Fighting a US Army Division

A Monograph

by

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14. ABSTRACT
Tactical employment of the US Army division is essential to success in large-scale combat operations, the greatest challenge for Army forces. Over the last seventeen years the US Army has mainly executed stability operations and transitioned to a modular structure on around the brigade as the primary tactical level headquarters. These factors have led division staffs to struggle with understanding the division's role in large-scale combat. This paper seeks to equip division staffs by answering the question: how can division staffs more efficiently produce effective mission-orders that synchronize organic and joint capabilities while maximizing disciplined initiative by subordinate commands? To effectively fight a division a proper understanding of its organization, capabilities, and operational employment is critical. The synthesis of current and World War II era doctrine and professional writings led to the conclusion that the division echelon's flexible task-organization and robust capability provide the required reconnaissance, fires, and cyber electromagnetic activities to establish the proper conditions and the mission-command necessary for successful synchronization of close combat by the subordinate brigade combat teams. Divisions can succeed in large-scale combat operations through timely mission-orders that define and articulate the operational framework, weigh main and supporting efforts, and allocate resources through a priority of support.

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Abstract

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Tactical employment of the US Army division is essential to success in large-scale combat operations, the greatest challenge for Army forces. Over the last seventeen years the US Army has mainly executed stability operations and transitioned to a modular structure based on the brigade as the primary tactical level headquarters. These factors have led division staffs to struggle with understanding the division's role in large-scale combat. This historical study seeks to equip division staffs by answering the question: how can division staffs more efficiently produce effective mission-orders that synchronize organic and joint capabilities while maximizing disciplined initiative by subordinate commands? To effectively fight a division, a proper understanding of its organization, capabilities, and operational employment is critical. The synthesis of current and World War II era doctrine and professional writings led to the conclusion that the division echelon's flexible task-organization and robust capability provide the required reconnaissance, fires, and cyber electromagnetic activities to establish the proper conditions and the mission-command necessary for successful synchronization of close combat by the subordinate brigade combat teams. Divisions can succeed in large-scale combat operations through timely mission-orders that define and articulate the operational framework, weigh main and supporting efforts, and allocate resources through a priority of support.

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Acronyms

AAR	After Action Review
ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
AM	Amplitude Modulation
ARFOR	Army Forces Command
CBRNE	Chemical, Biological, Radiological, Nuclear, High-Yield Explosives
CC	Combat Command
CEMA	Cyber Electromagnetic Activities
DIVARTY	Division Artillery
EW	Electronic Warfare
FM	Frequency Modulation
FMI	Field Manual Interium
HHB	Headquarters and Headquarters Battalion
IO	Information Operations
JAGIC	Joint Air Ground Integration Cell
JFLCC	Joint Forces Land Component Command
JTF	Joint Task Force
LOC	Line of communication
MCTP	Mission Command Training Program
MDMP	Military Decision-Making Process
OPCON	Operational Control
SAMS	School of Advanced Military Studies
SOI	Signal Operations Instructions
TACP	Tactical Air Control Party
TACON	Tactical Control

Illustrations

Fighting a US Army Division

> The proliferation of advanced technologies; adversary emphasis on force training, modernization, and professionalization; the rise of revisionist, revanchist, and extremist ideologies; and the ever-increasing speed of human interaction makes large-scale ground combat more lethal, and more likely, than it has been in a generation.

—Lieutenant General Michael Lundy, Commander, Combined Arms Center, FM 3-0, *Operations*

Introduction

How the Army Traditionally Organized Itself at the Tactical Level

The need for the US Army to prepare for, fight, and win large-scale combat operations, major operations and campaigns aimed at defeating an enemy's armed forces and military capabilities, drove the requirement for and reorganization efforts of the division echelon.[1] The division became an enduring echelon after the War Department's review of the mobilization efforts and combat performance of the US Army during the Spanish-American War in 1898.[2] The War Department's findings concluded that due to the larger and more complex battlefield, increased firepower available, and requirement for additional combat support, the division would replace the corps as the primary combined arms unit.[3] The division remained the primary tactical combined arms echelon throughout the 20th century, undergoing numerous organizational and capability adaptations based on the nation's requirements and technological advancements.

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[1] On the history of US Army unit organization, see John Wilson, John McGrath, and Jonathan House's works. John Wilson, *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades* (Washington, DC: US Army Center of Military History, 1998); John McGrath, *The Brigade: A History - Its Organization and Employment in the US Army*, Combat Studies Institute (Fort Leavenworth, KS: Combat Studies Institute Press, 2004); Jonathan M House, *Toward Combined Arms Warfare: A Survey of 20th-Century Tactics, Doctrine, and Organization*, Combat Studies Institute (Fort Leavenworth, KS: US Army Command and General Staff College, 1984).

[2] Wilson, *Maneuver and Firepower*, 23-29. Wilson began his work with a section describing the US Army's early employment of division during the Revolutionary War through the Civil War. He also wrote about the transition into the "modern" division after the Spanish-American War and provided an in-depth analysis and organizational charts for every major development of the division during the 20th Century.

[3] Ibid, 23.

Figure 1. FM 3-0 Conflict Continuum and the Range of Military Operations. US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), 1-1.

The US Army still needs the division echelon to synchronize and sequence operations and formations to fight and win large-scale combat operations.[4] Removing the division and relying on the corps headquarters to directly control brigades is not feasible in large-scale combat.[5] There is not a clear distinction between large-scale combat operations and limited contingency operations. However, increased lethality, tempo, and size of operations characterize large-scale combat.[6] The complex nature of large-scale combat operations require divisions to simultaneously conduct offensive, defensive, and stability operations, while the brigade cannot effectively conduct all three at the same time.[7] Additionally, the division is able to ensure the

[4] Brian Linn, *The Echo of Battle: The Army's Way of War* (Cambridge, MA: Harvard University Press, 2007), prologue. Brian Linn argued that the way a nation conducts war goes beyond narratives and debates to "how it prepares for war." The division is an essential component to preparing for large-scale combat operations.

[5] William M. Donnelly, *Transforming an Army at War: Designing the Modular Force, 1991 – 2005* (Washington, DC: US Army Center of Military History, 2007), 63–81. William Donnelly's study is a detailed historical overview of the actions of Task Force Modularity's studies to support General Schoomaker's 2003 transformation directive, which included the possibility of eliminating either the corps or division echelon. The idea of eliminating a headquarters level was an attractive notion after large-scale combat had ended in Iraq in 2003. However, ultimately, as Donnelly showed, General Schoomaker did not want to lose flexibility in case another large-scale conflict erupted and risk overextending the Army, therefore he did not eliminate an echelon.

[6] US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), 1-1 – 1-3.

[7] Ibid, 1-16; US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington DC: Government Printing Office, 2008), 3-21. Both the 2017 and 2008 versions of FM 3-0 state that the division can combine offense, defense, and stability tasks while brigades normally focus on one task.

operational environment is shaped appropriately for its brigades to win the close fight by controlling the tempo and employing fires, reconnaissance, cyber, and electronic warfare (EW) capabilities. The ability to shape the close combat fight is outside the scope of the corps and brigade headquarters during large-scale combat operations because the need for responsiveness is outside their mission command capabilities, specifically the size and location of their command posts. The division fulfils this role.[8] Lastly, due to the lethality and size of the battlefield during large-scale combat operations, the division needs to synchronize and sequence brigades, not just act as a reporting headquarters.[9]

This paper contributes to our understanding by attempting to answer the question; how can division staffs more efficiently produce effective mission-orders for large-scale combat operations, commensurate with the most recent iteration of Field Manual (FM) 3-0, *Operations*, that synchronize organic and joint capabilities while maximizing disciplined initiative by subordinate commands?[10] This question is explored through a synthesis of current and World War II era doctrine and professional writings, including a case study of the 30th Infantry Division's training and operations in the European Theater. Studying the Army's doctrine, organization, and practice of large-scale combat operations during World War II offers current military professionals an analogy, though an imperfect one, to prepare themselves and their formations for future conflicts.[11]

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[8] US Army, FM 3-0 (2017), 1-21; Richard Kedzior, *Evolution and Endurance: The US Army Division in the Twentieth Century* (Santa Monica, CA: RAND, 2000), 45-47; McGrath, *The Brigade*, 131-138. Both Richard Kedzior's study on the division and McGrath's work on the brigade echelon reinforce US Army contemporary doctrine that brigades' mission command is suited for the close fight. However, brigades need a division echelon to shape that fight to establish conditions for success.

[9] US Army, FM 3-0 (2017), 2-13.

[10] US Army, FM 3-0 (2017), Introduction; Wilson, *Maneuver and Firepower*. The focus of this paper is on US Army Divisions current organization, capabilities, and employment. To understand the origin of the current division echelon, the research by Wilson and others was essential.

[11] Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 170-174.

The Contemporary Division Staff's Challenge

In 2003 the Army reorganized to a modular force structured around the employment of Brigade Combat Teams to provide standardized, rapidly deployable, independent, and self-contained units to support the requirement for stability and counterinsurgency operations in both Operations Enduring Freedom and Iraqi Freedom.[12] This realignment corresponded with a transition of the division level headquarters primary focus from the tactical to the operational level after the end of major combat operations in Iraq in May 2003.[13] This reorganization has inadvertently slowly contributed to a knowledge gap for mid-grade officers on the organization, capabilities, and proper employment of divisions as a tactical headquarters in large-scale combat operations.[14] Issues with synchronizing tactical actions in time, space, and purpose causes a breakdown in the operational level linking those tactical success to national and military strategic objectives.[15]

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[12] Donnelly, *Transforming an Army at War*, iii. William Donnelly defined modularity as, "idea of creating a pool of standardized, self-contained units, combat, support, and headquarters, that could be assembled into, or "plugged into' (and unplugged from), larger formations as needed with minimal augmentation or reorganization."

[13] Donnelly, *Transforming an Army at War*, 9-17; McGrath, *The Brigade*, 106-107; Jennifer Munro, "Transforming the Army Division in an Era of Persistent Conflict" (Monograph, School of Advanced Military Studies, 2009), 26; John Brown, *Kevlar Legions: Transformation of the US Army, 1989 – 2005* (Washington, DC: US Army Center of Military History, 2011), 298-305. Both Donnelly and McGrath's studies provided the history behind the reorganization of Army brigades into the primary tactical employment element and transition of the division headquarters into a "unit of employment" focused more at the operational level versus its historical usage as the primary tactical headquarters. John Brown's research depicts how brigades became more independent to fight the "close" fight, approximately 15 km, and divisions transitioned to the focus solely on the "second-echelon" enemy, approximately 120 km away. Major Jennifer Munro's monograph provided summary of the transformation of the division headquarters and its implications on modern employment. The transition of the division level headquarters' primary focus to the operational versus the tactical is hard to pinpoint. However, President Bush's famous speech aboard the USS *Lincoln* with a "mission accomplished" poster in the background is an estimated date of when the shifting of focus occurred.

[14] Rich Creed, "FM 3-0 Overview" (lecture, Marshall Auditorium, Fort Leavenworth, KS, February 14, 2017). Rich Creed defined the "knowledge gap" of employing divisions in large-scale combat operations in current Lieutenant Colonels, Majors, and Captains because they did not execute decisive action training environment exercises in their formative years.

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

The current generation of field grade officers have progressed through their careers conducting operations with the brigade serving as the highest echelon headquarters that truly functions at the tactical level. This generation of officers are now serving in division staffs as the Army revamps its focus on the Warfighter Exercise program to prepare divisions for large-scale combat operations as a tactical level headquarters.[16] The current knowledge gap appears as many officers serving in division staffs are unfamiliar in the organization and capabilities of divisions and misunderstand the role of divisions in large-scale combat operations. Additionally, this issue manifests in the mission-orders produced by division staffs which miss the balance between enough detail to create synchronization and too much detail that disrupts disciplined initiative.[17]

In February of 2017, the Mission Command Training Program (MCTP) published the fiscal year 2016 version of their key observations. The trends of the rotational units displayed evidence of an unfamiliarity of the division's organization and capabilities.[18] Units consistently demonstrated ineffective task organization, poor staff assessments, failure to fully integrate fires, cyber, information operations (IO), and electronic warfare into operations, and failed to generate common operational pictures that facilitated shared understanding. Additional trends of divisions show evidence of staff members not understanding the proper tactical role of the division in large-scale combat operations.[19] This problem manifest itself through ineffective mission analysis during the military decision-making process (MDMP), which normally occurs when a staff does

[16] US Army, FM 3-0 (2017), introduction. According to the October 2017 publication of Field Manual (FM) 3-0, *Operations*, the Army is "emphasizes the importance of preparation and training for large-scale combat operations across warfighting functions."

[17] Christopher Paparone, "US Army Decisionmaking: Past, Present and Future," *Military Review* (July - August 2001): 49-50. In 2001, Christopher Paparone argued that an effective planning mechanism facilitates interaction between detailed and conceptual planning. When a staff is deficient in training or time there are problems with mission-orders missing the balance between conceptual and detailed planning.

[18] Mission Command Training Program, *Mission Command Training in Unified Land Operations*, Informational (Fort Leavenworth, KS: US Army Combined Arms Center, 2017), xi - xv. The Mission Command Training Program Fiscal Year 2016 information paper gives an excellent summary of the issues that the various unit echelons face during their exercise rotations.

[19]MCTP, *Mission Command Training in Unified Land Operations*, xi–xv.

not clearly define the problem that their headquarters is responsible to solve.[20] Additionally, poor use of decision tools and order transitions indicate the orders the staff is producing are not communicating the proper information and in the correct manner.

The aim of the synthesis of current doctrine and professional writings was to describe the current division's organization, capabilities, and role during large-scale combat operations. Further, the conclusions of this paper analyze the commonalities between current and World War II era divisions that leads to a deeper understanding of current divisions' capability and how it can fight successfully in large-scale combat operations. Finally, the synthesis of doctrinal and academic writings and the World War II analysis and case study facilitates the development of recommendations to produce effective mission-orders for current military practitioners serving in divisions.

According to the Army Doctrine Publication 6-0, *Mission Command*, mission-orders are "directives that emphasize to subordinates the results to be attained, not how they are to achieve them." Further, they seek to "maximize individual initiative" and rely on "lateral coordination between units" versus a top down overly prescriptive solution.[21] In this paper, effective division level mission-orders are further defined from the doctrinal baseline as efficiently produced—produced timely enough to provide their subordinate units adequate planning time—and clearly communicated—transmitted and received in a mutually understood manner—orders that properly balance the level of detail required to synchronize organic and joint capabilities while remaining purpose driven to enable disciplined initiative. Narrowing the conclusions of this paper to provide recommendations for division staffs to follow during production of mission-orders allows clear take-aways from the research of the broad subject of past and current US Army divisions.

[20] MCTP, *Mission Command Training in Unified Land Operations*, 3.

[21] US Department of the Army, Army Doctrine Publication (ADP) 6-0, *Mission Command* (Washington, DC: Government Printing Office, 2012), 2-4 – 2-5.

The 30th Infantry Division is the case study for this paper due to its organization, training, and operational employment being roughly equivalent to a standard US Army Division during the World War II era. One of the strengths of American mobilization was the ability to produce divisions through a standardized training and organization process that resulted in a baseline of effectiveness.[22] Though the 30th is a National Guard Division, during World War II its manning, equipping, and training was indistinguishable from an active duty division.[23] The research focused on determining how the 30th Division collected and processed information, organized for combat, executed operations, and improved in large-scale combat operations. This research studied the history and employment of the 30th Division through multiple secondary sources of compiled interviews and analysis of operations. Additionally, analysis of primary sources of the 30th Division's official after-action reviews helped to further identify how they task organized and conducted operations.

This paper narrates the generic World War II divisions' ability to collect and process information, organize for combat, and conduct operations. The case study of the 30th Infantry Division's training and operations further developed the narrative. This narrative was compared to the struggles facing current US Army divisions as they execute training and their Warfighter capstone exercise. The recommendations to guide the production of division-level mission-orders were based on this commonality and a synthesis of the current doctrine and academic literature.

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[22] Peter Mansoor, *The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941 - 1945* (Lawrence, KS: University Press of Kansas, 1999), 5, 16-60. Peter Mansoor argued that corps and army commanders understood the basic capability and competency of their divisions due to the standized organziation and training executed prior to deploying into a combat theater. Mansoor stated that the unit's leadership of commanders and combat experience would lead to more, or less, combat effectiveness over time.

[23] Bell Wiley, *The Activation and Early Training of "D" Division, Study No. 13,* Studies in the History of Army Ground Forces (Washington, DC: Historical Section - Army Ground Forces, 1948). Bell Wiley's book on the "D" Division described the characteristics of a standard World War II Era Division.

Overview of Paper

This paper consists of four sections. The first section explains the organization, capabilities, and role in large-scale combat operations of divisions during World War II. The second section is a case study of the 30th Division's history and operational employment. Additionally, it presents analysis of the 30th Division's operations and adjustments made based on after-action reports. The third section provides an overview of contemporary US Army divisions' organization, capabilities, and role in large-scale combat operations. Finally, the conclusion section provides analysis of the commonality between World War II era and current divisions to ascertain the value of their study. Additionally, the conclusion section provides recommendations for producing effective division-level mission-orders.

Literature Review for the Study of Large-Scale Combat Operations

Studying the organization, doctrine, training, and combat employment of World War II era divisions is valuable for contemporary military professionals training to conduct large-scale combat operations. This section describes the literature on the history of Army unit organizations, doctrine, the US Army of World War II, and the 30th Infantry Division that contributed to the research, analysis, and conclusions of this paper.

The US Army Center of Military History, Combat Studies Institute, Combat Operations Group, and the RAND Corporation provided history and analysis of Army unit organizations. John Wilson's *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades*, described the organization of the "modern" division after the 1898 Spanish-American War then examines and analyses the organizational changes throughout the 20th Century.[24] *Kevlar Legions: Transformation of the US Army, 1989 – 2005*, by John Brown, provided the bulk of the understanding of the US Army's evolution into a modular force.[25] From the Combat Studies

[24] Wilson, *Maneuver and Firepower*.

[25] Brown, *Kevlar Legions*. Brown's work focused on the transformation into the modular Army. However, he started his writing with analysis of the historical transitions that occurred in the division

Institute, John McGrath's work, *The Brigade: A History – Its Organization and Employment in the US Army*, assisted in the understanding of how the current division developed as the brigade echelon undertook additional capability and responsibility.[26] The RAND Corporation's *Evolution and Endurance: The US Army Division in the Twentieth Century*, detailed the structural changes that occurred from WWI through the 1990s.[27] Additionally, Virgil Ney's report for the Combat Operations Group, *Evolution of the US Army Division: 1939 – 1968*, detailed the history of the division with an emphasis on the continuity of its structure centering around the employment of massive amounts of firepower.[28]

Past and current doctrine and historical military writings enabled the understanding of how World War II era and current divisions fight. Historian Walter Kretchik argued that the US Army's understanding of its role in strategy, operations, and tactics is traceable from its "keystone" manual, which he stated is FM 100-5, *Operations* during World War II and currently FM 3-0, *Operations*.[29] The centrality of the division as the basis for tactical level action in the 1941 version of FM 100-5, *Operations* changed to the brigade in the 2008 version of FM 3-0,

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headquarters. Brown's argument is that the efforts to transform the US Army to exploit information age technology and adapt to the post-Cold War strategic circumstance were largely successful.

[26] McGrath, *The Brigade*.

[27] Kedzior, *Evolution and Endurance*. Kedzior's study's analysis on the multiple adjustments to the organization of the division from 1936 through 1943 were insightful into the mobility, flexibility, and firepower capability US Army decision-makers prioritized as they prepared for combat. Kedzior's report also provided exact numbers and detailed charts of the division as it was developed to prepare for World War II.

[28] Virgil Ney, *Evolution of the US Army Division: 1939 – 1968* (Fort Belvoir, VA: Combat Operations Research Group, 1969), 57-71.

[29] Walter Kretchik, *US Army Doctrine: From the American Revolution to the War on Terror* (Lawrence, KS: University Press of Kansas, 2011), introduction, 63-107, 221-278; Barry Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca, NY: Cornell University, 1984), 220-221. Walter Kretchik followed the "intellectual thread" of how the Army viewed itself and its role in future combat by following "keystone" manuals. Kretchik defined "keystone" manuals as the dominant manual that shape army operations. Barry Posen argued that an army's doctrine is important because it "affects the stability of the international system and security of states." Posen's book described how the doctrine that was written in the inter-war period determined how France, Britain, and Germany viewed the organization, training, and probable deployment of their militaries and drove those nations to employ them in that manner.

Operations, the direct replacement of the FM 100-5 series.[30] However, in the 2017 version of FM 3-0, the division's primary role is specified as a tactical echelon fighting as a formation, not just a headquarters, in large-scale combat operations. This role is a reversion to the typical twentieth century model.[31] In addition to doctrine, historians Michael Doubler, Jonathan House, Brian Linn, and Peter Mansoor's works focused on how the US Army fought during World War II, specifically with standardized training and staff processes, combined arms maneuver, firepower, effective communication capability, and adaptation on the battlefield.[32]

The US Army historical establishment has produced extensive information and analysis of World War II era divisions. The Combat Studies Institute's report, *Sixty Years of Reorganizing for Combat: A Historical Trend Analysis*, detailed the capability, including motorization and requirement for ship-born movement, the World War II divisions developed.[33] Historical Studies including *The Procurement and Training of Ground Combat Forces, The Organization of Ground Combat Forces*, and *Division and Corps Command Post in World War II* described the

[30] War Department, Field Manual (FM) 100-5*, Operations* (Washington, DC: War Department, 1941), 253; US Army, FM 3-0 (2008), 2-11, 3-20.

[31] US Army, FM 3-0 (2017), 2-13 – 2-15; Wilson, *Maneuver and Firepower*.

[32] Michael Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944 - 1945* (Lawrence, KS: University Press of Kansas, 1994); House, *Toward Combined Arms Warfare*; Linn, *The Echo of Battle*; Mansoor, *The GI Offensive in Europe*. Michael Doubler's study on US Army operations in World War II focused on the ability of the Army to adapt to the specific terrain and enemy they faced and the critical nature of combined arms, a combination of two or more of infantry, armor, artillery, or aerial fires. House's work focused on analyzing the adaptations of the Army capability from World War I through post-World War II. Brian Linn's book tied the nature of America's preparations for its next war as the critical component for how it views the role of its Army. Linn distinguishes between three types of military leaders, guardian, hero, and manager, and described the characteristics of each. Linn argued that even though there was broad disagreements on how the Army was organized during the inter-war period the structure that was emplaced was effective enough to lead America to victory over Germany and Japan. Peter Mansoor's book focused on the US Army's combat effectiveness as compared with the German Wehrmacht during World War II. He concluded that the US Army triumphed over the Wehrmacht due to a more formidable organization, ability to evolve, endurance, use of intelligence and fires, and the ability to execute joint operations.

[33] Combat Studies Institute, *Sixty Years of Reorganizing for Combat: A Historical Trend Analysis* (Fort Leavenworth, KS: US Army Command and General Staff College, Combat Studies Institute, 1999), 3-5.

context of organization of World War II divisions.[34] Army Ground Forces Historical Section historian, Bell Wiley's studies of the organization, training, and history of the Army Ground Forces communicated the magnitude of effort the country partook on during its preparation for war. In Wiley's study, *The Activation and Early Training of "D" Division*, he presented the timeline of a hypothetical division.[35] Christopher Gabel's work, *The US Army GHQ Maneuvers of 1941*, detailed the preparation and execution of the US Army's famed "Louisiana Maneuvers" which were the crucible of the training for Army units prior to combat. This work provided key insight into the evolution of the 30th Infantry Division as they learned tough training lessons they later integrated into combat.[36]

The 30th Infantry Division's actions in the European Theater provided an example of a US Army Division engaging in large-scale combat. Alwyn Featherston's *Saving the Breakout: The 30th Division's heroic Stand at Mortain, August 7 – 12, 1944*, Mark Reardon's *Victory at Mortain: Stopping Hitler's Panzer Counteroffensive*, and Martin King's *The Fighting 30th Division: They Called them Roosevelt's SS* were based on interviews and research into the actions of this storied unit.[37] Also, the former 30th Division's Assistant Intelligence Officer,

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[34] Robert Palmer, Bell Wiley, and Williams Keast, *The Procurement and Training of Ground Combat Forces* (Washington, DC: US Army Center of Military History, 1991); Kent Greenfield, Robert Palmer, and Bell Wiley, *The Organization of Ground Combat Troops* (Washington, DC: US Army Center of Military History, 1987); Bruce Pirnie, *Division and Corps Command Post in World War II,* Historical Analysis (Washington, DC: US Army Center of Military History, 1986).

[35] Wiley, *The Activation and Early Training of "D" Division*, 10-37; Bell Wiley, *The Building and Training of Infantry Divisions, Study No. 12,* Army Ground Forces (Washington, DC: Historical Section - Army Ground Forces, 1946), 1-20. Wiley's study number 13 dipicted the training, and the adjustments to training, of divisions that were undertaken throughout the war. This writing gave a detailed overview of the training and equiping of World War II era Divisions.

[36] Christopher Gabel, *The US Army GHQ Maneuvers of 1941* (Washington, DC: US Army Center of Military History, 1992), 137-149.

[37] Alwyn Featherston, *Saving the Breakout: The 30th Division's Heroic Stand at Mortain, August 7 - 12, 1944* (Novato, CA: Presidio Press, 1993); Mark Reardon, *Victory at Mortain: Stopping Hitler's Panzer Counteroffensive* (Lawrence, KS: University Press of Kansas, 2002); Martin King, David Hilborn, and Michael Collins, *The Fighting 30th Division: They Called Them Roosevelt's SS* (Havertown, PA: Casemate Publishers, 2015). Featherston provided a micro anlaysis of the 30th Division's actions at Mortain. Reardon's book focused on the larger post-D Day operations through the breakout and pursuit. King, Hilborn, and Collins' book focused more on the personal actions of individuals and their relation to the 30th's tactical actions.

Robert Hewitt's *The Story of the 30th Infantry Division*, provided specifics on why decisions were made in combat.[38] Additionally, both the Battle Analysis compilation and the original micro-film official after-action reviews of the 30th Division display how and why the division organized for combat and what was effective and what was not.[39] The US Army Center of Military History's "Green Books" on the European Theater depict detailed analysis of the actions of the 30th as they fought across Europe.[40] Additional works on the 88th Division's operations in the Italian Theater provided additional studies of an Infantry Division's experiences in combat.[41]

Finally, the study of the numerous School of Advanced Military Studies (SAMS) Monographs and US Army Command and General Staff College Masters of Military Art and Science Theses provided additional context and information. There are extensive writings on mission command, the history of divisions, and arguments for, and against, the abolition of the division in the brigade-centered current force.[42] However, there were not specific writings found

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[38] Robert Hewitt, *Workhorse of the Western Front: The Story of the 30th Infantry Division* (Washington, DC: Washington Infantry Journal Press, 1946). Hewitt's account is based on first hand interviews and extensive research into the official operations orders, reports, and after-action reviews of the 30th.

[39] 30th Infantry Division Headquarters, *30th Infantry Division After Action Review* (US Army, July 1944); 30th Infantry Division Headquarters, *30th Infantry Division After Action Review* (US Army, August 1944).

[40] Martin Blumenson, *The European Theater of Operations: Breakout and Pursuit* (Washington, DC: US Army Center of Military History, 1993); Charles MacDonald, *The European Theater of Operations: The Siegfried Line Campaign* (Washington, DC: US Army Center of Military History, 1993). Both Martin Blumenson and Charles MacDonald's accounts of the Allied Armies efforts from D-Day until the defeat of the German forces along the Siegfried Line are meticulously researched, including the original operations orders, reports, and unit logs.

[41] John Sloan Brown, *Draftee Division: The 88th Infantry Division in World War II* (Lexington, KY: The University Press of Kentucky, 1986); John Delaney, *The Blue Devils in Italy: A History of the 88th Infantry Division in World War II* (Washington, DC: Infantry Journal, 1947).

[42] Edward Filiberti, "The Standard Operations Order Format: Is its Current Form and Content Sufficient for Command and Control?" (Monograph, School of Advanced Military Studies, 1987); Michael Fischer, "Mission-Type Orders in Joint Air Operations: The Empowerment of Air Leadership" (Thesis, Maxwell Air Force Base, AL: School of Advanced Airpower Studies, 1994); John Johnson, "Mission Orders in the United States Army: Is the Doctrine Effective?" (Thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 1990); James Kane, "The Broken Machine: The US Army Division in the Age of Brigade Modularity" (Monograph, School of Advanced Military Studies, 2017); Lester Layman, "Does the US Army Need Divisions?" (Monograph, School of Advanced Military Studies, 2003); William Pennypacker, "Automation: The Commander's Key to Victory in the AirLand Battle or Another Source of Friction" (Monograph, School of Advanced Military Studies, 1987); Matthew Smith, "The Five

focused on preparing field grade officers to assume staff positions in the division, including a summation of the division's organization, capabilities, and employment during large-scale combat operations. This deficiency in the current body of writing led the research and analysis to determine recommendations to produce mission-orders for division staff officers.

World War II Divisions

According to the 1941 publication of FM 100-5, *Operations*, the division "is the basis of organization of the field forces." Further it "can strike or penetrate effectively, maneuver readily, and absorb reinforcing units easily."[43] The division can operate alone or under the command of a corps and army headquarters. When executing operations under a corps headquarters, the division is given additional combat support and combat service support enablers.[44] The division echelon depicted in FM 100-5 undertook numerous adjustments before it settled into the structure that shouldered the fighting burden for the US Army during World War II.

WWII – Organization

The World War II US Army division that fought in North Africa, Europe, and the Pacific resulted from the 1939 decision by then Chief of Staff of the Army, General George Marshall to reorganize the Army's infantry divisions into smaller three regiment "triangular" divisions, versus

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Paragraph Field Order: Can a Better Format be Found to Transmit Combat Information to Small Tactical Units?" (Monograph, School of Advanced Military Studies, 1988); Martin Sonnenberger, "Initiative Within the Philosophy of Auftragstaktik Determining Factors of the Understanding of Initiative in the German Army 1806-1955" (Thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 2013); Martin Sonnenberger, "Mission Command During the War of Moevement in World War I - Initiative and Synchronization of the German Right Wing in August and Early September 1914" (Monograph, School of Advanced Military Studies, 2014); David Welfortd, "Mission Command Philosophy Within the British and American Armies; Differences and Implications for Interoperabilty" (Thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 2017); John Womack, "Reorganizing for Global War: General Malin Craig and the Triangular Infantry Division, 1935-1939" (Monograph, School of Advanced Military Studies, 2014).

[43] War Department, FM 100-5 (1941), 253.

[44] Ibid, 254-255. The 1941 Corps was also responsible for providing reconnaissance, field artillery, and movement control support to synchronize the actions of multiple divisions to accomplish their missions.

the larger "square" division that fought in World War I.[45] The driving factor with wanting to reduce the size of the unit was the need for enhancing mobility.[46] The new triangular division required less road space than the World War I division and, due to its smaller and mobile composition, it could rapidly deploy from its movement formation. Additionally, the United States' geographic location forced military units to deploy via ship to their theaters so tight shipping requirements drove the smaller size.[47] The initial triangular division consisted of 13,512 personnel. This number raised to 15,245 based upon the results of the 1940 Louisiana Maneuvers when it was determined that it required additional anti-tank and support assets.[48] Additional adjustments to the infantry division occurred in 1942 and 1943 to "shrink" the size of the division by cutting non-essential troops and combing the field artillery battalion headquarters with their target acquisition company to increase strategic mobility.[49]

As stated by the lead of the 1936 Provisional Infantry Division Study, Lieutenant General Leslie McNair, "the infantry division was the fundamental permanent combined arms team, intended to have the right amount of organic artillery and auxiliary elements to enable its infantry riflemen to move forward against average resistance."[50] This drove the elimination of one of the infantry regiments from the World War I era division. The new formation consisted of three infantry regiments, each with three battalions and an anti-tank company, and a field artillery

[45] Combat Studies Institute, *Sixty Years of Reorganizing for Combat*, 4; Kedzior, *Evolution and Endurance*, 15; Mansoor, *The GI Offensive in Europe*, 16-83. The Combat Studies Report dated the decision to create the modernization board to 1935, directed by then Chief of Staff of the Army, General Malin Craig. However, the decision to fully implement the new formation was made in 1939 by General Marshall. Mansoor's chapters on mobilization and training efforts reinforced the centrality of the division echelon as the basis for US Army's future tactical employment.

[46] Wilson, *Maneuver and Firepower*, 179-184.

[47] Kedzior, *Evolution and Endurance*, 16.

[48] Ibid, 16.

[49] Kent Greenfield, Robert Palmer, and Bell Wiley, *The Organization of Ground Combat Troops*, 300.

[50] Combat Studies Institute, *Sixty Years of Reorganizing for Combat*, 18. Lieutenant General McNair also stated that the division must have, "a minimum of specific defensive weapons, streamlined for open warfare, and backed up by units of other types at corps and army levels."

regiment, consisting of three 105mm battalions, a 155mm and 75mm battalion, and a headquarters battery. Additionally, the division received organic reconnaissance, medical, signal, transportation, engineer, ordnance, quartermaster, and military police support.[51]

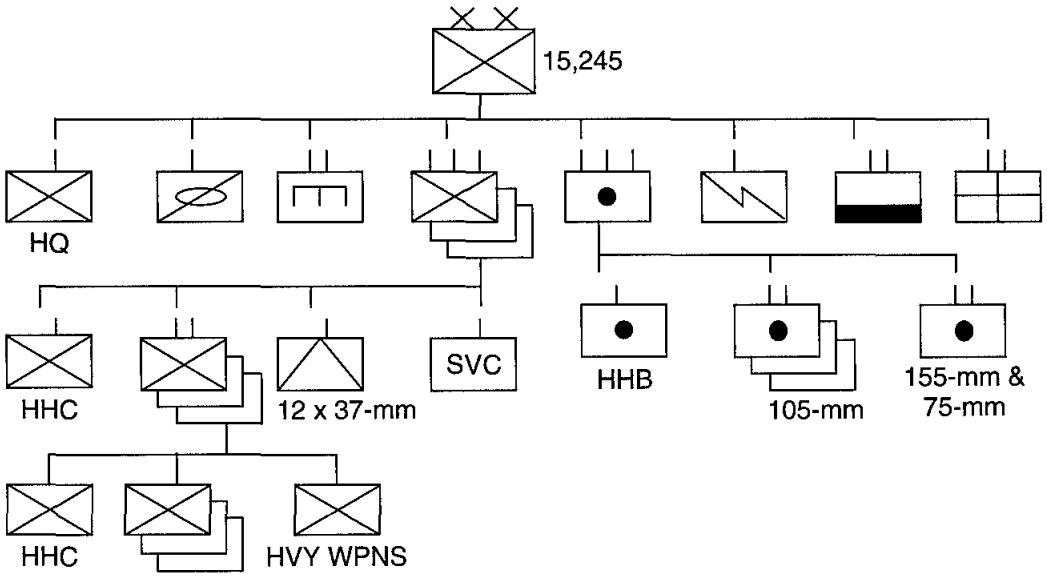
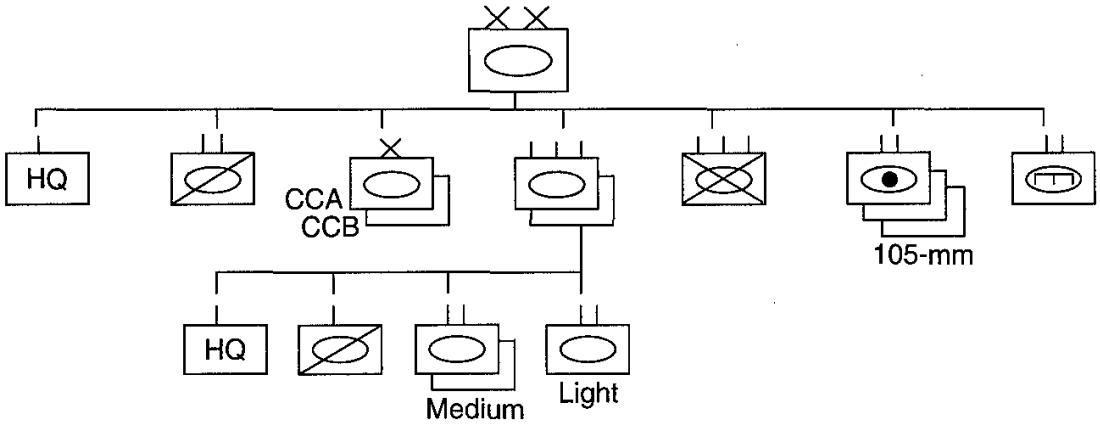


Figure 2. The Triangular Division, November 1940. Richard Kedzior, *Evolution and Endurance: The US Army Division in the Twentieth Century* (Santa Monica, CA: RAND, 2000), 17.

In 1940, the US Army also developed an Armored Division. Though not the focus of this study, understanding its organizational differences with the Infantry Division is informative. The Armored Division continually evolved from its inception due to its flexible design. Combat commands, designed for rapid and flexible organization of forces tailored to each mission, replaced the regimental headquarters echelon. The Armored Division consisted of two combat command (CC) headquarters, named CC A and B. The combat command headquarters were task organized to control a combination of the two armored regiments, each with two medium and one

[51] Combat Studies Institute, *Sixty Years of Reorganizing for Combat*, 4-5; Kedzior, *Evolution and Endurance,* 16; Kent Greenfield, Robert Palmer, and Bell Wiley, *The Organization of Ground Combat Troops*, 300–315. The US Army's Center of Military History's republishing of the 1946 writing, *The Organization of Ground Combat Troops* provided a concise overview of the Infantry Division. Additionally, it explained decisions to cut certain troops strengths in their larger context. For example, the field artillery battalions were reduced almost 20% from the original square division by combining the headquarters and target acquisition companies.

tank battalions, one armored infantry regiment, consisting of three infantry battalions, and three field artillery battalions. Additionally, the reconnaissance and engineering assets increased.[52]



NOTE: CCA and CCB denote combat commands A and B, respectively.

Figure 3. The Armored Division, March 1942. Richard Kedzior, *Evolution and Endurance: The US Army Division in the Twentieth Century* (Santa Monica, CA: RAND, 2000), 19.

During combat or training World War II era divisions' staffs normally divided into two echelons, forward and rear. The forward echelon consisted of elements required near the commander for tactical operations and consisted of a command post with the assistant commander, chiefs of the general staff sections, G1 through G4, and the artillery commander.[53] The rear echelon consisted of the remainder of staff, primarily focused on administrative activities.[54]

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[52] Kedzior, *Evolution and Endurance*, 18-21; Kent Greenfield, Robert Palmer, and Bell Wiley, *The Organization of Ground Combat Troops,* 319-226; Wilson, *Maneuver and Firepower*, 160-170.

[53] John McGrath, *Crossing the Line of Departure, Battle Command on the Move: A Historical Perspective* (Fort Leavenworth, KS: US Army Combined Arms Center, 2006), 103; Pirnie, *Division and Corps Command Post in World War II*, 9; War Department, Field Manual (FM) 101-5, *Staff Officers' Field Manual The Staff and Combat Orders* (Washingon, DC: War Departement, 1940), 3-5. FM 101-5 described how the division's staff can separate into two echelons and gives principles for that division, forward staff required near the commander. McGrath's research showed that the forward element, or command post, supported the commander in controlling and commanding his subordinate units. The staff executed this function primarily through situation reports with an emphasis on detailed situation maps. While Pirnie's analysis showed how most of World War II divisions organized their command post.

[54] War Department, FM 101-5 (1940), 3-5; Pirnie, *Division and Corps Command Post in World War II*, 9-10. The rear echelon normally consisted of the adjutant general, judge advocate, inspector general, medical section, finance section, postal section, and chaplain.

Headquarters companies supported the staffs of World War II era divisions. The headquarters companies included an administrative section and transportation and security platoons.[55] The transportation platoon moved the division's command post, staff, and provided the commander with the ability to traverse the battlefield. The organic security platoon provided local security for the division's command post and staff.

WWII – Capability

World War II era divisions consisted of a range of mission command, fires, and transportation capability. Personnel increased steadily throughout the war and by 1945 the division headquarters had a large enough staff to effectively plan future operations while controlling current operations, even in the mobile European Theater.[56] The division headquarters was able to execute its command and control functions through a combination of wire, radio, runners, and personal contact by commanders or their representatives to control subordinate units.[57] Wire was the primary means of communication in the division. Each echelon, down to the battalion level, had signal personnel trained to lay wire. The division normally ran two wire lines between its subordinate rifle and artillery regiments. The first, the command line, received reports and provided orders between echelons. The second, the artillery line, connected the fire direction center with the supporting artillery unit.[58]

The US Army was the first military to augment their wireless amplitude modulation (AM) frequencies with frequency modulation (FM) frequencies. This technological leap

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[55] Pirnie, *Division and Corps Command Post in World War II*, 3.

[56] Ibid, 1-2.

[57] War Department, Field Manual (FM) 7-24, *Communication in the Infantry Division* (Washington, DC: War Department, 1944), 1, 5, 7. FM 7-24, *Communication in the Infantry Division* described the communication capability of the World War II era division. This technical manual stated plans for the employment of the signal and communication personnel and equipment inside a division. Further, the manual articulated signal operations instructions (SOI) for the proper employment of the wire and signal-based communications equipment available to the division.

[58] McGrath, *Crossing the Line of Departure, Battle Command on the Move*, 87.

increased the range of wireless radio and enabled an almost static-free medium for communication.[59] During offensive operations divisions received reports and provided direction to their assaulting regiments primarily through radio. The alternate communication was normally courier or wired communication with the assaulting regiment's rear headquarters. Additionally, portable FM radios became the primary means of communication between the field artillery and their supported units.[60] Commanders augmented their communication with liaison officers that acted as their representatives to subordinate, adjacent, and higher units.[61]

The communication technology and systems enabled World War II era divisions to synchronize their organic fires, engineer, military police, medical, and transportation capability. Organic fires consisted of three 105mm field artillery battalions, designed to support the three infantry regiments.[62] Though the 105mm were normally directly supporting each of the infantry regiments, during division level offensive or defensive operations they were frequently pooled to provide massed effects.[63] The division's one 155mm and 75mm battalion provided general support throughout the division. Divisions possessed enough artillery assets to shape the battlefield to support their infantry regiments' maneuver.

The World War II divisions' cavalry troop consisted of lightly armored vehicles and remained under the control of the division. This cavalry troop equipped the division commander with an organic reconnaissance capability.[64] Though a highly sought-after capability, only having

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[59] McGrath, *Crossing the Line of Departure, Battle Command on the Move*, 87-88.

[60] Ibid, 87–88.

[61] Ibid, 89.

[62] Kedzior, *Evolution and Endurance*, 15–17.

[63] Brown, *Draftee Division*, 107. In World War II, one of the major roles of the divisions was to synchronize and mass artillery fires to facilitate an attack or a defense. Brown's description of the 88th's advance at the Diadem in 1944 is one example of when this technique led to great effects on the battlefield.

[64] Reardon, *Victory at* Mortain, 155-156, 167, 191; Kedzior, *Evolution and Endurance*, 15–17; Combat Studies Institute, *Sixty Years of Reorganizing for Combat*, 3-7. World War II Divisional Artillery was often augmented with field artillery observation planes, which identified enemy positions and called and controled fire missions. These observation planes provided division commanders with additional organic reconnaisance capability.

one dedicated cavalry troop was inadequate to the division's information collection requirements.[65] Additional complaints included the inadequately armored and armed vehicles.[66] These complaints led to the armored division acquiring a cavalry squadron and led to some division commanders utilizing their troop to primarily conduct internal route reconnaissance or communication between subordinate units.[67]

The division's organic military police, medical, transportation, and engineer assets provided mobility enhancement and support for the division. The organic military police enabled security of lines of communications (LOC) and internal route control to deconflict movement between the infantry regiments. The medical section's personnel, normally allocated to the subordinate regiments and battalions, provided an echelon one medical care, which is medic treatment at the point of injury. The division's primary responsibility was ensuring casualty evacuation assets and routes were available to transport wounded soldiers to the surgical hospitals, generally located close to the front.[68] The division's motorized assets could organically move itself. However, it did not possess enough transportation assets to move the division in its entirety at one time.[69] The engineer assets provided protection, river crossing, reduction capability, and technical assistance in the construction of protective works and camouflage.[70]

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[65] Combat Studies Institute, *Sixty Years of Reorganizing for Combat*, 14; Ney, *Evolution of the US Army Division*, 55. After the 7 May, 1945 armistice, the General Board, United States Forces, European Theater studied the US Army Infantry Division. One of its findings was the inadequate number of reconnaissance assets in the Triangular Division. The board recommended replacing the Troop with a Mechanized Cavalry Squadron.

[66] House, *Toward Combined Arms Warfare*, 73 and 106.

[67] Wilson, *Maneuver and Firepower*, 196-199.

[68] Ney, *Evolution of the US Army Division*, 33; James Nanney and Peter Dorland, *Dust Off: Army Aeromedical Evacuation in Vietnam* (Washington, DC: US Army Center of Military History, 1982), 9. Ney depicts the task organization of the medical section of a World War II division. Nanney and Dorland's book on medical evacuation described how shortages in trained medical personnel, surgeons and specialist were pooled in surgical facilities close to the front line.

[69] Combat Studies Institute, *Sixty Years of Reorganizing for Combat*, 5; Kedzior, *Evolution and Endurance,* 15-17.

[70] War Department, FM 100-5 (1941), 14-16; House, *Toward Combined Arms Warfare*, 105-108.

The division's field artillery and combat support enablers facilitated their decisive element, the infantry regiments. As stated in FM 100-5, "the infantry is essentially an arm of close combat. Its primary mission in the attack is to close with the enemy and destroy or capture him; in defense, to hold its position and repel the hostile attack."[71] The infantry regiments were capable of providing their own organic mortar and limited anti-tank capability to enable their maneuver. The infantry's ability to maneuver over challenging terrain in smaller formations and to conceal and preserve personnel allowed their organic fires, and division or higher provided fires, to achieve maximum effect. Additionally, the new robust transportation assets in the division enhanced their mobility, allowing force preservation and pursuit of the enemy.[72]

Due to personnel and equipment shortages and the need to keep units small to decrease shipping space, World War II divisions relied upon capability that was "pooled" at higher echelons.[73] These efforts aimed to make the division more mobile and adaptive, ability to receive non-organic capability, to the requirements for their specific mission. Additional transportation and engineer assets held at the corps and army level augmented the division as required. Tank, anti-tank, and air defense artillery were temporary assigned infantry divisions. Though, there were efforts to develop relationships with habitual units.[74] These ever-changing task organizations created some confusion and resulted in complaints of not having organic tank, anti-tank, and air defense artillery assets. However, "pooling" resulted in an effective way to manage finite resources and led to firepower and mobility superiority over German forces.[75]

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[71] War Department, FM 100-5 (1941), 5.

[72] Ibid, 5-12; Kedzior, *Evolution and Endurance*, 16.

[73] House, 105-106; Combat Studies Institute, *Sixty Years of Reorganizing for Combat*, 5.

[74] Ibid, 106; Kent Greenfield, Robert Palmer, and Bell Wiley, *The Organization of Ground Combat Troops*, 290–296; House, *Toward Combined Arms Warfare*, 107. House stated that corps and army headquarters determined the need to maintain the relationships between the specialized units, tank, anti-tank, and air defense artillery, with the division they supported due to the normal confusion that occurred as those units "meshed."

[75] Ibid, 107; Wilson, *Maneuver and Firepower*, 196.

WWII – Doctrinal Framework

The 1941 edition of FM 100-5, *Operations*, was the keystone doctrine during World War II and provided an overview of the Army's organization, philosophy of leadership, and operational employment, offense, defense, retrograde, and various special operations and devotes a chapter to the characteristics, capabilities, and employment of the division.[76] The updated edition of FM 100-5 combined the 1939 version with observations from the German operations in Poland and France, the Louisiana Maneuvers, and input from Army professionals.[77]

The companion manual to FM 100-5 was the 1940 publication of FM 101-5, *Staff Officers' Field Manual: The Staff and Combat Orders*. FM 101-5 is a "compilation of information and data to be used as a guide for the operations in the field of the general staff or similar staff group of all units in peace and war."[78] The manual further articulated the roles and responsibilities of the commander and the units staff, general and special. Of note, FM 101-5 described in detail and provided formats for the different type of orders, field and administration.[79]

World War II – Role in Large-Scale Combat Operations

Combined arms operations, tactics and techniques employed through a combination of two or more combat arms (infantry, armor, and artillery), was essential for success in World War II.[80] World War II infantry divisions would frequently assign field artillery, tank, anti-tank, and

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[76] War Department, FM 100-5 (1941), iii-iv, 182–238, 253–277; Kretchik, *US Army Doctrine*, 4, 107-157. FM 100-5 provided principles and guidance for conducting operations. This included mission planning, security operations, troop movements and "special operations," river crossings, night combat, and combat in towns or woods. Kretchik argued that the 1941 version of FM 100-5 was the "keystone" doctrine for the US Army during World War II.

[77] Kretchik, *US Army Doctrine*, 148.

[78] War Department, FM 101-5 (1940), introduction.

[79] FM 101-5 provided order formats for frequently executed operations, such as road marches or river crossings. Ibid, 41, 47, 110–115.

[80] Doubler, *Closing with the Enemy*, 2, 9, 302; Mansoor, *The GI Offensive in Europe*, 3-5, 160-161; House, *Toward Combined Arms Warfare*, 1-5, 113, 142. Doubler argued that US Army units achieved tactical success when they were more adept at combining multiple combat arms. Both Mansoor and

air defense artillery units to their regiments, creating regimental combined arms teams, the division was the primary combined arms headquarters.[81] World War II divisions executed their role as the primary tactical fighting formation by defining the operational framework, setting conditions for their infantry regiments, and prioritizing and providing support. FM 100-5, *Operations (1941)*, described how to define the operational framework by "establishing one or more main or decisive attacks in which the greatest possible offensive power is concentrated to bring about a decision." Additionally, "secondary or holding attacks" provided support to the main attack.[82]

Divisions communicated and controlled operations through mission-orders and orders based on map overlays.[83] Once operations had commenced the division relied on short and clear verbal orders to either stop, press forward, or adjust the advancing unit. Geographic control measures, such as phase lines, checkpoints, or march objectives, controlled adjustments and advances.[84] Additionally, attacks across the division, or higher, were normally synchronized based on the establishment of time of attack. Proper synchronization of efforts strove to achieve mutual support of subordinate units, unity of effort.[85]

World War II divisions established conditions for their infantry regiments to succeed in close combat. Divisions accomplished this by properly organizing subordinate headquarters,

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House's works reinforced the critical nature of combined arms maneuver, though Mansoor groups combined arms maneuver under the larger description of "combat effectiveness."

[81] War Department, FM 101-5 (1940), 107.

[82] War Department, FM 100-5 (1941), 97-99.

[83] War Department, FM 101-5 (1940), 36-51, 54-88. FM 101-5 (1940) provided a "technique" of orders which detailed the purpose, orders should promote clarity and prevent misunderstanding. Additionally, the manual discussed when the amount of detail is high or low, high in describing cardinal directions, time, and boundaries, low in prescribing only methods of execution as "are necessary to ensure that the actions of the subordinate unit concerned will conform to the plan." The manual also provided a checklist of the necessary information required for basic combat and movement orders, basically a current situation paragraph, mission statement, scheme of maneuver, boundary changes, and tasks for subordinate units.

[84] McGrath, *Crossing the Line of Departure, Battle Command on the Move,* 103-105.

[85] War Department, FM 100-5 (1941), 108.

completion of the signal communication plan and system, the provision of ammunition and other support, and the regulation and coordination of fires.[86] Division fires' primary mission was the support of the infantry regiments by neutralizing enemy observation, movements, and positions and were either massed or separated. Corps fires' primary mission was the neutralization, or destruction, of the enemy's artillery or long-range interdiction fires missions. Additionally, the corps fires assets augmented the division's field artillery battalions as required. The army headquarters fires assets supported the army and focused on long-range interdiction or supported corps and division fires assets.[87]

The division ensured proper coordination with adjacent units and provided reconnaissance of the battlefield, either organically or through coordination with higher and adjacent units. Additionally, the subordinate infantry regiments were augmented with non-organic units allocated to the division, normally tank, anti-tank, engineer, and air defense artillery. The division would retain whichever portion of those forces it deemed necessary to direct itself and assigned the remainder directly to the control of the infantry regiments.[88]

During an attack, the division executed the artillery preparation. The division first massed its effects, along with additional higher assets as required, to neutralize the enemy's artillery, destroy the enemy's command and control, isolate the enemy's defense from their support, and disrupt assembled enemy hostile forces, for example their reserve. Once the artillery neutralized the enemy's artillery, it focused on the enemy's defenses to enable the friendly assault.[89]

After the proper preparation, an attack would commence. Infantry regiments, and their battalions, adjusted the close field artillery support to facilitate their maneuver. The division normally retained a reserve, either an entire regiment or one or more battalions, under its control.

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[86] War Department, FM 100-5 (1941), 118.

[87] War Department, FM 100-5 (1941), 9-11.

[88] House, *Toward Combined Arms Warfare*, 105-109.

[89] War Department, FM 100-5 (1941), 119-120.

The reserve's primary mission was to execute offensive action to facilitate victory. In the penetration this normally was to exploit a breakthrough. In the envelopment, to extend the envelopment or exploit success by attacking into the enemy's rear.[90] The regiments could receive control of non-organic battalions to either continue a pursuit or relief the advancing element. This allowed flexibility in the attack as the point of decision shifted and was identified.[91] The assaulting regiments were supported with fires, reinforcements, and additional combat and support enablers based upon an established priority designated by the division.

FM 100-5, *Operations* (1941), depicted the role of combat aviation in support of ground forces. Combat aviation's role was the destruction or neutralization of enemy forces to contribute to a successful attack.[92] However, there were difficulties with the incorporation of close air support into division level operations.[93] Both the 30th and the 88th Division repeatedly either failed to integrate air support, even when it was allocated to them, or, in the case of the 30th, suffered losses from friendly air bombing actions.[94] Air assets were available to World War II divisions to facilitate close air support. However, due to the lack of joint training, issues with trust after multiple fratricide incidents, and the tendency of divisions to rely on their large amounts of

[90] War Department, FM 100-5 (1941), 104.

[91] War Department, FM 100-5 (1941), 110–120.

[92] Ibid, 111; Kretchik, *US Army Doctrine*, 150. FM 100-5 stated, "the action of combat aviation in support of ground troops is closely coordinated with the plan of attack. Its first objectives are those hostile elements, the destruction or neutralization of which will contribute most toward a successful attack. Its employment to complement the fire of artillery in a crisis or in fast moving situations is habitual, especially in attacks by tanks and armored forces." Kretchik wrote that the 1941 version of FM 100-5 expanded the role of Army Air Forces into ground doctrine. However, the manual acknowledged that air power's enhancements to ground operations are "only for a limited period with limited results."

[93] House, *Toward Combined Arms Warfare*, 77, 129; Doubler, *Closing with the Enemy*, 63-86. House described how both the British Royal Air Force and the US Army Air Corps "neglected" the development of effective close air support tactics and techniques due to their preoccupation with strategic bombing. Both House and Doubler described how the US Army overcame this deficiency through increased communication and formalized techniques, especially in the European Theater, and air and ground cooperation became an effective tactic against the German Army.

[94] Brown, *Draftee Division*, 48; Featherston, *Saving the Breakout*, 33-35. Brown identified a training deficiency in the integration of close air support into the division, especially compared with the skill in which field artillery supported infantry advances. Featherston described the terrifying experience of the 30th during the onset of Operation Cobra when friendly aircraft killed 111 30th Infantry soldiers.

organic field artillery contributed to the poor integration of close air support for most World War II era divisions.[95]

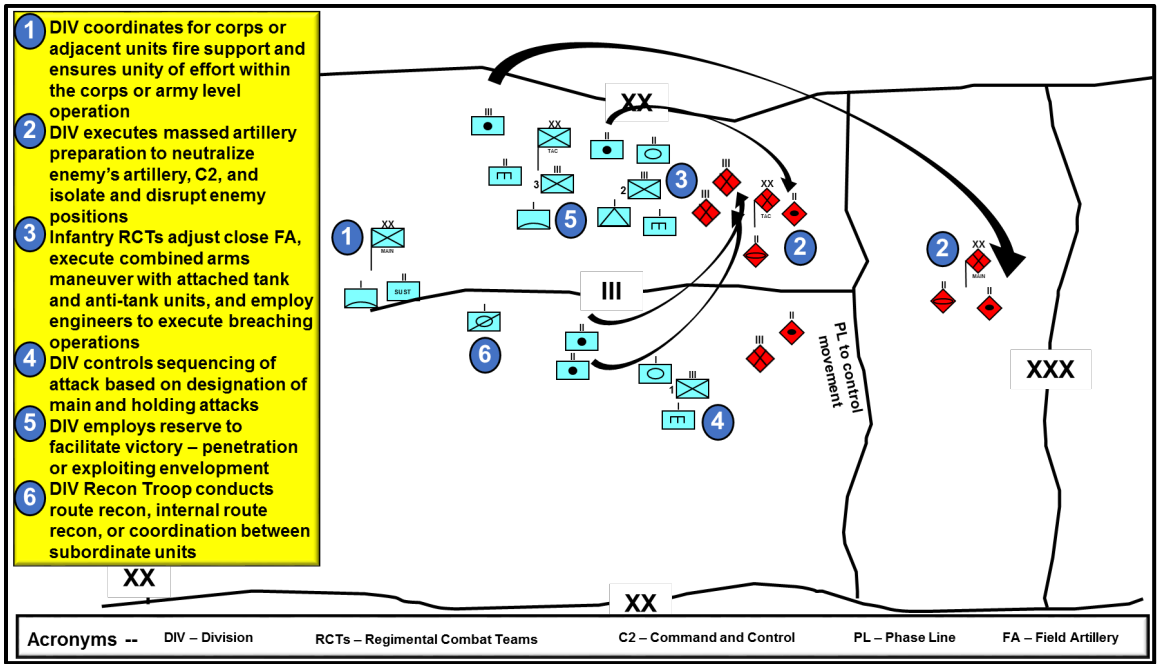

Figure 4. Example Overview of an Offense in World War II. Created by author with data from War Department, Field Manual (FM) 100-5*, Operations* (Washington, DC: War Department, 1941).

World War II era divisions were the key echelon for tactical success during large-scale combat operations. Their organization and capability allowed them to execute combined arms maneuver, strike quickly, and receive additional reinforcements as necessary to continue an attack or support a defense. The doctrinal framework defined in the World War II era FM 100-5 and FM 101-5 provided the basis for the divisions to define their operational frameworks, set conditions for their infantry regiments, and prioritize and provide support for operations.

[95] Brown, *Draftee Division*, 48; Featherston, *Saving the Breakout*, 130–133. Featherston wrote that the 30th Infantry Division Commander, Major General Hobbs was allocated more air support than he employed. Featherston attributed this failure to the earlier air force mishaps and the large amount of artillery the 30th had at its disposal.

Case Study – The 30th Infantry Division "Old Hickory"

History – Background – "Roosevelt's SS"

The 30th Infantry Division's proud history began in 1917 when it was renamed from the 9th Infantry Division and became a National Guard Division. The four infantry regiments drew most of their soldiers from North Carolina, South Carolina, Tennessee, and Georgia.[96] The 30th fought valiantly in World War I and earned more than half the decorations awarded to American troops from the British and twelve of the seventy-eight Medals of Honor awarded during the war. The division's nickname was in honor of General, and President, Andrew Jackson, who was born near the North and South Carolina border and grew in political prominence in Tennessee.[97]

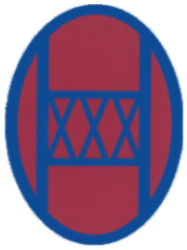

Figure 5. The 30th Infantry Division Patch. Robert Hewitt, *Workhorse of the Western Front: The Story of the 30th Infantry Division* (Washington, DC: Washington Infantry Journal Press, 1946), Introduction.

The 30th Infantry Division reported to an old-World War I camp, Fort Jackson, near Columbia, South Carolina, in the fall of 1940 for reorganization.[98] Upon conclusion of the reorganization, the 30th Division's maneuver units consisted of the 117th, 119th, and 120th

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[96] Featherston, *Saving the Breakout*, 2-5.

[97] Featherston, *Saving the Breakout*, 4-5. The Division's patch is red and blue and consist of an O with an H overlapping and the Roman numeral XXX forming the crossbar. When some soldiers in 1918 received the patch, they must have not understood the symbolism and mistakenly sewed them on sideway. This mishap became a part of the Division's heritage and persisted through World War I.

[98] Featherston, *Saving the Breakout*, 9-13; Hewitt, *The Story of the 30th Infantry Division*, 5-11. Wilson, *Maneuver and Firepower*, 157-160. At Fort Jackson, the 30th underwent the turbulent personnel challenges of reorganizing into a triangular division, it lost the 118th and 121st Infantry Regiments and reactivated the 119th Infantry Regiment, and constant influx and outflux of soldiers as it acted as a replacement division until 1942. Wilson described the US Army's efforts and challenges to reorganize the National Guard Divisions. Guard Divisions were significantly understrength, approximately 9,600 personnel instead of the 1940 Infantry Divisional required strength of 15,245 and remained organized as Square Divisions until 1942. The 30th Division transitioned to federal duty on 16 September 1940. However, it did not reorganize until the beginning of 1942.

Infantry Regiments. During this time of transition, the 30th continued to train and took part in the Ground Headquarters Maneuvers of 1941. During the Carolina Phase I, the 30th fell under the I Corps, First Army (Blue Forces). During the exercise the division performed admirably and received high marks from the Chief Umpire.[99] The tough lessons learned during their training undoubtedly left an impact on the Division. Of note, during the exercise they faced off against the Red Army's 2nd Armored Division, then commanded by Major General George Patton, at the town of Cheraw. At Cheraw, the 30th conducted a defense integrating anti-tank, infantry, and artillery positions against Patton's tanks. Though the 30th achieved initial success, the 2nd Armored Division eventually maneuvered around their defensive positions and broke through. The 2nd routed the 30th and captured their division commander, Major General Henry Russell's command post.[100] Three years later in the critical battle at Mortain, the 30th again executed an area defense. However, this time the 30th successfully integrated and supported their positions with devastating indirect fires and withstood four German Divisions for five days.

After Major General Leland Hobbs assumed command in September, 1942, the 30th began a sixteen-month process of training at Camp Blanding, near Gainesville, Florida. At Camp Blanding, Brigadier General William Kelly Harrison became the assistant division commander and completed the command team. Though the two men often clashed, they complimented each other for the ultimate betterment of the division.[101] Brigadier General Harrison immediately

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[99] Featherston, *Saving the Breakout*, 10-11; Gabel, *The US Army GHQ Maneuvers of 1941*, 137-140.

[100] Gabel, *The US Army GHQ Maneuvers of 1941*, 139-140; Featherston, *Saving the Breakout*, 11. Major General Henry Russell highlights a different aspect of the training battle at Cheraw than the official account, depicted by Gabel. Major General Russell states that before the 2nd Armored Division's success at the town, soldiers from the 30th surrounded and captured three enemy tanks. One of them, contrary to the umpire's complaints, sped away from his captors. Major General Patton reportedly manned that fleeing tank. "Patton had a lot of fine qualities," Russell stated, "but fair play in maneuvers wasn't one of them."

[101] Featherston, *Saving the Breakout*, 13–14; Reardon, *Victory at Mortain*, 78-79. Both Featherston and Reardon discuss the sometimes friction that existed between Hobbs and Harrison, they both agree that they complemented each other and their professionalism enabled them to work together well for the good of the division.

impacted the 30th's training. His three principles of leadership guided them during training and later in combat. Brigadier General Harrison's leadership philosophy was, "first, a commander must impart his orders precisely, so that each man knows exactly what he is expected to do; second, a commander must set a personal and visible example for his men; third, a commander must hold his officers and men accountable for following his orders exactly."[102]

After seventh months training at Camp Blanding, the 30th moved to Camp Atterbury, Indiana for advanced training. There the division received additional personnel until it moved to Camp Miles Standish, outside of Boston, Massachusetts, in February, 1944. At Camp Miles Standish the 30th was alerted for overseas movement to England. Once in England, the 30th received the attachment of the 823rd Tank Destroyer Battalion and conducted additional training as part of the preparation for the Normandy Invasion. The first elements of the 30th entered the European Theater on 10 June 1944 as the sixth American Division into France. They were immediately thrust into combat.[103]

Operational Overview – "The American Army's Work Horse Division"

The 30th engaged in combat from the beaches of Normandy in early June 1944, until finally conducting link up with Red Army forces on the Elb River on 4 May 1945. To highlight the 30th's first experience in large-scale combat operations, this paper focuses on their early combat experience from the beaches of Normandy through the hedgerows to the Vire et Taute Canal and crossings of the Vire River and Vire et Taute Canal to seize St.-Lo.[104]

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[102] Featherston, *Saving the Breakout*, 13. Quoted from an interview of Harrison after the war.

[103] Featherston, *Saving the Breakout*, 16-18; Hewitt, *The Story of the 30th Infantry Division*, 15. The 230th Field Artillery Battalion, which normally supported the 120th Infantry Regiment, was the first element of the 30th deployed to Normandy to support the 29th Infantry Division after they lost much of their artillery in the surf on D-Day.

[104] Mansoor, *The GI Offensive in Europe*, 5. Focusing on the 30th's initial combat experience allows for the research to focus on the combat effectiveiness of a standard division prior to the unique combat experience either increased or decreased a unit's combat performance.

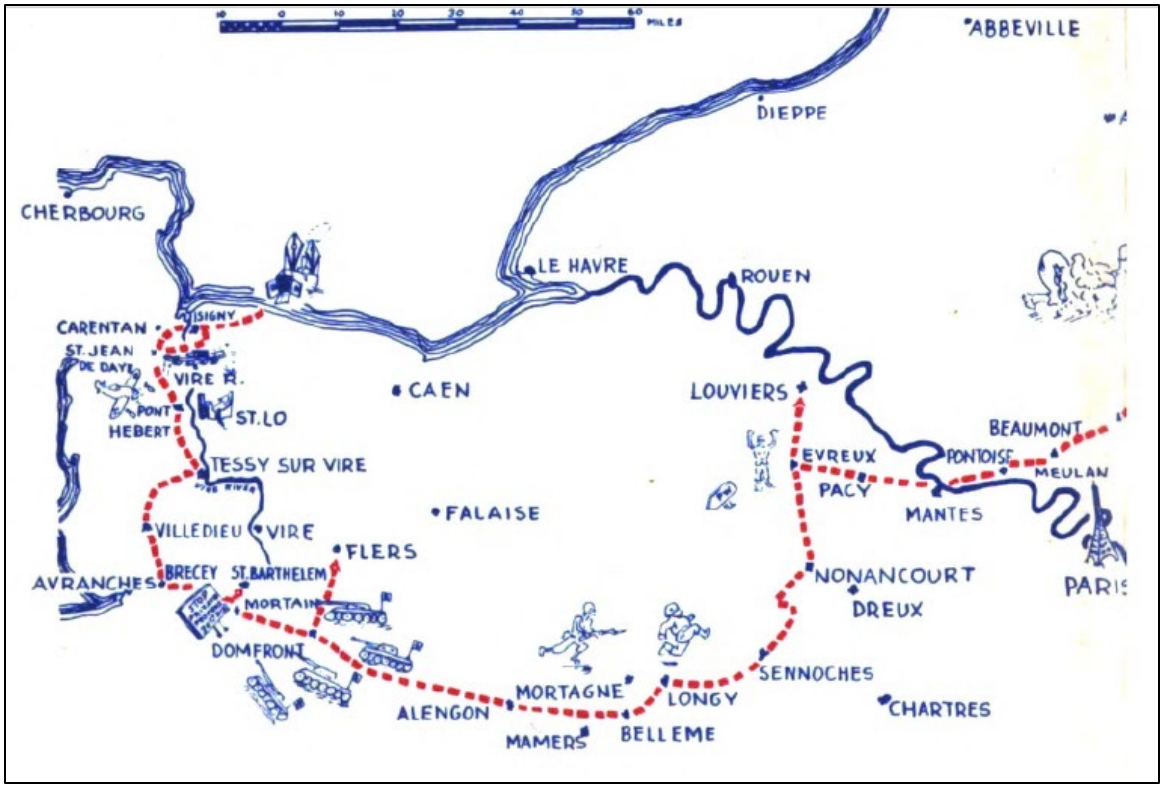

Figure 6. The 30th Infantry Division's Operational Overview Sketch. Robert Hewitt, *Workhorse of the Western Front: The Story of the 30th Infantry Division* (Washington, DC: Washington Infantry Journal Press, 1946), Introduction.

Omaha to the Vire et Taute Canal – "Baptism of Fire"

On 13 June, 1944 the commander of the US First Army, General Omar Bradley, directed the relief of the 101st Airborne Division and expansion of the narrow corridor connecting Utah and Omaha Beaches. V Corps directed the 30th to drive the Germans back to the Vire River, approximately two and a half miles from the beach.[105] This operation was critical to establishing the US Army's defensive front against German counterattacks.[106]

Due to the narrow front, and that the division was still concentrating its forces at Isigny, the 120th Infantry Regiment was selected to lead the assault to the Vire River. To accomplish the operation, the 743rd Tank Battalion was attached to the 30th and subsequently assigned under the operational control of the 120th Infantry Regiment for the attack. On the morning of 15 June, the

[105] Featherston, *Saving the Breakout*, 18-20.

[106] Hewitt, *The Story of the 30th Infantry Division*, 17.

120th attacked. The 30th Division Headquarters supplied the 230th Field Artillery Battalion, tasked to support the 120th, with an immense stock of ammunition and arranged for naval gunfire support from battleships offshore through the corps and army headquarters.[107] Additionally, fighter-bomber attacks were planned to occur one hour prior to the attack on German positions.[108] This overwhelming amount of firepower, focused on the deep and close German positions, was critical to the 120th steady advance through the tall and dense hedgerows.[109]

The 30th learned much about the enemy, terrain, and themselves from its first action. Even though the 120th was the primary infantry regiment involved, Major General Hobbs ensured those lessons spread throughout the division.[110] Coordinating for additional pre-assault fires from the corps and adjacent divisions was a key take-away for the 30th. Additionally, the division learned the massive amount of ammunition required to break through the stubborn German defenses and that prior coordination is essential to ensure adequate supplies are available. Also, the 120th's ability to rapidly transition into the defense proved crucial to defeating a strong German counterattack by establishing integrated infantry positions supported by massed artillery fire, a lesson that paid dividends in the future.[111]

The 30th also learned the danger of slowing their assaults when uncertain. In the limited visibility caused by the hedgerows units would stop when confused and thus expose themselves to German artillery fire. 120th Infantry Regiment leaders emphasized the need to continue the

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[107] Featherston, *Saving the Breakout*, 20. A German prisoner of war stated that the 30th Division's artillery support was truly impressive. He said it was "terrific, firing three hundred shots to our one." Though probably an exaggeration, the arrangements for stockpiling adequate ammunition paid dividends.

[108] Hewitt, *The Story of the 30th Infantry Division*, 19.

[109] Doubler, *Closing with the Enemy*, 33-62. Doubler's chapter on the US Army's efforts to "bust the bocage" described the successful employment of both deep and close fires to faciliate advancing elements.

[110] Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 96; Hewitt, *The Story of the 30th Infantry Division*, 21-22. Major General Hobbs ensured that the 120th Regimental Commander and his subordinate Battalion Commanders visited the other Regimental Headquarters to share lessons learned. Additionally, while preparing for the next major advance, Major General Hobbs directed subordinates to rotate units off their defenisve lines to train in the bocage terrain.

[111] Featherston, *Saving the Breakout*, 20; Mansoor, *The GI Offensive in Europe*, 154-155.

advance and take initiative to punch through German defenses.[112] Infantry and tank combined arms operations were adequate, considering the short timeframe the 743rd Tank Battalion was assigned to the 30th, but needed improvement. The 30th would task organize the 743rd across each of the Infantry Regiments throughout the war according to the specific operational requirement. This allowed each Infantry Regiment to familiarize themselves with tank employment and maximized the usage of their limited number.[113] Lastly, the 30th learned it could fight and win against a tough enemy, they acquired confidence. According to interviews of the 30th's leadership, this confidence was vital for the tough fights ahead.[114]

Crossing the Vire River and Vire et Tatue Canal – "The Breakout"

After reaching the Vire Canal, the 30th was tasked to hold the southern boundary of First Army while other divisions drove west.[115] The First Army began preparations for a major attack, involving three corps, to break the stalemate in the hedgerows. Their task was to cross the Vire River and the Vire et Tatue Canal, the canal that connected the Vire and the Tatue Rivers, establish a bridgehead and seize the road intersection near St. Jean-d-Daye, approximately three miles from the river.

Given the time required to properly plan for the assault, the 30th conducted extensive reconnaissance and preparation. The division planned an envelopment by choosing to cross both the Vire River and the Vire et Taute Canal.[116] General Hobbs selected the 117th for the more defended river crossing at the Vire River, due to their river crossing training at Camp Benning.[117]

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[112] Hewitt, *The Story of the 30th Infantry Division*, 21–23.

[113] Ibid, 21; 30th Infantry Division Headquarters, *30th Infantry Division After Action Review* (US Army, July 1944), 1-5.

[114] Hewitt, *The Story of the 30th Infantry Division*, 22.

[115] Featherston, *Saving the Breakout*, 25.

[116] Hewitt, *The Story of the 30th Infantry Division*, 25.

[117] Featherston, *Saving the Breakout*, 25; Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 93. The 117th Infantry Regiment had staged demonstrations of river crossing during training at Camp Benning in 1943.

The 120th would cross the Vire et Taute Canal while the 119th was the division's reserve. The attached 113th Cavalry Group would cross after the 120th and protect the 30th's right flank.[118] General Hobbs and his Division Artillery Commander, Brigadier General George Shea, developed an extensive fires plan, incorporating dive bombers, the entirety of the division's artillery, the corps' artillery, and the support of an adjacent division's artillery.[119]

The division also planned for their attached 92nd Chemical's mortars and 823rd Tank Destroyer Battalion's 3-inch guns to deliver indirect fires to support both crossings.[120] The 743rd Tank Battalion was divided between assaulting infantry regiments. The 30th was allocated the 247th Engineer Combat Battalion and 503rd Light Pontoon Company to support the crossing. These assets, plus the 30th's internal engineers and military police, were tasked to facilitate the bridging and traffic control vital to successfully achieving rapid movement across the rivers.[121] The engineers conducted detailed reconnaissance of the crossing sites and even constructed makeshift ladders and footbridges to facilitate faster movement from the banks to the river.[122]

General Hobbs was personally involved in the planning. He emphasized to his subordinates that "hugging the artillery barrage" would "carry us through." He also ensured that the regiments planned extensive infantry, armor, and engineer coordination into their plans.[123] Lastly, after receiving enough engineer support and conducting reconnaissance of the potential crossing sites, General Hobbs directed the two-pronged envelopment attack that forced the Germans to defend in multiple locations.[124]

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[118] Hewitt, *The Story of the 30th Infantry Division*, 26.

[119] Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 95.

[120] Hewitt, *The Story of the 30th Infantry Division*, 25.

[121] Hewitt, *The Story of the 30th Infantry Division*, 26.

[122] King, Hilborn, and Collins, *The Fighting 30th Division*, 60-61.

[123] Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 95-96.

[124] Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 93.

The attacks across the rivers and onward to St.-Lo from 7 through 20 July were costly, but ultimately successful. The 30th sustained 3,934 casualties, almost 40 percent of its total strength.[125] The casualties sustained by the specific German units facing the 30th were high.[126] The fast-armored dash imagined by senior Allied commanders had not occurred yet. The objective of St.-Lo fell only after the 30th slowly fought up the high ridge west of the city using massive firepower and tank support to continue its advance.[127] However, due to persistent pressure by advancing army forces and fires bombardment to disrupt the enemy's command and control, German forces were unable to counterattack and regain their lost ground. Major General Hobbs summarized the resulting penetration when he stated, "this thing has busted wide open."[128]

This tough fought, two week action produced many lessons that the 30th relied upon for the remainder of the war. The 30th learned the hard lesson of securing their lines of communication and ensuring their support zone had sufficient combat power when a Panzer Division counter-attack on their rear caused confusion until the 120th Infantry Regiment defeated them.[129] Controlling the traffic flow of the river crossing sites was incredibly difficult. The 30th quickly recognized that it required one crossing site for the main supply route and reinforcements moving to the front and another for casualties moving to the rear.[130]

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[125] Featherston, *Saving the Breakout*, 28.

[126] Hewitt, *The Story of the 30th Infantry Division*, 34. For the total German casualties suffered, the US First Army estimated that by the end of July, 1944 the German Army had suffered 160,00 men, almost 400 tanks, and approximately 2,500 vehicles to the Allied force and French resistance groups in the European Theater.

[127] Featherston, *Saving the Breakout*, 26.

[128] Mansoor, *The GI Offensive in Europe*, 165-167.

[129] Hewitt, *The Story of the 30th Infantry Division*, 30.

[130] Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 100.

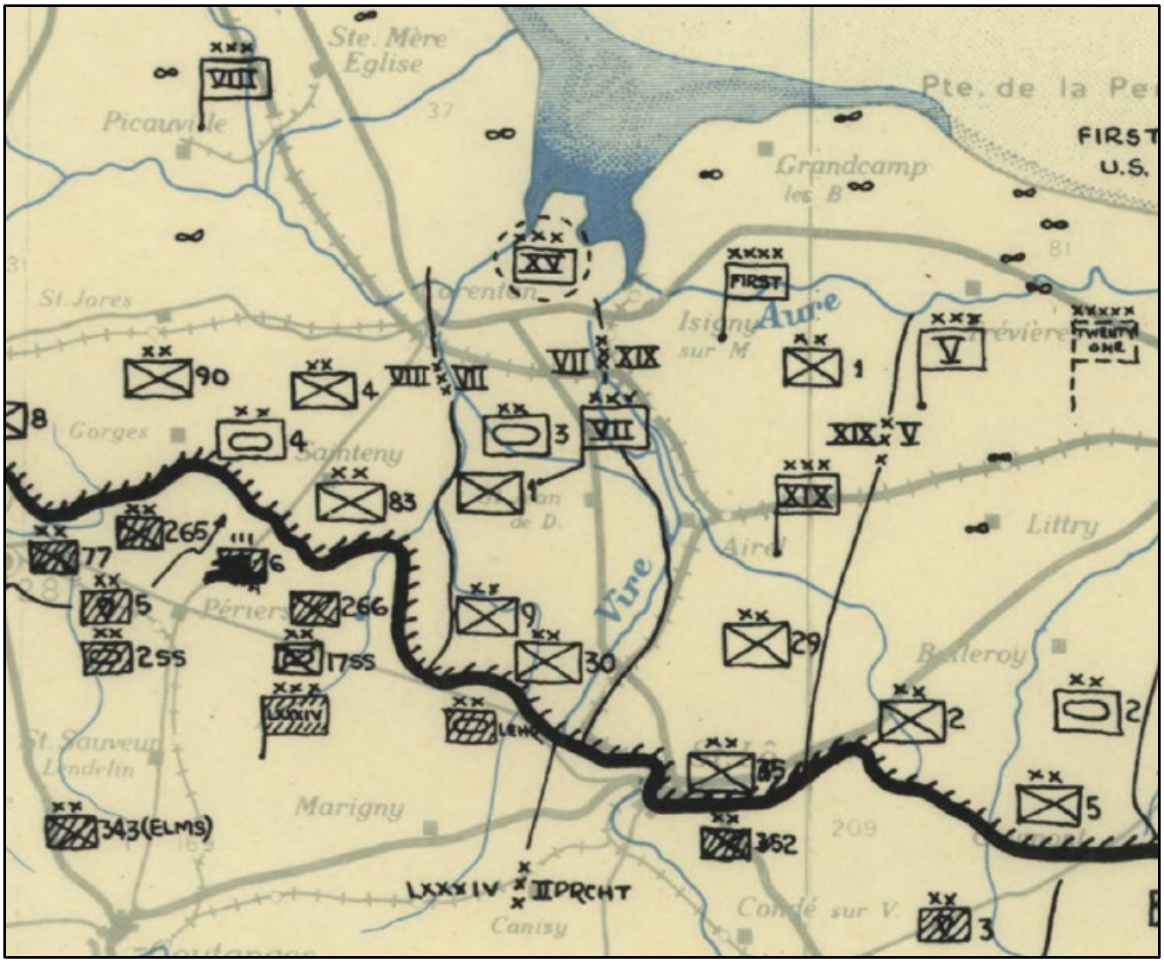

Figure 7. Twelfth Army Group Situation Map, 20 July 1944. Electronic picture of original Twelfth Army Group 20 July 1944 Situation Map, received digital copy on 15 November 2017 from Combined Arms Research Library.

Major General Hobbs also learned that the 30th Division Headquarters had to control the deep artillery fight and maintain awareness of the assaulting infantry regiments advance. When the advancing infantry's attack stalled, Major General Hobbs personally canceled the artillery barrage and directed its adjustment. He made this decision because his headquarters understood the larger context, in terms of synchronization of assaulting regiments and ammunition supplies.[131] Lastly, the division learned it was their responsibility to synchronize the movement of the division command post and the position areas for artillery of the division's artillery. This became apparent when the Division Artillery Fire Direction Center had to stop and re-establish to

[131] Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 99.

coordinate for a multi-field artillery battalion fire mission against a German counter-attack.[132] The capability of synchronizing the division's artillery assets needed to remain available at all time.

The 30th Infantry Division engaged in large-scale combat operations from early June 1944 until 4 May 1945. The study of the 30th's initial operations provides an example of the results of pre-war efforts to develop the organization and doctrine of World War II era divisions in preparation for large-scale combat operations. The 30th's initial combat performance was admirable. The 120th rapidly advanced through complex terrain, the bocage, to the Vire River after its landing in Normandy, while integrating numerous fires assets and tanks. The 30th Division Staff's rapid planning and coordination, within less than 72 hours of landing in Normandy, for this attack was impressive.[133] Additionally, the simultaneous river crossings of the Vire and the Vire et Taute Canal were doctrinally executed and successful, though not flawless.[134] The 30th's example reinforces Doubler and Mansoor's conclusion that World War II era Division's organization, capability, and doctrine were effective enough to grant divisions the ability to have initial combat success. This success allowed divisions to then learn, through combat experience, better combined arms coordination, fire and maneuver, and use of terrain and improvise to alleviate structural shortfalls, such as not enough anti-tank and tank assets.[135]

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[132] Hewitt, *The Story of the 30th Infantry Division*, 29.

[133] Ibid, 17-21; Featherston, *Saving the Breakout*, 20-21. The 30th Division began its landing on 13 June and was executing an attack through the headgerows with numerous organic and in-organic fires assets support on 16 June.

[134] War Department, FM 100-5 (1940), 226-235. FM 100-5 stresses the importance of reconnaissance, engineer preparation, preparatory fires, and close coordination between advancing infantry and artillery support. The 30th's execution was firmly grounded in doctrine.

[135] Doubler, *Closing with the Enemy*, 29. Mansoor, *The GI Offensive in Europe*, 110, 249-250. Doubler stated that the fundamental conclusions of US Army doctrine were correct, there was not a need to suspend or slow operations to "reevaluate the institutional approach." Doubler argued anti-tank and close air support doctrine and procedures did need revision. Mansoor reinforces Doubler by writing that World War II Divisions fought credibly in their initial exposures to combat and that they gained the experience of fire and maneuver, combined arms coordination, night combat, use of smoke and terrain, and small unit effectiveness over time. Mansoor also stated that the anti-tank organization and doctrine and the lack of

Current US Army Divisions

According to FM 3-94, *Theater Army, Corps, and Division Operations* (2014), the division level headquarters is the "tactical hammer" which translates operational level plans into offensive, defensive, and stability task on the ground.[136] Additionally, FM 3-0, *Operations*, states the division's primary role as "tactical headquarters commanding brigades in decisive action."[137] Higher echelon theater army headquarters will "set the theater and assist army forces into the fight" and corps level headquarters "integrate land-power throughout each phase of a campaign." This allows divisions to "outmaneuver the enemy, destroy enemy ground forces, seize and exploit operationally significant objectives, and match decisive action to ground conditions."[138]

Current – Organization's Context

The organization of the current US Army Division is a reflection of the Chief of Staff of the Army General Peter Schoomaker's 2003 directed transition to a modular force designed around the employment of brigade-sized units.[139] Since the reorganization of brigades to include combined arms and additional sustainment capability, once held at the division, in the 1990s, the concept of their independent employment became more attractive.[140] Additionally, the downsizing and stationing issues in the latter half of the 1990s further enhanced the attractiveness of brigades operating independently of their parent division. This shift was a radical change from

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close air support training and standardization of techniques prior to the US Army's entry into the war was costly.

[136] US Department of the Army, Field Manual (FM) 3-94, *Theater Army, Corps, and Division Operations* (Washington, DC: Government Printing Office, 2014), vii.

[137] US Army, FM 3-0 (2017), 2-13.

[138] US Army, FM 3-94 (2014), introduction.

[139] Munro, "Transforming the Army Division in an Era of Persistent Conflict," 26. Then Major Munro traced the transition of the division being the primary unit of action to the brigade in her monograph.

[140] McGrath, *The Brigade*, 104-106, 110. McGrath described the brigade combat team as an "analogy with the pre-1957 regimental combat team." Additionally, he showed that the division reduced its logistics capability by moving the assets that were designed to support the brigades down to the direct control of brigade commanders.

the traditional organization and role of the echelons above brigade—including combat support and combat service support.[141]

The tactical success achieved by brigades during Operation Iraqi Freedom in 2003 solidified the vision of a brigade-based Army.[142] The rapid advances of the three maneuver brigades of the Third Infantry Division over a frontage exceeding 150 miles was impressive and unique, but it occurred against an ineffective and demoralized Iraqi Army, not a near-peer adversary.[143] FM 3-0 (2017) states that large-scale combat operations against a peer threat require divisions and corps to focus on "the execution of multiple tasks synchronized and converged across multiple domains." Brigades, as earlier discussed, focus on the execution of decisive action tasks, offensive, defensive, and stability.[144] Additionally, the post-major conflict stability and later counter-insurgency operations were an optimal environment for independent and self-sustained brigades. This environment permitted the transition to the modular brigade combat team formation and enabled the Army to deploy and employ brigades in the non-contiguous and non-linear battlefields of Iraq and Afghanistan.[145]

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[141] Wilson, *Maneuver and Firepower*, 390-399; Brown, *Kevlar Legions*, 310. Wilson's detailed account of the evolution of divisions and brigades focused on the post-1973 Israeli Arab War adaptations the Army embarked upon through the 1980s specialized divisions. Brown argued that the shift to the brigade as the "unit of action" radically changed the location of the combat support and service support personnel as they were assigned to the brigade combat teams and functional brigades.

[142] Anthony Carlson, *Sixteen Cases of Mission Command – Thunder Run in Baghdad, 2003* (Fort Leavenworth, KS: Combat Studies Institute Press, 2013), 105-119. The tactical success achieved by the eight maneuver brigades in 2003, compared to twenty-two during Gulf War, was against an Iraqi Army that Dr. Anthony Carlson argued in *Sixteen Cases of Mission Command* was not an effective fighting force. Due to the employment of joint fires and the Republican Guards internal issues, the Third Infantry Division never encountered the stiff conventional force resistance they expected. Though Dr. Anthony Carlson's account in *Sixteen Cases of Mission Command* described the tough asymmetrical resistance encountered by 3ID.

[143] McGrath, *Crossing the Line of Departure, Battle Command on the Move*, 212-214.

[144] US Army, FM 3-0 (2017), 5-3 – 5-4. FM 3-0 (2017) described how divisions and corps focus on synchronizing decisive action tasks, offense, defense, and stability, while brigade combat teams concentrate on the execution of those decisive action tasks.

[145] McGrath, *Crossing the Line of Departure, Battle Command on the Move*, 110-126; Munro, "Transforming the Army Division in an Era of Persistent Conflict," 25-27. Both McGrath and Munro discussed how the structural changes of the Army, mainly downsizing and basing issues, facilitated increasingly robust and independent brigades. When the brigade displayed tactical success during the

Increasing the tactical roles of brigades to include additional sustainment, fires, and mobility responsibilities directly impacted the Army's vision for the role of the division. In November 2003, the Army's organization responsible for the transition to modularity, Task Force Modularity, developed a concept of the "Unit of Employment" with the goal of condensing the three levels of headquarters above brigade, the division, corps, and army, into two modular organizations. Task Force Modularity's study found that increasing the tactical responsibilities of brigades allowed for divisions to assume additional tactical level activities of corps, primarily the integration of support and Army and joint fires. This transition in responsibility allowed for corps headquarters to transition their focus to the operational level. Ultimately, in April 2005, General Schoomaker decided to retain the three echelons above brigade. However, the ideas and concepts of modular and flexible headquarters above brigade with a higher tactical and operational focus remained.[146]

Current – Organization Structure

The organization of a current US Army division, as of the 2015 Focused Area Review Group II design, is flexible in its deployment options and adaptive in its task organization.[147] The

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invasion of Iraq in 2003 and the post-invasion stability operations required smaller, mobile, and independent units the reorganization around the brigade headquarters was the natural outcome.

[146] Donnelly, *Transforming an Army at War*, 63-81. Donnelly's study is an overview of the actions of Task Force Modularity to support General Schoomaker's 2003 transformation directive. Donnelly provided the background of how brigades became more independent with additional fires, sustainment, and reconnaissance assets. Additionally, how that capability allowed them to achieve success during Operation Iraqi Freedom in 2003 and, due to the desire to create more flexible deployment options, the logical choice of the primary tactical headquarters during stability and counterinsurgency operations. The operational employment of the division and corps headquarters in the stability and counterinsurgency dominate environment of Operations Enduring Freedom and Iraqi Freedom reinforced those headquarters' operational focus. The caveat remained that major combat operations on a large scale would most likely require multiple corps headquarters focused at the tactical level.

[147] Army Capabilities Integration Center, "Multi-Component Division and Corps (FARG II)" (Operational and Organziational (O&O) Concept, Fort Eustis, VA: ARCIC , 2015); US Department of the Army, *Division Headquarters and Headquarters Battalion Modification Table of Organizational Equipment* (Washington, DC: Headquarters, Department of the Army, 2015). The Army Cababilities and Integration Center article described how the division reorganization effort addressed the need to reduce the size of the division headquarters, primarily through moving personnel assigned to the main command post from active duty positions to reserve component, while maintaining the ability to accomplish all its core functions. The reorganization effort was designed to enable divisions to increase their ability to conduct

division's design is a self-contained headquarters element that can command a combination of brigades.[148] This adaptive command structure of modular brigades is contrary to the fixed organizations of a set number of infantry regiments of the square, triangular, and Army of Excellence divisions of past structures.[149] This allows the organization of allocated forces to reflect the specific operational requirement and is based on the division's ability to command those forces across the assigned area of operations, integrate joint capabilities, interagency support, and multinational forces.[150]

The composition of the division consists of two to five brigade combat teams and at least one of each of the multifunctional support brigades, combat aviation, fires (Division Artillery (DIVARTY)), sustainment, and maneuver enhancement brigades provide the base capabilities for large-scale combat operations. The brigade combat teams can consist of either armored, infantry, or Stryker formations.[151] One or more medical and military intelligence-theater brigades provide support, normally on an area basis, however, they are not operationally controlled (OPCON) or assigned to the division headquarters. Additional engineer, air and missile defense, military police, military intelligence, civil affairs, psychological operations, and network assets are controlled by the corps and then reinforce the division, normally in a tactical control (TACON) command responsibility role.[152]

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security force assistance, limited contingency, and disaster relief operations while maintianing the ability to deploy a full compliment of personnel to man additional command post positions to execute large-scale combat operations.

[148] US Army, FM 3-0 (2017), 2-13.

[149] Wilson, *Maneuver and Firepower*, 384-397; Kedzior, *Evolution and Endurance*, 7-21. Wilson provided a thorough overview of the evolution of division level headquarters that occurred after the 1973, Arab-Israeli War. While Kedzior's RAND study is an historical account of the US Army's efforts at developing the modern-era division through the changes that occurred post-World War II.

[150] US Department of the Army, Field Manual Interium (FMI) 3-0.1, *The Modular Force* (Washington, DC: Government Printing Office, 2008), 5-1; US Army, FM 3-94 (2014), 1-2 – 1-4.

[151] For additional information on the composition of armor, infantry, and Stryker brigade combat teams see Figure 6-1. US Army, FM 3-94 (2014), 6-3 – 6-4; US Army, FM 3-0 (2017), 2-13.

[152] Ibid, 2-14; US Army, FM 3-94 (2014), 6-1 – 6-3.

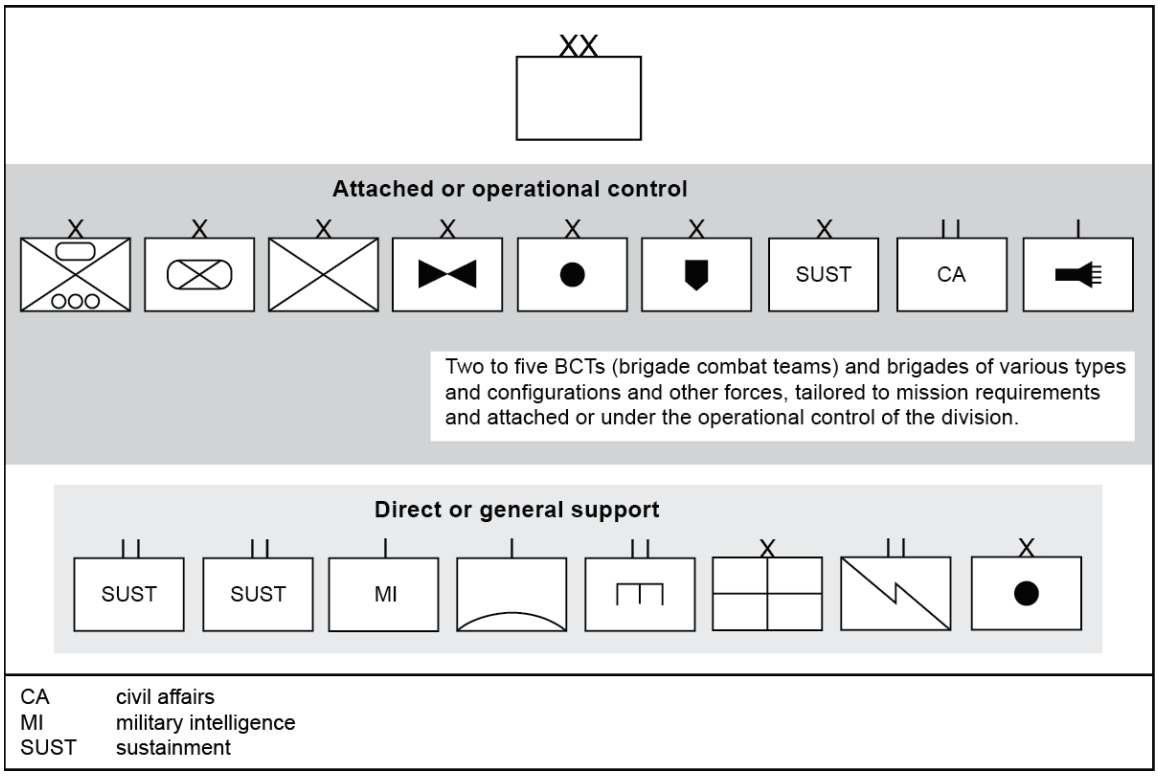

Figure 8. FM 3-0 Division Task-Organized for Large-Scale Combat Operations. US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), 2-14.

Current divisions have a main command post and a smaller, more mobile, tactical command post. Additionally, the division commander and his designated staff retain the organic capability to move via land or air, while retaining the ability to exercise mission command of the division via voice and data communications, in the mobile command group. This capability allows the commander to move to critical locations and provide personal leadership, assess situations, make decisions, and execute influence operations. Lastly, the division has a headquarters and headquarters battalion (HHB) that maintains the ability to provide mission command for additionally security elements required to secure the division's command posts and a band.[153]

[153] US Army, FM 3-0 (2017), 1-7 – 1-9; US Department of the Army, Field Manual (FM) 6-0, *Commander and Staff Organization and Operations* (Washington, DC: Government Printing Office, 2014), 1-1 – 1-9.

Current – Capability

The current division headquarters possess an impressive array of capability. The division maintains the personnel and equipment to provide mission command across three-time horizons through its integration cells, current operations, future operations, and plans. Therefore, the division commander can track, direct, adjust, and plan operations within the short, mid, and long-range time horizons simultaneously. These integration cells reflect representation from each warfighting function, movement and maneuver, fires, sustainment, intelligence, and protection. However, the cells exact composition is adjustable to the mission requirement. A network and suite of mission command systems, physically in the division's main command post, tactical command post, and mobile command group, enable and enhance the division's ability to execute across those integration cells.[154]

This robust capability to execute mission command allows the division to synchronize its organic medium and long-range fires, attack, assault, and reconnaissance aviation assets, sustainment, and mobility enhancement (military police, engineer, chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE), air and missile defense) assets. Additionally, the division's mission command function enables the integration of specialized personnel and capability. This additional capability includes, but not limited to, additional intelligence analysis, space operations, cyber electromagnetic activities (CEMA), and civil affairs. The specialized personnel are either controlled directly by the division or support the division's requests while remaining within a higher or adjacent unit.[155] The division also includes the capability to integrate joint fires and control its assigned air space to facilitate rapid employment of surface, rotary, and fixed-wing fires.[156]

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[154] US Army, FM 3-94 (2014), 1-1 – 1-10.

[155] US Army, FM 3-94 (2014), 1-8 – 1-9.

[156] Curtis Neal, Robert Green, and Troy Caraway, "Bridging the Gap from Coordination to Integration" *Joint Fires Quarterly* (4th Quarter 2012): 97-98. Currently, divisions accomplish air space control and integration with joint air ground integration cells (JAGIC) which combine the division's

The above capability shapes the operational environment, in terms of the enemy, civilians, and terrain, to allow the division to synchronize the movement and maneuver of its assigned brigade combat teams to allow them to "maneuver against, close with, and destroy the enemy." Each brigade combat team consist of its own combined arms, fires, reconnaissance, sustainment, and movement enhancement, that provides support internally or to an adjacent unit, through the division's ability to allocate capabilities across the brigades. The maneuver of the brigade combat teams, supported and enabled by division, is the principle means by which the division accomplishes its assigned offensive and defensive missions.[157]

The division organization consists of robust organic mission command, fires, sustainment, aviation, and movement enhancement capability. This capability exists while maintaining the flexibility to exercise mission command of a variety of additional combat enabling capabilities and a diverse configuration of brigade combat teams, developed based on the specific mission requirements.

Current – Doctrinal Framework

Current US Army doctrine provides the framework for the organization of divisions, their responsibility, and roles, and how they conduct operations. FM 3-94, *Theater Army, Corps, and Division Operations* (2014) outlines the roles of headquarters above the Brigade level and provides guidance for their organization and employment.[158] However, the recently published updated version to FM 3-0, *Operations* (2017) provides the primary framework for the employment of the division in large-scale combat operations. FM 3-0's purpose is to provide the doctrinal approach to how the US Army's theater armies, corps, divisions, and brigades deter

organic fires and air and missile defense personnel with the allocated air force tactical air control party (TACP).

[157] US Army, FM 3-94 (2014), 6-3 - 6-4, 7-1.

[158] US Army, FM 3-94 (2014), introduction, 1-19 – 1-20.

adversaries and fight a peer threat with today's force and capabilities.[159] FM 3-0 is the keystone doctrine for understanding the Army's intent for fighting higher echelon headquarters, including the division, and is foundational to increasing a staff's ability to fight a division in large-scale combat operations.

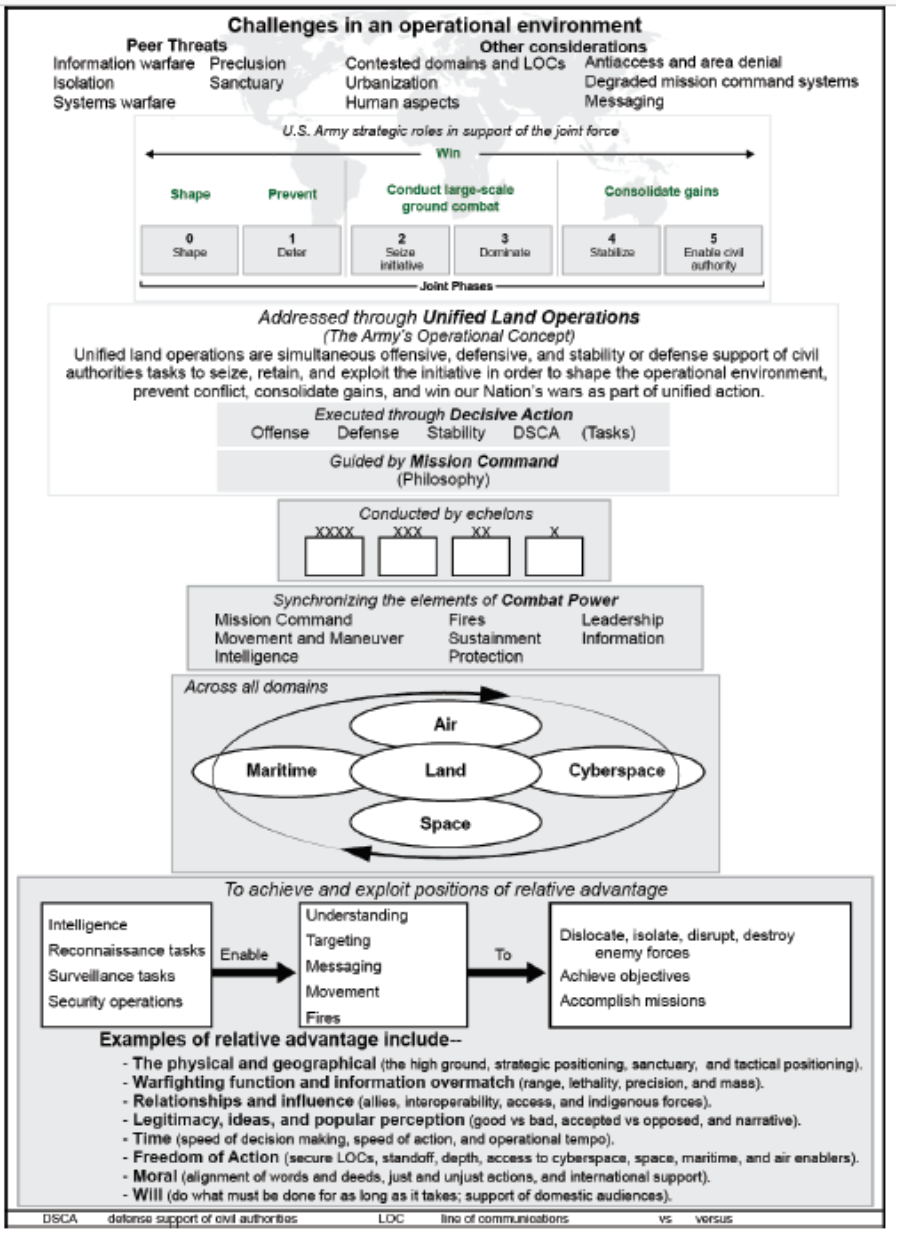

Figure 9. FM 3-0 Logic Chart. US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), x.

[159] US Army, FM 3-0 (2017), introduction. The intent of FM 3-0 is to provide fundamentals, tactics, and techniques "focused on fighting and winning large-scale combat operations."

Current – Role in Large-Scale Combat Operations

The current US Army division's primary role is to serve as a tactical headquarters during campaigns and major operations. In crisis response and limited contingency operations, however, it can serve as the joint forces land component (JFLCC) headquarters underneath a joint task force (JTF) or even, with augmentation, as a joint task force headquarters for limited contingency operations. Lastly, the division headquarters can serve as the Army forces command (ARFOR) within a joint task force in crisis response and limited contingency operations.[160]

The division's focus during large-scale combat operations are the tasks of defining the operational framework for the elements underneath its control, designating main and supporting efforts and priorities of support, and allocating resources to ultimately set the proper conditions for its brigade combat teams to destroy enemy forces through close combat.[161] Understanding the division's role in these tasks is critical to understanding what the division is charged with accomplishing during operations. This understanding of the division's operational employment will lead to a clearer understanding of how to accomplish these actions by using effective mission-orders.

ADP 3-0, *Operations*, defines an operational framework as "a cognitive tool used to assist commanders and staffs in clearly visualizing and describing the application of combat power in time, space, purpose, and resources in the concept of operations."[162] Due to the large nature of the geographic, and potentially demographic, area assigned to divisions, the division is responsible for establishing this framework during large-scale combat operations to link the

[160] US Army, FM 3-94 (2014), 1-20.

[161] Ibid, 1-19.

[162] US Department of the Army, Army Doctrine Publication (ADP) 3-0, *Operations* (Washington, DC: Government Printing Office, 2016), 4-1 – 4-4. ADP 3-0 also states the operational framework "provides Army leaders with basic conceptual options for arraying forces and visualizing and describing operations."

purpose of its subordinate's operations to time and space.[163] For large-scale combat operations, the synchronization between brigades is vital, therefore, the primary means for describing the operational environment is through an operational framework that designates the deep, close, support, and consolidation areas. This allows for the full capability of the division to focus its efforts impacting the environment to achieve reinforcing and synchronized effects. These effects enable the division to establish the proper conditions in the operational environment to allow for the brigade combat teams to succeed.[164]

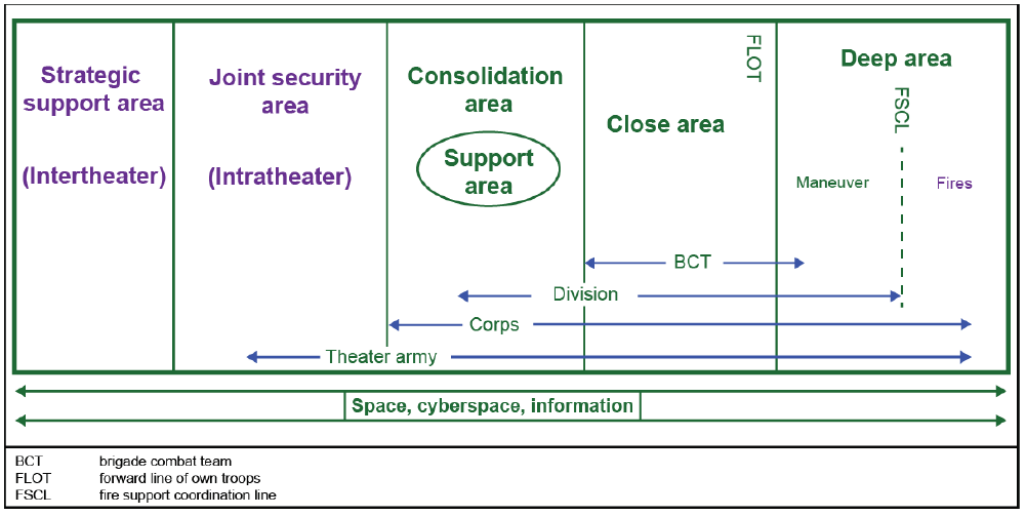

Figure 10. FM 3-0 Macro-view of Operational Framework. US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), 1-30.

Additionally, in conjunction with creating a shared understanding of the operational environment through its designation of the operational framework, divisions allocate resources by designating main and supporting efforts and determining a priority of support. ADP 3-0, *Operations*, defines main effort as "a designated subordinate unit whose mission at a given point in time is most critical to overall mission success" and supporting effort as "a designated subordinate unit with a mission that supports the success of the main effort." Based on the robust mission command capability of the division, it can shift combat power, whether lethal or non-

[163] US Army, FM 3-94 (2014), 7-16; US Army, FM 3-0 (2017), 7-6 – 7-9.

[164] US Army, FM 3-0 (2017), 1-25 – 1-39.

lethal fires, aviation, intelligence support, cyber electronic magnetic activities, or information operations, to support its subordinate elements in time and space to ensure the most critical task is supported at the right time. In other words, the division is suited to rapidly shift capability to support the accomplishment of tasks when those tasks are the most critical to the overall accomplishment of the mission.[165] The division also determines a priority of sustainment support, either by time or event-based phases, for its subordinate brigades to weigh the importance of their efforts to achieving the purpose of the division's operation.

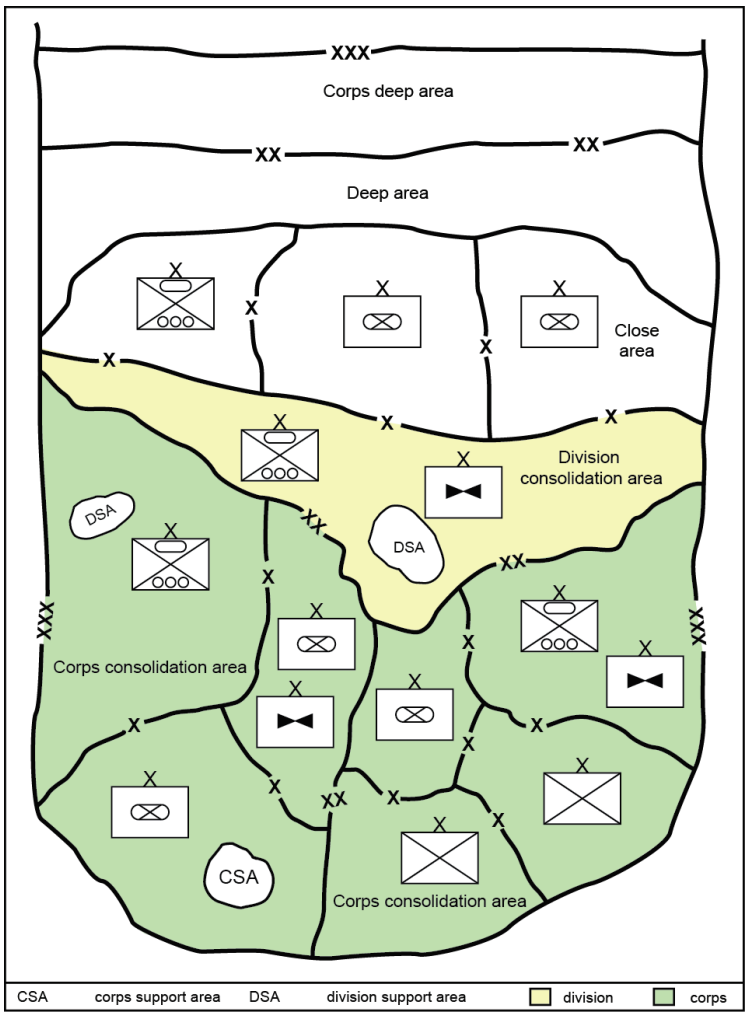

Figure 11. FM 3-0 Example of the Operational Framework for Large-Scale Combat Operations. US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017), 8-15.

[165] US Army, FM 3-94 (2014), 7-1 – 7-7; US Army, ADP 3-0 (2016), 11.

To better explain how the division synchronizes actions to set conditions for the brigade combat teams during large-scale combat operations an example below provides an overview of actions and responsibilities during an offensive operation. First, the division will identify and shape the enemy in the deep area through its organic and joint reconnaissance and fires, both lethal and non-lethal, as the division's subordinate brigades conduct movement towards the enemy.[166] Once the enemy is inside the division's close area, the division continues to shape the enemy for the brigade combat teams to ultimately destroy. The division accomplishes this by creating shared understanding of the enemy based on the totality of reconnaissance conducted within the division's area of operations and by massing fires, both by the division artillery and the brigade combat teams field artillery battalions, in support of the designated main effort. Additionally, the division directs supporting effort units to accomplish tasks or provide support to the main effort to ensure its success.

Sustainment is allocated to support the designated priority to ensure the main effort receives the proper ammunition, fuel, or other support at the right time to accomplish its task. The division designates the area encompassing logistic and command and control nodes as the support area. The maneuver enhancement brigade headquarters is responsible for the support area. The maneuver enhancement brigade commander executes terrain management, movement control, clearance of fires, and security operations inside the designated support area.[167]

During large-scale combat operations the "fluidity and rapid tempo" facilitates the bypassing of enemy forces and allows opportunities for reconstituted enemy to conduct attacks on the division's sustainment and command and control nodes. The division counters this threat by identifying and assigning responsibility to consolidation areas.[168] A brigade combat team is assigned responsibility for the consolidation area. That brigade initially conducts attacks and area

[166] US Army, FM 3-0 (2017), 7-8.

[167] Ibid, 7-13.

[168] Ibid, 7-13.

security operations to clear enemy forces and then transition to select stability tasks to set the conditions for long-term stability.[169] Assigning a consolidation area also lessens the geographic area that the maneuver enhancement brigade headquarters is responsible for in the support area.[170] The deep-close-support-consolidation area operational framework allows the division to simultaneously execute operations across their area of responsibility, vital in large-scale combat operations.

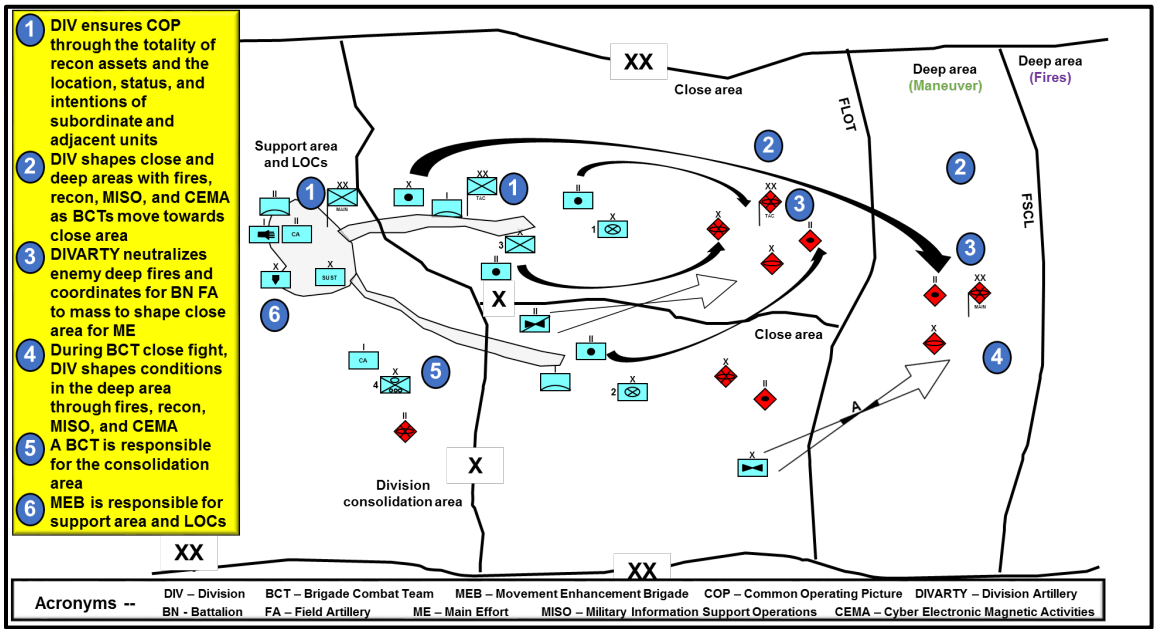

Figure 12. Example Overview of Actions and Responsibilities During the Offense in Large-Scale Combat Operations. Created by author with data from US Department of the Army, Field Manual (FM) 3-0, *Operations* (Washington, DC: Government Printing Office, 2017).

Understanding the role of the division in large-scale combat operations is important to understanding how it fights. The division's operational roles are to define the operational framework and allocate resources based on its designation of main and supporting efforts and priority of support, which facilitates the rapid synchronization and employment of organic and joint capabilities, available to the division, to shape conditions for decisive close combat of the

[169] US Army, FM 3-0 (2017), 7-13.

[170] Ibid, 8-6.

brigade combat teams. A clear understanding of these roles enables mid-grade officers in divisions to develop effective mission-orders.

Conclusions

Analysis – Commonality Between Current and World War II Era Divisions

Understanding the operational employment of World War II divisions enables the identification of commonalities and differences with current division employment during large-scale combat operations. The commonalities are useful for current military professionals preparing for large-scale combat operations. The differences, especially in the lack of a cyber and space component in World War II era divisions, are mostly self-evident to military professionals and easily discarded prior to integration into current training.

Though the method for articulating the operational framework has changed, now deep, close, support, and consolidation areas, divisions fighting in World War II employed a similar structure with how they employed their organic and non-organic fires. For example, corps focused on the enemy's artillery while division focused on the enemy's defensive positions, 105mm on the closer and the 155mm on the further targets.

The task organization of the current brigade combat teams is designed to require less augmentation than its World War II equivalents, which required tank, anti-tank, and air defense artillery based upon equipment shortages and shipping constraints. However, like World War II era regimental headquarters, the current brigade combat teams require integration of additional air defense, electronic warfare, and cyber capability, not contained organically. Therefore, the role of the current division, to ensure its subordinate brigades are task organized to successfully accomplish their assigned missions, is similar to that of the World War II era divisions. The current division artillery commander's role, supported by the division staff, of facilitating deep fires and synchronizing the field artillery battalions to achieve the proper effects is comparable to the World War II era divisions. Lastly, the current division's role of allocating resources based on

main and supporting efforts and priority of support is like the World War II era division's method of prioritizing resources based on main and supporting attacks.

Analysis – The 30th Infantry Division's Lessons for the Current Division Staff

The hard fighting the 30th participated in during World War II provides many lessons relevant to today's military professionals serving on division staffs. These conclusions focus on relating the case study of the 30th to addressing current division staff's challenges of proper task organization, developing decision support tools, and integrating fires, cyber and electronic warfare assets.

The 30th adjusted its task organization to prepare for each offensive action based on an analysis of the situation and assets available. The 30th allocated the external tank, anti-tank, engineer, and air-defense assets based on the capability required to shape environment, based on the enemy and terrain, to enable the success of its assaulting infantry regiments. Though maintaining habitual relationships between supporting and supported units was discussed as a technique, this research did not find evidence that General Hobbs and his staff allowed habitual relationships to trump operational requirements.[171] Current division staffs should note that each operation is unique and requires a unique approach to solve the associated division level problems. Understanding the capabilities available to the division, organically and non-organically, is important to developing a successful task organization.

General Hobbs was clear with his staff as to where they would focus their energies during planning and execution. Setting the conditions with indirect, aerial, and naval fires prior to the infantry regiments assaulting was his foremost concern based on the 30th's pre-assault coordination and adjustments made during battle. During the river crossing planning, General

[171] 30th Infantry Division Headquarters, *30th Infantry Division After Action Review* (US Army, July 1944); 30th Infantry Division Headquarters, *30th Infantry Division After Action Review* (US Army, August 1944). The 30th Infantry Division's after-action reviews show rapid and continuous task-organization changes throughout July and August 1944. The Tank and Tank-Destroyer Battalions assignments across the Division, either to the Infantry Regiments or Artillery Regiment, constantly changed as operations were planned and executed.

Hobbs personally stressed not getting bogged down. When the engineers were hesitant to establish the bridge due to enemy artillery, he ordered them to disregard the enemy fire and emplace the bridge.[172] Additionally, General Hobbs was involved in the decision of when and where to move the division command post and key point positions for artillery.

Current staffs need to understand where their commander needs them to focus during planning and execution. Ensuring the conditions are set for the close fight of the brigade combat teams, movement of command post and position areas for artillery, and critical events, such as river crossings, are likely key efforts for a division staff. Once the focus of the division is understood, the staff can determine the information required for the commander to make the decisions associated with those critical events. The division's information collection plan must collect that required information.

The 30th's ability to integrate organic and non-organic fires, both indirect, aerial, and during their first operation naval, was impressive. World War II divisions ability to direct devastating amounts of fires was critical to their ultimate success.[173] Due to the period the division lost its division artillery as a subordinate unit, the ability to integrate fires across current division's field artillery battalions has atrophied.[174] Additionally, since the brigade combat teams have assigned field artillery battalions, it can seem that the division's role is to integrate the division artillery, corps, and joint fires. However, based on the devastating effects that massed artillery will have on future battlefields, division staffs should focus on shaping the conditions for

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[172] Blumenson, *The European Theater of Operations: Breakout and Pursuit*, 100. After the engineers established the bridge, General Hobbs stated "knew it could be done if they had guts."

[173] Doubler, *Closing with the Enemy*, 19-20, 306; Mansoor, *The GI Offensive in Europe*, 5, 7, 123, 242. Doubler argued that the US Army's combined arms manuever, enabled mostly by massive amounts of artillery fire, was critical to tactical success. Mansoor argued that one of the main reasons the US Army triumphed over German forces was their supior integration of massed artillery fires. Mansoor stated that the combination of radio equipped foreward orbservers, centralized fire direction centers, and flexible field artillery batteries enabled the quick and effective massing of fires.

[174] MCTP, *Mission Command Training in Unified Land Operations*, 31. One of the reocurring issues that divisions are having during their Warfighter Exercise is a lack of an understanding of the roles and responsiblities of the DIVARTY, specifically with counter-fire and force field artillery fire missions.

success of their maneuver brigades and that may entail massing the brigade's field artillery battalion fires. Additionally, that same mentality should drive the integration of cyber and electronic warfare. Staffs should determine the requirement in terms of cyber electronic and magnetic reconnaissance, jamming, defense, and attack for their brigades to achieve success and plan it appropriately.

Recommendations for Producing Effective Division-Level Mission-Orders for Large-Scale Combat Operations

The recommendations for producing effective division-level mission-orders for large-scale combat operations are based on addressing the key issues that current divisions have struggled with while executing their Warfighter Exercise at the Mission Command Training Program. The key issues are broadly categorized as challenges with misunderstanding the division's organization, capability, and operational employment. The recommendations are based on the synthesis of current and historical doctrine and professional writings and the case study of the 30th Infantry Division's initial operations. The recommendations below for division staffs to produce effective mission-orders are additive to doctrine and emphasize focus areas during the orders process.

Division mission-orders are timely and iterative in nature. The division staff must focus their energies on clarifying and articulating the initial key aspects of the operations, describing the operational environment, defining the operational framework, the mission, intent, initial task organization, primary tasks to subordinate units, concepts of fires, sustainment, and protection, determining the main and supporting elements, and priority for support. The division should communicate that information to the subordinate units as timely as possible. Then, through the iterative process of confirmation briefs, back briefs, and staff-coordination, additional aspects of the plan will develop and change. Once the brigades understand what they are tasked to do and why, they will fully determine what they need to accomplish their mission and request additional capabilities from the division, enabling disciplined initiative. The additional more

detailed planning efforts of movement tables, target synchronization matrixes, etc... continues throughout the iterative planning effort.

Division mission-orders articulate how the division's organic and non-organic reconnaissance, fires, cyber, electronic warfare, and sustainment capability shapes the conditions within the operational framework for brigade combat teams to win their close fights. When staffs are developing the operational framework to synchronize assets in time, space, and purpose it must be to the level of detail that creates shared understanding of how all those capabilities allow for the brigade combat teams to succeed in their close fights. That focus enables the planning and discussion to ensure proper utilization of reconnaissance and fires assets, including massing, cyber electromagnetic activities to achieve the required effects, and a sustainment plan that ensures the fuel, ammunition, and supplies needed to maintain the division's movement and fires.

Division mission-orders describe the plan for securing lines of communication and providing local, air-defense artillery, counter-fire, and cyber security for the division's command posts, the division support area, and the Division's position areas for artillery. In large-scale combat operations, divisions must provide security of the above critical nodes and lines of communication. Mission-orders that clearly articulate that security effort decrease the probability of losing a critical capability during execution.

Mission-orders during execution ensure the common operating picture of the division includes the information collected from all organic and non-organic reconnaissance assets and the location, status, and intentions of subordinates and key adjacent units. During large-scale combat operations, the division continually produces and disseminates mission-orders. One of the division's roles is to produce the common operating picture by incorporating all organic and non-organic reconnaissance assets' findings into the mission command network. Additionally, subordinate units should receive the division's mission-orders and quickly

understand the location, status, and intentions of their adjacent units. This includes all available fires, air-defense artillery, and reconnaissance assets to maximize their efficient and effective use.

Gaps in Research – Recommendations for Future Study

Studying past US Army divisions' organization, capability, and operational employment provides insight for current divisions' planning and execution of large-scale combat operations. However, due to the nature of the case study in this paper, located in the European Theater, the research did not provide much insight into the proper role of the division in the execution of operations inside the consolidation area. Perhaps finding the right unit in the Italian Campaign, or during the Korean War, would provide an adequate case study. Additionally, the case study chosen for this paper did not have any cyber, space, or electronic warfare capabilities to analyze. To better understand how these capabilities will impact future large-scale combat operations, studies of recent usages in the conflict in Ukraine would provide potential insights.

Summary

This paper synthesized current and World War II era doctrine and professional writings and researched the training and combat operations of the 30th Infantry Division to equip staff officers for large-scale combat operations. According to the Army's keystone doctrine, FM 3-0, large-scale combat operations are the greatest challenge the Army may face in the future.[175] Michael Howard once said, "it is impossible to anticipate precisely the character of future conflicts. The key is to not be so far off the mark that it becomes impossible to adjust once that character is revealed."[176] The US Army must prepare to fight and win large-scale combat operations to ensure it can accomplish this core capability for the nation.

The Division is the key tactical echelon in large-scale combat operations. Mid-grade staff officers need to understand the division's organization, capabilities, and operational employment

[175] US Army, FM 3-0 (2017), 1-2.

[176] Michael Howard, "Military Science in an Age of Peace" *RUSI Journal*, no. 119 (1974): 3-9.

to produce effective mission-orders required to successfully fight in large-scale combat operations. The 30th Infantry Division attempted to publish their mission-orders early to facilitate an iterative process with their subordinates, described the operational framework, and massed their fires to establish the conditions for their regimental combat teams, which were task organized for success, to fight and win their close fights.

This paper recommends that division staffs focus their energies on producing mission-orders that are timely and iterative in nature. Orders that articulate how organic and non-organic reconnaissance, fires, cyber, electronic warfare, and sustainment capability shape conditions for the brigade combat teams to win their close fights; while describing how the Division secures its lines of communication, command post, support area, and position areas for artillery. Finally, during execution, mission-orders should ensure the Division's common operating picture flattens information collected and disseminates relevant units' location, status, and intentions.

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