

# Field Manual 4-0

## Driving Sustainment Change

Lt. Gen. Michael D. Lundy, U.S. Army

Maj. Gen. Rodney D. Fogg, U.S. Army

Col. Richard D. Creed Jr., U.S. Army

Lt. Col. William C. Latham Jr., U.S. Army, Retired

**A**rmies that do not adapt to the changing circumstances of their operational environments often suffer serious consequences in the next war their country requires them to fight. The U.S. Army has been no different throughout its history, particularly when it neglected to ensure

it had capabilities essential for large-scale ground combat against peer threats like those it faced in the two world wars and Korea. Preparing for large-scale ground combat, and ensuring that adversaries understand that the United States is prepared for that scale of conflict, is essential for the kind of conventional



deterrence that helped ensure the Cold War stayed cold in Europe and the armistice held for more than sixty years in Korea.

The recognition that great-power competition defines the current operational environment brings with it the realization that the U.S. Army needs to adapt once again if it is going to be prepared enough to deter adversaries willing to risk conventional conflict in an increasingly multipolar world. Effective adaptation re-

quires change based upon a realistic view of ourselves and the threats as they are, not how we want them to be. Understanding what the Army needs to be able to do if it is going to prevail in large-scale ground combat is the first step. The next step is ensuring that the Army has the doctrine necessary to defeat the threats it faces. Without adequate doctrine, the Army cannot adapt its organizations, training, and priorities in the most effective fashion that available resources allow.

“ Doctrine establishes the logical foundation for the adjustments that the Army makes, providing leaders at every echelon with a common frame of reference and language. ”

quires change based upon a realistic view of ourselves and the threats as they are, not how we want them to be. Understanding what the Army needs to be able to do if it is going to prevail in large-scale ground combat is the first step. The next step is ensuring that the Army has the doctrine necessary to defeat the threats it faces. Without adequate doctrine, the Army cannot adapt its organizations, training, and priorities in the most effective fashion that available resources allow.

Doctrine establishes the logical foundation for the adjustments that the Army makes, providing leaders at every echelon with a common frame of reference and language. Doctrine allows leaders to describe and visualize their roles and responsibilities while preparing to accomplish missions and win the wars they are asked to fight.<sup>1</sup> In the U.S. Army, doctrine drives change.

Doctrine-driven change has been happening for a while, and it is gaining momentum. The October 2017 publication of Field Manual (FM) 3-0, *Operations*, initiated the changes in readiness focus that are reverberating throughout the Army. It describes the Army's strategic roles, how the Army will execute

competition and conflict, requiring senior leaders to reexamine current Army capabilities and adjust supporting tactics, techniques, and procedures to meet the challenge of preparing for and conducting LSCO.<sup>2</sup>

The publication of FM 3-0, with its emphasis on the Army's strategic roles and focus on preparation for and execution of LSCO, required an in-depth review of sustainment doctrine to determine what was missing or needed to be added to support the conduct of operations during great-power competition and conflict. FM 4-0, *Sustainment Operations*, released in July 2019, was the first result of that analysis. It provides the doctrinal framework for synchronizing Army sustainment with the combined-arms approach to large-scale ground combat in a multi-domain environment described in FM 3-0. FM 4-0 provides the blueprint to support necessary changes in sustainment organizations, training, leader development, materiel development, and downtrace sustainment doctrine. It specifically articulates how the U.S. Army must organize, train, and deploy sustainment formations at each echelon to provide commanders with the freedom of action, operational reach, and prolonged endurance required to fight and win during LSCO.<sup>3</sup>

## The Enduring Necessity of Change

Armies that do not rapidly adapt and pace the changes in the operational environment quickly become irrelevant. Beginning soon after the invasion of

Equipment of the 3rd Armored Brigade Combat Team, 4th Infantry Division, arrives 27 February 2019 at Shuaiba Port, Kuwait, for the unit's rotation in support of Operation Spartan Shield. (Photo by Staff Sgt. Veronica McNabb, U.S. Army National Guard)



Iraq in 2003, the U.S. Army adapted to the emerging challenge of counterterrorism, stability, and counterinsurgency (COIN) operations. Shifting our priorities from the large-scale ground combat focus central to AirLand Battle and the full-spectrum operations described in the 2001 FM 3-0 to limited contingency operations (COIN, counterterrorism, and stability) was both logical and prudent given the scale and scope of Army commitments in both Afghanistan and Iraq. However, the almost myopic focus over the decade that followed swung the Army's adaptation too far, resulting in a force that was optimized for COIN and stability missions instead of the full range of military operations. The characteristics of COIN operations differ greatly from those of large-scale ground combat operations for which the Army sustainment organizations of the time were originally designed. In the U.S. Central Command area of responsibility, Army sustainers provided centralized support from fixed forward operating bases while relying heavily on contractors for construction, commodities, and a wide array of services.<sup>4</sup> Army formations rarely engaged in prolonged direct combat against their lightly armed

Soldiers in the 1st Cavalry Division Sustainment Brigade's combined operations and intelligence center process current operations updates during Warfighter Exercise 18-05 at Fort Hood, Texas. (Photo courtesy of the U.S. Army)

adversaries, and they were distributed across wide areas to secure populations and key infrastructure. The mission's duration and complexity required a steady flow of ground units into and out of theater. To meet this high deployment tempo and adapt to the demands of COIN, the Army changed its doctrine, its training, and its organizational structure.<sup>5</sup> The organizational changes that were part of the modular transformation process had a particularly heavy impact on sustainment doctrine, capacity, and capability.

The new, modularized force gave more flexibility to brigade combat team commanders while generating a host of new challenges for Army sustainers. The requirement to support multiple, geographically dispersed brigade- and battalion-sized formations caused the Army to heavily revise its capstone sustainment doctrine. In 2009, U.S. Army Training and

Doctrine Command (TRADOC) published FM 4-0, *Sustainment*. It described independent human resource operations, integrated financial management and resource management capabilities, modularized Army Health System support, and changed distribution and materiel management at echelons above brigade. These innovations enabled deployment of hundreds of units and thousands of soldiers into and out of the U.S. Central Command area of responsibility while providing continuous, exceptional support to a myriad of complex operations throughout the region.<sup>6</sup>

The changes were appropriate for the missions in Afghanistan, Iraq, and other similarly limited contingencies. However, the Army's renewed focus on large-scale combat against peer threats, where the joint force is contested in all domains, reflected a realization that the near-term operational environment was likely to generate very different requirements for the Army than the ones of the previous decade. Starting in 2016, TRADOC began some significant doctrinal changes to support the focus on LSCO. The primary catalyst for change was the reissue of FM 3-0, *Operations*, in October 2017.

## Why FM 4-0?

FM 3-0 describes how Army echelon-above-brigade formations, fighting as part of a joint force,

**Lt. Gen. Michael D. Lundy, U.S. Army**, is the former commanding general of the U.S. Army Combined Arms Center and the former commandant of the Command and General Staff College on Fort Leavenworth, Kansas. He holds an MS in strategic studies and is a graduate of the Command and General Staff College and the Army War College. He previously served as the commanding general of the U.S. Army Aviation Center of Excellence at Fort Rucker, Alabama, and he has deployed to Haiti, Bosnia, Iraq, and Afghanistan.

support the Army's four strategic roles: to shape operational environments, to prevent conflict, to prevail in large-scale ground combat, and to consolidate gains.

**Maj. Gen. Rodney D. Fogg, U.S. Army**, commands the U.S. Army Combined Arms Support Command at Fort Lee, Virginia. He holds a BA from King College and master's degrees from the Florida Institute of Technology and the U.S. Army War College.

FM 3-0 represents a change to how we think, talk, organize, train, and equip for the next fight, and it requires military professionals from every warfighting function to consider their readiness to prevail in the no-longer-unthinkable possibility of large-scale ground combat against enemies with capabilities that rival our own.<sup>7</sup>

FM 4-0, *Sustainment Operations*, complements this effort by describing how we will meet the massive sustainment demands required to prevail in a LSCO environment that puts a premium on speed, mobility, and redundancy. For example, it describes new force structures and command relationships that provide division and corps commanders with more capacity and endurance. These changes include the shift from single logistics command and control (C2) to maneuver commanders providing C2 over corps-aligned expeditionary sustainment commands and division-aligned sustainment brigades. The Army is redesignating the latter as division sustainment brigades (DSBs) and enhancing its capabilities by adding division sustainment support battalions.<sup>8</sup>

In the LSCO environment, corps and divisions are no longer simply C2 headquarters that require external support. They operate as tactical formations that integrate sustainment as part of a combined-arms approach to warfighting at every echelon. FM 4-0, therefore, clarifies issues concerning the prioritization of support and provides corps and divisions with a senior sustainment commander to execute the concept of support.

FM 4-0 addresses all four elements of the sustainment warfighting function—logistics, financial management, personnel services, and health service

**Col. Richard Creed, U.S. Army**, is the director of the Combined Arms Doctrine Directorate at Fort Leavenworth, Kansas. He holds a BS from the U.S. Military Academy and master's degrees from the U.S. Army School of Advanced Military Studies and the U.S. Army War College.

**Lt. Col. William C. Latham Jr., U.S. Army, retired**, is chief of the Doctrine Division within the G-3/5/7, US Army Combined Arms Support Command, at Fort Lee, Virginia. He holds a BA from Georgetown University and an MA from the University of Alaska, Fairbanks.

support—and illustrates these elements arrayed at echelon on a multi-domain battlefield. Division support area graphics, for example, include both the DSB and the human resources company, the financial management support unit, and a number of medical units.<sup>9</sup>

many sustainment challenges that commanders overcame during the Korean War.<sup>11</sup>

At the same time, FM 4-0 is driving the restructuring of Army sustainment formations to support the central warfighting principles established in doctrine.

“ Field Manual 4-0 [*Sustainment Operations*] provides the doctrinal basis for prioritizing sustainment capabilities within the Army’s modernization strategy, which will give Army formations the equipment necessary to support the demands of large-scale combat operations. ”

FM 4-0 further reinforces the critical importance of sustainment integration and synchronization within Army formations, as well as with joint and other unified action partners. The speed and violence of LSCO impose unprecedented demands on Army sustainers. In this environment, sustainers must fight for situational awareness when communications are intermittent. They coordinate with neighboring units as well as their senior and subordinate headquarters while anticipating requirements and preparing for rapid transitions. Sustainment rehearsals are a critical aspect of success during LSCO, enabling commanders to synchronize sustainment with other warfighting functions while ensuring that both the maneuver and sustainment plans are clearly understood.<sup>10</sup>

FM 4-0 is driving other changes as well. Sustainment is a fundamental consideration as the Army rewrites training programs and develops tasks, conditions, and standards to prepare the Total Army for LSCO. Sustainment has become central to discussions about operational art and is more explicitly addressed in the keystone doctrinal publications of other warfighting functions. The combat training centers now challenge units with the same threats we anticipate in LSCO, and the Army has reemphasized sustainment in the warfighting tactics, techniques, and procedures in every training and professional military education course from advanced individual training to the Army War College. As an example, TRADOC’s Army Strategic Education Program–Command (ASEP-C) incorporates a vignette examining the

The development of new units such as the DSB, division sustainment support battalions, and lettered, organic companies within these formations provide commanders with more sustainment capacity, thus extending the endurance of the division formation during combat operations. The restructuring also increases readiness—instead of deploying piecemeal and fighting as a pickup team, sustainment units will now train, deploy, and fight as organic elements of a larger team.<sup>12</sup>

FM 4-0 provides the doctrinal basis for prioritizing sustainment capabilities within the Army’s modernization strategy, which will give Army formations the equipment necessary to support the demands of LSCO. New tactical and bulk fuel distribution systems, for example, significantly expand the Army’s ability to distribute Class III at the corps and division levels. New testing and diagnostic equipment will accelerate troubleshooting and reduce repair times. Autonomous and semiautonomous delivery systems will increase transportation capacity to units operating dispersed along multiple axes of advance. Additive manufacturing will reduce wait time by producing critical items, such as medical devices and repair parts, at the point of need. All of these capabilities will significantly increase the speed, responsiveness, and survivability of sustainment units in the next war.<sup>13</sup>

In the meantime, Army doctrine continues to evolve. Having just completed the difficult work of developing capstone doctrine for sustainment, the U.S. Army Combined Arms Support Command and others are rewriting all of the downtrace doctrinal publications

that support it. The publication of FM 4-0 has reshaped how we sustain LSCO at every echelon, as well as how sustainment formations themselves operate and fight. While the Army updates its sustainment doctrine, the Combined Arms Center has begun work on a future update to FM 3-0, which will continue the emphasis on sustainment considerations during LSCO.<sup>14</sup>

## Conclusion

Gen. Eric Shinseki reminded audiences that “If you don’t like change, you will like irrelevance even

less.”<sup>15</sup> Today’s Army sustainers find themselves in the midst of wholesale changes in how we envision, think, and talk about the next war. Those changes reflect enormous efforts by the thousands of soldiers and civilians across the sustainment enterprise who have shared lessons learned and provided thoughtful analysis. Operationalizing these changes, however, requires Army leaders at every level to read and apply this doctrine within their training and leader development programs. FM 4-0 provides the blueprint. Leaders will make it reality. ■

## Notes

1. Army Doctrine Publication 1-01, *Doctrinal Primer* (Washington DC: U.S. Government Publishing Office [GPO], 2019), accessed 25 November 2019, [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/pdf/web/ARN18138\\_ADOP%201-01%20FINAL%20WEB.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN18138_ADOP%201-01%20FINAL%20WEB.pdf).

2. Field Manual (FM) 3-0, *Operations* (Washington, DC: U.S. GPO, 2017), accessed 18 November 2019, [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/pdf/web/ARN6687\\_FM%203-0%20C1%20Inc%20FINAL%20WEB.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN6687_FM%203-0%20C1%20Inc%20FINAL%20WEB.pdf); Michael Lundy and Richard Creed, “The Return of U.S. Army Field Manual 3-0, *Operations*,” *Military Review* 97, no. 6 (November–December 2017): 14–21.

3. FM 4-0, *Sustainment Operations* (Washington, DC: U.S. GPO, 2019), accessed 18 November 2019, [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/pdf/web/ARN19602\\_FM%204-0%20FINAL%20WEB%20v2.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN19602_FM%204-0%20FINAL%20WEB%20v2.pdf).

4. Adrian Gamez and Matthew A. Price, “Developing Sustainment Leaders for the Future Fight,” *Army Sustainment*, 28 February 2017, accessed 18 November 2019, [https://www.army.mil/article/182928/developing\\_sustainment\\_leaders\\_for\\_the\\_future\\_fight](https://www.army.mil/article/182928/developing_sustainment_leaders_for_the_future_fight).

5. Stuart E. Johnson et al., “A Review of the Army’s Modular Force Structure” (Santa Monica, CA: RAND Corporation, 2012), accessed 18 November 2019, [https://www.rand.org/pubs/technical\\_reports/TR927-2.html](https://www.rand.org/pubs/technical_reports/TR927-2.html); see also FM 3-24, *Counterinsurgency* (Washington, DC: U.S. Government Printing Office, 2006 [obsolete]); Joel Rayburn and Frank Sobchak, eds., *The U.S. Army in the Iraq War: Volume 2, Surge and Withdrawal, 2007–2011* (Carlisle, PA: U.S. Army War College Press, 2019), 615–18, 622–23, accessed 18 November 2019, <https://publications.armywarcollege.edu/pubs/3668.pdf>.

6. FM 4-0, *Sustainment* (Washington, DC: U.S. Government Printing Office, 2009 [obsolete]). The Army subsequently revoked

this and other field manuals in 2012 and replaced them with a series of Army doctrinal publications.

7. Lundy and Creed, “The Return of U.S. Army Field Manual 3-0, *Operations*,” 16.

8. FM 4-0, *Sustainment Operations*, 2-48–2-50.

9. *Ibid.*, fig. 5-7.

10. *Ibid.*, 5-23 and 5-24.

11. ASEP-C [Army Strategic Education Program–Command] *Operations Block, a Primer with Professional Readings* (Fort Leavenworth, KS: Combined Arms Center, 11 April 2019).

12. “Operational Concept, Division Sustainment Brigade,” Fort Lee, VA, 1 August 2019.

13. “Tactical Fuel Distribution System, Increment II” (draft capability development document, Fort Lee, VA, 28 March 2019); James C. McConville, Memorandum for Commander, U.S. Army Training and Doctrine Command, Army Capabilities Integration Center, “Approval of the Bulk Fuel Distribution System, Capabilities Production Document,” 30 November 2017; Annex J (FFME Activities) to U.S. Army Futures Command OPORD 003-19 (Future Force Modernization Enterprise Annual Modernization Guidance 20-25), Austin, TX, 21 June 2019; Army Additive Manufacturing Campaign Plan, Washington, DC, 25 July 2018.

14. Michael Lundy, Richard Creed, and Scott Pence, “Feeding the Forge: Sustaining Large-Scale Combat Operations,” *Army.mil*, accessed 25 November 2019, [https://www.army.mil/article/223833/feeding\\_the\\_forge\\_sustaining\\_large\\_scale\\_combat\\_operations](https://www.army.mil/article/223833/feeding_the_forge_sustaining_large_scale_combat_operations).

15. James Dao and Thom Shanker, “No Longer a Soldier, Shinseki Has a New Mission,” *New York Times* (website), A21, 11 November 2009, accessed 18 November 2019, <https://www.nytimes.com/2009/11/11/us/politics/11vets.html>.