother, 29 June 1943, copy located in privately printed manuscript, World War II Survey collection, 505th Airborne Infantry Regiment, 82d Airborne Division, USAMHI, Carlisle Barracks, PA, p. 74.


5. Fact Sheet on 82d Airborne Division, NARA, MMRB, RG 407, Box 12344, File 382-0.

6. HQ, 82d Airborne Division, "Division History," 1 March 1944, NARA, MMRB, RG 407, Box 12344, File 382-0.1, p. 1; Blair, Ridgway's Paratroopers, p. 15.


8. Letter from Omar N. Bradley to Mark W. Clark, 4 March 1942, The Omar N. Bradley Papers, USAMHI, Carlisle Barracks, PA.

10. Ibid., p. 52.


12. HQ, 82d Airborne Division, "Division History," 1 March 1944, p. 1.


14. HQ, 82d Airborne Division, "Division History," 1 March 1944; Blair, Ridgway's Paratroopers, pp. 32-34.


16. HQ, 82d Airborne Division, "Division History," 1 March 1944.


18. HQ, 82d Airborne Division, "Division History," 1 March 1944, p. 1.


24. Teddy H. Sanford, Oral History, 1974, The Teddy H. Sanford Papers, USAMHI, Carlisle Barracks, PA, p. 46. Sanford was a company commander, battalion executive officer, assistant regimental operations officer, battalion commander, and regimental executive officer in the 325th Glider Infantry Regiment during World War II.


29. Ibid., p. 6.

30. First Lieutenant Richard M. Janney in a letter to Nancy Cadawalder, 2 June 1943, copy located in privately printed manuscript, World War II Survey collection, 505th Airborne Infantry Regiment, 82d Airborne Division, USAMHI, Carlisle Barracks, PA, p. 67.


32. HQ, 505th Parachute Infantry Regiment, "Airborne Assault Operations," 14 August 1943, NARA, MMRB, RG 407, Box 12346, File 382-0.3.0; Garland and Smyth, Sicily and the Surrender of Italy, pp. 172-173.

33. HQ, 82d Airborne Division, "82d Airborne Division in Sicily and Italy," p. 7.

34. Ibid., p. 19.

35. Ridgway, Soldier, p. 73.

36. Ibid., pp. 14-21; HQ, 82d Airborne Division, "Synopsis of Operations of the 82nd Airborne Division in the Sicilian Campaign, July 16 to August 21, 1943," 31 August 1943, NARA, MMRB, RG 407, Box 12345, File 382-0.3.


38. Ibid., p. 162.

39. HQ, 82d Airborne Division, Annex No. 3 to G-1 Periodic Report No. 5, 14 August 1943, NARA, MMRB, RG 407, Box 12348, File 382-1.1.


42. Ibid., p. 50.
43. Ibid., p. 50.

44. HQ, 82d Airborne Division, "Lessons Learned in Operation in Sicily (Supply and Evacuation Only)," 3 August 1943, NARA, MMRB, RG 407, Box 12421, File 382-4.01.


46. HQ, 82d Airborne Division, "The 82d Airborne Division in Sicily and Italy," pp. 41-42.

47. Ibid., pp. 47-48.


49. In fact, Hitler had positioned the German 2d Parachute Division and 3d Panzergrenadier Division near Rome to counter any Allied move in the area. See Blair, *Ridgway's Paratroopers*, p. 121.

50. HQ, 82d Airborne Division, "The 82d Airborne Division in Sicily and Italy," pp. 48-49.


54. HQ, 82d Airborne Division, "The 82d Airborne Division in Sicily and Italy," p. 49.


56. Ibid., p. 130; Gavin, *On to Berlin*, p. 67.


59. HQ, 82d Airborne Division, "The 82d Airborne Division in Sicily and Italy," pp. 55-79; Blumenson, Salerno to Cassino, pp. 134-136.

60. HQ, 325th Glider Infantry Regiment, "The 325th Glider Infantry in Action," 19 October 1943, NARA, MMRB, RG 407, Box 12448, File 382-INF(325)-0.3.

61. HQ, 82d Airborne Division, "History of Operations, Month of October 1943," 17 November 1943, NARA, MMRB, RG 407, Box 12345, File 382-0.3.


63. Ibid., pp. 82-83.

64. HQ, 82d Airborne Division, "Lessons of Airborne Operation in ITALY," 25 October 1943, NARA, MMRB, RG 407, Box 12348, File 382-0.4, p. 2.


66. Memo from Major General Ridgway, Commander, 82d Airborne Division, to Operations Division, War Department, 6 November 1943, The Matthew B. Ridgway Papers, Box 2a, USAMHI, Carlisle Barracks, PA.


70. Ridgway, Soldier, p. 92.


72. HQ, 82d Airborne Division, "82d Airborne Division Operations in Normandy," 7 July 1944, NARA, MMRB, RG 407, Box 12346, File 382-0.3.0, p. 1.

73. Eisenhower placed Taylor in command of the 101st Airborne Division in March 1944 after its commander, Major General William C. Lee, who had done so much to develop the airborne forces, suffered a heart attack.

75. HQ, 82d Airborne Division, "Operation NEPTUNE," 25 July 1944, NARA, MMRB, RG 407, Box 12345, File 382-0.3, Inclosure 5.

76. HQ, 82d Airborne Division, "82d Airborne Division Operations in Normandy," 7 July 1944, pp. 3-4.

77. Blair, Ridgway's Paratroopers, p. 218.

78. HQ, 82d Airborne Division, "82d Airborne Division Operations in Normandy," 7 July 1944, pp. 4-7; Max Hastings, Overlord: D-Day, June 6, 1944 (New York: Simon and Schuster, 1984, p. 75); Huston, Out of the Blue, p. 184.

79. HQ, 82d Airborne Division, "82d Airborne Division Operations in Normandy," 7 July 1944, pp. 4-7.

80. Ridgway, Soldier, p. 10.


82. Ibid., pp. 106-107.

83. Ibid., p. 108.


85. HQ, 82d Airborne Division, "82d Airborne Division Operations in Normandy," 7 July 1944, pp. 7-9; HQ, 505th Parachute Infantry Regiment, "505th Normandy Campaign," NARA, MMRB, RG 407, Box 12456, File 382-INF(505)-0.3, p. 12.

86. Ibid., pp. 9-11; Gavin, On to Berlin, pp. 115-117.


88. HQ, 82d Airborne Division, "82d Airborne Division Action in Normandy," 26 July 1944, NARA, MMRB, RG 407, Box 12346, File 382-0.3.0, report of Major General Ridgway.

89. Teddy H. Sanford, Oral History, p. 93.

90. Harrison, Cross-Channel Attack, p. 403.

91. HQ, 82d Airborne Division, "82d Airborne Division Operations in Normandy," 7 July 1944, p. 15.

92. Ibid., pp. 16-20.
93. Ibid., pp. 21-25.


95. HQ, 82d Airborne Division, "82d Airborne Division Operations in Normandy," 7 July 1944, pp. 26-29; Blumenson, Breakout and Pursuit, pp. 60-63.


98. Ibid., pp. 13-14.

99. HQ, 82d Airborne Division, "82d Airborne Division Action in Normandy, France," 26 July 1944, Annex 1D. The casualties broke down as follows: 1,142 killed or died of wounds; 2,373 wounded in action; 840 missing or captured; 377 evacuated sick; and 704 evacuated with non-battle injuries.


101. Gavin, On to Berlin, p. 120.


103. Memorandum from 82d Airborne Division to Commanding General, First (US) Army, 30 June 1944, SUBJECT: Training for Future Airborne Operations, The Matthew B. Ridgway Papers, USAMHI, Carlisle Barracks, PA, Box 3.

104. Ridgway, Soldier, p. 15.


107. Ibid., p. 143.

Military History, 1963), pp. 120-121.


111. MacDonald, The Siegfried Line Campaign, p. 132.

112. Powell, The Devil's Birthday, p. 36.

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CONCLUSION

The foregoing study shows that the best American divisions in World War II were very good indeed. Their success on the battlefield, however, was not an accident. Each division had a solid core of senior leadership who trained their units hard and learned from their mistakes. After an initial period of turbulence caused by the exodus of personnel for a variety of reasons, each division eventually settled down into a stable organization. This period of stability was crucial to the development of combat effectiveness in the division. The 9th Infantry Division, 4th Armored Division, and the 82d Airborne Division each used this time wisely to train and inculcate lessons learned from combat. This combination of personnel stability and time to train is what so many divisions in the Army of the United States lacked before their entry into combat. They paid the price for the hasty expansion of the Army after Pearl Harbor.

The study also shows that divisions are not static organizations, but change over time as they gather experience or suffer losses. One cannot categorically state that the 9th Infantry Division was the best or second best infantry division in the European Theater of Operations (Eisenhower
rated it one of the two best). The problem one faces is that the 9th Infantry Division that entered Normandy in June 1944 was not the same organization that exited the Huertgen Forest four months later. The same holds true of the 4th Armored Division after the Battle of the Bulge and the 82d Airborne Division after Operation MARKET. The optimal cycle of combat effectiveness for a division would resemble a steadily rising curve, with small dips when a unit takes losses in an operation, but an increased level of effectiveness after a period of rest and training. Of the three divisions in this study, only the 82d Airborne Division reached this optimal combat cycle.

Airborne divisions were the exceptions. Due to the shortage of divisions in Europe in 1944, Allied commanders had to use every unit at their disposal to keep the offensive going. This factor led to the misuse of armored divisions in static situations and the overextension and overwork of infantry divisions. Many divisions in France, such as the 9th Infantry Division, experienced wild swings in effectiveness as they stayed in combat for extended periods of time and took huge losses. The replacement system could keep the American divisions roughly at full strength, but could not keep the effectiveness in these units at a high level. Allied commanders simply needed more divisions to allow for a regular system of rotation out of combat for periods of reconstitution. The ninety division gamble and the use of
one-third of the Army's strength in the Pacific made such a system infeasible.

Nevertheless, the Army of the United States was able to develop combat effective divisions that defeated their enemies on battlefields around the world. A handful of divisions were superb near the beginning of their introduction to combat; others took several months to develop into good organizations. Even the 90th Infantry Division, which had such a rough time in Normandy, eventually developed into a fine combat organization after several changes of senior leadership. By the spring of 1945, American divisions had enough time and combat experience behind them to reach a level of excellence that overmatched their foes from Germany and Japan. They had proved that American combat divisions could fight effectively on the battlefield and win. The American people asked of them nothing less.
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