(Image by Spencer Bowers)

Musicians of Mars in Multiple Domains

Expanding Combined Arms in the Twenty-First Century

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To get harmony in battle, each weapon must support the other. Team play wins. You musicians of Mars ... must come into the concert at the proper place and at the proper time.

—George S. Patton

Over eighty years ago at the outset of World War II, then Maj. Gen. George S. Patton described how he wanted to fight to the 2nd Armored Division using a musical metaphor—an odd choice reflecting the ease with which the general often combined the profound with the profane. The instruments of battle are different today and so is the operational environment, but the metaphor still rings true. The new version of Field Manual (FM) 3-0, *Operations*, emphasizes the time-tested combined arms approach to operations, expanded to meet the challenges posed today by threats like China and Russia.[1] Both adversaries possess large, modern militaries that can contest the U.S. joint force through land, air, maritime, space, and cyberspace—an environment in which the U.S. Army has not fought for decades. Army forces meet this challenge through multidomain operations, the operational concept described in the new FM 3-0:

> Multidomain operations are the combined arms employment of joint and Army capabilities to create and exploit relative advantages that achieve objectives, defeat enemy forces, and consolidate gains on behalf of joint force commanders.[2]

At the core of multidomain operations is the expansion of combined arms beyond traditional one- and two-domain approaches to include all domains—land, air, maritime, space, and cyberspace. The multidomain approach increases options for Army and joint force commanders to create exploitable advantages against enemy forces with peer capabilities. Effective integration of all available capabilities and methods demands leaders who understand doctrine and are masters of their craft. Reading FM 3-0 and other doctrine

Russian Defence Minister Sergei Shoigu (*left*) and Chinese Defense Minister Wei Fenghe watch a joint military exercise by Russia and China held 13 August 2021 in the Ningxia Hui Autonomous Region of China. (Photo by Savitskiy Vadim, Russian Defence Ministry via Associated Press)

is essential, but mastery requires application during leader development and training at home station and combat training centers.

From its inception in 2016, multidomain operations were threat informed. The entry point for understanding multidomain operations is therefore an understanding of the Chinese and Russian threats.

Challenges Posed by China and Russia

Chinese and Russian military modernization and the proliferation of space, cyberspace, and nuclear capabilities with military applications are the key factors driving change in security policy and doctrine. Although several adversaries can contest the joint force in multiple domains, China and Russia remain the most dangerous. They possess operationally durable formations and capabilities that are resilient and adaptable. Defeating either of them rapidly in a single decisive effort is unlikely. Army forces must therefore be able to mass combat power against multiple decisive points, accrue advantages over time, and defeat enemy forces in detail by creating and exploiting favorable force ratios.[3]

At the strategic level, China and Russia present different threats and at different scales. However, both adversaries employ standoff approaches, utilizing networked sensor and long-range fires capabilities to deny the U.S. joint force access to strategically valuable areas necessary for force projection and global response from the continental United States. Both nations concluded from U.S. operations against Iraq and Afghanistan that the best way to defend themselves was to prevent enemies from building up combat power close to their borders.[4] Joint doctrine describes these standoff approaches as antiaccess and area denial. Antiaccess typically refers to long-range capabilities that prevent the joint force from entering an area. Area denial typically refers to mid- and short-range capabilities that limit a force's freedom of maneuver once they are in an area. These standoff approaches make China and Russia capable of doing things to the U.S. joint force that we have been able to do to others with impunity since the end of the Cold War. One of the strategic impacts of peer-threat standoff approaches is an increase in the potential cost in terms of money, time, and lives to the joint force and our allies in the event of armed conflict, effectively increasing the threshold at which the United States might respond to provocation with force. By diluting the effectiveness of conventional deterrence, adversaries have greater freedom of action to expand aggression and conduct malign activities, including information warfare.

China and Russia continue to advance their interests with limited risk of

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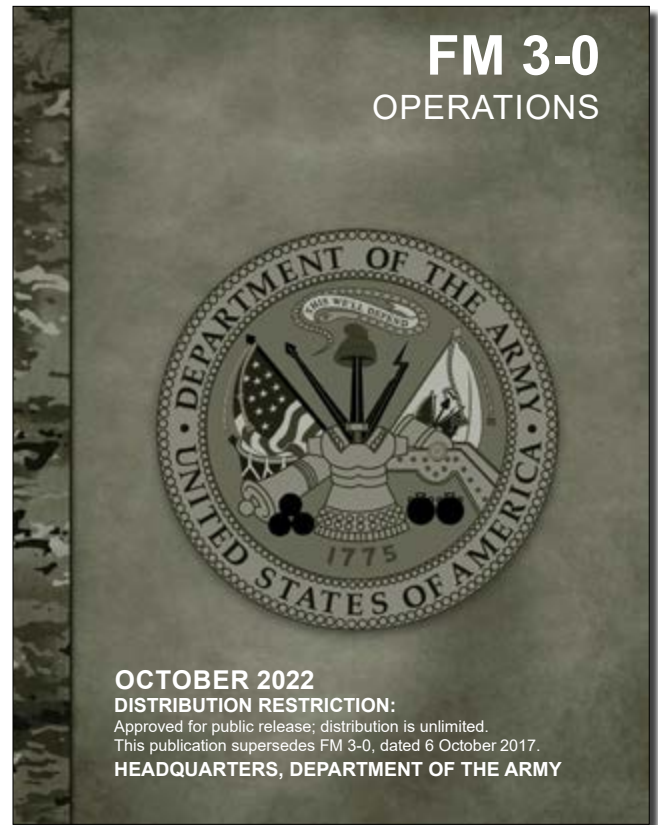
having to engage U.S. military forces in close combat. The development of multidomain operations took these strategic considerations into account.[5]

At the operational level, there are two basic fights relevant to Army forces: (1) the joint fight, enabled by Army capabilities, to defeat the enemy antiaccess and area denial approaches; and (2) the land fight, enabled by joint capabilities, to defeat enemy forces, control key terrain and populations, and accomplish national objectives for joint force commanders. Critical to both fights is the role of Army corps fighting as formations to defeat components of the enemy's integrated air defense system and overall integrated fires command.

The tactical challenge also has two components. First is how forward-postured forces will defend critical terrain and joint infrastructure at risk from no-notice enemy aggression and offensive action. Second is how Army forces will conduct expeditionary offensive operations against peer threats employing a layered deliberate defense enabled by global intelligence, surveillance, and reconnaissance capabilities. Threat defenses have many initial advantages, including time to prepare, lines of communications relatively close to their national borders, better understanding of terrain and populations, forces available, and the ability to rapidly mass high volumes of fires. During both defensive and offensive friendly operations, enemy forces will target friendly logistics and command and control (C2) nodes, degrade friendly communications through electromagnetic warfare, and target our will to fight through information warfare. Should deterrence fail, it is likely that Army tactical formations will need to fight and win with an ally while outnumbered and isolated from the rest of the U.S. joint force.

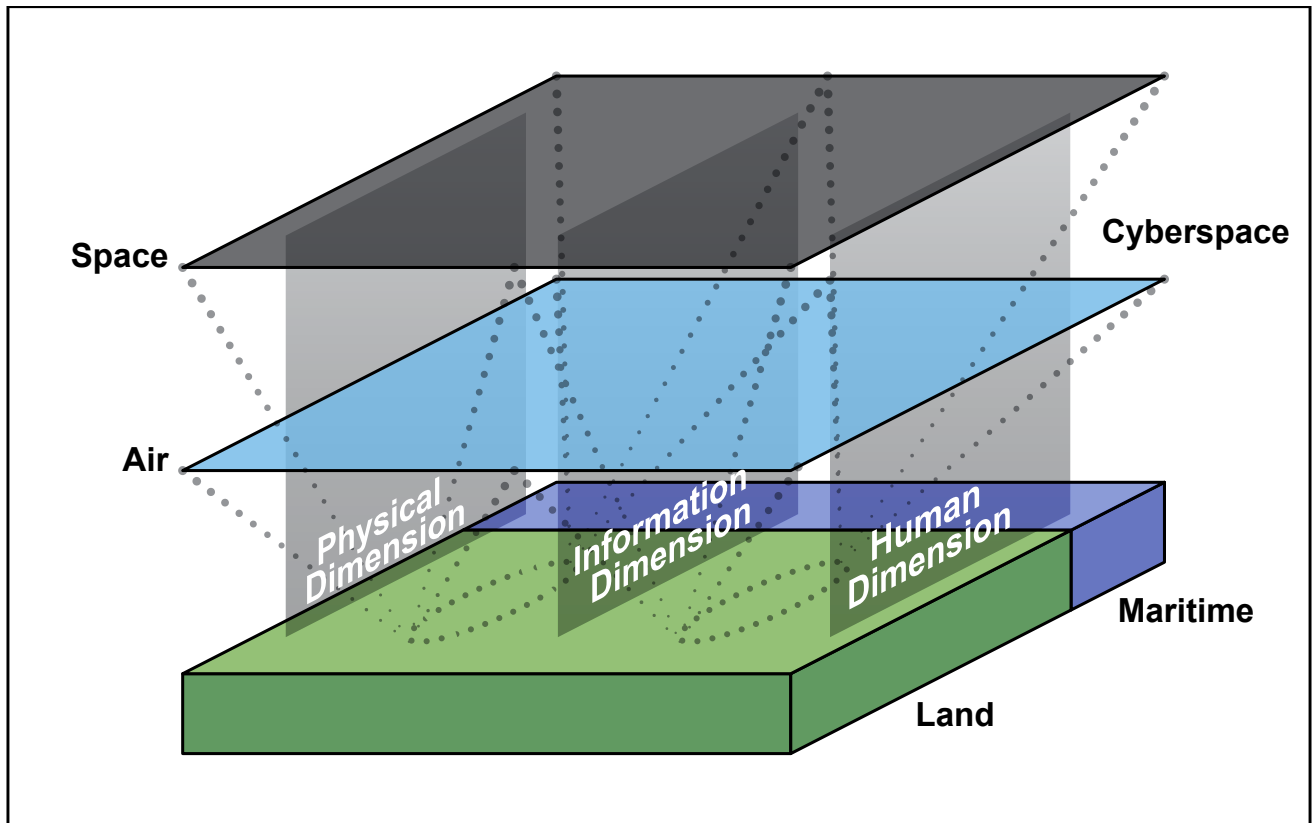## Meeting the Challenge: Multidomain Operations

Multidomain operations are the Army's contribution to joint campaigns that achieve sustainable policy outcomes. All operations depend, in some way, on capabilities and operations through multiple domains. Multidomain operations apply at every echelon, though in different ways. Corps and above typically have the lead role in allocating or integrating joint and Army capabilities, which are inherently multidomain, into their subordinate formations. Divisions may play

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an integrating role as well in some instances. However, even when a formation is not allocated joint capabilities, it must be aware of the threats posed by enemy capabilities from all domains and take appropriate measures to mitigate them. Preserving combat power requires a high level of situational awareness and physical exertion, which are imperatives in FM 3-0.

Multidomain operations are built on the foundation of a joint and combined arms approach to operations in a coalition environment. The operational concept emphasizes the need to understand the effects and processes for employing all available capabilities. FM 3-0 provides a model to help leaders view the operational environment through five domains, understood across three dimensions—physical, information, and human (see figure, page 5). Multidomain operations focus on large-scale combat operations but describe how Army forces integrate operations as part of joint campaigns during competition, crisis, and armed conflict in complementary and reinforcing ways. Four tenets and nine imperatives guide the conduct of operations, providing

(Figure from Field Manual 3-0, *Operations*)

Figure. Domains and Dimensions of an Operational Environment

options for how leaders apply and preserve combat power against specific challenges posed by peer threats. Multidomain operations emphasize the use of defeat mechanisms and defeating enemy forces in detail while maintaining the cohesion of friendly operations. FM 3-0 describes how Army forces integrate deep, close, support, and rear operations within and between echelons to generate combat power and employ it to the greatest possible effect against enemy forces.

Combined Arms

Expanding combined arms is at the core of what makes multidomain operations a step forward. The complementary and reinforcing effects created through the combined arms employment of capabilities from different domains are unlocked through the integration and synchronization that occurs during the operations process. Integration is about determining which formations at which echelon require which capabilities to achieve their assigned objectives, and

then allocating those capabilities. Synchronization is about applying combinations of those capabilities in time and space to create dilemmas for which the enemy has no good solutions. Leaders integrate and synchronize conventional forces, multinational forces, special operations forces, irregular forces, and all available unified action partners. Each contributing member of the expanded combined arms team has strengths that the others can reinforce and limitations that the others can mitigate. Understanding how different types of capabilities work together and employing them in ways the enemy does not expect is critical to success against opponents expecting us to be predictable. Leaders must understand how their formation and capabilities enable the higher headquarters, adjacent units, and the joint campaign. They also must understand how capabilities and formations they do not control can enable their operations.

Success demands leader commitment to the highest possible level of subject-matter expertise across branches

and occupational specialties. Leaders must further understand how to balance effectiveness and efficiency when integrating or allocating capabilities across Army echelons in a risk-informed manner. This reality means that our point of departure, regardless of at what echelon one is assigned, is a clear understanding of the operational environment in terms of friendly and adversary assigned areas and their areas of influence.

Understanding the Operational Environment: Domains and Dimensions

Multidomain operations requires that leaders understand their operational environment through the five domains and their physical, information, and human dimensions. "A *domain* is a physically defined portion of an operational environment requiring a unique set of warfighting capabilities and skills."[6]

Leaders do not need to understand every technical aspect of joint or Army capabilities, but they need to understand how they can be employed in mutually beneficial ways, and how to request those capabilities to support operations on land. Likewise, Army leaders at echelons above brigade need to advocate for the employment of Army capabilities to create freedom of action for the other service components of the joint force.

Although physical characteristics define the domains, multidomain operations emphasize the importance of factors beyond the physical. FM 3-0 notes that "understanding the physical, information, and human dimensions of each domain helps commanders and staffs assess and anticipate the impacts of their operations."[7]

Although most Army operations initiate action through the physical dimension, they ultimately must influence (through the information dimension) to impact the adversary's will (the human dimension). FM 3-0 also emphasizes the continued importance of intangible factors for friendly forces, like leadership and the mission command approach to C2.

See Yourself: Generating and Applying Combat Power

The warfighting functions and dynamics of combat power play a key role in helping leaders see their units and understand how to employ capabilities against the enemy to best effect. FM 3-0 identifies six warfighting functions:

- Command and Control
- Movement and Maneuver
- Intelligence
- Fires
- Sustainment
- Protection[8]

FM 3-0 modifies the combat power model. It aligns the definition of combat power with the joint definition and emphasizes what lethal and disruptive means can be applied against the enemy. It changes the components of combat power from "elements" to "dynamics" to reinforce the idea that combat power consists of variables that are interactive and subject to changes in the environment. FM 3-0 deliberately differentiates the dynamics of combat power from the warfighting functions. It defines combat power as "the total means of destructive and disruptive force that a military unit/formation can apply against an enemy at a given time (JP 3-0)" and identifies the dynamics of combat power as the following:

- Leadership
- Firepower
- Information
- Mobility
- Survivability[9]

See the Enemy: Threats and Their Methods

Army forces conduct operations oriented on the threat. The threat is always thinking and adapting, so understanding the threat is a continuous requirement during operations. FM 3-0 notes, "Threats faced by Army forces are, by nature, hybrid. They include individuals, groups of individuals, paramilitary or military forces, criminal elements, nation-states, or national alliances."[10]

China and Russia combine five broad methods to achieve their objectives during competition, crisis, and conflict:

- *Information warfare* is the use of information activities such as cyberspace operations, electronic warfare, psychological operations, disinformation campaigns, and other deception operations to achieve objectives.
- *Systems warfare* is the use of networked mutually supporting systems, like Integrated Air Defense Systems and the Integrated Fire Complexes, to achieve objectives. Threats protect their own

Chinese troops parade during the Vostok-2018 military drills on 13 September 2018 at Tsugol Training Ground in Siberia, not far from Russia's borders with China and Mongolia. (Photo by Mladen Antonov, Agence France-Presse)

systems while disintegrating their opponent's systems.

- *Preclusion* is the use of standoff approaches to deny the joint force access to strategically important areas.
- *Isolation* is the use of national instruments of power to separate coalition partners, components of the joint force, or forward positioned forces from external support.
- *Sanctuary* is the positioning of threat forces beyond the reach of friendly forces.[11]

China and Russia apply the threat methods in different ways at the operational and tactical levels. Leaders use the threat methods to better understand enemy tactics, anticipate enemy actions, and evaluate friendly courses of action.

Operations During Competition, Crisis, and Armed Conflict

Multidomain operations are the contribution of Army forces to joint operations and typically involve allies and partners. Harnessing the advantages provided by the joint force and our multinational partners is a critical consideration in every context. The strategic contexts—*competition, crisis,* and *armed conflict*—help commanders understand their role in the context of a joint campaign and prepare for their missions. During competition, Army forces counter adversary activities and demonstrate warfighting credibility through training and interoperability with allies and partners. This activity sets conditions for successful combat operations, recognizing that there is no extra time to prepare for conflict—Army forces deter conflict by continuously preparing for it. During crisis, Army forces provide options to joint force commanders to deter further aggression and protect national interests. During armed conflict, Army forces defeat enemy forces and control key terrain and populations. Regardless of strategic context, Army forces continuously consolidate gains in support of the joint force so that it achieves sustainable political outcomes.[12]

Fundamentals of Multidomain Operations: Tenets and Imperatives

Tenets and imperatives characterize effective operations and help guide leaders through the operations process.

Tenets. Four tenets characterize desirable qualities of operations: *agility, convergence, endurance,* and *depth.* They all link to the core idea of combined arms employment of all available combat power from multiple domains to create and exploit advantages.

Agility encompasses many considerations. Agile commands transition rapidly between phases, contexts, and task organizations. Agile leaders devise operational approaches designed to exploit fleeting windows of opportunity. Agile forces rapidly disperse to hinder enemy targeting, rapidly concentrate when required, and adapt more rapidly than the enemy as conditions change.

Convergence ensures that echelons above brigade employ all available Army and joint capabilities to maximize relative combat power in ways that create opportunities to defeat capable enemy forces. Convergence creates opportunities for maneuver and close operations but requires agile Army forces to rapidly exploit those opportunities.

Endurance reflects the ability to absorb the enemy's attacks and press the fight over the time and space necessary to accomplish the mission. It is a function of protection, sustainment, and managing tempo.

Depth applies combat power throughout the enemy's formations and the operational environment, securing successive operational objectives and consolidating gains for the joint force. Operations in depth disrupt the enemy's preferred approach, disintegrate the interdependent elements of enemy systems, and make enemy forces vulnerable to defeat in detail.[13]

Imperatives. Nine imperatives describe what units must do to win at acceptable cost on the modern battlefield. They are derived from the principles of war but are tailored to current challenges. They should heavily inform how we develop our leaders and train our formations because they must drive the necessary cultural change to prevail during large-scale combat operations in the twenty-first century. The nine imperatives are as follows:

- See yourself, see the enemy, and understand the operational environment.
- Account for being under constant observation and all forms of enemy contact.
- Create and exploit relative physical, information, and human advantages in pursuit of decision dominance.
- Make initial contact with the smallest element possible.
- Impose multiple dilemmas on the enemy.
- Anticipate, plan, and execute transitions.
- Designate, weight, and sustain the main effort.
- Consolidate gains continuously.
- Understand and manage the effects of operations on units and Soldiers.[14]

The second imperative—account for constant enemy observation and all forms of contact—is one that affects every rank and military occupational specialty in our Army. It addresses the importance of not presenting lucrative targets to enemy fires. As FM 3-0 succinctly states, "That which can be detected can be targeted for attack and killed."[15] Units must employ combinations of capabilities and techniques to ensure dispersion, cover, concealment, camouflage, masking of electromagnetic radiation signatures, operations security, and deception. Accounting for continuous enemy observation operationalizes protection, which is ultimately an outcome requiring continuous leader attention to the realities of the increasingly transparent operational environment.[16]

Defeating Enemy Forces

Defeat in detail is concentrating overwhelming combat power against separate parts of a force rather than defeating the entire force at once.[17]

Defeating an evenly matched, adaptive enemy operating with complex capabilities and formations in a single, decisive effort is highly unlikely. FM 3-0 therefore provides an approach to defeating enemy forces in detail. Defeating enemy forces in detail allows commanders to bring superior combat power to bear against portions of a potentially superior enemy force and the systems that enable it, like integrated fires commands and integrated air defense systems. Commanders apply combinations of defeat mechanisms to do so. As FM 3-0 describes, "Multidomain operations fracture the coherence of threat operational approaches by repeatedly destroying, dislocating, isolating, and disintegrating their interdependent systems and formations, and exploiting the opportunities to defeat enemy forces in detail."[18]

Operational Framework

Battlefields are chaotic environments. Enemy and friendly forces are intermingled, with friendly units often separated by long distances or operating under different commands. Commanders use the operational framework to help impose order and focus on the forces they control and to manage the application of violence. FM 3-0 describes the 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

their ability to distribute forces to mitigate the effects of enemy targeting. However, they should not extend too far beyond subordinate areas of influence, which would impose uncertain or excessive levels of risk on the subordinate formation. When an echelon retains areas it also retains the associated risk with those areas. During noncontiguous operations, leaders must continuously assess the risk in those retained areas, especially regarding C2 and sustainment nodes.

Within assigned areas, commanders organize their operations in terms of time, space, and purpose by

> The focus on 'operations' in this version of FM 3-0 helps clarify a unit's role in terms of purpose—areas define a unit's location; operations define a unit's purpose.

in the concept of operations (ADP 1-01)."[19] The three models commonly used to build an operational framework are *assigned areas; deep, close, and rear operations; and main effort, supporting effort, and reserve.*[20]

Leaders should not take an overly rigid approach to the operational framework. They should only use models when they apply and should feel free to adapt a model to the unique requirements of a situation. If an entirely different model better suits their needs, then they must coordinate higher and lower to ensure each echelon understands and follows the same approach. When adapting models, leaders must ensure that their framework still nests with their higher echelon's framework.

Commanders consider mutual support between subordinate forces when assigning areas. Mutual support can include supporting ranges between weapons and capabilities. It also includes consideration of the supporting distances between units. Corps and divisions operating along multiple axes will have noncontiguous subordinate formations. When a higher echelon assigns noncontiguous assigned areas, it maintains responsibility for the risk associated with the areas for which it does not assign responsibility. An assigned area may be an area of operations, a zone, or a sector depending on the type of operation and level of control required by the higher echelon. Assigned areas should be large enough to support subordinate maneuver and

synchronizing deep, close, support, and rear operations. Divisions and higher may also echelon their formations according to deep, close, support, and rear areas because of the size and scale of their operations during large-scale combat. The focus on "operations" in this version of FM 3-0 helps clarify a unit's role in terms of purpose—areas define a unit's location; operations define a unit's purpose.

Seizing and defending contested land areas require close operations and typically involve close combat or the threat of close combat. Close combat is the highest risk activity for conventional forces. Deep and rear operations are generally conducted to enable success during close operations and establish favorable conditions for maneuver in close combat. "*Deep operations* are tactical actions against enemy forces, typically out of direct contact with friendly forces, intended to shape future close operations and protect rear operations. … *Close operations* are tactical actions of subordinate maneuver forces and the forces providing immediate support to them, whose purpose is to employ maneuver and fires to close with and destroy enemy forces. … *Rear operations* are tactical actions behind major subordinate maneuver forces that facilitate movement, extend operational reach, and maintain desired tempo."[21]

Because Army forces will fight in contested communications environments, the mission command approach to command and control is more essential than

ever. One way in which commanders enable disciplined initiative and the ability to assume risk is by describing each echelon's role in time, space, and purpose. FM 3-0 provides some general considerations:

> During large-scale combat operations, brigade combat teams (BCTs) and divisions generally focus on defeating enemy maneuver formations. Corps and higher echelons generally focus on defeating enemy integrated air defense systems and portions of the enemy's integrated fires command according to the JFC [joint force commander's] plan and priorities.[22]

Corps fight their divisions, divisions fight their brigades, and brigades fight their battalions. Each higher

as units achieve objectives and defeat enemy forces, they take action to make their gains more permanent. Consolidating gains may start out as a small unit consolidating on an objective. It can include a division assigning a brigade the mission to defeat a bypassed enemy force to set conditions for stability operations. Asking an ally or partner to conduct essential stability tasks in an urban area would be a potentially effective means of consolidating gains.

Higher echelons request resources to increase the scale and accelerate the tempo of consolidating gains. Their access to host nation forces, joint fires, security force assistance capabilities, special operations forces, civil affairs, public affairs, engineers, and space and

> "The land component may often support the air and maritime components, which is a switch from what Army forces have been accustomed to in recent decades."

echelon seeks to set conditions for its subordinate formations to achieve their assigned objectives while providing them the resources, guidance, and situational awareness to do so. Corps and divisions fight as formations, which requires an integrated approach to deep, close, support, and rear operations—no echelon can afford to have a myopic focus on one part of the battlefield.

Consolidating Gains

The 2017 FM 3-0 introduced the idea of consolidating gains, and the 2019 Army Doctrine Publication 3-0, *Operations*, continued to clarify the necessity to do so. The 2022 version of FM 3-0 affirms the importance of continuous consolidation of gains as an imperative and key consideration for operations during competition, crisis, and armed conflict. Consolidating gains achieves the ultimate purpose of the operations Army forces conduct. It is not a phase—it is the exploitation of tactical objectives for strategic outcomes. Consolidating gains requires leaders to conduct operations with the end state in mind and take the actions required to achieve that overall end state as rapidly as possible. Consolidating gains starts with a clear description of the purpose of an operation and shared understanding for how to achieve it. Then,

cyberspace capabilities provides opportunities to coalesce and expand the success of subordinate units. During major campaigns and operations, consolidating gains is the yardstick that drives toward transition of responsibility for areas and populations to other legitimate authorities and, ultimately, sustainable policy outcomes. During postconflict competition, Army forces continue to consolidate gains for the joint force, expanding or maintaining stability of the desirable conditions.

Maritime Environments

A decade after the Pacific Pivot, it is critical that Army doctrine begin to account for the unique considerations of operating in maritime environments like the Indo-Pacific theater.[23] Chapter 7 addresses many of those considerations, and likewise describes aspects of operating in the Arctic, which is also heavily influenced by the maritime environment.

Operating in maritime environments requires the employment of joint and Army capabilities in mutually supporting ways. Sustainment, communication, protection, and mobility are challenging for land forces in maritime environments and require an even higher level of integration with the joint force. The land component may often support the air and maritime

components, which is a switch from what Army forces have been accustomed to in recent decades. Maritime operations depend on land forces to secure bases, ports, and maritime choke points. Land forces enable air and maritime operations with surface-to-surface and surface-to-air fires while allowing the joint force to retain or seize critical landmasses and infrastructure.[24]

Contested Deployments

Army forces should expect challenges by the threat from home station all the way to their assembly areas overseas. Since World War II, "U.S. military forces conducted uncontested and generally predictable deployments from home stations to operational theaters because our enemies lacked the capability to significantly affect deploying units at home station or while in transit to a theater of operations. This is no longer the case."[25] Annex C in FM 3-0 describes how we plan to deal with peer threats able to observe, disrupt, delay, and attack U.S. forces at any stage of force projection, including while still positioned at home stations in the United States and overseas. "Commanders and staffs must therefore plan and execute deployments with the assumption that friendly forces are always under observation and in contact"—a multidomain operations imperative.[26]

Multidomain Operations into the Future

FM 3-0 is a catalyst for change across the Army. Multidomain operations doctrine will drive an update to other Army doctrine and influence future force design. Professional military education must account for its tenets, imperatives, and approach to the operational environment. Multidomain operations will drive changes to collective training at unit home stations and combat training centers. Interoperability with allies and partners is more important than ever before and should address technical, human, and procedural requirements. Our focus must be on being a good ally or partner, not only having allies and partners.

Just as AirLand Battle doctrine drove a deeper level of air-ground integration by the joint force, multidomain operations will drive the continued development of tactics, techniques, and procedures for integrating maritime, space, and cyberspace capabilities in support of operations on land. Organizations, such as the multidomain task force and the theater fires command are first steps. Units must develop and experiment with solutions for how to integrate new capabilities with existing Army and joint structures and processes. The experimentation may result in new or adjusted Army and joint processes or adjustments to our existing organizations. Whatever changes we make as an Army and joint force must be informed by a shared understanding of how we fight, however. That shared understanding starts with our doctrine.

This version of multidomain operations is not the "end of doctrine." It will continue to evolve as Army forces learn, train, and refine the ideas in FM 3-0 to reach the Army of 2030. Future versions of multidomain operations will continue to update key ideas and account for new capabilities, informed by the experience of the force.

Patton used the metaphor of an orchestra and the role of each instrument in his "Musicians from Mars" speech to describe the combined arms approach for how he wanted to fight. Across the globe and two millennia earlier, Sun Tzu identified the advantage of combinations in his axioms on music, color, and taste:

> There are not more than five musical notes, yet the combinations of these five give rise to more melodies than can ever be heard. There are not more than five primary colors, yet in combination they produce more hues than can ever been seen. There are not more than five cardinal tastes, yet combinations of them yield more flavors than can ever be tasted.[27]

We know that the observations of these icons of military thought do not provide a magic bullet for how to win wars. Their resonance over time, however, suggests that the idea of employing combinations during war in ways that surprise and overwhelm enemy forces is more than a passing fad. It is, in fact, part of the very fabric of what makes a military organization successful. Leaders who are masters of their craft, able to incorporate all available capabilities in ways that are surprising and overwhelming to enemy forces, can take a modest update to doctrine and turn it into an overwhelming advantage provided by Army forces to the joint force. ■

Notes

Epigraph. George S. Patton, quoted in Center for Army Lessons Learned (CALL) Publication 90-6, *The Musicians of Mars: A Story of Synchronization for the Company/Team Commander* (Fort Leavenworth, KS: CALL, June 1990), 4.

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