# The 80th Infantry Division in World War II: Education, Training, and the Application of Operational Art

A Monograph

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# Abstract

The 80th Infantry Division in World War II: Education, Training, and the Application of Operational Art, by MAJ Paul P. Cheval, US Army, 40 pages.

The military history of the 80th Infantry Division in World War II provides important insights for modern US Army leaders as they prepare for combat with a peer or near-peer adversary. The 80th Infantry Division entered combat operations in Europe following two years of maneuver training under the same key leaders, all educated at the US Army's premier schools during the interwar period. Schooling and training exposed 80th Infantry Division's leaders to modern operational art in all but name. Despite this unusually stable, robust, and lengthy period of training time prior to entering combat, the 80th Infantry Division struggled to apply phasing and transitions to maintain tempo and manage risk to prevent culmination at Argentan and while crossing the Moselle River. The 80th Infantry Division's initial struggles and subsequent successes in both battles provide insights for modern US Army leaders with respect to the writing, application, and training of Army tactical doctrine, and the risks associated with modularity as a mindset.

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| AAR | After Action Review |
| ADP | Army Doctrine Publication |
| ADRP | Army Doctrine Reference Publication |
| AEF | American Expeditionary Forces |
| AGF | Army Ground Forces |
| CAMA | California-Arizona Maneuver Area |
| CCA | Combat Command A |
| CGSS | Command and General Staff School |
| CTC | Combat Training Center |
| DTC | Desert Training Center |
| FM | Field Manual |
| JRTC | Joint Readiness Training Center |
| NTC | National Training Center |
| USAWC | US Army War College |
| WWI | World War I |
| WWII | World War II |

# Illustrations

# Introduction

> One day the United States of America may yet again have to mobilize an army for war. To succeed, the army of the future must field highly effective combat organizations, for our past and recent history suggests that it is the quality of units rather than the quantity that will decide the difference between victory and defeat.

—Peter R. Mansoor, *The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941-1945*

After more than seventeen years of counterinsurgency operations in the Middle East, the United States (US) Army's leaders shifted organizational focus towards the threat of combat with peer or near-peer adversaries. On December 13, 2016 US Army Chief of Staff General Mark A. Milley said that future wars will be "very lethal, unlike anything our Army has experienced since World War II."[1] General Milley argued that US Army units must prepare and train for decisive action against a peer or near-peer adversary in an austere environment that will often require rudimentary operations. He predicted that in the future "being surrounded will become the norm, the routine, the life of a unit in combat."[2]

The US Army's recently published doctrine echoed these concerns. Lieutenant General Michael D. Lundy, Commanding General of the US Army Combined Arms Center, echoed General Milley's concerns in his foreword to FM 3-0, published in October 2017. Lundy wrote, "today's operational environment presents threats to the Army and joint force that are significantly more dangerous in terms of capability and magnitude than those we faced in Iraq and Afghanistan."[3] Lundy continued, "as the Army and the joint force focused on counter-insurgency and counter-terrorism at the expense of other capabilities, our adversaries watched,

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[1] Rick Maze, "Radical Change is Coming: Gen. Mark A. Milley Not Talking About Just Tinkering Around the Edges," *The Association of the United States Army*, December 13, 2016, accessed August 31, 2017, https://www.ausa.org/articles/radical-change-coming-gen-mark-milley-not-talking-about-just-tinkering-around-edges.

[2] Todd C. Lopez, "Milley: Army on cusp of profound, fundamental change," Army News Service, October 6, 2016, accessed October 14, 2017, https://www.army.mil/article/176231/milley_army_on_cusp_of_profound_fundamental_change.

[3] US Department of the Army, Field Manual (FM) 3-0, Operations (Washington, DC: Government Printing Office, 2017), Foreword.

learned, adapted, modernized and devised strategies that put us at a position of relative disadvantage in places where we may be required to fight."[4] The messages of US Army leaders and doctrine are clear: the US Army must prepare to fight peer and near-peer threats, potentially from a relative position of disadvantage, something it has not done since World War II (WWII).

This context and General Milley's specific reference to WWII suggest that contemporary US Army leaders can benefit from studying the preparation and performance of US Army units that fought the German Army in WWII, a larger and more experienced opponent when American soldiers first engaged them in ground combat. Viewed through the lens of modern doctrine, this analysis can provide beneficial insight to commanders and staffs entrusted with training and leading today's US Army combat formations as they prepare to defeat peer and near-peer adversaries. As Peter Mansoor observed in his study of US Army infantry divisions in WWII, US Army leaders must prepare high quality units in an environment of quantitative disadvantage.[5]

## Background

Many historical events avail themselves to study the challenge evoked by current US Army senior leaders and doctrine: the defeat of a peer adversary in decisive action. Historian John Lewis Gaddis stressed the importance of selectivity and scale in drawing proper conclusions from history. WWII history is replete with different units and campaigns from which to select and conduct research. This study evaluates the division as the level of command and elements of operational art as the criteria to evaluate a division's quality of performance against a peer threat.[6]

Jacques Guibert, a French military theorist, first developed the concept of the division in the 1790s. Guibert built on the successes of Frederick the Great and developed the division as a

[4] US Army, FM 3-0, Foreword.

[5] Peter R. Mansoor, *The GI Offensive in Europe: The Triumph of American Infantry Divisions*, 1941-1945 (Lawrence: University Press of Kansas, 1999), 265-266.

[6] John Lewis Gaddis, *The Landscape of History: How Historians Map the Past* (New York: Oxford University Press, 2002), 22-26.

flexible military formation in his *Essai General de Tactique.* The concept of the division as a military headquarters remains important today, evidenced by larger staffs that did not exist in Guibert's day. US Army doctrine defines the role of the division in FM 3-94, Theater Army, Corps, and Division Operations. FM 3-94 explains that "the division is the Army's primary tactical warfighting headquarters."[7]

The US Army adopted operational art as a doctrinal concept in the 1980s, but military leaders practiced operational art long before then. Historian Michael R. Matheny argued in *Carrying the War to the Enemy: American Operational Art to 1945*, that "although the American Army did not officially recognize operational art as a third level of war, it did develop operational art during the interwar period, 1919-1940, and practiced it to great effect during World War II."[8] Matheny identified operational art as a concept applied in all but name during WWII.

Today, the US Army emphasizes operational art and its role as a cognitive approach for commanders and staffs to win in war. US Army Doctrine Reference Publication (ADRP) 3-0 defines operational art as "the pursuit of strategic objectives through the arrangement of tactical actions in time, space, and purpose."[9] It further specifies that "operational art applies to all levels of warfare, strategic, operational, and tactical."[10] The US Army expects all headquarters, including the division, to practice operational art. The US Army division and operational art serve as the lens through which this monograph draws conclusions to aid commanders and staffs preparing to fight a near peer adversary.

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[7] Michael A. Bonura, *Under the Shadow of Napoleon: French Influence on the American Way of Warfare from the War of 1812 to the Outbreak of WWII* (New York: New York University Press, 2012), 18-41; US Department of the Army, Field Manual (FM) 3-94, Field Army, Corps, and Division Operations (Washington, DC: Government Printing Office, 2014), 6-1.

[8] Michael R. Matheny, *Carrying the War to the Enemy: American Operational Art to 1945* (Norman: University Press of Oklahoma, 2011), xiv.

[9] US Department of the Army, Army Doctrine Reference Publication (ADRP) 3-0, Operations (Washington, DC: Government Printing Office, 2016), 2-1.

[10] Ibid.

The messages of US Army senior leaders and updated doctrine urge the US Army to prepare to fight a peer or near-peer adversary in a highly contested environment not seen since WWII. This monograph analyzes interwar officer education and the training of the 80th Infantry Division's commander and staff prior to entering combat in WWII and their resulting application of modern operational art in initial campaigns against the German Army. The 80th Infantry Division, less famous than other WWII divisions, trained for two years before deploying to Western Europe and engaging in several notable campaigns.

During its training and throughout combat in Europe, the 80th Infantry Division served the same commanding general, Major General Horace L. McBride. This unique leadership stability sets the 80th Infantry Division apart from other US Army Divisions in World War II, most of which experienced high personnel turnover. It provides an opportunity to study a division with fewer variables, facilitating an analysis to empower leaders to better prepare large units to apply operational art in combat against a peer adversary.[11]

## Methodology

The research for this monograph consists of three major elements, with analysis conducted using a case study methodology. First, the monograph provides a general background of officer education and division training prior to WWII. This research explains the level of emphasis placed on preparing leaders to conduct operational art during the interwar period, as well as the training method to prepare US Army Infantry Divisions for deployment in WWII. Next, the research will analyze the 80th Infantry Division's stateside training to determine the degree of emphasis on operational art. Finally, the research evaluates the 80th Infantry Division's performance in its initial battles against the German Army at Argentan and while crossing the Moselle River against modern elements of operational art.

[11] Berry Craig, *80th "Blue Ridge" Infantry Division*, ed. Edgar E. Bredbenner and Robert T. Murell (Paducah: Turner Publishing Company, 1991), 14.

The case study analysis reveals how the 80th Infantry Division's pre-deployment training, combined with the education of its division level leaders, contributed to its ability to apply what the US Army today defines as elements of operational art during its initial operations against the German Army. This analysis draws lessons from US Army interwar officer education and the Army Ground Forces deployment training model in relation to the initial performance of a US Army division against a peer enemy, to suggest recommendations for modern US Army division leaders.

This monograph evaluates whether the training of the US Army's 80th Infantry Division and the education of its officers prepared the division to apply modern elements of operational art against the German Army, a peer enemy. To focus the analysis within current military doctrine, this monograph uses four of the ten elements of operational art defined in ADRP 3-0: tempo, phasing and transitions, risk, and culmination. *Tempo* refers to the relative speed and rhythm of military operations over time with respect to the enemy. A *phase* is a planning and execution tool used to divide an operation in duration or activity; *transitions* mark a change of focus. Commanders accept *risk* while seeking opportunities to create and maintain the conditions necessary to seize, retain, and exploit the initiative and achieve decisive results. A unit reaches *Culmination* when it no longer has the capability to continue its form of operations, offense, or defense.[12]

## Thesis

In WWII, the 80th Infantry Division entered combat operations in Europe following two years of maneuver training under the same key leaders, all educated at the US Army's premier schools during the interwar period. Schooling and training exposed the 80th Infantry Division's leaders to modern operational art in all but name. Despite this unusually stable, robust, and lengthy period of training time prior to entering combat, the 80th Infantry Division struggled to

[12] US Army, ADRP 3-0, 2-2.

apply phasing and transitions to maintain tempo and manage risk to prevent culmination at Argentan and while crossing the Moselle River. The 80th Infantry Division's initial struggles and subsequent successes in both battles provide insights for modern US Army division-level leaders training their units for combat.

## Officer Education and Operational Art, 1919 to 1940

The complexity and scale of combat in France in 1917 humbled American Expeditionary Force (AEF) leaders. Lieutenant Colonel George C. Marshall, 1st Division Operations Officer at the beginning of American participation in the war, "found himself immersed in tasks he described as 'the most strenuous, hectic, and laborious in [his] experience.'"[13] Planning operations to iteratively concentrate an army's combat power overwhelmed Marshall. He explained the degree to which American officers found themselves unprepared for this task:

> I could not recall an incident in history where the fighting of one battle had been preceded by the plans for a later battle to be fought by the same army on a different front, and involving the issuing of orders for movement of troops already destined to participate in the first battle, directing their transfer to the new field station.[14]

Thus, the AEF tasked Lieutenant Colonel Hugh Drum to establish an ad-hoc staff school in Langres, France. It trained officers serving in key staff positions during World War I (WWI). After three months of training, officers returned to their units more prepared for the demands of modern warfare.[15]

The US Army returned from WWI committed to educating its officers for future war; many officers believed another such war inevitable. General John J. Pershing appointed Brigadier General Edward F. McGlachlin to chair of a board of officers tasked to determine the best educational system for US Army officers. Based on the board's findings, the War Department

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[13] Peter J. Schifferle, *America's School for War: Fort Leavenworth, Officer Education, and Victory in World War II* (Lawrence: University of Kansas Press, 2010), 10.

[14] Matheny, 37.

[15] Ibid., 3; Schifferle, 31-37.

created a two-tiered senior officer education system consisting of the Command and General Staff School and the Army War College. Both began instructing army leaders on the roles of staffs and commanders in large unit combined arms operations, instilling in these officers an understanding of concepts now defined as operational art.[16]

## Command and General Staff School[17]

The Command and General Staff School (CGSS) was one of two educational experiences completed by most US Army senior leaders prior to WWII. Career officers regarded this highly competitive and selective school as the first of two major institutional milestones prior to service on division and corps staffs in the US Army. The CGSS mission remained unchanged from 1925 to 1940:

> Prepare officers for command and general staff duty by training them in the following:
> 1. The combined use of all arms in the division and in the army corps
> 2. The proper functions of commanders of divisions, army corps, and corps areas and the techniques of exercising command
> 3. The proper functions of general staff officers of divisions, army corps, and corps areas and the technique of general staff concepts[18]

The CGSS curriculum did not include operational art as defined by the US Army today, but it built the foundation for officers to exercise its key elements. The CGSS focused on skills and knowledge, or the science of staff work at the division and corps level. Specifically, it taught officers the following elements of modern operational art: center of gravity, culmination, phasing, and transitions.[19]

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[16] Mark T. Calhoun, *General Lesley J. McNair: Unsung Architect of the US Army* (Lawrence: University Press of Kansas, 2015), 100-101.

[17] The term Command and General Staff School refers to the Leavenworth Schools during the interwar period. The Leavenworth Schools alternated between two years and one year of schooling, for a total of four changes. When two schools ran, the first year consisted of the School of the Line and second year of the General Staff School. The term General Staff College is avoided due to its use as the name for the Army War College from 1918 to 1921. For more information see: Harry P. Ball, *Of Responsible Command: A History of the U.S. Army War College* (Carlisle Barracks: The Alumni Association of the US Army War College, 1983), 123-233; and Schifferle, 78-82.

[18] Schifferle, 35.

[19] Matheny, 52-54; Schifferle, 83-85. For more detail on the debate within the War Department and amongst Fort Leavenworth leaders about teaching staff work vice teaching command, see Schifferle,

Officers such as Major Dwight D. Eisenhower attended lectures on centers of gravity and culmination at the CGSS in 1926. Lieutenant Colonel Oliver Robinson lectured that "against [the] center of gravity the concentrated blow of all the forces must be directed," and that commanders "must make it their business that the culminating point will see the maximum result accomplished [and that they] must stop [their] advance the moment [they] discover that [their] strength would fail by undertaking more."[20] Robinson's lecture closely resembled modern US Army doctrine. ADRP 3-0 explains that the center of gravity "provides a focal point" for commanders to orient their efforts and stresses the importance of correctly analyzing a center of gravity.[21] Echoing Robinson's lecture, ADRP 3-0 defines culmination as "the point at which a force no longer has the capability to continue its form of operations."[22] Such CGSS lectures introduced officers to warfighting concepts that served as the basis for today's elements of operational art, as did course texts.

The 1922 CGSS text "Tactical and Strategical Studies, Corps and Army" explained phases and the need to develop branches and sequels. It read, "the plan of campaign may also contemplate probable successive operations phases to continue the success of primary operations, and consider steps to be taken contingent upon results different from those expected."[23] The descriptions in ADRP 3-0 of phases and transitions largely reflect this 1922 text, explaining that

72-77. Per Schifferle, "students at Leavenworth learned the functions of commanders and staff simultaneously during the interwar period, in part because the doctrine required of the commander an intimate integrated knowledge of staff functions and staff officers needed comprehensive knowledge of the role of commanders."

[20] Matheny, 53. The CGSS lectures introduced US Army officers to the theories of Carl von Clausewitz in the interwar period. For more information on Clausewitz's theories on War Planning, see: Carl von Clausewitz, *On War*, ed. and trans. Peter Paret and Michael Howard (Princeton: Princeton University Press, 1976), 577-637; for Clausewitz's definition of a center of gravity, see Clausewitz, 595-596.

[21] US Army, ADRP 3-0, 2-4.

[22] Ibid., 2-9.

[23] Matheny, 54.

"a phase is a planning tool used to divide an operation in duration or activity," and that transitions "mark a change of focus between phases."[24]

Additionally, the CGSS emphasized logistics; officers trained in G-4 duties and studied the integration of logistics with tactical planning. This emphasis on logistics linked the curriculum to the modern concept of operational reach, which is directly related to unit culmination and defined in ADRP 3-0 as "balanc[ing] the natural tension among endurance, momentum, and protection."[25] The CGSS recognized logistics as integral to providing units with the necessary endurance to prevent culmination.[26]

The CGSS introduced what the US Army today defines as operational art to three of the 80th Infantry Division's most senior leaders during the interwar period. Major General McBride, the Commanding General, Brigadier General Jay W. Mackelvie, the Division Artillery Commander, and Colonel Samuel P. Walker, the Division Chief of Staff, all graduated from CGSS. All three officers received an education that introduced them to operational art and prepared them, as historian Harry P. Ball described, "for duty as General Staff officers with *tactical* units and for higher *tactical command*."[27] These same leaders also graduated from the US Army War College, expanding their education in operational art and preparing them for combat at a scale now differentiated from tactics as the operational level of war.[28]

[24] US Army, ADRP 3-0, 2-8.

[25] Ibid., 2-9.

[26] Matheny, 55; Schifferle, 83-85.

[27] Ball, 152, emphasis added.

[28] "History of the 80th." Headquarters, 80th Infantry Division, Office of the Information and Education Officer, accessed 30 August, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm, 3.

## US Army War College

The US Army War College (USAWC), the second senior officer educational experience, focused primarily on strategy and large-unit operations at echelons above corps. War Department Regulation 350-5 defined its mission as:

> a. To train officers in the conduct of field operations of the Army and higher echelons; and to instruct in those political, economic, and social matters which influence the conduct of war.
> b. To instruct officers in War Department General Staff duties and those of the Office of the Assistant Secretary of War.
> c. To train officers for joint operation of the Army and the Navy.
> d. To instruct officers in the strategy, tactics, and logistics of large operations in past wars, with special reference to the World War.[29]

Colonel H. B. Crosby, assistant commandant of the USAWC, lectured students that, "at Leavenworth we accepted and should have accepted the principles and doctrines laid down by the faculty of that school. Here we reach our own conclusions, faculty and student."[30] The USAWC conducted this education through focused study on intelligence, operations, logistics, and training through the analysis of campaigns and real-world war plans. The course educated officers through committee work, during which they analyzed historical cases and War Department plans and presented their analysis both their classmates and as feedback to the War Department's G3 Plans section.[31]

USAWC students also studied logistics at the theater level. Major General Fox Connor lectured to a USAWC class in 1931 that, "you need very few Napoleon Bonapartes in war, but a lot of superb G4s."[32] USAWC students studied logistics in campaigns using historical case studies ranging from the Mexican-American War to WWI. Officers learned about the use of rail,

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[29] George S. Pappas, *Prudens Futuri: The US Army War College 1901-1967* (Carlisle Barracks: The Alumni Association of the US Army War College, 1967), 123

[30] H. B. Crosby, "Orientation Lecture to the Army War College Class of 1924-1925," quoted in Matheny, 57.

[31] Ball, 155; Matheny, 55-57.

[32] Fox Connor, "Organization and Function of G-3, AEF," lecture delivered to the AWC, September 18, 1931, AWC Curricular Files 383-A-8, G-3 Course, 6, USAHEC, quoted in Matheny, 77.

highways, inland waterways, and how to link these with industrial systems. The curriculum included the construction of bases and hospitals, and the purchase of land, giving USAWC students in the interwar period a practical understanding of the modern concept of basing. ADRP 3-0 defines a *base* as "a locality from which operations are projected or supported," and even alludes to the need for "lend-lease agreements."[33] The USAWC's instruction of logistics, like modern concepts of basing, educated officers to meet the challenge of future mobilization and deployment from the United States.[34]

The USAWC curriculum also linked tactical actions to strategy through logistics. Pershing directed that USAWC students "investigate the tactics, logistics, and strategy of the field army."[35] Student committees evaluated previous war plans and created future ones. When Lieutenant Colonel Lesley J. McNair attended the USAWC class of 1929, he chaired Command Group 3, and analyzed the WWI French Army's operational plans and tactical actions from mobilization to the Battle of the Marne. McNair and his committee gained valuable insight into large unit operations. The study and wargaming of War Plan Orange at the USAWC demonstrated the interwar officer education system's espousal of concepts integral to modern operational art in campaigns including, as historian Michael Matheny described, "joint command, phasing, an indirect approach, detailed planning for logistics, [and] even deception."[36]

The USAWC emphasized campaign planning and the arrangement of tactical actions sustained by large logistical efforts to meet strategic aims. The 80th Infantry Division's senior leaders all received this education before WWII; McBride graduated in 1928, MacKelvie in 1932, and Walker in 1939. All three received the training and education that helped lead Field Marshal

[33] US Army, ADRP 3-0, 2-6.

[34] Fox Connor, "Organization and Function of G-3, AEF," 156-192.

[35] Ball, 198.

[36] Matheny, 88.

Gerd von Rundstedt to remark, "we cannot understand the difference in your leadership in the last war and in this… we now find all of your corps commanders good and of equal quality."[37]

## Army Ground Forces' Training of the 80th Division

The War Department created the Army Ground Forces (AGF) Headquarters on March 9, 1942 to man, equip, and train the US Army's combat units for WWII. The US Army numbered twenty-nine infantry divisions at the time; the AGF organized its growth to ninety divisions by the end of 1943. This rapid growth rate provided countless challenges in organizing personnel, equipment, and training programs for the AGF and its commander, Lieutenant General McNair.[38]

McNair proved instrumental in reorganizing the division to a triangular organization, and thus believed that the division served as the US Army's primary combat unit. When he discovered that the Infantry School at Fort Benning placed primacy on the regimental combat team, McNair "protested that the division was itself the paramount combat team and chief fighting unit of the army, [and] arranged through the Chief of Infantry to have the matter corrected."[39] McNair's philosophy extended to matters of personnel; the AGF nominated Division Commanders, Assistant Division Commanders, and Division Artillery Commanders to the War Department for approval. Furthermore, AGF policy "[made] it mandatory that all General Staff appointees be graduates of the regular Command and General Staff School."[40]

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[37] Letter from Henry L. Stimson to Harry S. Truman, September 1, 1950, Huntington, Long Island Truman Library, Truman Papers, President's Secretary's Files (PSF), Box 126, Folder: Military: Universal Training, quoted in Schifferle, 195.

[38] Bell I. Wiley, *The Building and Training of Infantry Division: Study No. 12* (Washington, DC: Headquarters Army Ground Forces, 1946), 1.

[39] Kent Roberts Greenfield, Robert R. Palmer, and Bell I. Wiley, *The Organization of Ground Combat Troops*, United States Army in World War II, Edited by Kent Roberts Greenfield (Washington, DC: Historical Division, Department of the Army, 1947), 41.

[40] Robert R. Palmer, Bell I. Wiley, and William R. Keast, *The Procurement and Training of Ground Combat Troops,* United States Army in World War II, Edited by Kent Roberts Greenfield (1948; repr., Washington, DC: Center of Military History, 1971), 439.

McNair's emphasis on the division's primacy shaped the AGF's training methodology, and thus the training of the 80th Infantry Division.[41]

## Army Ground Forces Training Methodology

The AGF's training method sought to develop division-level proficiency in large unit combined arms operations through exercises at training centers. It aimed to train and deploy a division for combat within twelve months through a progression of tests beginning with elementary training and culminating in free maneuvers. McNair insisted on realism throughout all training, which included command post exercises, field exercises, and field maneuvers. The AGF oversaw all army-level maneuvers, which pitted several divisions organized as corps against each other; McNair insisted these maneuvers remain free-flowing and not follow a script.[42]

Emphasis on realism extended to logistics and communications. When McNair discovered that the Third Army planned for a $200,000 phone line for their maneuvers in Louisiana, he sharply rebuked, "I submit that such stuff is artificial…and suggest that you ask your staff, in substance, how the German army made such preparations for their campaign in Poland."[43] The AGF's training methodology and McNair's demanding standards resulted in the most thorough pre-deployment training the US Army's ground forces had ever completed.[44]

On December 7, 1942, the AGF issued a directive describing the maneuvers expected of divisions. This directive applied to all AGF maneuver areas in Louisiana, Tennessee, West

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[41] Calhoun, 224-226. This section of *General Lesley J. McNair: Unsung Architect of the US Army* provides more information about McNair and the AGF's role in the selection of officers for key positions at the division level, as well as McNair's role as the primary advisor to General Marshall on the selection of combat unit commanders.

[42] Greenfield, Palmer, and Wiley, 41-55.

[43] Personal letter of Lieutenant General McNair to Lieutenant General Krueger, June 5, 1944; quoted in Ibid., 45.

[44] Calhoun, 223. See this reference for further detail about McNair's leadership and expectations, as well as for ties to McNair's reforms in the AGF and many of the training principles currently used in the US Army.

Virginia, Oregon, and the California-Arizona Maneuver Area (CAMA), and prescribed the following maneuvers:

> a. Movement to contact, meeting engagement, and aggressive action by both sides.
> b. Meeting engagement, aggressive action by a larger force, and the withdrawal of a small force.
> c. Aggressive action against a covering force, with a view to forcing it to withdraw across or through an obstacle.
> d. Attack and defense of a river line, the objective of the attacker to require the crossing of his major elements.
> e. Coordinated attack of a prepared position. Situation to be so drawn as to permit at least 24 hours of uninterrupted and unobserved work on the defensive position.
> f. Delaying action on successive positions over a considerable distance.
> g. Breakthrough of an over-extended position and the withdrawal of the defender over a considerable distance.[45]

The complexity and scope of these large-scale maneuvers exercised commanders and staffs at the division level in tactical planning and execution in the context of a larger campaign. Every maneuver included several phases, requiring divisions to plan and execute transitions.

Success in a free-flowing maneuver against a peer unit demanded the maintenance of tempo, and the management of risk. Furthermore, the realism exacted by McNair extended to logistics: "Army staff members were directed to operate depots in a manner comparable to that followed in overseas theaters."[46] These parameters forced commanders and staffs to prevent culmination in part through their management of logistics. The AGF's maneuver requirements, combined with McNair's exacting standards for logistical realism, appeared to train division leaders in modern operational art in all but name.

## Training Progression of the 80th Infantry Division

The AGF manned, equipped, and trained the 80th Infantry Division as one of sixty-four divisions it fielded for the US Army from 1942 to 1943. The AGF reactivated the 80th Infantry Division on July 15, 1942 at Camp Forrest, Tennessee. Much like every division, its story and

[45] Bell I. Wiley. *Training in The Ground Army, 1942-1945: Study No. 11* (Fort Monroe: Historical Section–Army Ground Forces, 1948), 46.

[46] Wiley, 47.

path were unique. While like other divisions in many ways, it differed in others. Manning problems plagued divisions nearing the end of pre-deployment training; the AGF transferred many key leaders in trained divisions to serve as cadre in newly formed divisions. The 80th Infantry Division experienced these losses, as did most other divisions. An AGF memo written in May 1943 mentioned that "the 80th Division officer losses [to mobilization cadre requirements] have mounted to 450 in six months."[47] The 80th Infantry Division's training progression, however, set it apart.[48]

The 80th Infantry Division trained for twenty-three months prior to embarking for Europe in July 1944, compared to an AGF average of twelve months. Of all AGF divisions, only twenty divisions trained as an entire unit in maneuvers and thirteen trained at the vaunted Desert Training Center (DTC) in the CAMA; the 80th Infantry Division did both. It also experienced unusual leadership stability at the highest level; the commanding general, McBride, commanded the division through all large maneuvers and during the division's combat actions in Europe, including the surrender of the 6th German Army in Austria.[49]

After McBride assumed command in March of 1943, the 80th Infantry Division trained at three different training centers. It left Camp Forrest for the Tennessee Maneuver area in June of 1943, culminating with maneuvers against the 83rd Infantry Division. The 80th Infantry Division then moved to Camp Phillips, Kansas in August of 1943, where it continued training. The 80th

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[47] AGF memo of Lt Col R. L. Baughman, Assistant G-3, for ACofS G-3, 25 May 1943, "Inspection Trip to Ft Jackson and Camp Forrest, 20-22 May 1943, AGF G-3 Training Division files, 333.1, quoted in Palmer, Wiley, and Keast, 466.

[48] For more detailed information explaining the personnel challenges of mobilization faced by the AGF, with a focus on the 88th Infantry Division and draftee divisions (a category which included the 80th Infantry Division), see: John Sloan Brown, *Draftee Division: The 88th Infantry Division in World War II*, (Lexington: The University Press of Kentucky, 1986), 12-32.

[49] Samuel P. Walker, "Surrender of the Sixth German Army," Headquarters, 80th Infantry Division, Officer of the Chief of Staff, accessed November 2, 2017, http://www.80thdivision.com /MiscReports/Surrender_of_SixthGermanArmy_to_GenMcBride.pdf.

Infantry Division began its final training on November 17, 1943 at the DTC, known as the "graduate school of combined training."[50]

Major General George S. Patton designed the DTC for the AGF in March of 1942. The AGF made the DTC the premier training center in the US Army. McNair lauded it as "our best training agency for both combat and service units."[51] The AGF designed the DTC as "a theater of operations…to afford maximum training of combat troops, service units, and staffs under conditions similar to those which might be encountered overseas."[52] The 80th Infantry Division trained at the DTC from its arrival on November 17, 1943 until the AGF closed the center approximately five months later on April 5, 1943.[53]

Only the last five of thirteen weeks in a division training cycle at the DTC involved maneuvering the entire division. Nevertheless, the logistical situation at the DTC exercised the division staff's ability to sustain the division's tempo in training and prevent the culmination of subordinate units. The remote location of the DTC imposed logistical realism, as did the AGF exercise staff and referees, who emplaced railhead and truck distribution points within normal theater supply distances. In keeping with McNair's standards of realism, commanders and staffs exercised all wartime logistical responsibilities. The challenges increased during division maneuvers.[54]

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[50] "80th Division: Ever Forward, The Story of the 80th Infantry Division," G.I. Stories on the Ground, Air, and Service Forces in the European Theater of Operations; Orientation Section, Information and Education, ETOUSA, accessed August 30, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm, 3; Palmer, Wiley, and Keast; 466, 470, 490; Wiley, 64.

[51] Sidney L. Meller, "The Desert Training Center and C-AMA: Study No. 15" (Fort Monroe: Historical Section–Army Ground Forces, 1946), 38-44.

[52] Ibid., 38.

[53] Ibid., 43.

[54] Ibid., 36, 48.

The division-level collective training at the DTC exposed McBride and his staff to managing tempo, phasing and transitions, culmination, and risk. The first phase of division-level training included:

> A retirement that involved a defense in depth on a narrow front; a defense on a broad front, with combat teams abreast; a defense by the division across open, flat terrain; a defense through parallel corridors and defiles by semi-independent columns retiring on a common objective.[55]

The complexity of such combined arms integrated with air assets undoubtedly challenged McBride and his staff to manage risk, phasing, and transitions. In the defense, leaders develop engagement areas and must balance risk and opportunity; they emplace key weapons systems and units in selected positions to mass effects, thus making decisions about where to accept risk in other areas. Deliberate phasing and transitions are necessary for the timing of reserve commitments and counterattacks. 80th Infantry Division leaders learned "[to] accept risk, [creating] opportunities to seize, retain, and exploit the initiative and achieve decisive results," much like today's ADRP 3-0 explains risk management.[56]

The second phase of division-level maneuvers at the DTC challenged divisions to maintain operational reach and prevent culmination. Lasting eleven days, these maneuvers "tested the endurance of units and their ability to fight, and…tested the capability…to resupply units over great distances and provide day-to-day maintenance."[57] These training objectives tested the proficiency of the 80th Infantry Division's commander and staff to prevent unit culmination, which ADRP 3-0 explains occurs when "units lack required resources to achieve the end state."[58] The long duration of this phase of maneuvers combined with the enormous area occupied by the

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[55] Meller, 62.

[56] US Army, ADRP 3-0, 2-10.

[57] Meller, 63.

[58] US Army, ADRP 3-0, 2-9.

CAMA also trained the commander and staff in the maintenance of operational reach, which requires endurance.[59]

The 80th Infantry Division was amongst the last divisions to benefit from training at the DTC. It left on April 5, 1944 to deploy to Europe. The DTC ceased operations on May 1, 1944. McBride and his staff's opportunity to maneuver the 80th Infantry in a wide variety of tactical actions in the context of an operational theater seemingly exposed them to situations that resemble ADRP 3-0's modern definition of operational art. Combined with McBride's unusual stability in his position as commanding general, the 80th Infantry Division appeared more prepared for combat than most AGF divisions.

## 80th Infantry Division: Initial Combat at Argentan

The 80th Infantry Division celebrated its second anniversary on July 15, 1944 in England. McBride praised the division's training and the quality of its soldiers. He wrote in General Order Number Fourteen that "we can look back on two years of varied and intensive training which… will be put to the test in the near future… the members of the Division can enter battle with confidence in themselves, their comrades, and their units."[60] McBride's comments proved prescient; two weeks later, the 80th Infantry Division joined the Third US Army in France and participated in the exploitation phase of Operation Cobra.

### Background

Operation Cobra marked the audacious breakout of the First US Army from the gridlock of combat in the bocage. Historian Robert Citino refers to the operation as "the high point for military operations in the war."[61] On the heels of Operation Cobra and after VII Corps halted a

[59] Additional information concerning the complexity of division-level maneuvers at the DTC is available through the G-3 logs from Camp Laguna, AZ in February and March of 1944; "G3 Camp Laguna, Arizona: 26 February1944–03 March 1944." 80th Infantry Division Archives, accessed August 30, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm.

[60] Craig, 15.

[61] Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence: University Press of Kansas, 2004), 228.

German counterattack at Mortain, US Army leaders discovered an opportunity to trap the German 5th Panzer Army and 7th Army in the Falaise-Argentan pocket. Lieutenant General Omar N. Bradley, 12th Army Group Commander and responsible for the operation, exclaimed that "[this is] an opportunity that comes to a commander not more than once a century."[62] This opportunity called upon the newly activated Third Army, and its recently arrived subordinate, the 80th Infantry Division.[63]

The War Department activated Third Army on August 1, 1944 under the command of Lieutenant General George S. Patton, and the 80th Infantry Division joined the Third Army's XX Corps on the same day. Its advance party crossed the English Channel and debarked at Utah Beach on August 2, 1944, fifty-seven days after D-Day. The 80th Infantry Division's first assignment involved protecting XV Corps' left and rear flank as it maneuvered along the LeMans-Alencon-Argentan axis to deny the German egress routes to the south of the Falaise pocket. The division's regiments cleared the towns of Evron and Sille-le-Guillaume and met little resistance; few Germans remained. The 80th Infantry Division's location and availability made it ideal for the seizure of Argentan, a town near the southern shoulder of the Falaise pocket, as part of a larger operation to close the pocket and trap the retreating German forces.[64]

Patton created an ad-hoc corps under the command of his chief of staff, Major General Hugh Gaffey, consisting of the 80th Infantry Division (minus the 319th Infantry Regiment, tasked with securing Angers), the 90th Infantry Division, the 2d French Armored Division, the 773d Tank Destroyer Battalion, and four battalions of corps artillery. Patton ordered Gaffey to "attack,

[62] Omar N. Bradley, *A Soldier's Story* (New York: Henry Holt, 1951), 375-376.

[63] Rick Atkinson, *The Guns at Last Light: The War in Western Europe, 1944-1945*, (New York: Henry Holt and Company, LLC, 2013), 162.

[64] Carlo D'Este, *Patton: A Genius for War* (New York: Harper Perennial, 1996), 626; Craig, 15-16; Martin Blumenson, *Breakout and Pursuit*, United States Army in World War II, ed. Kent Roberts Greenfield (1961; repr., Washington, DC: Center of Military History, 1984), 497-498.

take, and hold [the] line[of] Argentan-Trun as part of a pincer movement."[65] On August 18, 1944 Major General Leonard T. Gerow assumed command of this unit, newly designated V Corps, and ordered a simultaneous three-division attack. He ordered the 2nd French Armored Division to serve as the base unit for the double envelopment of Argentan and Chambois, and the 90th Infantry Division to seize Chambois. Gerow ordered the 80th Infantry Division to simultaneously secure Argentan and cut the road linking Argentan with Trun. McBride thus maneuvered most of the 80th Infantry Division's elements in combat for the first time.[66]

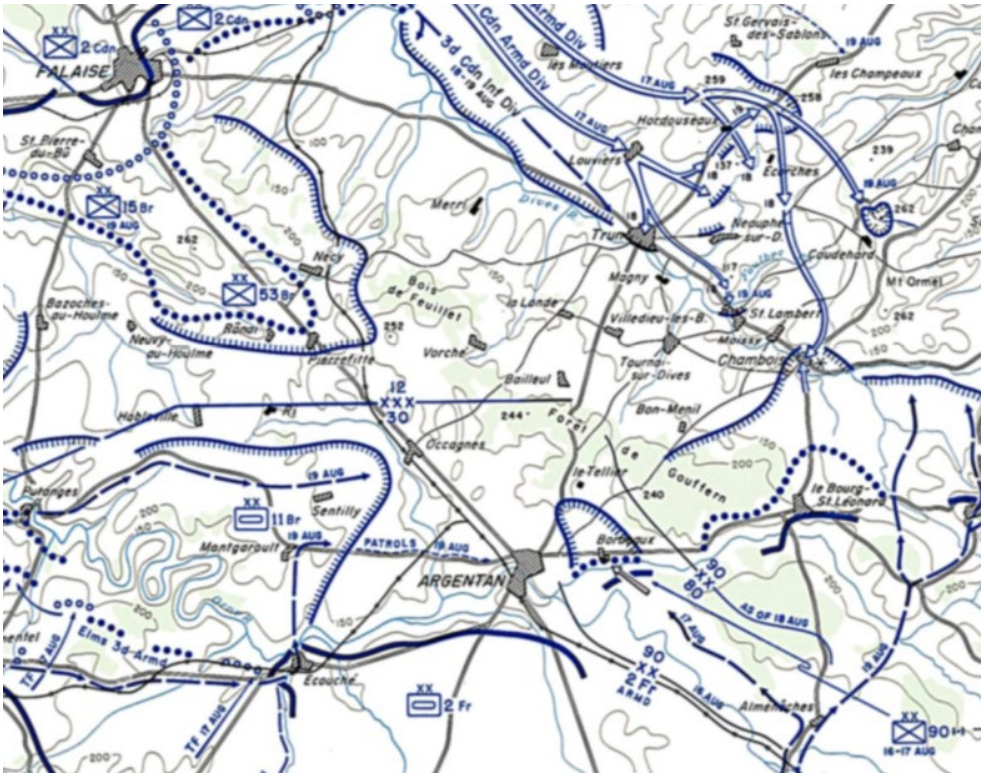

Figure 1. Closing the Argentan-Falaise Pocket. Data adapted from Martin Blumenson, *Breakout and Pursuit*, United States Army in World War II, ed. Kent Roberts Greenfield (1961; repr., Washington, DC: Center of Military History, 1984), Map XI.

[65] Mark J. Reardon, *Victory at Mortain: Stopping Hitler's Panzer Counteroffensive* (Lawrence: University Press of Kansas, 2002), 280.

[66] "History of the 80th Infantry Division – August 1944." 80th Infantry Division Archives, accessed 30 August, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm, 9, 280-281; Russel F. Weigley, *Eisenhower's Lieutenants: The Campaign of France and Germany, 1944-1945* (Bloomington: Indiana University Press, 1981), 207.

## Combat Operations

The 80th Infantry Division G-2 estimated an enemy strength in Argentan of 2,500 soldiers and 20 tanks in a well-prepared defense described as "well dug in in the finest defensive positions, protected by tanks, artillery, anti-aircraft guns, automatic weapons, barbed wire entanglements, and well-placed mine fields."[67] In response, McBride and his staff planned a three-phased operation beginning with an attack in a column of battalions by the 318th Infantry Regiment to seize a hill dominating Argentan from the south, followed by the same regiment's maneuver into Argentan, and subsequent securing of the route from Argentan to Trun. The plan did not integrate the division's combat power in each phase; uncommitted units included the 313th, 314th, and 315th Field Artillery Battalions, the 702nd Tank Battalion, and the 610th Tank Destroyer Battalion. The field artillery supported the 318th Infantry Regiment but fired mostly before maneuver began. The 80th Infantry Division retained the 317th Infantry Regiment as the division reserve during the attack. The enemy tested the 80th Infantry Division's planned phases, as well as its ability to transition.[68]

The 318th Infantry Regiment attacked at six in the morning on August 18, 1944. To set conditions, the division artillery shelled suspected German positions south of Argentan. Despite this effort, a combination of enemy machine guns and 40mm anti-aircraft fire devastated the flanks of the 318th Infantry Regiment's lead elements as they attacked. Confusion overtook soldiers and leaders who found themselves in combat against a skilled, determined enemy for the first time. Lieutenant Colonel Daniel J. Minahan, commanding the 314th Field Artillery

[67] "History of the 80th Infantry Division – August 1944," 13.

[68] Ibid., 12-13; William L. Koob, "The Operations of the Antitank Company (Reinforced), 317th Infantry (80th Infantry Division) Northeast of Argentan in the Closing of the Argentan-Falaise Gap, 17-20 August, 1944 (Northern France Campaign), (Personal Experiences of the Company Commander)," Student Paper, Advanced Infantry Officer's Course, 1949-1950, accessed November 02, 2017, https://www.benning.army.mil/library/content/Virtual/Donovanpapers/wwii/, 7; Tristan Rondeau, "Baptism by Fire in Argentan: The First Engagement of August 18-19, 1944," translated by Dennis Adams, *Normandie 1944 Magazine*, Issue 6 (2013), accessed November 2, 2017, http://www.80thdivision.com/Publications.htm: 4.

Battalion, recalled that "things didn't happen as perfectly or easily as the After-Action Report would lead you to believe…losses were heavy…many were commanding officers necessary to keep the units moving… leaders were pitching fits because their radios weren't working."[69] The 318th Regiment fell back to Urou to regroup.[70]

McBride called off the attack. He and his staff developed a new plan for the following day, August 19. The new plan tasked one battalion from the 318th Infantry Regiment to attack from the northwest toward Argentan under the cover of seven battalions' worth of field artillery fire. It also committed the 317th Infantry Regiment in two phases: first to support-by-fire in support of the 318th Infantry Regiment's initial attack, and subsequently to follow-and-assume. Both battalions from the 318th Infantry Regiment culminated early in their attack, but the 317th Infantry Regiment continued the attack, passing through the 318th Infantry Regiment's position under heavy fire. The 317th Infantry Regiment secured a position on the outskirts of Argentan by the evening of August 19, 1944. Fearing a German counterattack, the 317th Infantry Regiment established a defense and planned to resume the attack the next day. Under the cover of darkness, the Germans withdrew from Argentan, allowing the 80th Infantry Division to secure Argentan without opposition on August 20, 1944.[71]

While heroic actions within the 80th Infantry Division contributed to the accomplishment of its mission at Argentan, its leaders struggled when evaluated against the criteria of modern operational art. McBride and his staff's poor management of phasing and transitions during the Argentan attack resulted in a loss of tempo that allowed the Germans to withdraw, and their equally poor management of risk resulted in early culmination of attacking units. The phases outlined in Field Order Number 6 for the August 18 attack relied primarily on only one infantry regiment for a division-wide mission. ADRP 3-0 counsels that phases "should strive to focus

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[69] *The 314th FA*, op. cit., P. 11 quoted in Rondeau, 5.

[70] Rondeau, 52.

[71] Blumenson, 534; "History of the 80th Infantry Division – August 1944," 14-15.

efforts, concentrate combat power in time and space at a decisive point, and achieve its objectives deliberately and logically."[72] While the division's phases provided logically sequenced objectives, they failed to concentrate the entire division's combat power in time and space. Instead, the division relied on one regiment with limited artillery support. Transitions proved an even larger friction point for the division and hindered its tempo.[73]

ADRP 3-0 defines transitions as "a change of focus between phases," and further explains that "unexpected changes in conditions may require commanders to direct an abrupt transition between phases."[74] The culmination of the 318th Infantry Regiment in the offense did not trigger the commitment of reserves from the 317th Infantry Regiment, nor did it trigger any previously developed branch plans. Instead, the division withdrew and developed a different plan for August 19, 1944. This caused a lull in tempo on August 18, allowing a German withdrawal. ADRP 3-0 explains that the maintenance of tempo requires "the complementary and reinforcing effects of simultaneous and sequential operations," and related this to transitions, which "require planning…so the force can maintain the momentum and tempo of its operations."[75] The 80th Infantry Division failed to phase and transition to maintain tempo on August 18. It improved on August 19 through a more deliberate massing of combat power supporting its attack, and a coordinated handoff between the 318th and 317th Infantry Regiments. Only then did the division reach Argentan.[76]

McBride and his staff also struggled to manage risk in the employment of both the infantry and tank forces, resulting in their early culmination. ADRP 3-0 defines risk as "the probability and severity of loss linked to hazards," and further explains that "the willingness to

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[72] US Army, ADRP 3-0, 2-8.

[73] "History of the 80th Infantry Division – August 1944," 13.

[74] US Army, ADRP 3-0, 2-8

[75] Ibid., 2-7.

[76] "History of the 80th Infantry Division – August 1944," 15.

incur risk is often the key to exposing enemy weaknesses that the enemy considers beyond friendly reach."[77] Despite intelligence of well-prepared enemy defenses, the division selected open terrain for an attack in a column of battalions. This placed the infantry at considerable risk from the effects of enemy weapons. McBride and his staff did not plan for combined arms maneuver of infantry with tanks or tank destroyer units. These factors resulted in the early culmination of the 318th Infantry Regiment. ADRP 3-0 defines culmination in the offense as the point "when the force cannot continue the attack and must assume a defensive posture or execute an operational pause."[78] Tank units experienced the same phenomena under McBride's direct orders.[79]

The division did not synchronize the employment of tanks with the infantry at Argentan. McBride, located with the 318th Infantry Regiment's command post at Urou, witnessed the defeats of both the 1st and 2nd Battalions in the offense on August 18. In response, he ordered a tank platoon led by Lieutenant William Miller to attack without infantry support. The attack failed, resulting in the destruction of four tanks. McBride then ordered the company commander, Captain Richard Stover, to continue the same attack with another tank platoon, and again without infantry support. Stover viewed the order as suicidal and refused, which resulted in his relief from command and eventual court-martial. McBride's personal involvement in this episode displayed a weakness in risk management. ADRP 3-0 explains that "commanders balance audacity and imagination with risk and uncertainty to strike a time and place in a manner wholly unexpected by enemy forces."[80] It is difficult to classify McBride's decision as imaginative, for the tank unit attacked in a manner analogous to the infantry; the enemy expected them. The 80th Infantry

[77] US Army, ADRP 3-0, 2-10.

[78] Ibid., 2-9.

[79] "History of the 80th Infantry Division – August 1944," 13; Koob, 10; Rondeau, 5.

[80] US Army, ADRP 3-0, 2-10.

Division failed to mitigate hazards, forcing the division into an unplanned operational pause until it resumed offensive operations on August 19.[81]

Despite its unusually long AGF training consisting of division-level maneuvers in the United States and the unusual continuity in its leadership, the 80th Infantry Division struggled to apply key elements of modern operational art in its initial combat at Argentan. The division's development of phases for its attack failed to concentrate its combat power at decisive points, and the division lost tempo during transitions primarily imposed by the German Army. Furthermore, the division assumed risks without adequate mitigation, repeatedly forcing unsupported units into early culmination. While the 80th Infantry Division eventually seized Argentan on August 20, 1944, it did so only after most German army elements withdrew the night prior. Its success at Argentan resulted more from the enemy's withdrawal than its own competence.

## 80th Infantry Division: Crossing the Moselle River

Following its initial combat experience at Argentan, the 80th Infantry Division next fought to cross the Moselle River. In August 1944, aiming to conclude the war, General Eisenhower directed a northeast attack into Germany as the main effort of allied forces in Europe. On September 1, while the 80th Infantry Division established a bridgehead across the Meuse River, Eisenhower assumed direct operational control of allied ground forces in Europe. Eisenhower ordered Patton's Third Army to attack along the Verdun-Metz axis to surprise, confuse, and disperse German army elements by presenting multiple dilemmas.[82]

### Background

The Third Army's receipt of these orders coincided with challenging operational conditions for allied forces in Europe. A lack of distribution in the Communications Zone, the base of supplies for allied forces in Europe, disrupted the tempo of operations for all allied armies

[81] Rondeau, 6-7.

[82] Dean J. Dominique and James H. Hayes, *One Hell of a War: Patton's 317th Infantry Regiment in WWII* (Wounded Warrior Press, 2014), 40-41; Weigley, 265.

in late August and early September. The Third Army's fuel requests "remained at 250,000 gallons a day until 26 August, where they almost doubled," and the First Army simultaneously increased its fuel requirements amidst this theater-wide challenge.[83] Thus, General Bradley "repeatedly placed restrictions on the Third Army's operations, authorizing only limited advances with the thought that General Patton's forces should not overextend themselves…and jeopardize the army group's mission."[84]

Despite this context, General Patton requested to cross the Moselle River, to the west of which German forces benefited from the additional time to prepare defenses while US Army forces dealt with gasoline shortages. In a letter to his wife Beatrice, Patton lamented that "books will someday be written…on that 'pause which did not refresh anyone but the Germans.'"[85] While Eisenhower shifted resources to support General Bernard Montgomery's Operation Market Garden, Patton continued to press for permission to cross the Moselle. Eisenhower conceded, justifying the move as defensive in nature to anchor and protect the Allied right flank. He warned Patton to reconsider if he became too heavily engaged. Patton instructed General Manton Eddy's XII Corps, consisting of the 4th Armored Division, the 35th Infantry Division, and the 80th Infantry Division, to cross the Moselle River.[86]

The XII Corps advanced 250 miles in sixteen days through a combination of speed and surprise across the Marne and Meuse Rivers; Eddy wished to maintain this momentum. Prompted by previous success, Eddy initially considered ordering the 4th Armored Division to cross the Moselle, and the infantry divisions to follow and support. Neither General John S. Wood, commanding the 4th Armored Division, nor McBride supported this idea; they anticipated a more

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[83] Roland G. Ruppenthal, *Logistical Support of the Armies: Volume 1*, United States Army in World War II, ed. Kent Roberts Greenfield (1953; repr., Washington, DC: Historical Division, Department of the Army, 2000), 508.

[84] Ibid., 504-507, 515.

[85] D'Este, 661.

[86] Dominique and Hayes, 40; Ibid., 661.

complex crossing than previously experienced. Instead, the division commanders recommended that the infantry secure bridgeheads for the armor to exploit. Eddy adopted their recommendations.[87]

The XII Corps scheme of maneuver, outlined in Field Order Number Six dated September 4, consisted of four elements. First, it required the 317th Infantry from the 80th Infantry Division to establish the northernmost bridgehead at Pont-a-Mousson. Second, with the bridgehead established, it called for Combat Command A (CCA) of the 4th Armored Division and a battalion of the 318th Infantry to exploit the bridgehead and attack Nancy. Third, it tasked the 319th Infantry to secure the southernmost bridgehead at Toul. Finally, the plan held the remaining two battalions of the 318th Infantry in reserve, yet also tasked them with establishing a "limited bridgehead in the center of the division zone…east of the Belleville-Marbache sector."[88]

The 80th Division followed the XII Corps plan and did little to improve phasing and transitions to maintain tempo or mitigate risk to prevent culmination. The mission assigned to the 80th Infantry Division by the XII Corps was to "secure [a] bridgehead across the Moselle and Meurthe [Rivers] vicinity Nancy, employing not to exceed one (1) CT, clearing Forêt de Haye and seizing Nancy, and one (1) CT preceding [the] 4th Armored Division."[89] The 80th Division issued orders to its subordinate regiments. It ordered the 317th Infantry to establish the main bridgehead across the Moselle to permit the 4th Armored Division to cross, the 319th Infantry to attack west from Toul and seize Nancy with the 4th Armored Division, and the 318th Infantry to establish a limited bridgehead in the center of the division sector. The division orders did not

[87] Hugh M. Cole, *The Lorraine Campaign*, United States Army in World War II, ed. Kent Roberts Greenfield (1950; repr., Washington, DC: Center of Military History, 1993), 57-58.

[88] Cole, 60.

[89] "Moselle River Crossing: Analysis," 1.

specify a division reserve and directed the 317th Infantry to begin the attack at five in the evening on September 5.[90]

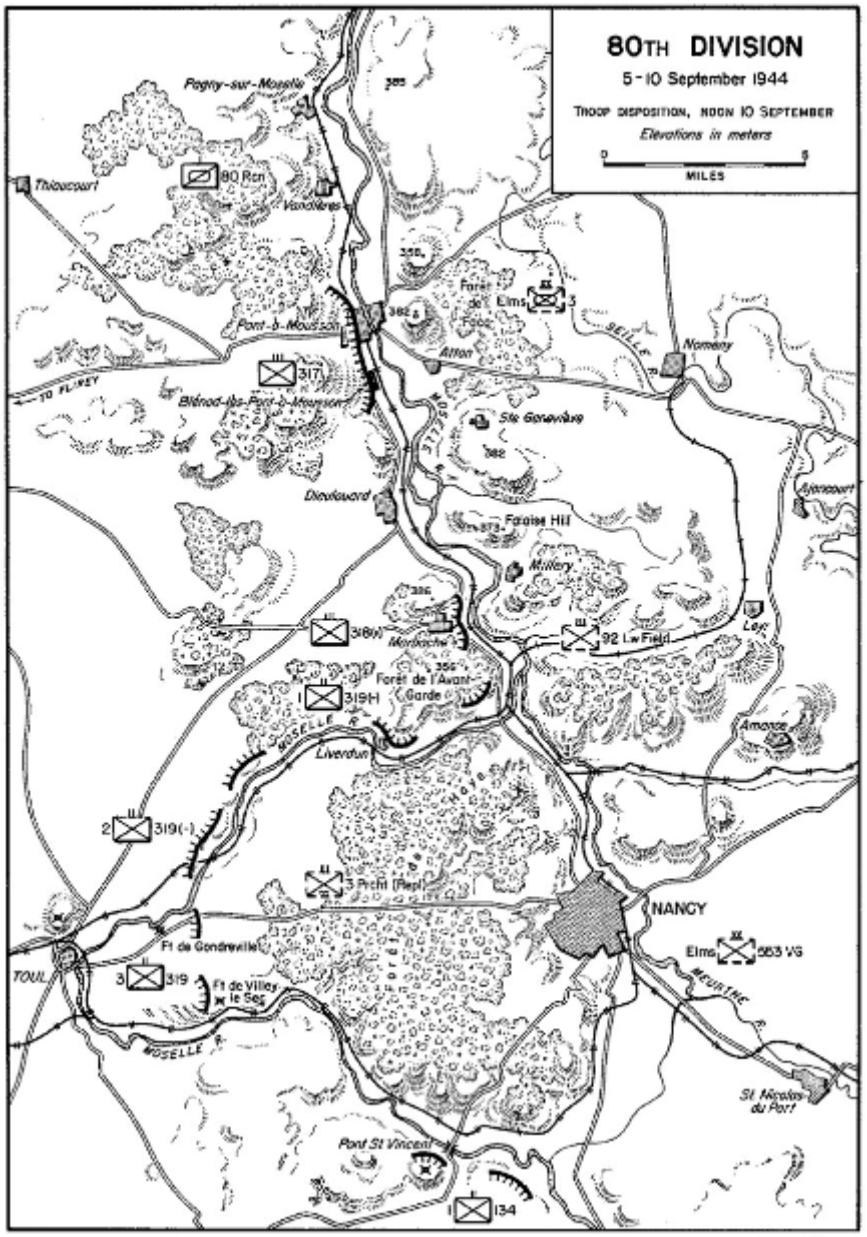


Figure 2. 80th Division Initial Plan to Cross the Moselle River. Data adapted from Hugh M. Cole, *The Lorraine Campaign,* United States Army in World War II, ed. Kent Roberts Greenfield (1950; repr., Washington, DC: Center of Military History, 1993), 61.

[90] Cole, 59-60.

The 80th Infantry Division's plan consisted of what historian Michael Doubler described as "almost a direct lift from FM 100-5," which called for divisions to conduct river crossings over a wide front.[91] As the 80th Infantry Division's initial failure to cross the Moselle demonstrated, doctrine encouraged the application of a division's combat power across a broad front despite well-defended crossing sites. Doctrine addressed phasing with respect to the technical aspects of crossing and bridging but did not specify how to phase operations against heavy enemy resistance. Combined with an inaccurate understanding of the enemy situation across the Moselle, these factors caused the plan to fail. The 80th Infantry Division attempted the crossing again on September 12 and established a crossing site. Both attacks proved costly; the 317th Infantry Regiment alone suffered over 3,000 casualties.[92]

## Combat Operations

Lieutenant Colonel Richard R. Fleisher, 80th Infantry Division G-2, provided contradictory analysis of enemy dispositions. He predicted that German artillery would "wait until [US] [recon] elements approached, [to subsequently] fire, and withdraw," and that "no small arms fire was expected [west] of [the] Moselle [River]."[93] Paradoxically, he also predicted that the division would encounter enemy forces dug in on the east bank of the Moselle, and that the enemy had emplaced strong points at nearly every significant location in the XII Corps plan: Pont-a-Mousson, Toul, Nancy, and Forêt de Haye.[94]

Eddy struggled to determine the enemy's disposition and strength as well. He believed the 80th Infantry Division faced little enemy resistance along the Moselle. During a visit to the

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[91] Michael D. Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945*, (Lawrence: University Press of Kansas, 1994), 147.

[92] Dominique and Hayes, 41; "Moselle River Crossing: Analysis," 1; Doubler, 143-147.

[93] "Operations of Enemy in Sector of 80th Infantry Division on Attack on Moselle River 4 to 15 September 1944." Headquarters, 80th Infantry Division, Officer of the Assistant Chief of Staff, G-2, accessed August 30, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm, 1.

[94] "Moselle River Crossing: Analysis." 80th Infantry Division Archives, accessed 30 August, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm, 1.

317th Infantry Regiment, he declared to Colonel Cameron and Major James Hayes while overlooking the Moselle that "there aren't any Germans out there."[95] Unknown to Eddy, the 3d Panzer Grenadier Division occupied the west bank of the Moselle in a prepared defense; its recent transfer from Italy to Lorraine placed battle-tested troops across from the 80th Infantry Division. Despite lacking engineers and armor, the 3d Panzer Grenadier Division's posture reflected its readiness to fight. By contrast, with "none of the troops [having] yet seen the river and the surrounding terrain or [having] any idea of the enemy situation," the 80th Infantry Division muddled its way through its initial attack to cross the Moselle River.[96]

The 80th Infantry Division's struggle to plan and manage phasing and transitions during river crossing operations across the Moselle River caused the division to cede the element of tempo to the enemy, much as it did at Argentan. While conforming to FM 100-5's directives concerning river crossings, the 80th Infantry Division did not conduct reconnaissance of the terrain and enemy, nor did it set conditions for the successful crossing of its infantry regiments. Captain Andrew Z. Adkins of Company H, 317th Infantry Regiment reflected that "in our mad dash across France, we reached the river before the Army was ready to properly support us…we did not have enough time for reconnaissance, intelligence, air support, or artillery support."[97] The 80th Infantry Division's plan, containing numerous simultaneous objectives for subordinate units, further complicated its hasty approach to the Moselle.

When defining phasing and transitions, ADRP 3-0 specifies that "simultaneity, depth, and tempo are vital to all operations," yet "they cannot always be attained to the degree desired; in such cases, commanders limit the number of objectives engaged simultaneously."[98] The 80th

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[95] Dominique and Hayes, 51.

[96] Doubler, 145-147; "Operations of Enemy in Sector of 80th Infantry Division on Attack on Moselle River 4 to 15 September 1944," 1-2.

[97] A. Z Adkins, Jr, and Andrew Z. Adkins, III, *You Can't Get Much Closer Than This: Combat with Company H, 317th Infantry Regiment, 80th Division,* (Havertown: Casemate, 2005), 34.

[98] US Army, ADRP 3-0, 2-8.

Infantry Division's first attempt to cross the Moselle between the 4th and 6th of September aimed to maximize simultaneity to increase tempo and "degrade enemy capabilities throughout the area of operations."[99] In so doing, the division failed to mass effects against a particular objective. Instead, the division attempted simultaneity across three objectives: Pont-a-Mousson, Toul, and Marbache. While the simultaneous assault on three objectives presented the 3d Panzer Grenadier Division with multiple dilemmas, the 80th Infantry Division lacked the depth necessary to overwhelm the enemy at any one of the three. The 317th Infantry Regiment's experience at Pont-a-Mousson illustrates this point.

Before the beginning of the attack on September 4, Colonel Cameron, commander of the 317th Infantry Regiment, "assured his battalion commanders that air and artillery support would be available" for the crossings.[100] His regiment soon found that to be false. According to Lieutenant Colonel Shaw, the executive officer of the 80th Infantry Division Artillery, "on the 5th of Sept the infantry attempted crossing [and] no artillery was requested."[101] The complete lack of fire support resulted in infantry forces "pinned down without any support [with] the Moselle to our front and the Rhine-Marne Canal behind us."[102] ADRP 3-0 notes that "commanders normally seek to maintain a higher tempo than an enemy does; a rapid tempo can overwhelm an enemy's ability to counter friendly actions."[103] In this instance, elements of the 80th Infantry Division lost the advantage in speed and rhythm of military operations and ceded tempo to the German Army.

Paralleling the challenges of the 80th Infantry Division at Argentan, McBride's poor management of risk resulted in the early culmination of the division's subordinate units during the first attack across the Moselle on September 4, 1944. The hasty nature of the first crossing

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[99] Ibid., 2-7.

[100] Doubler, 147.

[101] "Moselle Crossing: Division Artillery, 80th Div.," Interview with Lt Col E.J. Shaw, Executive Officer, accessed August 30, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm, 1.

[102] Adkins, 26.

[103] US Army, ADRP 3-0, 2-7.

highlighted the dilemma that ADRP 3-0 proposes with respect to risk: "inadequate planning and preparation risks forces, and it is equally rash to delay action while waiting for perfect intelligence and synchronization."[104] Influenced by Patton's aggressive nature and Eddy's belief in light enemy resistance, McBride appeared to risk inadequate planning and preparation to avoid a delay in the attack.

This resulted in the early culmination of two infantry battalions from the 317th Infantry Regiment, which found themselves pinned down between the Moselle River and the Rhine-Marne Canal by artillery, mortar, and machine gun fire. Unable to place any effects on the enemy, "commanders feared that a withdrawal might result in excessive casualties, so for the rest of the day soldiers remained huddled in shallow foxholes and exposed to a continuous artillery and mortar bombardment."[105] Both battalions experienced what ADRP 3-0 defines as culmination in the offense: "the culmination point occurs when the force cannot continue the attack and must assume a defensive posture or execute an operational pause."[106] Following the retreat of both battalions at three in the afternoon on September 5, 1944, McBride decided to commit a third battalion to attempt, yet again, to force a crossing.

McBride's personal decision to commit the third battalion on the evening of September 5 echoed his mismanagement of risk at Argentan by committing tanks, unsupported by infantry, against the same objective twice. At this point, McBride had commanded the 80th Infantry Division throughout its stateside training and maneuvers and initial combat at Argentan. As a long-serving division commander in a war in which division commanders rarely remained in command so long, McBride did not lack experience. ADRP 3-0 explains that "experienced

[104] Ibid., 2-10.

[105] Doubler, 148.

[106] US Army, ADRP 3-0, 2-9.

commanders balance audacity and imagination with risk and uncertainty to strike at a time and place in a manner wholly unexpected by enemy forces; this is the essence of surprise."[107]

McBride's experience, as defined today by ADRP 3-0, did not show when he ordered another attempt to cross at Pont-a-Mousson. He ordered it at the exact same location as the previously failed assault, with a smaller force and less support. During the first crossing, elements of the 3d Panzer Grenadier Division destroyed thirty-eight of sixty-four assault boats belonging to the 305th Engineer Combat Battalion, rendering them unable to support the third battalion's attack. Furthermore, artillery support remained uncoordinated. During the night of September 5 and against all odds, four platoons from Companies I and L established a shallow bridgehead on the east bank of the Moselle and dug in. The enemy quickly attacked. Without any air or artillery support, nor the ability to reinforce rapidly due to the recent loss of boats, the four platoons ceased to exist by eleven in the morning on September 6, at the cost of all 160 men. This last failure finally caused Eddy to cancel the crossing. XII Corps transitioned to a defensive posture along the West bank of the Moselle to prepare for a second crossing.[108]

McBride's second decision to commit less resources and forces against the same objective merits scrutiny. It forced a subordinate element to culminate in the offense once again and resulted in the annihilation of a unit in exchange for no tactical or operational gain. ADRP 3-0 notes that "the surest means to create opportunity is to accept risk while mitigating hazards to friendly forces."[109] McBride failed to create opportunity, because he accepted risk to his infantry regiments without applying appropriate measures to mitigate that risk.

While the 80th Infantry Division did not fail to meet all its objectives, it only achieved one of three. Its failure to secure a bridgehead at Pont-a-Mousson and enable the crossing of the

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[107] Cole, 65; Doubler, 143-148; Ibid., 2-10.

[108] Cole, 65; "Moselle River Crossing: 05-06 September 1944.," Interviews with engineers from the 1117th Engineer Group, accessed 30 August, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm.

[109] US Army, ADRP 3-0, 2-9.

4th Armored Division resulted in the entire XII Corps assuming a defensive posture from September 6 to September 11. Additionally, the 318th Infantry Regiment failed to secure the heights in Marbache and prepare for a crossing in the face of stiff enemy resistance. At Toul, the 319th Infantry Regiment succeeded in establishing a bridgehead and began offensive operations around Toul. The 80th Infantry Division failed to create the momentum and secure the routes necessary to seize Nancy, the XII Corps mission. Accordingly, Eddy halted XII Corps to prepare for a second crossing attempt in the 80th Infantry Division zone, writing in his diary that "this time we will make sure it goes through."[110]

The second attempt to cross the Moselle not only involved more resources and deliberate planning than the first attempt, it successfully arranged tactical actions in time and space to achieve its mission. Phasing and transitions enabled the maintenance of tempo throughout the attack, and management of risk averted early culmination. XII Corps issued Field Order Number Eleven on September 11. It directed the 80th Infantry Division to force a crossing of the Moselle River "in the vicinity of Dieulouard, and establish a bridgehead from Pont-a-Mousson south to Millery."[111] After the failure of September 5 and 6, McBride, with his staff and regimental commanders, developed a more appropriately phased and deliberate plan to cross the Moselle River.[112]

The plan now involved phasing and transitions within the 80th Infantry Division and synchronized combined arms to create conditions for a successful crossing. The 80th Infantry Division now benefitted from support from the XIX Tactical Air Command, eight battalions of artillery, fifty heavy machine guns, and heavy engineers from the 1117th Engineer Combat Group. First, as early as September 8, the 80th Infantry Division prepared for the crossing: it

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[110] Cole, 65-69.

[111] "History of the 80th Infantry Division – September 1944.," 80th Infantry Division Archives, accessed 30 August, 2017, http://www.80thdivision.com/WebArchives/OperHistory.htm, 11.

[112] Cole, 75.

conducted reconnaissance and determined a suitable crossing site at Dieulouard, and "each day the American artillery fired concentrations on targets selected for special treatment on the day of the assault…to forestall an enemy alert prior to H Hour."[113] Second, it tasked the 317th Infantry Regiment to seize the river crossing and secure a hold on the enemy bank, with an initial objective of the hills east of Dieulouard. Third, it tasked the 318th Infantry Regiment to exploit the bridgehead and seize Mousson Hill and the surrounding heights. Finally, the 80th Infantry Division planned to pass the 4th Armored Division through terrain held by both infantry regiments. These phases and transitions aimed to maintain tempo against the 3d Panzer Grenadier Division in a specific location and prevent the culmination of either infantry regiment in the offense.

McBride mitigated risk through combined arms planning and reconnaissance. On September 12, he took the informed risk of ordering the heavy construction companies to work immediately; he believed that the speed and ease of infantry movements warranted it. His decision proved prudent; the armor of the 702d Tank Battalion and the 313th Field Artillery Battalion crossed the pontoons and enabled the division's successful defense of the bridgehead.[114]

The 80th Infantry Division faced one more test of its ability to transition and prevent culmination after crossing the Moselle; the 3d Panzer Grenadier Division, 17th SS Panzer Grenadier Division, and the 29th Panzer Grenadier Regiment counterattacked at one in the morning on September 13. In bitter fighting that ensued and often resulted in "majors commanding platoons and captains commanding battalions," the division rapidly transitioned to the defense and held its ground.[115] Heavy casualties included the division's artillery commander, Brigadier General Edmund W. Searby, killed in action while coordinating artillery fires. McBride

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[113] Cole, 77.

[114] Adkins, 34; Dominique and Hayes, 62; "Moselle Crossing: Division Artillery, 80th Div.," 1; Cole, 79.

[115] Cole, 81.

ordered a final transition in the battle for the Moselle River Crossing—a counterattack into the remnants of the 3d Panzer Grenadier Division. By the afternoon of September 13, the 80th Infantry Division secured the bridgeheads once more, allowing the 4th Armored Division to pass through its defensive line and advance to Nancy.[116]

Again, McBride and the 80th Infantry Division appeared to struggle in the application of the modern elements of operational art at the beginning of an operation. Despite training, education of the leadership, and prior experience in battle at Argentan, the division struggled to create and manage phases and transitions to maintain tempo and mitigate risk to prevent early culmination. Unlike at Argentan, the 80th Infantry Division did not achieve its objective of crossing the Moselle River because the Germany Army withdrew; it defeated elements of the German Army. The division's second attempt at crossing the Moselle River displayed adroit use of the elements of operational art and showed signs an organization striving to learn from its mistakes.

## Conclusion

The training and employment of the 80th Infantry Division in World War II is relevant to the US Army's recent shift of focus to the preparation of large scale units for combat against in decisive action. The 80th Infantry Division trained for two years under leaders educated at the US Army's foremost schools in the interwar period; this period resembles modern two-year command timelines at the battalion level and above. The 80th Infantry Division trained at the US Army's most realistic training center prior to deployment and faced German Army for the first time on the field of battle in Europe. Should the US Army engage in combat against a peer or near-peer adversary again, it is likely conditions will at best resemble those of the 80th Infantry Division; it is unlikely a division will have two full years to train. Consequently, the description

[116] Ibid., 79-84; "Moselle Crossing: Division Artillery, 80th Div.," Interview with Lt Col E.J. Shaw, Executive Officer, accessed August 30, 2017, http://www.80thdivision.com/WebArchives /OperHistory.htm, 1.

of the 80th Infantry Division's training and subsequent performance as described in the case studies provides insight for modern leaders faced with greater constraints.

## Findings

The analysis of the 80th Infantry Division focused on three areas. First, it examined the education of the 80th Infantry Division's leaders during the interwar period at the CGSS and the USAWC to determine their amount of exposure to the modern concept of operational art. Second, it examined the training progression of the 80th Infantry Division in large-scale maneuvers to ascertain the degree to which leaders exercised linking tactical actions in time, space, and purpose in the context of a larger campaign. Finally, it evaluated the performance of the 80th Infantry Division at Argentan and the crossing of the Moselle River to determine its success in applying phases and transitions to maintain tempo and managing risk to prevent culmination in its initial battles against the German Army. This study led to two major conclusions: one concerning the impact of doctrine and training on education on the operational art at the tactical level, and the second with the potential risks associated with the modular employment of forces.

The division commander, division artillery commander, and chief of staff of the 80th Infantry Division all attended both the CGSS and the USAWC. Both curricula exposed them to the concept in modern doctrine of operational art. At the CGSS, the education focused on large-scale unit command and staff doctrine, while the USAWC focused on theater-level concepts. Despite this education, however, the 80th Infantry Division's leaders twice failed to link tactical actions in time and space to achieve an initial advantage over the German Army.

Similar conclusions stem from the study of the 80th Infantry Division's training progression at the AGF's premier training center. Modern brigade-sized combat training center (CTC) rotations at the Joint Readiness Training Center (JRTC) or National Training Center (NTC) seem simple in scope compared to the AGF's corps and division maneuvers at the DTC, which the 80th Infantry Division participated in for several months before deploying. Despite realistic training in both theater-level logistics and tactical-level transitions in large-scale combat

operations, the 80th Infantry Division failed its initial attempts to seize objectives from the German Army at Argentan and while crossing the Moselle River.

The 80th Infantry Division's initial battle plans at Argentan and the Moselle River both led to defeat. Following these initial defeats, the division devised new plans that better incorporated elements of operational art, and thus linked tactical actions to ensure an advantage as it transitioned between phases to maintain tempo, and managed risk to prevent early culmination. Both engagements raise an important concern: despite the education and training of these concepts at the US Army's premier schools and training centers, the 80th Infantry Division struggled to succeed on initial contact, at the cost of several thousand Soldiers' lives. Despite the division's involvement in some of the most important battles in the Third Army, Eisenhower refused their citation.[117]

The 80th Infantry Division's initial combat experiences at Argentan and the Moselle River lead to two conclusions. First, while ideas such as tempo, culmination, phasing, and risk were present in both educational curriculum and training, doctrine did not specifically prescribe it for tactical actions. When crossing the Moselle River, the 80th Infantry Division followed doctrine in FM 100-5 for a wet gap crossing, but initially failed. This doctrine focused heavily on maneuver at the tactical level and influenced US Army tactical units to focus on mobility and rapid maneuver, rather than ensuring a clear position of advantage in every engagement using elements such as tempo, phasing and transitions, risk, and culmination. The subsequent planning efforts of 80th Infantry Division leaders to cross the Moselle River linked tactical actions in time in space as modern US Army capstone doctrine recommends.[118]

Second, the engagements at both Argentan and the Moselle River demonstrate that on both occasions, the 80th Infantry Division entered combat without the entirety of its forces; corps

[117] Mansoor, 265.

[118] Doubler, 23; Weigley, 728.

headquarters task organized regimental combat teams, artillery, or armor, thus preventing the 80th Infantry Division from fighting as a complete combined arms team. The 80th Infantry Division struggled to apply phasing and transitions to achieve tempo and manage risk to prevent culmination in part due to corps headquarters tasking some of its organic combined arms capacity prior to attacks. On subsequent attacks, the 80th Infantry's composition more closely resembled that of a division with all its organic assets (or more).

## Recommendations

These findings lead to two recommendations: the first applies to US Army doctrine, and the second to modularity. This case study of the 80th Infantry Division demonstrates that in combat with a peer or near-peer adversary, maneuver, while essential, will not suffice. Combined arms maneuver must be conducted in the context of the fundamentals of operational art; tactical actions linked in time and space to achieve greater objectives are critical to "overcome [the] ambiguity and intricacies of a complex, ever-changing, and uncertain operational environment."[119] ADRP 3-0 notes that operational art is imperative at every level of warfare; hence, it is important not only for the US Army's educational and training system, but also for tactical doctrine to address it in a manner that reinforces its importance. The US Army should publish doctrine at the tactical level that incorporates operational art in written and visual form for leaders to ensure that leaders do not overlook these principles during the heat of execution, when leaders often turn to doctrine as their baseline for action. Training centers must reinforce this emphasis on operational art at the tactical level through the After-Action Review (AAR) process, thus encouraging leaders to reflect on its implementation in action and immediately afterwards.

The second recommendation deals with modularity in the US Army. The 80th Infantry Division trained as an entire division as part of its AGF training progression, a luxury no longer

[119] US Army, ADRP 3-0, 2-9.

afforded to US Army divisions. Instead, divisions typically serve as modular headquarters to exercise Mission Command over modular Brigade Combat Teams, a concept necessary for sustained operations following September 11, 2001. Despite the quality and scale of the 80th Infantry Division's training, it struggled upon initial contact in part because the corps headquarters modularized its elements. Regimental combat teams from within the 80th Infantry Division became corps assets during key attacks, as did artillery and armor units, preventing the 80th Infantry Division's commander and staff from employing the division as one combined arms team capable of using elements of operational art to defeat the German Army. As the US Army trains to fight peer and near-peer adversaries, it must recognize that while modularity provides flexibility for deployment and certain mission types, it also presents significant risk to a division's ability to achieve a position of advantage on the battlefield against a similar enemy organization.

Both recommendations suggest how the US Army can structure its training, education, and doctrine to empower US Army divisions, and how it should employ them on the field of battle against peer enemies. The 80th Infantry Division's past illuminates challenges the US Army may face again if "one day the United States of America may yet again have to mobilize an army for war."[120]

[120] Mansoor, 265-266.

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