

ARMY SMARTBOOK

6th Edition (AODS6-1)
w/SMARTupdate 1

Unified Land Operations
(ADP 3-0, Jul 2019)

Large-Scale Combat
Operations (FM 3-0, 2017)

Command & Control
(ADP 6-0, Jul 2019)

Movement & Maneuver
(ADP 3-90, Jul 2019)

Intelligence
(ADP 2-0, Jul 2019)

Fires
(ADP 3-19, Jul 2019)

Sustainment
(ADP 4-0, Jul 2019)

Protection
(ADP 3-37, Jul 2019)

OPERATIONS & DOCTRINE

Guide to FM/ADP 3-0 Operations & the Elements of Combat Power



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w/SMARTupdate 1 (July 2019 ADPs)

The Lightning Press
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Guide to FM/ADP 3-0 Operations & the Elements of Combat Power (with SMARTupdate 1 / July 2019 ADPs)

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SMARTupdate 1 to AODS6 (July 2019 ADPs) updates/replaces material in the first printing of the AODS6 SMARTbook with new material from the Army's July 2019 ADPs, along with "pen-and-ink" reference citation and terminology changes. (Read more at www.thelightingpress.com/smartupdates/)

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(AODS6-1) Notes to Reader

Guide to FM/ADP 3-0 Operations & the Elements of Combat Power (with SMARTupdate 1 / July 2019 ADPs)

An **operation** is a sequence of tactical actions with a common purpose or unifying theme. Army forces, with unified action partners, conduct land operations to shape security environments, prevent conflict, prevail in ground combat, and consolidate gains. Army forces provide multiple options for responding to and resolving crises. Army forces defeat enemy forces, control terrain, secure populations, and preserve joint force freedom of action.

While the U.S. Army must be manned, equipped, and trained to operate across the range of military operations, **large-scale ground combat against a peer threat** represents the **most significant readiness requirement**. FM 3-0 expands on ADP 3-0 by providing tactics describing how theater armies, corps, divisions, and brigades work together and with unified action partners to successfully prosecute operations short of conflict, prevail in large-scale combat operations, and consolidate gains to win.

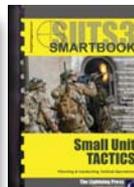
Decisive action is the continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks. Army forces conduct **multi-domain battle**, as part of a joint force, to seize, retain, and exploit control over enemy forces.

Combat power is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time. To an Army commander, Army forces generate combat power by converting potential into effective action. Combat power has eight elements: leadership, information, mission command, movement and maneuver, intelligence, fires, sustainment, and protection. The Army collectively describes the last six elements as the **warfighting functions**.

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(AODS6-1) Guide to FM/ADP 3-0 Operations & the Elements of Combat Power

Army Operations

An operation is a sequence of tactical actions with a common purpose or unifying theme. Army forces, as part of the joint force, contribute to the joint fight through the conduct of unified land operations.



Chapter 1



Chapter 2



"BSS5: The Battle Staff SMARTbook"

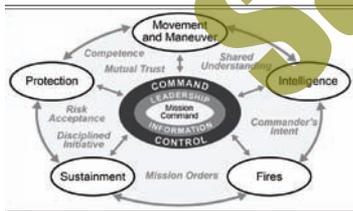
Chap 1: Operations (ADP 3-0)

An operation is a sequence of tactical actions with a common purpose or unifying theme. Army forces, with unified action partners, conduct land operations to shape security environments, prevent conflict, prevail in ground combat, and consolidate gains. Army forces provide multiple options for responding to and resolving crises. Army forces defeat enemy forces, control terrain, secure populations, and preserve joint force freedom of action.

Chap 2: Large-Scale Combat Operations (FM 3-0 w/Chg 1)

While the U.S. Army must be manned, equipped, and trained to operate across the range of military operations, large-scale ground combat against a peer threat represents the most significant readiness requirement. FM 3-0 expands on ADP 3-0 by providing tactics describing how theater armies, corps, divisions, and brigades work together and with unified action partners to successfully prosecute operations short of conflict, prevail in large-scale combat operations, and consolidate gains to win enduring strategic outcomes.

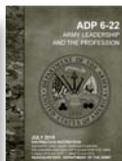
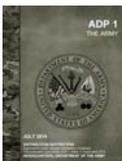
The Elements of Combat Power



To execute combined arms operations, commanders conceptualize capabilities in terms of combat power. Combat power has eight elements: leadership, information, command and control, movement and maneuver, intelligence, fires, sustainment, and protection. The Army collectively describes the last six elements as the **warfighting functions**. Commanders apply combat power through the warfighting functions using leadership and information.

Leadership & Information

Commanders apply leadership through mission command. **Leadership** is the multiplying and unifying element of combat power. **Information** enables commanders at all levels to make informed decisions on how best to apply combat power. Ultimately, this creates opportunities to achieve definitive results.



"TLS5: The Leader's SMARTbook"



Information

The Six Warfighting Functions



Chapter 3



Chapter 4



Chapter 5



Chapter 6



Chapter 7



Chapter 8

Chap 3: Command & Control (ADP 6-0)

The command and control warfighting function is the related tasks and a system that enable commanders to synchronize and converge all elements of combat power. The primary purpose of the command and control warfighting function is to assist commanders in integrating the other elements of combat power to achieve objectives and accomplish missions.

Chap 4: Movement and Maneuver (ADP 3-90 & others)

The movement and maneuver warfighting function is the related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats. Direct fire and close combat are inherent in maneuver. The movement and maneuver warfighting function includes tasks associated with force projection related to gaining a position of advantage over the enemy. Movement is necessary to disperse and displace the force as a whole or in part when maneuvering. Maneuver is the employment of forces in the operational area.

Chap 5: Intelligence (ADP 2-0)

The intelligence warfighting function is the related tasks and systems that facilitate understanding the enemy, terrain, and civil considerations. This warfighting function includes understanding threats, adversaries, and weather. It synchronizes information collection with the primary tactical tasks of reconnaissance, surveillance, security, and intelligence operations. Intelligence is driven by commanders and is more than just collection. Developing intelligence is a continuous process that involves analyzing information from all sources and conducting operations to develop the situation.

Chap 6: Fires (ADP 3-19)

The fires warfighting function is the related tasks and systems that create and converge effects in all domains against the threat to enable actions across the range of military operations. These tasks and systems create lethal and nonlethal effects delivered from both Army and Joint forces, as well as other unified action partners.

Chap 7: Sustainment (ADP 4-0)

The sustainment warfighting function is the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance. The endurance of Army forces is primarily a function of their sustainment. Sustainment determines the depth and duration of Army operations. It is essential to retaining and exploiting the initiative. Sustainment provides the support necessary to maintain operations until mission accomplishment.

Chap 8: Protection (ADP 3-37)

The protection warfighting function is the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission. Preserving the force includes protecting personnel (combatants and noncombatants) and physical assets of the United States and multinational military and civilian partners, to include the host nation. The protection warfighting function enables the commander to maintain the force's integrity and combat power. Protection determines the degree to which potential threats can disrupt operations and then counters or mitigates those threats.



(AODS6-1) References

The following references were used to compile The Army Operations & Doctrine SMART-book. All references are available to the general public and designated as “approved for public release; distribution is unlimited.” The Army Operations & Doctrine SMARTbook does not contain classified or sensitive material restricted from public release.

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Army Doctrinal Publications (ADPs)

ADP 1-02*	Aug 2018	Terms and Military Symbols
ADP 2-0*	Jul 2019	Intelligence
ADP 3-0*	Jul 2019	Operations
ADP 3-05*	Jul 2019	Army Special Operations
ADP 3-07*	Jul 2019	Stability
ADP 3-19*	Jul 2019	Fires
ADP 3-28*	Jul 2019	Defense Support of Civil Authorities
ADP 3-37*	Jul 2019	Protection
ADP 3-90*	Jul 2019	Offense and Defense
ADP 4-0*	Jul 2019	Sustainment
ADP 5-0*	Jul 2019	The Operations Process
ADP 6-0*	Jul 2019	Mission Command: Command and Control of Army Forces

Field Manuals (FMs) & Army Techniques Publications (ATPs)

FM 3-0*	Dec 2017	Operations (with Change 1)
FM 3-34	Apr 2014	Engineer Operations
FM 3-52	Oct 2016	Airspace Control
FM 3-90-1	Mar 2013	Offense and Defense, Volume 1
FM 3-90-2	Mar 2013	Reconnaissance, Security, and Tactical Enabling Tasks, Volume 2
FM 6-0	Apr 2016	Commander and Staff Organization and Operations (w/change 2)
ATP 3-35*	Mar 2015	Army Deployment and Redeployment

Joint Publications (JPs)

JP 3-0*	Dec 2018	Joint Operations (with Change 1)
JP 5-0	Jun 2017	Joint Planning

* Denotes new/updated reference since first printing.



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I. Operations (ADP 3-0, Jul '19)

Ref: ADP 3-0, Operations (Jul '19), chap. 1.

ADP 3-0 describes how the Army conducts operations as a unified action partner using the Army's operational concept—a fundamental statement that frames how Army forces, operating as part of a joint force, conduct operations (ADP 1-01). The Army's operational concept is unified land operations. ADP 3-0 discusses the foundations, tenets, and doctrine of unified land operations, which serves as a common reference for solving military problems in multiple domains and the framework for the range of military operations across the competition continuum. It is the core of Army doctrine, and it guides how Army forces contribute to unified action.

I. An Operational Environment

An operational environment is a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander (JP 3-0). Commanders at all levels have their own operational environments for their particular operations. An operational environment for any specific operation comprises more than the interacting variables that exist within a specific physical area. It also involves interconnected influences from the global or regional perspective (for example, politics and economics) that impact on conditions and operations there. Thus, each commander's operational environment is part of a higher echelon commander's operational environment.

Operational environments include considerations at the strategic, operational, and tactical levels of warfare. At the strategic level, leaders develop an idea or set of ideas for employing the instruments of national power (diplomatic, informational, military, and economic) in a synchronized and integrated fashion to accomplish national objectives. The operational level links the tactical employment of forces to national and military strategic objectives, with the focus being on the design, planning, and conduct of operations using operational art. The tactical level of warfare involves the employment and ordered arrangement of forces in relation to each other. The levels of warfare help commanders visualize a logical arrangement of forces, allocate resources, and assign tasks based on a strategic purpose, informed by the conditions within their operational environments.

See pp. 1-21 to 1-32 for a discussion of operational art.

Broad trends such as globalization, urbanization, technological advances, and failing states affect land operations. These trends can create instability and contribute to an environment of persistent competition and conflict. Persistent conflict is the protracted confrontation among state, nonstate, and individual actors willing to use violence to achieve political and ideological ends. In such an operational environment, commanders must seek and exploit opportunities for success. To exploit opportunities, commanders must thoroughly understand the dynamic nature of their operational environment. Previous experience within a similar operational environment is not enough to guarantee future mission success in the current one.

Threats seek to employ capabilities to create effects in multiple domains and the information environment to counter U.S. interests and impede friendly operations. Their activities in the information environment, space, and cyberspace attempt to influence U.S. decision makers and disrupt friendly deployment of forces. Land-based threats will attempt to impede joint force freedom of action across the air, land, maritime, space, and cyberspace domains. They will disrupt the electromagnetic

Strategic-Level Context for the Army

Ref: ADP 1, *The Army* (Jul '19), pp. 2-4 to 2-6 (and ADP 3-0 (Jul '2019), pps. 1-5 to 1-6.)

Army Strategic Roles

The Army's primary mission is to organize, train, and equip its forces to conduct prompt and sustained land combat to defeat enemy ground forces and seize, occupy, and defend land areas. The Army accomplishes its mission by supporting the joint force and unified action partners in four strategic roles: shape operational environments, prevent conflict, prevail in large-scale ground combat, and consolidate gains. The strategic roles clarify the enduring reasons for which the Army is organized, trained, and equipped. Strategic roles are not tasks assigned to subordinate units.

- ADP 3-0, *Operations* (Jul '19)

Readiness for ground combat is and will remain the U.S. Army's first priority. The Army accomplishes its mission by supporting the joint force in four strategic roles: shaping operational environments, preventing conflict, prevailing in large-scale ground combat, and consolidating gains. The strategic roles clarify the enduring reasons for which our Army is organized, trained, and equipped. Army forces are further organized, trained, and equipped to provide specific core competencies delivering essential and enduring capabilities aligned with joint doctrine. The Army's operational concept of unified land operations described in ADP 3-0 is built on the conceptual framework established by the Army's strategic roles and its core competencies. Title 10, USC, the National Military Strategy, and DODD 5100.01 provide the overall guidance on the capabilities that the Army must provide to the Nation. The Army shapes operational environments and prevents conflict based upon the requirements of combatant commanders. The ability to prevail against any enemy during large-scale ground combat is what provides the military credibility necessary to deter war. Every operation must consolidate gains to make temporary operational success enduring and set the conditions for a sustainable and stable environment. Our non-negotiable obligation to the Nation is to win by achieving the combatant commander's operational objective when the Army is committed to any type of operation.

Shape Operational Environments

The Army provides unique forces with capabilities to shape operational environments. Shaping operational environments allows combatant commanders to reassure partners and deter aggression while establishing conditions that support the potential employment of joint forces. Army regionally aligned forces—including special operations units, Army Reserve units, and Army National Guard units—assist partners with internal defense and develop the capabilities needed to deter adversaries and defeat enemies. Army forces further develop relationships with multinational partner land forces, share intelligence, strengthen their security forces, increase cultural awareness, and conduct bilateral and multilateral military exercises. Through efforts such as the State Partnership Program, Army National Guard and Reserve units supply unique and dual-trained Soldiers with special skills obtained as civilians to assist in medical and engineering activities, disaster preparedness, critical infrastructure management, and resource protection. Together, these efforts allow the Army to maintain a global landpower network that is critical in shaping operational environments and winning wars. Army forces conduct shaping operations through the day-to-day actions of its Service component commanders, trainers, advisors, and logistic activities as specified under Title 10, USC and support to Title 22 and Title 50, USC.

Prevent Conflict

Preventing conflict includes all activities that deter adversary military actions which threaten allies or partners and deny them the ability to achieve objectives counter to U.S. interests. A well-trained, credible, and capable Army reduces the risk of aggression by adversaries because it raises both the risk and potential cost of military action to their forces. Moving ready and trained Army forces into a region tells adversaries that the United States is prepared and willing to protect its interests. Partner nations under external threats understand that introducing U.S. forces alters the regional military balance of power in their favor and bolsters their resolve to resist aggression. Multinational partners and adversaries recognize that Army forces—combined with the nation's joint air, maritime, and space-based forces—are dominant and therefore are a deterrence to armed conflict. This role meets the objectives described in the National Military Strategy.

Prevail In Large-Scale Ground Combat

The Army's capability and capacity to conduct large-scale ground combat is unique and foundational to its other roles. Only the Army has the capabilities necessary for sustained ground combat anywhere in the world. The credibility inherent in its ability to conduct large-scale ground combat as part of the joint force is a critical part of U.S. conventional deterrence. It is a primary source of assurance to friendly nations and an important factor in worldwide stability. The U.S. Army conducts large-scale ground combat as part of the joint force. When it deploys and fights, the Army both enables and is enabled by the other Services when they perform their roles. An Army that can defeat any enemy worldwide requires professionally committed leadership, well-equipped and trained units, and proficiency in the conduct of joint and multinational operations. Maintaining the readiness necessary for large-scale ground combat is a difficult and continual process that consumes significant time and resources. Readiness for large-scale ground combat operations saves lives.

Consolidate Gains

Operations to consolidate gains make temporary operational successes enduring and set the conditions to facilitate the transition of control over territory to legitimate authorities. Army forces enable the joint force commander to capitalize on operational success by following through to ensure sustainable conditions on the ground. Consolidation of gains is an integral part of winning armed conflict and is essential to retaining the long-term initiative over determined adversaries. Army forces reinforce and integrate the efforts of all unified action partners when they consolidate gains. Operations serve a higher national purpose in support of U.S. interests and are planned and executed to support that purpose at each echelon. A clear understanding of the higher purpose of the mission and operational environment determines what must happen to consolidate gains during the course of operations. How well ground forces consolidate gains determines in large part how enduring the results of operations will be. Effectively consolidating gains increases options for national leaders and contributes to decisive outcomes.

Win

Winning is the achievement of the purpose of an operation and the fulfillment of its objectives. The Army wins when it successfully performs its roles as part of the joint force during operations. It wins when it effectively shapes an operational environment for combatant commanders and when it responds rapidly with enough combat power to prevent war through deterrence. When required to fight, the Army's ability to prevail in large-scale ground combat becomes a decisive factor in breaking an enemy's will to continue fighting. Army forces win when the enemy is defeated to the degree that it can no longer achieve their objectives or effectively contest the joint force on land. To ensure that the military results of combat are not temporary, the Army follows through with its unique capability to consolidate gains and ensure enduring outcomes that are favorable to U.S. interests.

spectrum, sow confusion in the information environment, and challenge the legitimacy of U.S. actions. Understanding how threats can present multiple dilemmas to Army forces in all domains helps Army commanders identify (or create), seize, and exploit their own opportunities.

Some peer threats have nuclear and chemical weapons capabilities and the ability to employ such weapons in certain situations. However, capability does not always equal intent to use, and it is generally presumed that most would use restraint. Preparation and planning that takes nuclear and chemical weapons capabilities into account is of paramount importance in any confrontation with an adversary armed with them. Understanding threat nuclear and chemical weapons doctrine is important, particularly during large-scale ground combat operations.

Nuclear terrorism remains a threat to the United States and to international security and stability. Preventing the illicit acquisition of a nuclear weapon, nuclear materials, or related technology and expertise by a violent extremist organization is a significant U.S. national security priority. The more states—particularly rogue states—that possess nuclear weapons or the materials, technology, and knowledge required to make them, the greater the potential risk of terrorist acquisition. Given the nature of terrorist ideologies, commanders and staffs must assume that terrorists would employ a nuclear weapon were they to acquire one.

Large-scale ground combat operations can occur below the nuclear threshold, and they are not synonymous with total war. Large-scale ground combat operations are sustained combat operations involving multiple corps and divisions. Planning for large-scale ground combat operations against enemies possessing nuclear weapons must account for the possibility of their use against friendly forces. The operational approaches employed by joint force commanders (JFCs) may thus be constrained to avoid nuclear escalation in terms of their geographic depth and the assigned objectives. Large-scale ground combat operations, while potentially enormous in scale and scope, are typically limited by the law of war and the political objectives of the conflict itself. Against nuclear armed enemies, the political objectives of a conflict are also informed by the strategic risk inherent in escalation. While the scale and scope of conventional conflict has been smaller than World War II since 1945, it retains its inherent lethality and complexity.

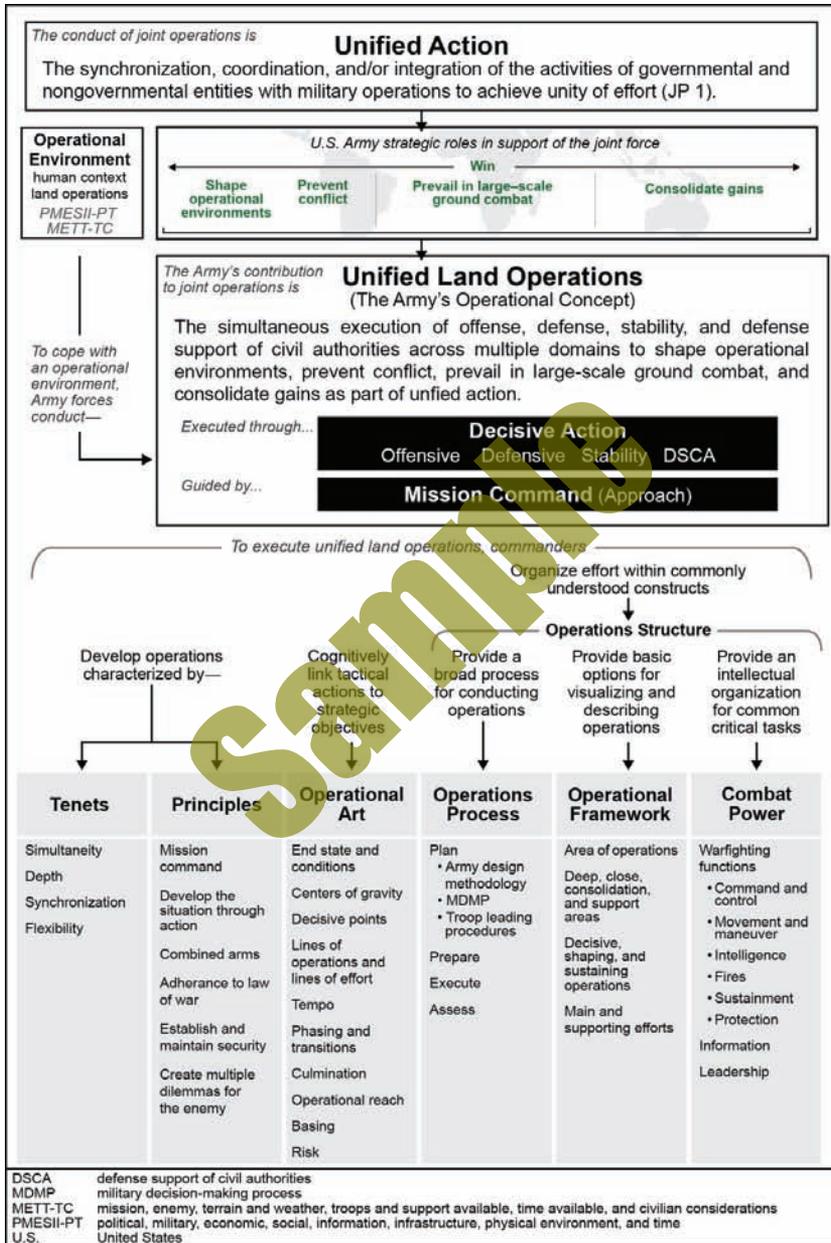
Successful operations against nuclear and chemically capable peer threats require units prepared to react to the employment of those capabilities and operate degraded in contaminated environments. Planning and training must include active and passive measures for protection against the effects of these weapons, as well as techniques for mitigating their effects to preserve combat power. This includes greater emphasis on dispersion, survivability, and regenerating communications between echelons. These requirements must be incorporated into every facet of doctrine and training, so units and commanders are technically and psychologically prepared for the environment they may encounter. Survivability in this environment should be a training and readiness objective.

Modern information technology makes the information environment, which includes cyberspace and the electromagnetic spectrum, indispensable to military operations. The information environment is the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information (JP 3-13). It is a key part of any operational environment, and it will be simultaneously congested and contested during operations. All actors in the information environment—enemy, friendly, or neutral—remain vulnerable to attack by physical, psychological, cyber, or electronic means.

No two operational environments are the same. An operational environment consists of many relationships and interactions among interrelated variables. How entities and conditions interact within an operational environment is often difficult to understand and requires continuous analysis.

Operations (Unified Logic Chart)

Ref: ADP 3-0, Operations (Jul '19), Introductory figure. ADP 3-0 unified logic chart.

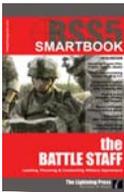


An operational environment continually evolves because of the complexity of human interaction and how people learn and adapt. People's actions change that environment. Some changes can be anticipated, while others cannot. Some changes are immediate and apparent, while other changes evolve over time or are extremely difficult to detect.

The complex and dynamic nature of an operational environment makes determining the relationship between cause and effect difficult and contributes to the friction and uncertainty inherent in military operations. Commanders must continually assess their operational environments and re-assess their assumptions. Commanders and staffs use the Army design methodology, operational variables, and mission variables to analyze an operational environment to support the operations process.

A. Operational and Mission Variables

An operational environment evolves as each operation progresses. Army leaders use operational variables to analyze and understand a specific operational environment, and they use mission variables to focus on specific elements during mission analysis.



Refer to BSS5: The Battle Staff SMARTbook, 5th Ed. (pp. 1-16 to 1-17) for further discussion of the eight operational variables (PMESII-PT: political, military, economic, social, information, infrastructure, physical environment, and time) and mission variables (METT-TC : mission, enemy, terrain and weather, troops and support available, time available, and civil considerations).

Operational Variables (PMESII-PT)

Army planners describe conditions of an operational environment in terms of operational variables. Operational variables are those aspects of an operational environment, both military and nonmilitary, that may differ from one operational area to another and affect operations. Operational variables describe not only the military aspects of an operational environment, but also the population's influence on it. Using Army design methodology, planners analyze an operational environment in terms of eight interrelated operational variables: political, military, economic, social, information, infrastructure, physical environment, and time (known as PMESII-PT). As soon as a commander and staff have an indication of where their unit will conduct operations, they begin analyzing the operational variables associated with that location. They continue to refine and update that analysis throughout the course of operations.

Mission Variables (METT-TC)

Upon receipt of an order, Army leaders filter information from operational variables into mission variables during mission analysis. They use the mission variables to refine their understanding of the situation. The mission variables consist of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). Incorporating the analysis of the operational variables with METT-TC ensures that Army leaders consider the best available information about the mission.

II. War as a Human Endeavor

Ref: ADP 3-0, Operations (Jul '19), pp. 1-4 to 1-5.

War is chaotic, lethal, and a fundamentally human endeavor. It is a clash of wills fought among and between people. All war is inherently about changing human behavior, with each side trying to alter the behavior of the other by force of arms. Success requires the ability to out think an opponent and ruthlessly exploit the opportunities that come from positions of relative advantage. The side that best understands an operational environment adapts more rapidly and decides to act more quickly in conditions of uncertainty is the one most likely to win.

War is inextricably tied to the populations inhabiting the land domain. All military capabilities are ultimately linked to land and, in most cases, the ability to prevail in ground combat becomes a decisive factor in breaking an enemy's will. Understanding the human context that enables the enemy's will, which includes culture, economics, and history, is as important as understanding the enemy's military capabilities. Commanders cannot presume that superior military capability alone creates the desired effects on an enemy.

Commanders must continually assess whether their operations are influencing enemies and populations, eroding the enemy's will, and achieving the commanders' intended purpose.

When unified land operations occur among populations, they influence and are influenced by those populations. The results of these interactions are often unpredictable—and potentially uncontrollable. Commanders should seek to do less harm than good to gain the support of populations and, when possible, to influence their behaviors. Gaining support requires a combination of both coercion and incentives, the exact mix of which is unique to each case. During operations to shape operational environments and prevent conflicts, the scale is weighted heavily towards incentivizing desired behavior. However, in large-scale combat operations, coercion may play a larger role. Large-scale combat operations are extensive joint combat operations in terms of scope and size of forces committed, conducted as a campaign aimed at achieving operational and strategic objectives. Consolidating gains requires a more balanced approach. Regardless of the context, U.S. forces always operate consistently with international law and their rules of engagement.

U.S. military forces operate to achieve the goals and accomplish the objectives assigned to them by the President and Secretary of Defense. Normally, these goals and objectives involve establishing security conditions favorable to U.S. interests. Army forces do this as a function of unified action.

B. Threats and Hazards

Ref: ADP 3-0, Operations (Jul '19), pp. 1-3 to 1-4.

For every operation, threats are a fundamental part of an operational environment. A threat is any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland. Threats may include individuals, organized or unorganized groups, paramilitary or military forces, nation-states, or national alliances. Commanders and staffs must understand how current and potential threats organize, equip, train, employ, and control their forces. They must continually identify, monitor, and assess threats as they adapt and change over time. In general, the various actors in any operational area can qualify as an enemy, an adversary, a neutral, or a friend.

Enemy

An enemy is a party identified as hostile against which the use of force is authorized. An enemy is also called a combatant and is treated as such under the law of war. Enemies will apply advanced technologies (such as cyberspace attack) as well as simple and dual-use technologies (such as improvised explosive devices). Enemies avoid U.S. strengths (such as long-range surveillance and precision strike missiles) through countermeasures (such as integrated air defense systems, dispersion, concealment, and intermingling with civilian populations).

Adversary

An adversary is a party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged (JP 3-0).

Neutral

During competition and conflict, a neutral is an identity applied to a party whose characteristics, behavior, origin, or nationality indicate that it is neither supporting nor opposing friendly forces.

Friendly

Finally, a friendly is an individual or group that is perceived to be supportive of U.S. efforts. Land operations often prove complex because an enemy, an adversary, a neutral, or a friend intermix, often with no easy means to distinguish one from another.

Hybrid Threat

The term hybrid threat captures the complexity of operational environments, the multiplicity of actors involved, and the blurring of traditionally regulated elements of conflict. A hybrid threat is the diverse and dynamic combination of regular forces, irregular forces, terrorists, or criminal elements acting in concert to achieve mutually benefitting effects. Hybrid threats combine traditional forces governed by law, military tradition, and custom with unregulated forces that act without constraints on the use of violence. These may involve nation-states using proxy forces or nonstate actors such as criminal and terrorist organizations that employ sophisticated capabilities traditionally associated with states. Hybrid threats are most effective when they exploit friendly constraints, capability gaps, and lack of situational awareness.

Hazard

A hazard is a condition with the potential to cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation (JP 3-33). Hazards include disease, extreme weather phenomena, solar flares, and areas contaminated by toxic materials. Hazards can damage or destroy resources, reduce combat power, and contribute to early culmination that prevents mission accomplishment. Understanding hazards and their effects on operations is generally done in the context of terrain, weather, and various other factors related to a particular mission.

Peer Threat

A peer threat is an adversary or enemy able to effectively oppose U.S. forces worldwide while enjoying a position of relative advantage in a specific region. These threats can generate equal or temporarily superior combat power in geographical proximity to a conflict area with U.S. forces. A peer threat may also have a cultural affinity to specific regions, providing them relative advantages in terms of time, space, and sanctuary. They generate tactical, operational, and strategic challenges an order of magnitude more challenging militarily than other adversaries.

Peer threats can employ resources across multiple domains to create lethal and nonlethal effects with operational significance throughout an operational environment. They seek to delay deployment of U.S. forces and inflict significant damage across multiple domains in a short period to achieve their goals before culminating. A peer threat uses various methods to employ their instruments of power to render U.S. military power irrelevant. Five broad methods, used in combination by peer threats, include—

- Information warfare
- Preclusion
- Isolation
- Sanctuary
- Systems warfare

Enemies and adversaries pursue anti-access and area-denial capabilities, putting U.S. power projection at risk and enabling an extension of their coercive power well beyond their borders. As a result, the United States may be unable to employ forces with complete freedom of action. The ability of U.S. forces to deliberately build up combat power, perform detailed rehearsals and integration activities, and then conduct operations on their own initiative will likely be significantly challenged. Threats might use cyberspace attack capabilities (such as disruptive and destructive malware), electronic warfare, and space capabilities (such as anti-satellite weapons) to disrupt U.S. communications; positioning, navigation, and timing; synchronization; and freedom of maneuver. Finally, enemies may attempt to strike installations outside the continental United States to disrupt or delay deployment of forces. These types of threats are not specific to any single theater of operations, since they have few geographic constraints.

When dealing with nuclear powered adversaries, the JFC may face constraints to mitigate risk of escalation. Tensions may heighten when employing ground forces that will operate close to an enemy's border or when exploiting offensive success in ways that threaten the viability of an enemy government to maintain power. Because of the potential for nuclear escalation, Army commanders and staffs should consider tensions and the overall strategic situation as they develop operational approaches at their particular echelon.

Violent extremist organizations work to undermine regional security in areas such as the Middle East and North Africa. Such groups radicalize populations, incite violence, and employ terror to impose their visions on fragile societies. They are strongest where governments are weakest, exploiting people trapped in fragile or failed states. Violent extremist organizations often coexist with criminal organizations, where both profit from illicit trade and the spread of corruption, further undermining security and stability.



Refer to *CTS1: The Counterterrorism, WMD & Hybrid Threat SMARTbook* for further discussion. *CTS1* topics and chapters include: the terrorist threat (characteristics, goals & objectives, organization, state-sponsored, international, and domestic), hybrid and future threats, forms of terrorism (tactics, techniques, & procedures), counterterrorism, critical infrastructure, protection planning and preparation, countering WMD, and consequence management (all hazards response).

III. Unified Action

Unified action is the synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort (JP 1). Unity of effort is coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization, which is the product of successful unified action (JP 1). Unified action partners are those military forces, governmental and nongovernmental organizations, and elements of the private sector with whom Army forces plan, coordinate, synchronize, and integrate during the conduct of operations. Military forces play a key role in unified action before, during, and after operations. The Army's contribution to unified action is unified land operations.

The Army is the dominant U.S. fighting force in the land domain. Army forces both depend upon and enable the joint force across multiple domains, including air, land, maritime, space, and cyberspace. This mutual interdependence creates powerful synergies and reflects that all operations are combined arms operations, and all combined arms operations are conducted in multiple domains. The Army depends on the other Services for strategic and operational mobility, joint fires, and other key enabling capabilities. The Army supports other Services, combatant commands, and unified action partners with ground-based indirect fires and ballistic missile defense, defensive cyberspace operations, electronic protection, communications, intelligence, rotary-wing aircraft, logistics, and engineering.

The Army's ability to set and sustain the theater of operations is essential to allowing the joint force freedom of action. The Army establishes, maintains, and defends vital infrastructure. It also provides the JFC with unique capabilities, such as port and airfield opening; logistics; chemical defense; and reception, staging, and onward movement, and integration of forces.

Interagency coordination is a key part of unified action. Interagency coordination is within the context of Department of Defense involvement, the coordination that occurs between elements of Department of Defense, and participating United States Government departments and agencies for the purpose of achieving an objective (JP 3-0). Army forces conduct and participate in interagency coordination using established liaison, personal engagement, and planning processes.

Unified action may require interorganizational cooperation to build the capacity of unified action partners. Interorganizational cooperation is interaction that occurs among elements of the Department of Defense; participating United States Government departments and agencies; state, territorial, local, and tribal agencies; foreign military forces and government agencies; international organizations; nongovernmental organizations; and the private sector (JP 3-08). Building partner capacity helps to secure populations, protects infrastructure, and strengthens institutions as a means of protecting common security interests. Building partner capacity results from comprehensive interorganizational activities, programs, and military-to-military engagements united by a common purpose. The Army integrates capabilities of operating forces and the institutional force to support interorganizational capacity-building efforts, primarily through security cooperation interactions.

See facing page for discussion of security cooperation activities.

A. Cooperation with Civilian Organizations

When directed, Army forces provide sustainment and security for civilian organizations, since many lack these capabilities. Within the context of interagency coordination, this refers to non-Department of Defense (DOD) agencies of the U.S. Government. Other government agencies include, but are not limited to, Departments of State, Justice, Transportation, and Agriculture.

Security Cooperation & Military Engagement Activities

Ref: ADP 3-0, Operations (Jul '19), pp. 1-7 to 1-8.

Security cooperation is all Department of Defense interactions with foreign security establishments to build security relationships that promote specific United States security interests, develop allied and partner nation military and security capabilities for self-defense and multinational operations, and provide United States forces with peacetime and contingency access to allied and partner nations (JP 3-20). Security cooperation provides the means to build partner capacity and accomplish strategic objectives. These objectives include—

- Building defensive and security relationships that promote U.S. security interests.
- Developing capabilities for self-defense and multinational operations.
- Providing U.S. forces with peacetime and contingency access to host nations to increase situational understanding of an operational environment.

Army forces support the objectives of the combatant commander's campaign plan in accordance with appropriate policy, legal frameworks, and authorities. The plan supports those objectives through security cooperation, specifically those involving security force assistance and foreign internal defense. Security force assistance is the Department of Defense activities that support the development of the capacity and capability of foreign security forces and their supporting institutions (JP 3-20). Foreign internal defense is participation by civilian and military agencies of a government in any of the action programs taken by another government or other designated organization to free and protect its society from subversion, lawlessness, insurgency, terrorism, and other threats to its security (JP 3-22).

Security force assistance and foreign internal defense professionalize and develop security partner capacity to enable synchronized sustaining operations. Army security cooperation interactions enable other interorganizational efforts to build partner capacity. Army forces—including special operations forces—advise, assist, train, and equip partner units to develop unit and individual proficiency in security operations. The institutional force advises and trains partner army activities to build institutional capacity for professional education, force generation, and force sustainment. (See FM 3-22 for more information on Army support to security cooperation.)

Refer to FM 3-22 for more information on Army support to security cooperation.



Refer to TAA2: *Military Engagement, Security Cooperation & Stability SMARTbook (Foreign Train, Advise, & Assist)* for further discussion. Topics include the Range of Military Operations (JP 3-0), Security Cooperation & Security Assistance (Train, Advise, & Assist), Stability Operations (ADRP 3-07), Peace Operations (JP 3-07.3), Counterinsurgency Operations (JP & FM 3-24), Civil-Military Operations (JP 3-57), Multinational Operations (JP 3-16), Interorganizational Coordination (JP 3-08), and more.

An intergovernmental organization is an organization created by a formal agreement between two or more governments on a global, regional, or functional basis to protect and promote national interests shared by member states. Intergovernmental organizations may be established on a global, regional, or functional basis for wide-ranging or narrowly defined purposes. Examples include the United Nations and the European Union.

A nongovernmental organization is a private, self-governing, not-for-profit organization dedicated to alleviating human suffering; and/or promoting education, health care, economic development, environmental protection, human rights, and conflict resolution; and/or encouraging the establishment of democratic institutions and civil society (JP 3-08). Their mission is generally humanitarian and not one concerned with assisting the military in accomplishing its objectives. In some circumstances, nongovernmental organizations (NGOs) may provide humanitarian aid simultaneously to elements of both sides in a conflict. Nevertheless, there are many situations where the interests of Army forces and NGOs overlap.

A contractor is a person or business operating under a legal agreement to provide products or services for pay. A contractor furnishes supplies and services or performs work at a certain price or rate based on contracted terms. Contracted support includes traditional goods and services support, but it may also include interpreter communications, infrastructure, and other related support. Contractor employees include contractors authorized to accompany the force as a formal part of the force and local national employees who normally have no special legal status.

Refer to ATP 4-10 for more information on contractors.

Most civilian organizations are not under military control, nor does the American ambassador or a United Nations commissioner control them. Civilian organizations have different organizational cultures and norms. Some may be willing to work with Army forces; others may not. Civilian organizations may arrive well after military operations have begun, making personal contact and team building essential. Command emphasis on immediate and continuous coordination encourages effective cooperation. Commanders should establish liaison with civilian organizations to integrate their efforts as much as possible with Army and joint operations. Civil affairs units typically establish this liaison.

Refer to FM 3-57 for more information on civil affairs units.

B. Joint Operations

Single Services may perform tasks and missions to support DOD objectives. However, the DOD primarily employs two or more Services (from two military departments) in a single operation across multiple domains, particularly in combat, through joint operations. Joint operations are military actions conducted by joint forces and those Service forces employed in specified command relationships with each other, which of themselves, do not establish joint forces (JP 3-0). A joint force is a force composed of elements, assigned or attached, of two or more Military Departments operating under a single joint force commander (JP 3-0). Joint operations exploit the advantages of interdependent Service capabilities in multiple domains through unified action. Joint planning integrates military power with other instruments of national power (diplomatic, economic, and informational) to achieve a desired military end state. The end state is the set of required conditions that defines achievement of the commander's objectives (JP 3-0). Joint planning connects the strategic end state to the JFC's operational campaign design and ultimately to tactical missions. JFCs use campaigns and major operations to translate their operational-level actions into strategic results. Campaigns are always joint operations. Army forces do not conduct campaigns unless they are designated as a joint task force (JTF). However, Army forces contribute to campaigns through the conduct of land operations.

See following pages (pps. 1-14 to 1-15) for further discussion of joint operations.

C. Multinational Operations

Ref: ADP 3-0, Operations (Jul '19), pp. 1-7 to 1-8.

Multinational operations is a collective term to describe military actions conducted by forces of two or more nations, usually undertaken within the structure of a coalition or alliance (JP 3-16). While each nation has its own interests and often participates within the limitations of national caveats, all nations bring value to an operation. Each nation's force has unique capabilities, and each usually contributes to an operation's legitimacy in terms of international or local acceptability. Army forces should anticipate that most operations will be multinational operations and plan accordingly.

Refer to FM 3-16 for more information on multinational operations.

Alliance

An alliance is the relationship that results from a formal agreement between two or more nations for broad, long-term objectives that further the common interests of the members (JP 3-0). Military alliances, such as the North Atlantic Treaty Organization (commonly known as NATO), allow partners to establish formal, standard agreements.

Coalition

A coalition is an arrangement between two or more nations for common action. Nations usually form coalitions for specific, limited purposes. A coalition action is an action outside the bounds of established alliances, usually in a narrow area of common interest. Army forces may participate in coalition actions under the authority of a United Nations' resolution.

Multinational operations present challenges and demands. These include cultural and language issues, interoperability challenges, national caveats on the use of respective forces, the sharing of information and intelligence, and the rules of engagement. Commanders analyze the particular requirements of a mission in the context of friendly force capabilities to exploit the multinational force's advantages and compensate for its limitations. Establishing effective liaison with multinational partners is critical to situational awareness.

Multinational sustainment requires detailed planning and coordination. Normally each nation provides a national support element to sustain its forces. However, integrated multinational sustainment may improve efficiency and effectiveness. When authorized and directed, an Army theater sustainment command can provide logistics and other support to multinational forces. Integrating support requirements of several nations' forces—often spread over considerable distances and across international boundaries—is critical to the success of multinational operations and requires flexibility, patience, and persistence.



Refer to TAA2: Military Engagement, Security Cooperation & Stability SMARTbook (Foreign Train, Advise, & Assist) for further discussion. Topics include the Range of Military Operations (JP 3-0), Security Cooperation & Security Assistance (Train, Advise, & Assist), Stability Operations (ADRP 3-07), Peace Operations (JP 3-07.3), Counterinsurgency Operations (JP & FM 3-24), Civil-Military Operations (JP 3-57), Multinational Operations (JP 3-16), Interorganizational Coordination (JP 3-08), and more.

Joint Operations, Unified Action, & the Range of Military Operations (ROMO)

Ref: JP 3-0 (w/Chg 1), Joint Operations (Oct '18).

Services may accomplish tasks and missions in support of Department of Defense (DOD) objectives. However, the DOD primarily employs two or more services in a single operation, particularly in combat, through joint operations. The general term, joint operations, describes military actions conducted by joint forces or by Service forces employed under command relationships. A joint force is one composed of significant elements, assigned or attached, of two or more military departments operating under a single joint force commander. Joint operations exploit the advantages of interdependent Service capabilities through unified action, and joint planning integrates military power with other instruments of national power to achieve a desired military end state.

Unified Action

Whereas the term joint operations focuses on the integrated actions of the Armed Forces of the United States in a unified effort, the term unified action has a broader connotation. JFCs are challenged to achieve and maintain operational coherence given the requirement to operate in conjunction with interorganizational partners. CCDRs play a pivotal role in unifying joint force actions, since all of the elements and actions that comprise unified action normally are present at the CCDR's level. However, subordinate JFCs also integrate and synchronize their operations directly with the operations of other military forces and the activities of nonmilitary organizations in the operational area to promote unified action.

Unified action is a comprehensive approach that synchronizes, coordinates, and when appropriate, integrates military operations with the activities of other governmental and nongovernmental organizations to achieve unity of effort.

When conducting operations for a joint force commander, Army forces achieve unified action by synchronizing actions with the activities of components of the joint force and unified action partners.

The Range of Military Operations (ROMO)

The range of military operations is a fundamental construct that provides context. Military operations vary in scope, purpose, and conflict intensity across a range that extends from military engagement, security cooperation, and deterrence activities to crisis response and limited contingency operations and, if necessary, to major operations and campaigns. Use of joint capabilities in military engagement, security cooperation, and deterrence activities helps shape the operational environment and keep the day-to-day tensions between nations or groups below the threshold of armed conflict while maintaining US global influence.

Range of Military Operations



A. Military Engagement, Security Cooperation, and Deterrence

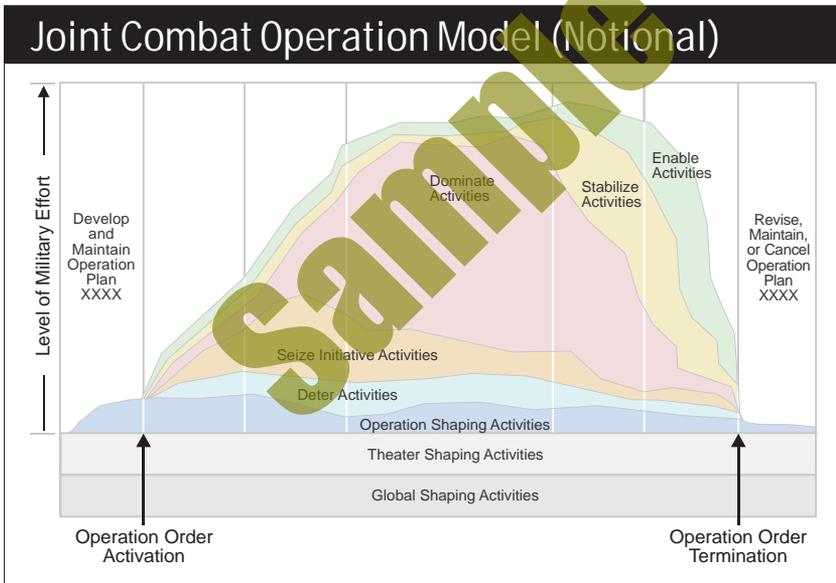
These ongoing activities establish, shape, maintain, and refine relations with other nations and domestic civil authorities (e.g., state governors or local law enforcement). The general strategic and operational objective is to protect US interests at home and abroad.

B. Crisis Response & Limited Contingency Operations

A crisis response or limited contingency operation can be a single small-scale, limited-duration operation or a significant part of a major operation of extended duration involving combat. The associated general strategic and operational objectives are to protect US interests and/or prevent surprise attack or further conflict.

C. Large-Scale Combat Operations

When required to achieve national strategic objectives or protect national interests, the US national leadership may decide to conduct a major operation or campaign normally involving large-scale combat. During **major operations**, joint force actions are conducted simultaneously or sequentially in accordance with a common plan and are controlled by a single commander. A **campaign** is a series of related major operations aimed at achieving strategic and operational objectives within a given time and space.



Refer to *JFODS5-1: The Joint Forces Operations & Doctrine SMARTbook (Guide to Joint, Multinational & Interorganizational Operations)*. Updated for 2019, topics include joint doctrine fundamentals (JP 1), joint operations (JP 3-0 w/Chg 1), an expanded discussion of joint functions, joint planning (JP 5-0), joint logistics (JP 4-0), joint task forces (JP 3-33), joint force operations (JPs 3-30, 3-31, 3-32 & 3-05), multinational operations (JP 3-16), interorganizational cooperation (JP 3-08), & more!

IV. Land Operations

An operation is a sequence of tactical actions with a common purpose or unifying theme (JP 1). The Army's primary mission is to organize, train, and equip forces to conduct prompt and sustained land combat operations and perform such other duties, not otherwise assigned by law, as may be prescribed by the President or the Secretary of Defense (as described in Title 10, United States Code). The Army does this through its operational concept of unified land operations. Army doctrine aligns with joint doctrine, and it is informed by the nature of land operations. Army forces are employed in accordance with the character of the threat and friendly force capabilities. They conduct operations to preserve vital national interests, most important of which are the sovereignty of the homeland and the preservation of the U.S. constitutional form of government. Army forces are prepared to operate across the range of military operations and integrate with unified action partners as part of a larger effort.

Army forces, with unified action partners, conduct land operations to shape security environments, prevent conflict, prevail in ground combat, and consolidate gains. Army forces provide multiple options for responding to and resolving crises. Army forces defeat enemy forces, control terrain, secure populations, and preserve joint force freedom of action.

The dynamic interaction among friendly forces, enemy forces, adversaries, neutral parties, and the environment make land operations exceedingly complex. Understanding each of these elements separately is necessary, but not sufficient, to understand their relationships with each other. Understanding the context of dynamic interaction in each case helps determine what constitutes positions of relative advantage. Exploiting positions of relative advantage allows Army forces to defeat adversaries and enemies at least cost.

Joint doctrine discusses traditional war as a confrontation between nation-states or coalitions of nation-states. This confrontation typically involves small-scale to large-scale, force-on-force military operations in which enemies use various conventional and unconventional military capabilities against each other. Landpower heavily influences the outcome of wars even when it is not the definitive instrument.

Landpower is the ability—by threat, force, or occupation—to gain, sustain, and exploit control over land, resources, and people. Landpower is the basis of unified land operations. Landpower includes the ability to—

- Protect and defend U.S. national assets and interests.
- Impose the Nation's will on an enemy, by force if necessary.
- Sustain high tempo operations.
- Engage to influence, shape, prevent, and deter in an operational environment.
- Defeat enemy organizations and control terrain.
- Secure populations and consolidate gains.
- Establish and maintain a stable environment that sets the conditions for political and economic development.
- Address the consequences of catastrophic events—both natural and man-made—to restore infrastructure and reestablish basic civil services.

A. Army Forces—Expeditionary Capability and Campaign Quality

Swift campaigns, however desirable, are the historical exception. Whenever objectives involve controlling populations or dominating terrain, campaign success usually requires employing landpower for protracted periods. The Army's combination of

B. Close Combat

Ref: ADP 3-0, Operations (Jul '19), p. 1-11.

The nature of close combat in land operations is unique. Combatants routinely come face-to-face with one another in large numbers in a wide variety of operational environments comprising all types of terrain. When other means fail to drive enemy forces from their positions, Army forces close with and destroy or capture them. The outcome of battles and engagements depends on the ability of Army forces to close with enemy forces and prevail in close combat. Close combat is warfare carried out on land in a direct-fire fight, supported by direct and indirect fires and other assets. Units involved in close combat employ direct fire weapons supported by indirect fire, air-delivered fires, and nonlethal engagement means. Units in close combat defeat or destroy enemy forces and seize and retain ground. Close combat at lower echelons contains many more interactions between friendly and enemy forces than any other form of combat.

Close combat is most often linked to difficult terrain where enemies seek to negate friendly advantages in technology and weapon capabilities. Urban terrain represents one of the most likely close combat challenges. The complexity of urban terrain and the density of noncombatants reduce the effectiveness of advanced sensors and long-range weapons. Operations in large, densely populated areas require special considerations. From a planning perspective, commanders view cities as both topographic features and a dynamic system of varying operational entities containing hostile forces, local populations, and infrastructure.

Effective close combat relies on lethality informed by a high degree of situational understanding across multiple domains. The capacity for physical destruction is the foundation of all other military capabilities, and it is building block of military operations. Army formations are organized, equipped, and trained to employ lethal capabilities in a wide range of conditions. The demonstrated lethality of Army forces provides the credibility essential to deterring adversaries and assuring allies and partners.

An inherent, complementary relationship exists between using lethal force and applying military capabilities for nonlethal purposes. In wartime, each situation requires a different mix of violence and constraint. Lethal and nonlethal actions used together complement each other and create multiple dilemmas for opponents. During operations short of armed conflict, the lethality implicit in Army forces enables their performance of other tasks effectively with minimal adversary interference.



Refer to SUTS3: The Small Unit Tactics SMARTbook, 3rd Ed., completely updated with the latest publications for 2019. Chapters and topics include tactical fundamentals, the offense; the defense; train, advise, and assist (stability, peace & counterinsurgency ops); tactical enabling tasks (security, reconnaissance, relief in place, passage of lines, encirclement, and troop movement); special purpose attacks (ambush, raid, etc.); urban and regional environments (urban, fortified areas, desert, cold, mountain, & jungle operations); patrols & patrolling.

B. Stability Mechanism

A stability mechanism is the primary method through which friendly forces affect civilians in order to attain conditions that support establishing a lasting, stable peace. As with defeat mechanisms, combinations of stability mechanisms produce complementary and reinforcing effects that accomplish the mission more effectively and efficiently than single mechanisms do alone.

The four stability mechanisms are compel, control, influence, and support. Compel means to use, or threaten to use, lethal force to establish control and dominance, affect behavioral change, or enforce compliance with mandates, agreements, or civil authority. Control involves imposing civil order. Influence means to alter the opinions, attitudes, and ultimately the behavior of foreign friendly, neutral, adversary, and enemy audiences through messages, presence, and actions. Support establishes, reinforces, or sets the conditions necessary for the instruments of national power to function effectively.

III. The Elements of Operational Art

In applying operational art, Army commanders and their staffs use intellectual tools to help understand an operational environment and visualize and describe their approach to conducting an operation. Collectively, these tools are the elements of operational art. They help commanders understand, visualize, and describe the integration and synchronization of the elements of combat power and their commander's intent and guidance. Commanders selectively use these tools in any operation. Their broadest application applies to long-term operations.

Not all elements of operational art apply at all levels of warfare. A company commander concerned about the tempo of an upcoming operation is probably not concerned with an enemies' center of gravity. A corps commander may consider all elements of operational art in developing a plan to support the JFC. As such, the elements of operational art are flexible enough to apply when pertinent.

As some elements of operational design apply only to JFCs, the Army modifies the elements of operational design into elements of operational art by adding Army-specific elements. During the planning and execution of Army operations, commanders and staffs consider the elements of operational art as they assess the situation. They adjust current and future operations and plans as the operation unfolds, and they reframe as necessary.

Elements of Operational Art

Operational art consists of these elements:

- | | |
|--|---|
| <ul style="list-style-type: none">• End state and conditions.• Center of gravity.*• Decisive points.*• Lines of operations and lines of effort.*• Tempo. | <ul style="list-style-type: none">• Phasing and transitions.• Culmination.*• Operational reach.*• Basing.*• Risk. |
|--|---|

*Common to elements of operational design.

Ref: ADRP 3-0 (2016), table 2-2. Elements of operational art.

A. End State and Conditions

The end state is a set of desired future conditions the commander wants to exist when an operation ends. Commanders include the end state in their planning guidance. A clearly defined end state promotes unity of effort; facilitates integration, synchronization, and disciplined initiative; and helps mitigate risk.

Army operations typically focus on achieving the military end state that may include contributions to establishing nonmilitary conditions. Commanders explicitly describe the end state and its conditions for every operation. Otherwise, missions lack purpose, and operations lose focus. Successful commanders direct every operation toward a clearly defined, conclusive, and attainable end state (the objective). Most military operations require Army forces to consolidate gains to achieve a desired political end state, the exception being a punitive expedition.

An end state may evolve as an operation progresses. Commanders continuously monitor operations and evaluate their progress. They evaluate the validity of assumptions and running estimates. Commanders use formal and informal assessment methods to assess their progress in achieving an end state and determine if they need to reframe. An end state should anticipate future operations and set conditions for transitions.

B. Center Of Gravity (COG)

A center of gravity is the source of power that provides moral or physical strength, freedom of action, or will to act (JP 5-0). The loss of a center of gravity can ultimately result in defeat. A center of gravity is an analytical tool for planning operations. It provides a focal point and identifies sources of strength and weakness. However, the concept of center of gravity is only meaningful when considered in relation to the objectives of the mission. Because most enemies represent adaptive, complex systems, they are likely to have multiple centers of gravity. Destroying or capturing one is unlikely to win a campaign or resolve most conflicts.

Centers of gravity are not limited to military forces, and they can be physical, moral, and virtual. They are part of a dynamic perspective of an operational environment, and they may change as an environment changes. Physical centers of gravity, such as a capital city or military force, are tangible and typically easier to identify, assess, and account for than moral centers of gravity. Physical centers of gravity can often be influenced solely by military means. In contrast, moral centers of gravity are intangible and more difficult to influence. They can include a charismatic leader, powerful ruling elite, or united population. Military means alone usually prove ineffective when targeting moral centers of gravity. Affecting them requires collective, integrated efforts of all instruments of national power. Likewise, a virtual center of gravity may provide the ability to maintain unity of purpose for a disaggregated or decentralized enemy which does not require mutual physical support to accomplish objectives and is not geographically bound. Virtual centers of gravity are usually associated with violent extremist ideologies and organizations, non-nation state actors, or super-empowered individuals, although nation states could also have them.

A center of gravity has subcomponents comprising a system, such as command and control or logistics, which can be targeted for information collection and attack. This targeting can identify critical vulnerabilities in the system, such as communications or enemy morale, against which commanders can apply friendly capabilities.

Commanders analyze a center of gravity thoroughly and in detail. Faulty conclusions drawn from hasty or abbreviated analyses can adversely affect operations, waste critical resources, and incur undue risk. Thoroughly understanding an operational environment helps commanders identify and target enemy centers of gravity. This understanding encompasses how enemies organize, fight, and make decisions. It includes their physical and moral strengths and weaknesses. This understanding helps planners identify centers of gravity, their associated decisive points, and the best approach for achieving the desired end state.

C. Decisive Points

A decisive point is a geographic place, specific key event, critical factor, or function that, when acted upon, allows commanders to gain a marked advantage over an enemy or contribute materially to achieving success (JP 5-0). Decisive points help

D. Lines of Operations and Lines of Effort

Ref: ADP 3-0, Operations (Jul '19), pp. 2-7 to 2-8.

Lines of operations and lines of effort link objectives to the end state physically and conceptually. Commanders may describe an operation along lines of operations, lines of effort, or a combination of both. The combination of them may change based on the conditions within an area of operations. Commanders synchronize and sequence actions, deliberately creating complementary and reinforcing effects. The lines then converge on the well-defined, commonly understood end state outlined in the commander's intent.

Commanders at all levels may use lines of operations and lines of effort to develop tasks and allocate resources. Commanders may designate one line as the decisive operation and others as shaping operations. Commanders synchronize and sequence related actions along multiple lines. Seeing these relationships helps commanders assess progress toward achieving the end state as forces perform tasks and accomplish missions.

Lines of Operations

A line of operations is a line that defines the directional orientation of a force in time and space in relation to the enemy and links the force with its base of operations and objectives. Lines of operations connect a series of decisive points that lead to control of a geographic or force-oriented objective. Operations designed using lines of operations generally consist of a series of actions executed according to a well-defined sequence. A force operates on interior and exterior lines. Interior lines are lines on which a force operates when its operations diverge from a central point. Interior lines allow commanders to move quickly against enemy forces along shorter lines of operation. Exterior lines are lines on which a force operates when its operations converge on the enemy. Exterior lines allow commanders to concentrate forces against multiple positions on the ground, thus presenting multiple dilemmas to the enemy. Lines of operations tie offensive and defensive operations to the geographic and positional references in the area of operations.

Lines of Effort

A line of effort is a line that links multiple tasks using the logic of purpose rather than geographical reference to focus efforts toward establishing a desired end state. Lines of effort are essential to long-term planning when positional references to an enemy or adversary have little relevance. In operations involving many nonmilitary factors, lines of effort may be the only way to link tasks to the end state. Lines of effort are often essential to helping commanders visualize how military capabilities can support the other instruments of national power.

Commanders use lines of effort to describe their vision of operations to achieve end state conditions. These lines of effort show how individual actions relate to each other and to achieving the end state. Commanders often use stability and DSCA tasks along lines of effort. These tasks link military actions with the broader interagency or interorganizational effort across the levels of warfare. As operations progress, commanders may modify the lines of effort after assessing conditions. Commanders use measures of performance and measures of effectiveness to continually assess operations. A measure of performance is an indicator used to measure a friendly action that is tied to measuring task accomplishment (JP 5-0). A measure of effectiveness is an indicator used to measure a current system state, with change indicated by comparing multiple observations over time (JP 5-0).

Combining Lines of Operations and Lines of Effort

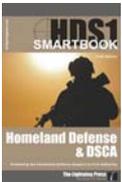
Commanders use lines of operations and lines of effort to connect objectives to a central, unifying purpose. The difference between lines of operations and lines of effort is that lines of operations are oriented on physical linkages, while lines of effort are oriented on logical linkages. Combining lines of operations and lines of effort allows a commander to include stability or DSCA tasks in the long-term plan. This combination helps commanders begin consolidating gains and set the end state conditions for transitions in an operation.

C. Homeland Defense and Decisive Action

Ref: ADP 3-0, Operations (Jul '19), pp. 3-4 to 3-5.

Homeland defense is the protection of United States sovereignty, territory, domestic population, and critical infrastructure against external threats and aggression or other threats as directed by the President (JP 3-27). The DOD has lead responsibility for homeland defense. The strategy for homeland defense (and DSCA) calls for defending U.S. territory against attack by state and nonstate actors through an active, layered defense that aims to deter and defeat aggression abroad and simultaneously protect the homeland. The Army supports this strategy with capabilities in forward regions of the world, geographic approaches to U.S. territory, and within the U.S. homeland.

During homeland defense, Army forces work closely with federal, state, territorial, tribal, local, and private agencies. Land domain homeland defense could consist of offense and defense as part of decisive action. Homeland defense is a defense-in-depth that relies on collection, analysis, and sharing of information and intelligence; strategic and regional deterrence; military presence in forward regions; and the ability to rapidly obtain and project warfighting capabilities to defend the United States, its allies, and its interests. This defense may include support to civil law enforcement; antiterrorism and force protection; counterdrug; air and missile defense; chemical, biological, radiological, nuclear, and high-yield explosives; and defensive cyberspace operations. It can also include security cooperation with other partners to build an integrated and mutually supportive concept of protection.



Refer to *The Homeland Defense & DSCA SMARTbook (Protecting the Homeland / Defense Support to Civil Authority)* for complete discussion. Topics and references include homeland defense (JP 3-28), defense support of civil authorities (JP 3-28), Army support of civil authorities (ADRP 3-28), multi-service DSCA TTPs (ATP 3-28.1/MCWP 3-36.2), DSCA liaison officer toolkit (GTA 90-01-020), key legal and policy documents, and specific hazard and planning guidance.



Refer to *CTS1: The Counterterrorism, WMD & Hybrid Threat SMARTbook* for further discussion. CTS1 topics include: the terrorist threat (characteristics, goals & objectives, organization, state-sponsored, international, and domestic), hybrid and future threats, forms of terrorism (tactics, techniques, & procedures), counterterrorism, critical infrastructure, protection planning and preparation, countering WMD, and consequence management (all hazards response).



Refer to *CYBER1: The Cyberspace Operations & Electronic Warfare SMARTbook (Multi-Domain Guide to Offensive/Defensive CEMA and CO)*. Topics and chapters include cyber intro (global threat, contemporary operating environment, information as a joint function), joint cyberspace operations (CO), cyberspace operations (OCO/DCO/DODIN), electronic warfare (EW) operations, cyber & EW (CEMA) planning, spectrum management operations (SMO/JEMSO), DoD information network (DODIN) operations, acronyms/abbreviations, and a cross-referenced glossary of cyber terms.

Elements of Decisive Action

Ref: ADP 3-0, Operations (Jul '19), pp. 3-3 to 3-4 and table 3-1, p. 3-2.

Decisive action requires simultaneous combinations of offense, defense, and stability or defense support of civil authorities tasks.

1. Offensive Operations

An offensive operation is an operation to defeat or destroy enemy forces and gain control of terrain, resources, and population centers. Offensive operations impose the commander's will on an enemy.

The offense is the most direct means of seizing, retaining, and exploiting the initiative to gain a physical and psychological advantage. In the offense, the decisive operation is a sudden action directed toward enemy weaknesses and capitalizing on speed, surprise, and shock. If that operation fails to destroy an enemy, operations continue until enemy forces are defeated. The offense compels an enemy to react, creating new or larger weaknesses the attacking force can exploit.

See pp. 4-2 to 4-3 and SUTS3: The Small Unit Tactics SMARTbook, 3rd Ed. (ADP 3-90)

2. Defensive Operations

A defensive operation is an operation to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability operations. Normally the defense cannot achieve a decisive victory. However, it sets conditions for a counteroffensive or a counterattack that enables forces to regain the initiative. Defensive operations are a counter to an enemy offensive action, and they seek

to destroy as much of the attacking enemy forces as possible. They preserve control over land, resources, and populations, and retain key terrain, protect lines of communications, and protect critical capabilities against attack. Commanders can conduct defensive operations in one area to free forces for offensive operations elsewhere.

See pp. 4-2 to 4-3 and SUTS3: The Small Unit Tactics SMARTbook, 3rd Ed. (ADP 3-90)

Offense

Types of Offensive Operations

- Movement to contact
- Attack
- Exploitation
- Pursuit

Purposes

- Dislocate, isolate, disrupt and destroy enemy forces
- Seize key terrain
- Deprive the enemy of resources
- Refine intelligence
- Deceive and divert the enemy
- Provide a secure environment for stability operations

Defense

Types of Defensive Operations

- Mobile defense
- Area defense
- Retrograde

Purposes

- Deter or defeat enemy offensive operations
- Gain time
- Achieve economy of force
- Retain key terrain
- Protect the populace, critical assets and infrastructure
- Refine intelligence

3. Stability Operations

A stability operation is an operation conducted outside the United States in coordination with other instruments of national power to establish or maintain a secure environment and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. These operations support governance by a host nation, an interim government, or a military government. Stability involves coercive and constructive action. Stability helps in building relationships among unified action partners and promoting U.S. security interests. It can help establish political, legal, social, and economic institutions in an area while supporting transition of responsibility to a legitimate

Stability

Stability Operations Tasks

- Establish civil security
- Establish civil control
- Restore essential services
- Support to governance
- Support to economic and infrastructure development
- Conduct security cooperation

Purposes

- Provide a secure environment
- Secure land areas
- Meet the critical needs of the populace
- Gain support for host-nation government
- Shape the environment for interagency and host-nation success
- Promote security, build partner capacity, and provide access
- Refine intelligence

Defense Support of Civil Authorities

Defense Support of Civil Authorities Tasks

- Provide support for domestic disasters
- Provide support for domestic CBRN incidents
- Provide support for domestic civilian law enforcement agencies
- Provide other designated support

Purposes

- Save lives
- Restore essential services
- Maintain or restore law and order
- Protect infrastructure and property
- Support maintenance or restoration of local government
- Shape the environment for interagency success

authority. Commanders are legally required to perform minimum-essential stability operations tasks when controlling populated areas of operations. These include security, food, water, shelter, and medical treatment.

See pp. 4-4 to 4-5 and TAA2: *The Military Engagement, Security Cooperation & Stability SMARTbook, 2nd Ed. (ADP 3-07)*

4. Defense Support of Civil Authority

Defense support of civil authorities is support provided by U.S. Federal military forces, DOD civilians, DOD contract personnel, DOD Component assets, and National Guard forces (when the Secretary of Defense, in coordination with the Governors of the affected States, elects and requests to use those forces in Title 32, United States Code status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events.

(DODD 3025.18). DSCA is a

task executed in the homeland and U.S. territories. It is performed to support another primary agency, lead federal agency, or local authority. When DSCA is authorized, it consists of four types of operations. National Guard forces—Title 32 or state active forces under the command and control of the governor and the adjutant general—are usually the first forces to respond on behalf of state authorities. When Federal military forces are employed for DSCA activities, they remain under Federal military command and control at all times.

See pp. 4-6 to 4-7 and HDS1: *Homeland Defense & DSCA SMARTbook. (JP 3-28)*

IV. Operations Structure

Ref: ADP 3-0, Operations (Jul '19), chap. 4.

The operations structure consists of the operations process, combat power, and the operational framework. This is the Army's common construct for unified land operations. It allows Army leaders to organize efforts rapidly, effectively, and in a manner commonly understood across the Army. The operations process provides a broadly defined approach to developing and executing operations. The warfighting functions provide a common organization for critical functions. The operational framework provides Army leaders with conceptual options for arranging forces and visualizing and describing operations.

I. The Operations Process

The operations process is a commander-led activity informed by mission command principles. It consists of the major command and control activities performed during operations: planning, preparing, executing, and continuously assessing an operation. These activities may be sequential or simultaneous. They are rarely discrete and often involve a great deal of overlap. Commanders use the operations process to drive the planning necessary to understand, visualize, and describe their unique operational environments; make and articulate decisions; and direct, lead, and assess military operations.

See following page (p. 1-51) for an overview of the operations process from ADP 5-0.

Planning is the art and science of understanding a situation, envisioning a desired future, and laying out effective ways of bringing that future about (ADP 5-0). Planning consists of two separate but interrelated components: a conceptual component and a detailed component. Successful planning requires the integration of both components. Army leaders employ three methodologies for planning: the Army design methodology, the military decision-making process, and troop leading procedures. Commanders determine how much of each methodology to use based on the scope of the problem, their familiarity with the methodology, the echelon, and the time available.

See p. 1-56 for an overview of the Army planning methodologies.

Preparation consists of activities that units perform to improve their ability to execute an operation. Preparation creates conditions that improve friendly forces' opportunities for success. It requires commander, staff, unit, and Soldier actions to ensure the force is trained, equipped, and ready to execute operations. Preparation activities help commanders, staffs, and Soldiers understand a situation and their roles in upcoming operations and set conditions for successful execution.

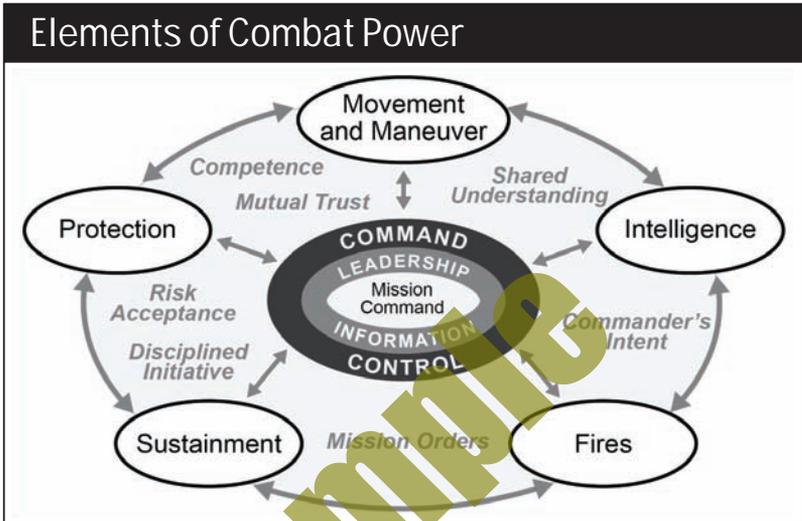
Execution is the act of putting a plan into action by applying combat power to accomplish the mission and adjusting operations based on changes in the situation (ADP 5-0). Commanders and staffs use situational understanding to assess progress and make execution and adjustment decisions. In execution, commanders and staffs focus their efforts on translating decisions into actions. They apply combat power to seize, retain, and exploit the initiative to gain and maintain a position of relative advantage. This is the essence of unified land operations.

Assessment is determination of the progress toward accomplishing a task, creating a condition, or achieving an objective (JP 3-0). Assessment precedes and then occurs during the other activities of the operations process. Assessment involves deliberately comparing forecasted outcomes with actual events to determine the overall effectiveness of force employment. Assessment helps commanders determine progress toward achieving a desired end state, accomplishing objectives, and performing tasks.

II. Elements of Combat Power

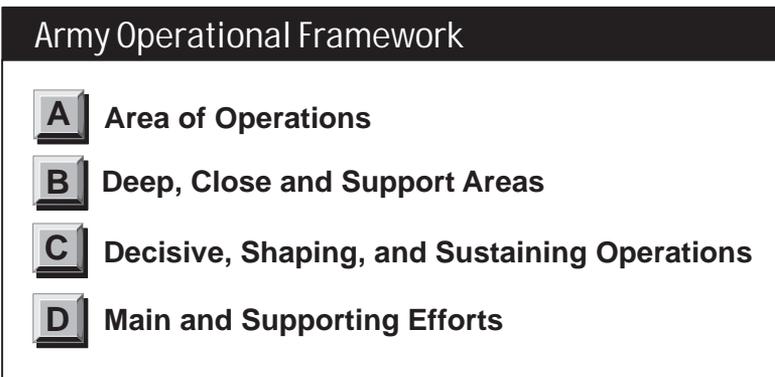
To execute operations, commanders conceptualize capabilities in terms of combat power. Combat power has eight elements: leadership, information, command and control, movement and maneuver, intelligence, fires, sustainment, and protection. The Army collectively describes the last six elements as warfighting functions. Commanders apply combat power through warfighting functions using leadership and information.

See pp. 1-60 to 1-61 for an overview and discussion of the elements of combat power (and the six warfighting functions).



III. Army Operational Framework

An operational framework is a cognitive tool that commanders and staffs use to visualize and describe the application of combat power, in time, space, purpose, and resources, as they develop the concept of operations. An operational framework organizes an area of geographic and operational responsibility for the commander and provides a way to describe the employment of forces. The framework illustrates the relationship between close operations, operations in depth, and other operations in time and space across domains.



See following pages (pp. 1-52 to 1-53) for an overview and further discussion.

Activities of the Operations Process

Ref: ADP 5-0, *The Operations Process* (Jul '19), pp. 2 to 6. See also pp. 3-14 to 3-15.

The Army's framework for organizing and putting command and control into action is the operations process. The operations process consists of the major command and control activities performed during operations (planning, preparing, executing, and continuously assessing).

The Operations Process (Underlying Logic)

Nature of Operations

Military operations are inherently human endeavors representing a contest of wills, characterized by violence and continuous adaption by all participants, conducted in dynamic and uncertain operational environments to achieve a political purpose.

To account for the nature of operations, the Army's philosophy of command and control is...

Mission Command

The Army's approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation.

The Army's framework for organizing and putting command and control into action is the...

Operations Process

The major command and control activities performed during operations: planning, preparing, executing, and continuously assessing the operation.

Plan

The art and science of understanding a situation, envisioning a desired future, and laying out effective ways of bringing the future about.

Prepare

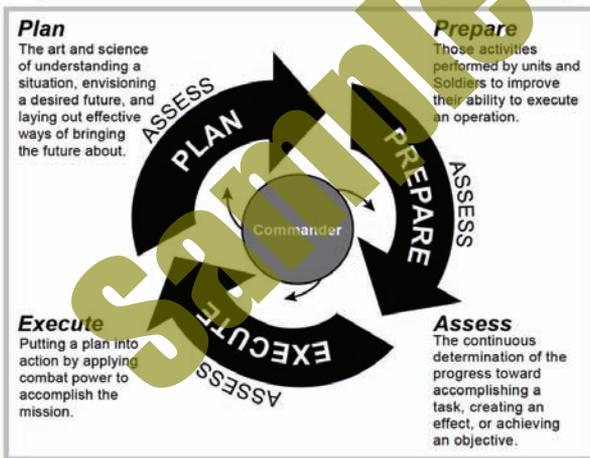
Those activities performed by units and Soldiers to improve their ability to execute an operation.

Execute

Putting a plan into action by applying combat power to accomplish the mission.

Assess

The continuous determination of the progress toward accomplishing a task, creating an effect, or achieving an objective.



Central idea...

Commanders, supported by their staffs, use the operations process to drive the conceptual and detailed planning necessary to understand their operational environment; visualize and describe the operation's end state and operational approach; make and articulate decisions; and direct, lead, and assess military operations.

Principles

Guided by...

- Drive the operations process.
- Build and maintain situational understanding.
- Apply critical and creative thinking.



Refer to BSS5: *The Battle Staff SMARTbook (Guide to Designing, Planning & Conducting Military Operations)* for discussion of the operations process. Commanders, supported by their staffs, use the operations process to drive the conceptual and detailed planning necessary to understand, visualize, and describe their operational environment; make and articulate decisions; and direct, lead, and assess military operations.

The Army Operational Framework

Ref: ADP 3-0, Operations (Jul '19), pp. 4-2 to 4-5. See also AODS6 pp. 2-14 to 2-21.

Army leaders are responsible for clearly articulating their concept of operations in time, space, purpose, and resources. They do this through an operational framework & associated vocabulary. An operational framework is 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 (ADP 1-01). An operational framework establishes an area of geographic and operational responsibility for the commander and provides a way to visualize how the commander will employ forces against the enemy.

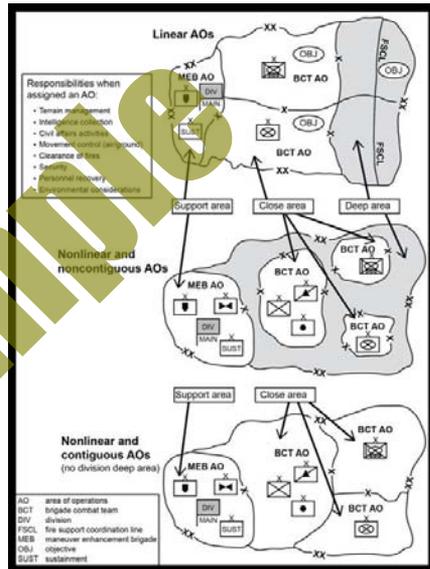
The operational framework has four components. First, commanders are assigned an area of operations for the conduct of operations. Second, a commander can designate a deep, close, and support areas to describe the physical arrangement of forces in time and space. Third, within this area, commanders conduct decisive, shaping, and sustaining operations to articulate the operation in terms of purpose. Finally, commanders designate the main and supporting efforts to designate the shifting prioritization of resources.

Area of Operations

An area of operations is an operational area defined by a commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces (JP 3-0). For land operations, an area of operations includes subordinate areas of operations assigned by Army commanders to their subordinate echelons. In operations, commanders use control measures to assign responsibilities, coordinate fire and maneuver, and control combat operations. A control measure is a means of regulating forces or warfighting functions (ADP 6-0). One of the most important control measures is the assigned area of operations. The Army commander or joint force land component commander is the supported commander within an area of operations designated by the JFC for land operations. Within their areas of operations, commanders integrate and synchronize combat power. To facilitate this integration and synchronization, commanders designate targeting priorities, effects, and timing within their areas of operations.

Area of Influence

Commanders consider a unit's area of influence when assigning it an area of operations. An area of influence is a geographical area wherein a commander is directly capable of influencing operations by maneuver or fire support systems normally under the commander's command or control (JP 3-0).



Understanding the area of influence helps the commander and staff plan branches to the current operation in which the force uses capabilities outside the area of operations.

Area of Interest

An area of interest is that area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission (JP 3-0). An area of interest for stability or DSCA tasks may be much larger than that area associated with the offense and defense.

Deep, Close, Support and Consolidation Areas

- The **deep area** is where the commander sets conditions for future success in close combat. Operations in the deep area involve efforts to prevent uncommitted enemy forces from being committed in a coherent manner. A commander's deep area generally extends beyond subordinate unit boundaries out to the limits of the commander's designated area of operations. The purpose of operations in the deep area is often tied to setting conditions for future events in time and space.
- The **close area** is the portion of the commander's area of operations where the majority of subordinate maneuver forces conduct close combat. Operations in the close area are within a subordinate commander's area of operations. Commanders plan to conduct decisive operations using maneuver and fires in the close area, and they position most of the maneuver force in it.
- A **support area** is the portion of the commander's area of operations that is designated to facilitate the positioning, employment, and protection of base sustainment assets required to sustain, enable, and control operations.
- The **consolidation area** is the portion of the land commander's area of operations that may be designated to facilitate freedom of action, consolidate gains through decisive action, and set conditions to transition the area of operations to follow on forces or other legitimate authorities.

Decisive, Shaping, and Sustaining Operations

Decisive, shaping, and sustaining operations lend themselves to a broad conceptual orientation.

- The **decisive operation** is the operation that directly accomplishes the mission. The decisive operation is the focal point around which commanders design an entire operation. The decisive operation is designed to determine the outcome of a major operation, battle, or engagement. Multiple subordinate units may be engaged in the same decisive operation across multiple domains. Decisive operations lead directly to the accomplishment of the commander's intent.
- A **shaping operation** is an operation at any echelon that creates and preserves conditions for success of the decisive operation through effects on the enemy, other actors, and the terrain. Information operations, for example, may integrate engagement tasks into an operation to reduce tensions between Army units and different ethnic groups. In combat, synchronizing the effects of aircraft, artillery fires, and obscurants to delay or disrupt repositioning forces illustrates shaping operations. Shaping operations may occur throughout the area of operations and involve any combination of forces and capabilities across multiple domains. Shaping operations set conditions for the success of the decisive operation. Commanders may designate more than one shaping operation.
- A **sustaining operation** is an operation at any echelon that enables the decisive operation or shaping operations by generating and maintaining combat power. Sustaining operations differ from decisive and shaping operations in that they focus internally (on friendly forces) rather than externally (on the enemy or environment).

Throughout decisive, shaping, and sustaining operations, commanders and their staffs need to ensure that forces maintain **positions of relative advantage**, operations are **integrated with unified action partners**, and **continuity** is maintained throughout operations.

Main and Supporting Efforts

Commanders designate main and supporting efforts to establish clear priorities of support and resources among subordinate units.

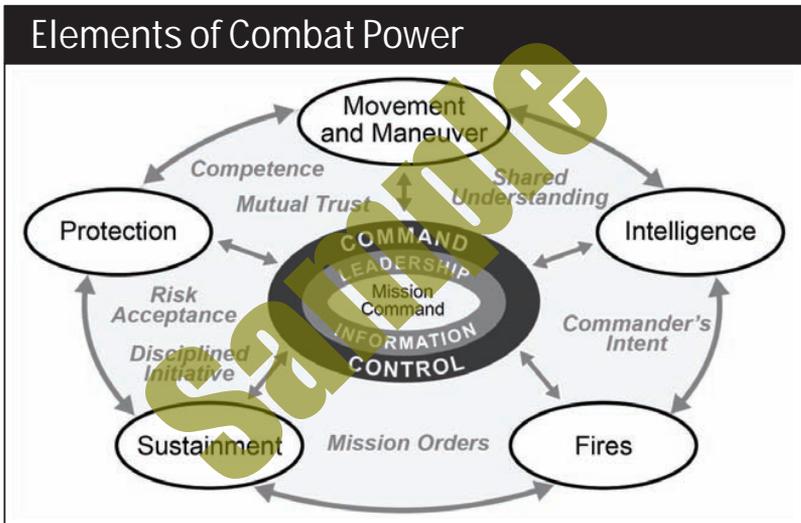
- The **main effort** is a designated subordinate unit whose mission at a given point in time is most critical to overall mission success. It is usually weighted with the preponderance of combat power. Typically, commanders shift the main effort one or more times during execution. Designating a main effort temporarily prioritizes resource allocation. When commanders designate a unit as the main effort, it receives priority of support and resources in order to maximize combat power.
- A **supporting effort** is a designated subordinate unit with a mission that supports the success of the main effort. Commanders resource supporting efforts with the minimum assets necessary to accomplish the mission. Forces often realize success of the main effort through success of supporting efforts.

V. Elements of Combat Power

Ref: ADP 3-0, Operations (Jul '19), chap. 5.

I. The Elements of Combat Power

Combat power is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time. Operations executed through simultaneous offensive, defensive, stability, or DSCA operations require the continuous generation and application of combat power. To an Army commander, Army forces generate combat power by converting potential into effective action. Combat power includes all capabilities provided by unified action partners that are integrated and synchronized with the commander's objectives to achieve unity of effort in sustained operations.



Ref: ADP 3-0, Operations (Jul '19), fig. 5-1. The elements of combat power.

To execute combined arms operations, commanders conceptualize capabilities in terms of combat power. Combat power has eight elements: leadership, information, command and control, movement and maneuver, intelligence, fires, sustainment, and protection. The elements facilitate Army forces accessing joint and multinational fires and assets. The Army collectively describes the last six elements as warfighting functions. Commanders apply combat power through the warfighting functions using leadership and information.

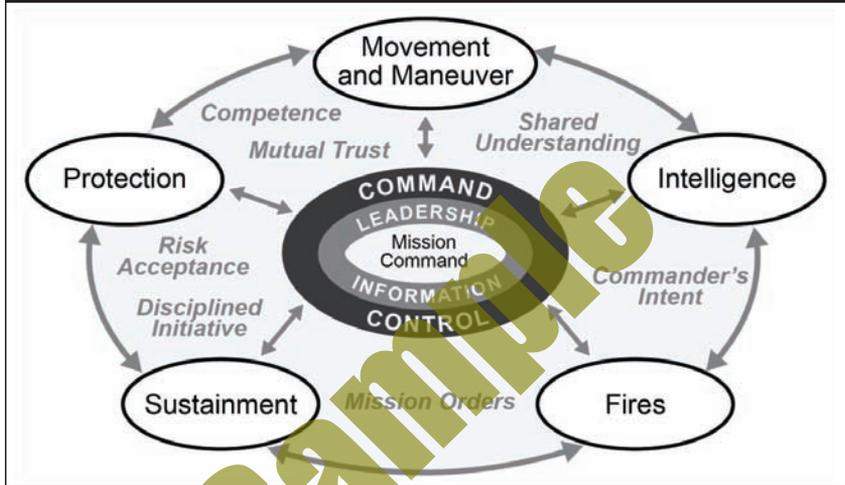
Generating and maintaining combat power throughout an operation is essential. Factors that contribute to generating and maintaining combat power include reserves, force rotation, network viability, access to cyberspace and space enablers, and joint support. Commanders balance the ability to mass lethal and nonlethal effects with the need to deploy and sustain the units that produce those effects. They balance the ability to accomplish the mission with the ability to project and sustain the force.

Elements of Combat Power

Ref: ADP 3-0, Operations (Jul '19), chap. 5 (and figure 5-1).

Combat power is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time. Operations executed through simultaneous offensive, defensive, stability, or DSCA operations require the continuous generation and application of combat power. To an Army commander, Army forces generate combat power by converting potential into effective action. Combat power includes all capabilities provided by unified action partners that are integrated and synchronized with the commander's objectives to achieve unity of effort in sustained operations.

Elements of Combat Power



To execute combined arms operations, commanders conceptualize capabilities in terms of combat power. Combat power has eight elements: leadership, information, command and control, movement and maneuver, intelligence, fires, sustainment, and protection. The elements facilitate Army forces accessing joint and multinational fires and assets. The Army collectively describes the last six elements as **warfighting functions**. Commanders apply combat power through the warfighting functions using **leadership and information**.

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Leadership & Information

Commanders apply leadership through mission command. **Leadership** is the multiplying and unifying element of combat power. The Army defines leadership as the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization (ADP 6-22). An Army commander, by virtue of assumed role or assigned responsibility, inspires and influences people to accomplish organizational goals. **Information** enables commanders at all levels to make informed decisions on how best to apply combat power.

See previous page (p. 1-59) for an overview of leadership from ADP 6-22. See pp. 3-16 to 3-21 for discussion of information operations from FM 3-0. See also p. 6-20.

The Six Warfighting Functions

1. Command and Control

The command and control warfighting function is the related tasks and a system that enable commanders to synchronize and converge all elements of combat power. The primary purpose of the command and control warfighting function is to assist commanders in integrating the other elements of combat power (leadership, information, movement and maneuver, intelligence, fires, sustainment, and protection) to achieve objectives and accomplish missions. See chap. 3 for further discussion.

2. Movement and Maneuver

The movement and maneuver warfighting function is the related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats. Direct fire and close combat are inherent in maneuver. The movement and maneuver warfighting function includes tasks associated with force projection. Movement is necessary to disperse and displace the force as a whole or in part when maneuvering. Maneuver directly gains or exploits positions of relative advantage. Commanders use maneuver for massing effects to achieve surprise, shock, and momentum. See chap. 4 for further discussion.

3. Intelligence

The intelligence warfighting function is the related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operational environment. Other significant aspects of an operational environment include threats, adversaries, and operational variables, which vary with the nature of operations. The intelligence warfighting function synchronizes information collection with primary tactical tasks of reconnaissance, surveillance, security, and intelligence operations. Intelligence is driven by commanders, and it involves analyzing information from all sources and conducting operations to develop the situation. See chap. 5 for further discussion.

4. Fires

The fires warfighting function is the related tasks and systems that create and converge effects in all domains against the adversary or enemy to enable operations across the range of military operations (ADP 3-0). These tasks and systems create lethal and nonlethal effects delivered from both Army and joint forces, as well as other unified action partners. See chap. 6 for further discussion.

5. Sustainment

The sustainment warfighting function is the related tasks and systems that provide support and services to ensure freedom of action, extended operational reach, and prolong endurance. Sustainment determines the depth and duration of Army operations. Successful sustainment enables freedom of action by increasing the number of options available to the commander. Sustainment is essential for retaining and exploiting the initiative. See chap. 7 for further discussion.

6. Protection

The protection warfighting function is the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission. Commanders incorporate protection when they understand and visualize threats and hazards in an operational environment. This allows them to synchronize and integrate all protection capabilities to safeguard bases, secure routes, and protect forces. Preserving the force includes protecting personnel (combatants and noncombatants) and physical assets of the United States, unified action partners, and host nations. See chap. 8 for further discussion.

I. Large-Scale Combat Operations (FM 3-0, 2017)

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), chap. 1.

I. Overview

Threats to U.S. interests throughout the world are countered by the ability of U.S. forces to respond to a wide variety of challenges along a conflict continuum that spans from peace to war as shown in figure 1-1.



Ref: FM 3-0 (w/Chg 1), fig. 1-1. The conflict continuum and the range of military operations.*

Range of Military Operations

U.S. forces conduct a range of military operations to respond to these challenges. The conflict continuum does not proceed smoothly from stable peace to general war and back. For example, unstable peace may erupt into an insurgency that quickly sparks additional violence throughout a region, leading to a general war.

The range of military operations is a fundamental construct that helps relate military activities and operations in scope and purpose within a backdrop of the conflict continuum. All operations along this range share a common fundamental purpose—to achieve or contribute to national objectives. Military engagement, security cooperation, and deterrence activities build networks and relationships with partners, shape regions, keep day-to-day tensions between nations or groups below the threshold of armed conflict, and maintain U.S. global influence. Typically, crisis response and limited contingency operations are focused in scope and scale and conducted to achieve a specific strategic or operational-level objective in an operational area. Large-scale combat operations occur in the form of major operations and campaigns aimed at defeating an enemy's armed forces and military capabilities in support of national objectives.

See pp. 1-14 to 1-15 for related discussion of joint operations, unified action, and the range of military operations from JP 3-0, Joint Operations (Jan '17).

Large-Scale Combat Operations

Large-scale combat operations are at the far right of the conflict continuum and associated with war. Historically, battlefields in large-scale combat operations have been more chaotic, intense, and highly destructive than those the Army has experienced in the past

FM 3-0 w/Chg 1 (2017): Overview & Logic Map

Ref: FM 3-0, (w/Chg 1) Operations (Dec '17), introduction.

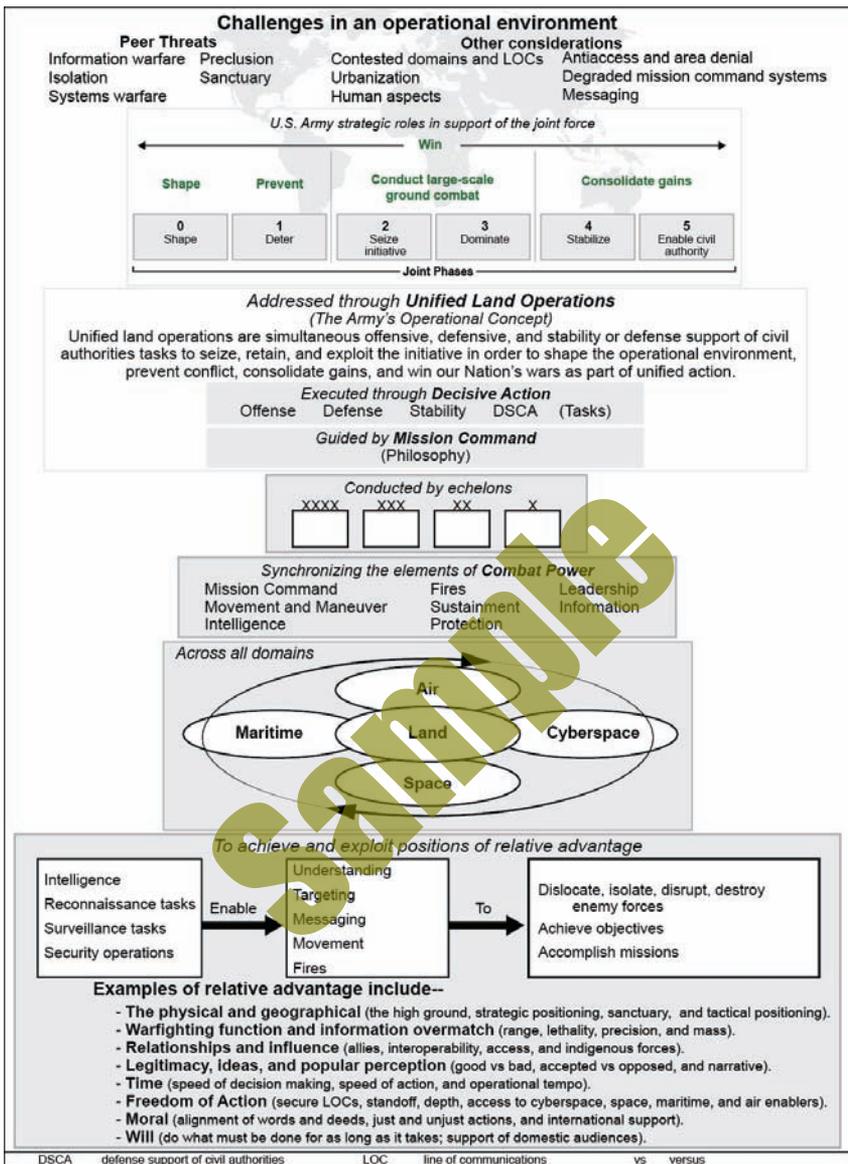
When the Cold War ended, U.S. defense policy postulated that a new era had dawned in which large-scale combat operations against a peer threat were unlikely. This hypothesis was supported by operations throughout the 1990s. While the U.S. military applied the relative conventional superiority it developed in competition with the Warsaw Pact to dominate a large, conventionally armed opponent in OPERATION DESERT STORM, it was an exception. U.S. forces conducted contingency operations at the lower end of the conflict continuum in the Balkans and elsewhere. In 2001 and 2003 the U.S. conducted two offensive joint campaigns that achieved rapid initial military success but no enduring political outcome, resulting in protracted counterinsurgency campaigns in Afghanistan and Iraq. The focus of Army training and equipping shifted from defeating a peer threat to defeating two insurgencies and the global terrorist threat.

Adversaries have studied the manner in which U.S. forces deployed and conducted operations over the past three decades. Several have adapted, modernized, and developed capabilities to counter U.S. advantages in the air, land, maritime, space, and cyberspace domains. Military advances by Russia, China, North Korea, and Iran most clearly portray this changing threat.

While the U.S. Army must be manned, equipped, and trained to operate across the range of military operations, large-scale ground combat against a peer threat represents the most significant readiness requirement. FM 3-0 provides doctrine for how Army forces, as part of a joint team, and in conjunction with unified action partners, do this. FM 3-0 is concerned with operations using current Army capabilities, formations, and technology in today's operational environment (OE). It expands on the material in ADRP 3-0 by providing tactics describing how theater armies, corps, divisions, and brigades work together and with unified action partners to successfully prosecute operations short of conflict, prevail in large-scale combat operations, and consolidate gains to win enduring strategic outcomes. Overall, the doctrine in FM 3-0 is consistent with ADRP 3-0. The most significant change is the use of the Army strategic roles as an organizing construct to describe how Army forces contribute to joint operations. In addition, FM 3-0—

- Modifies the Army's operational framework by adding a consolidation area to the deep, close, and support area operational framework.
- Adds the physical, temporal, cognitive, and virtual aspects of the operational framework in the context of a multi-domain environment.
- Emphasizes the importance of preparation and training for large-scale combat operations across warfighting functions.
- Recognizes the importance of operations to achieve strategic goals (win) short of armed conflict.
- Emphasizes the roles of echelons, initiative, and maneuver against enemies employing anti access and area denial operational approaches to gain and exploit positions of relative advantage.
- Describes corps and divisions as formations (headquarters and subordinate units) rather than just headquarters.
- Emphasizes the importance of consolidating gains to exploit positions of relative advantage and achieve enduring favorable outcomes.
- Establishes a support area command post for corps and division headquarters.

The writing style of FM 3-0 is different from other publications within the Doctrine 2015 construct. FM 3-0 contains fundamentals, tactics, and techniques focused on fighting and winning large-scale combat operations. FM 3-0 uses historical vignettes, quotes, and graphics to reinforce the doctrine within.



Ref: FM 3-0 (w/Chg 1), Introductory figure. FM 3-0 logic chart. *

The logic map begins with an anticipated OE that includes considerations during large-scale combat operations against a peer threat. Next it depicts the Army's contribution to joint operations through its strategic roles. Within each phase of a joint operation, the Army's operational concept of unified land operations guides how Army forces conduct operations. In large-scale ground combat, Army forces combine offensive, defensive, and stability tasks to seize, retain, and exploit the initiative in order to shape OEs, prevent conflict, conduct large-scale ground combat, and consolidate gains.

several decades. During the 1943 battles of Sidi Bou Zid and Kasserine Pass in World War II, 5,000 American Soldiers were killed over the course of just 10 days; during the first three days of fighting the Army lost Soldiers at the rate of 1,333 per day. Even later in the war, when units were better seasoned, trained, and equipped, casualty rates remained high due to the inherent lethality of large-scale combat operations. In the Hürtgen Forest the Army sustained 32,976 total casualties over 144 days, a loss of 229 Soldiers per day. Similarly, the Battle of the Bulge cost the Army 470 Soldiers per day, for a total loss of 19,270 killed and 62,489 wounded over 41 days of sustained combat.

Large-scale combat operations are intense, lethal, and brutal. Their conditions include complexity, chaos, fear, violence, fatigue, and uncertainty. Future battlefields will include noncombatants, and they will be crowded in and around large cities. Enemies will employ conventional tactics, terror, criminal activity, and information warfare to further complicate operations. To an ever-increasing degree, activities in the information environment are inseparable from ground operations. Large-scale combat operations present the greatest challenge for Army forces.

II. The Multi-Domain Battle

The Army conducts operations across multiple domains and the information environment. All Army operations are multi-domain operations, and all battles are multi-domain battles. Examples of Army multi-domain operations include airborne and air assault operations, air and missile defense, fires, aviation, cyberspace electromagnetic activities, information operations, space operations, military deception (MILDEC), and information collection. Large-scale combat operations such as these entail significant operational risk, synchronization, capabilities convergence, and high operational tempo. Key considerations for operating in multiple domains include—

- Mission command
- Reconnaissance in depth
- Mobility
- Cross-domain fires
- Tempo and convergence of effects
- Protection
- Sustainment
- Information operations

Army forces may be required to conduct operations across multiple domains to gain freedom of action for other members of the joint force. Examples of these operations include neutralizing enemy integrated air defenses or long-range surface-to-surface fires systems, denying enemy access to an AO, disrupting enemy C2, protecting friendly networks, conducting tactical deception, or disrupting an enemy's ability to conduct information warfare.

Positions of Relative Advantage

Enemies are likely to initiate hostilities against a friendly force from initial positions of relative advantage. These include physical, temporal, and cognitive positions and cultural, informational, and other human factors peculiar to the land domain. Once an enemy is in a position of disadvantage, the joint force must rapidly exploit its advantage with force-oriented operations to destroy key enemy capabilities. Well synchronized, high-tempo offensive action, often in the form of ground maneuver, is required to defeat enemies with significant long-range fires and air defense capabilities. Understanding the importance of planning and executing area security and stability tasks is also necessary to consolidate gains across multiple domains in ways that support the purpose of friendly tactical operations to achieve strategic goals.

See facing page for further discussion of positions of relative advantage.

Positions of Relative Advantage

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), pp. 1-18 to 1-19.

A position of relative advantage is a location or the establishment of a favorable condition within the area of operations that provides the commander with temporary freedom of action to enhance combat power over an enemy or influence the enemy to accept risk and move to a position of disadvantage (ADRP 3-0). Positions of relative advantage occur in all domains, providing opportunities for units to exploit. Commanders maintain momentum through exploitation of opportunities to consolidate gains, and they continually assess and reassess friendly and enemy effects for future opportunities. A key aspect in achieving a position of advantage is maneuver, the employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy (JP 3-0).

Positions of relative advantage are usually temporary and require initiative to exploit. While friendly forces are seeking positions of advantage, enemy forces are doing the same. There are multiple forms of positional advantage that provide opportunities to exploit. Some are considerations that should be understood when formulating tactical and operational concepts, while others are goals that can be worked towards as a means of destroying or defeating the enemy and achieving the overall purpose of the operation.

Examples of positional advantage include—

- Physical and geographical (including strategic positioning, sanctuary, and control of key terrain)
- Combat power and warfighting function overmatch (including range, lethality, precision, and mass)
- Relationships and influence (including allies, interoperability, access, and indigenous forces)
- Legitimacy, ideas, and popular perception (including what is good versus bad, accepted versus opposed, and a believable narrative)
- Time (including speed of recognition, speed of decision making, speed of action, and operational tempo)
- Freedom of action (including secure lines of communications, standoff, depth, access to cyberspace, maritime and air enablers, and friendly A2 and AD measures)
- Moral (including alignment of words and deeds, just and unjust, and international support)
- Will (including doing what must be done, continuing as long as it takes, and maintaining support from domestic leaders)

Relative positional advantage is something to gain, protect, and exploit across all domains. Combining positional advantages across multiple domains during each phase of operations provides opportunities for exploitation through maneuver. Physical or geographic positions of relative advantage are often identified first as decisive points and then depicted in operational graphics as objectives. The greater the number of positions of advantage a commander can generate, the increased number of dilemmas that commander can present to an enemy. The combination of positional advantages change over time relative to changes in the OE, and this change includes how the enemy reacts to friendly forces' activities. It is the exploitation of positions of advantage through maneuver which deters, defeats, or destroys an enemy. Leaders at every echelon are expected to display the initiative necessary to assume prudent risk while taking timely advantage of opportunities that present themselves under ambiguous, chaotic conditions. It is not always possible to understand those opportunities before they arise, so it is important that units have a command climate that rewards those who make decisions and act boldly in the absence of orders.

Multi-Domain Extended Battlefield

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), pp. 1-6 to 1-8.

The interrelationship of the air, land, maritime, space, and the information environment (including cyberspace) requires a cross-domain understanding of an OE. Commanders and staffs must understand friendly and enemy capabilities that reside in each domain. From this understanding, commanders can better identify windows of opportunity during operations to converge capabilities for best effect. Since many friendly capabilities are not organic to Army forces, commanders and staffs plan, coordinate for, and integrate joint and other unified action partner capabilities in a multi-domain approach to operations.

A multi-domain approach to operations is not new. Army forces have effectively integrated capabilities and synchronized actions in the air, land, and maritime domains for decades. Rapid and continued advances in technology and the military application of new technologies to the space domain, the EMS, and the information environment (particularly cyberspace) require special consideration in planning and converging effects from across all domains.

Space Domain

The space domain is the space environment, space assets, and terrestrial resources required to access and operate in, to, or through the space environment (FM 3-14). Space is a physical domain like land, sea, and air within which military activities are conducted. Proliferation of advanced space technology provides more widespread access to space-enabled technologies than in the past. Adversaries have developed their own systems, while commercially available systems allow almost universal access to some level of space enabled capability with military applications. Army forces must be prepared to operate in a denied, degraded and disrupted space operational environment (D3SOE).

Refer to FM 3-14 for doctrine on Army space operations.

Information Environment

The information environment is the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information (JP 3-13). The information environment is not separate or distinct from the OE but is inextricably part of it. Any activity that occurs in the information environment simultaneously occurs in and affects one or more of the physical domains. Most threat forces recognize the importance of the information environment and emphasize information warfare as part of their strategic and operational methods.

The information environment is comprised of three dimensions: physical, informational, and cognitive. The physical dimension includes the connective infrastructure that supports the transmission, reception, and storage of information.

Across the globe, information is increasingly available in near-real time. The ability to access this information, from anywhere, at any time, broadens and accelerates human interaction across multiple levels, including person to person, person to organization, person to government, and government to government. Social media, in particular, enables the swift mobilization of people and resources around ideas and causes, even before they are fully understood. Disinformation and propaganda create malign narratives that can propagate quickly and instill an array of emotions and behaviors from anarchy to focused violence. From a military standpoint, information enables decision making, leadership, and combat power; it is also key to seizing, gaining, and retaining the initiative, and to consolidating gains in an OE. Army commanders conduct information operations to affect the information environment.

Refer to FM 3-13 for doctrine on the information environment and the various information-related capabilities available to commanders.

electronic warfare. The corps headquarters reinforces divisions with supporting capabilities, including fires and aviation. In temporal terms, current planning ensures the success of the divisions by positively influencing conditions in the corps deep area while preparing to exploit success with branch plans and sequels for divisions to execute. Corps headquarters focus on what division headquarters cannot.

Deep Area

A deep area is the portion of the commander's area of operations that is not assigned to subordinate units (ADRP 3-0). Operations in the deep area involve efforts to prevent uncommitted or out of contact enemy maneuver forces from being committed in a coherent manner or preventing enemy enabling capabilities, such as fires and air defense, from creating effects in the close area. A commander's deep area generally extends beyond subordinate unit boundaries out to the limits of the commander's designated AO. The purpose of operations in the deep area is to set the condition for success in the close area or to set the conditions for future operations. Operations in the deep area might disrupt the movement of operational reserves, for example, or prevent an enemy from employing long-range cannon, rocket, or missile fires. Planning for operations in the deep area includes considerations for information collection, airspace control, joint fires, obstacle emplacement, maneuver (air and ground), special operations, and information operations.

Support Area

The support area is the portion of the commander's area of operations that is designated to facilitate the positioning, employment, and protection of base sustainment assets required to sustain, enable, and control operations (ADRP 3-0). It is where most of the echelon's sustaining operations occur. Within a division or corps support area, a designated unit, such as maneuver enhancement brigade, provides area security, terrain management, movement control, mobility support, and clearance of fires. This allows sustainment units to focus on their primary functions.

The corps headquarters is likely to position assets in the division support area to facilitate division operations and enable freedom of action. It controls movement short of division boundaries and allocates resources to support the concept of the operation. Planning in the support area largely influences current and future operations in the deep, close, and consolidation areas.

Consolidation Area

The consolidation area is the portion of the commander's area of operations that is designated to facilitate the security and stability tasks necessary for freedom of action in the close area and to support the continuous consolidation of gains (ADRP 3-0). Corps and division commanders may establish a consolidation area, particularly in the offense as the friendly force gains territory, to exploit tactical success while enabling freedom of action for forces operating in the other areas. When designated, a consolidation area refers to an AO assigned to an organization which extends from its higher headquarters boundary to the boundary of forces in close operations where forces have established a level of control and large-scale combat operations have ceased.

The consolidation area does not necessarily need to surround, nor contain, the support area base clusters, but typically it does. It requires a purposefully task-organized, combined arms unit to conduct area security and stability tasks and employ and clear fires. This unencumbers units conducting close operations and enables the higher echelon headquarters to focus on close operations, deep operations, and future planning. The additional combat power (BCTs or divisions) necessary to execute consolidation of gains is additional to the required combat power needed for close and deep operations. The theater army and GCC must include the expected force requirements to consolidate gains during operation plan (OPLAN) refinement and operations to shape and prevent to ensure these additional forces are included in the required forces to successfully conduct large-scale combat operations.

B. Corps

Large-scale combat operations may require a corps headquarters to function as a tactical land headquarters under a joint or multinational land component command. A corps is normally the senior Army headquarters deployed to a JOA. It commands Army and multinational forces in campaigns and major operations.

A corps headquarters is organized, trained, and equipped to control the operations of two to five divisions, together with supporting theater-level organizations. The distinguishing differences between corps and division operations are their scope and scale. During large-scale combat operations, a corps operates as a formation, not just as a headquarters. Normally, a corps exercises OPCON over two or more U.S. Army divisions and a variety of supporting brigades, it exercises TACON over various multinational units and U.S. Marine Corps units, and it is supported by various theater sustainment organizations. The corps has both operational and administrative responsibilities.

Refer to ATP 3-92 for information on corps operations.

Corps Operational Responsibilities

Corps conduct offensive, defensive, and stability tasks through a series of coordinated and integrated division and separate brigade operations. These operations achieve positions of relative advantage across multiple domains in order to destroy or defeat an enemy and achieve the overall purpose of the operations. Commanders direct decisive action tasks to create and exploit positions of relative advantage by using the appropriate combination of defeat and stability mechanisms that best accomplish the mission.

The corps commander synchronizes the employment of joint capabilities in conjunction with Army decisive action. Corps operations shape an OE and set the conditions for tactical actions by the division and lower echelons. In large-scale combat operations, the corps task-organizes and maneuvers divisions to destroy enemy land forces, seize key terrain and critical infrastructure, and dominate the land portion of the JOA. Corps tasks associated with the conduct of large-scale combat operations include—

- Conduct shaping operations within the corps AO.
- Task-organize and employ divisions and brigades.
- Integrate and synchronize operations of divisions and brigades.
- Mass effects at decisive points.
- Allocate resources and set priorities.
- Leverage joint capabilities.

Corps Administrative Responsibilities

All JTFs that include Army forces have an ARFOR. The ARFOR is the Army component and senior Army headquarters of all Army forces assigned or attached to a combatant command, subordinate joint force command, joint functional command, or multinational command (FM 3-94). When a corps is an ARFOR, the ARFOR consists of the corps commander, the corps headquarters, and all the Army forces attached to the JTF.

As an ARFOR, the corps provides administrative and logistics support to all Army forces assigned to these organizations as specified by the theater army. The theater army commander specifies the ADCON responsibilities of the ARFOR, with the theater army retaining control of RSOI, logistics support of the deployed force, personnel support, and medical support. Administrative responsibilities retained by the corps include internal administration and discipline, training within the JOA, and Service-specific reporting.

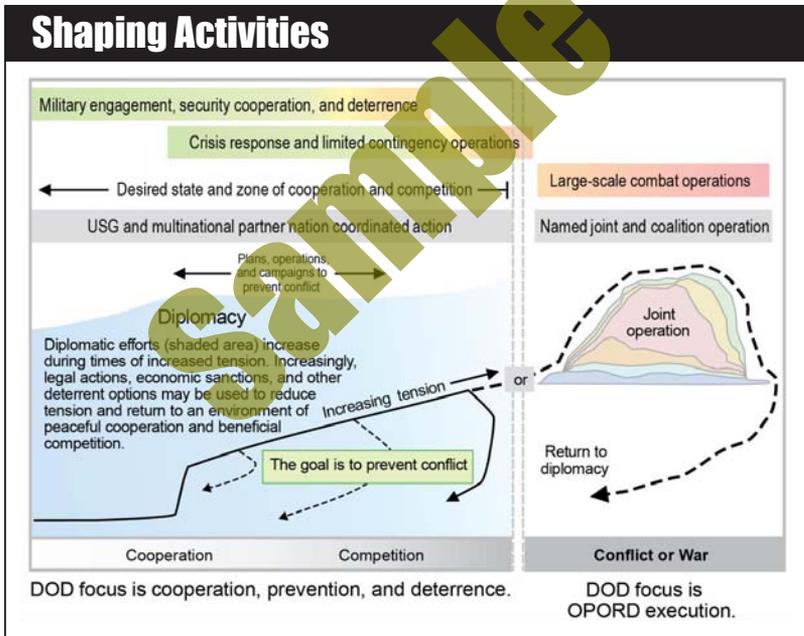
Refer to FM 3-94, chapter 2, for further details.

III. Operations to SHAPE

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), chap. 3.

Operations to shape consist of various long-term military engagements, security cooperation, and deterrence missions, tasks, and actions intended to assure friends, build partner capacity and capability, and promote regional stability. Operations to shape typically occur in support of the geographic combatant commander's (GCC's) theater campaign plan (TCP) or the theater security cooperation plan. These operations help counter actions by adversaries that challenge the stability of a nation or region contrary to U.S. interests. Operations to shape occur across the joint phasing model. Ultimately, operations to shape focus on four purposes:

- Promoting and protecting U.S. national interests and influence.
- Building partner capacity and partnerships.
- Recognizing/countering adversary attempts to gain positions of relative advantage.
- Setting conditions to win future conflicts.



Ref: FM 3-0 (w/Chg 1), fig. 3-1. Shaping activities.



Refer to TAA2: Military Engagement, Security Cooperation & Stability SMARTbook (Foreign Train, Advise, & Assist) for further discussion. Topics include the Range of Military Operations (JP 3-0), Security Cooperation & Security Assistance (Train, Advise, & Assist), Stability Operations (ADRP 3-07), Peace Operations (JP 3-07.3), Counterinsurgency Operations (JP & FM 3-24), Civil-Military Operations (JP 3-57), Multinational Operations (JP 3-16), Interorganizational Cooperation (JP 3-08), and more.

V. Large-Scale COMBAT Operations

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), chap. 5.

I. Large-Scale Combat Operations

A. Joint Large-Scale Combat Operations

As a nation, the United States wages war by employing all instruments of national power—diplomatic, informational, military, and economic. The President employs the Armed Forces of the United States to achieve national strategic objectives. The nature and scope of some missions may require joint forces to conduct large-scale combat operations to achieve national strategic objectives or protect national interests. Such combat typically occurs within the framework of a major operation or a campaign.

When large-scale combat operations commence, the joint force commander (JFC) immediately exploits friendly capabilities across multiple domains and the information environment to gain the initiative. The JFC seeks decisive advantage by using all available elements of combat power to exploit the initiative, deny enemy objectives, defeat enemy capabilities to resist, and compel desired behavior. The JFC coordinates with other U.S. governmental departments and agencies to facilitate coherent use of all instruments of national power in achieving national strategic objectives. Seizing the initiative generally requires force projection. The entry of Army and joint forces into a joint operations area (JOA) or theater of operations may be unopposed or opposed.

JFCs strive to achieve air, maritime, space, and cyberspace superiority early to allow the joint force to conduct land operations without prohibitive enemy interference. Previously deployed forward land forces and land forces projected into the theater during large-scale combat operations can enable joint capabilities in the other domains and provide the joint force freedom of action.

JFCs gain and maintain the initiative by projecting fires, employing forces, and conducting information operations in dynamic combination across multiple domains. Establishing a joint headquarters requires detailed planning, active liaison, and coordination throughout the joint force. Such a transition may involve a simple movement of flags and supporting personnel, or it may require a complete change of joint force headquarters. The new joint force headquarters may use personnel and equipment, especially communications equipment, from an existing headquarters, or it may require augmentation from different sources. One technique is to transfer command in several stages. Another technique is for the JFC to use the capabilities of one of the components until the new headquarters is fully prepared. Whichever way the transition is done, staffs must address all of the command and control (C2) requirements and the timing of the transfer of each requirement.



Refer to *JFODS-1: The Joint Forces Operations & Doctrine SMARTbook (Guide to Joint, Multinational & Interorganizational Operations)*. Updated for 2019, topics include joint doctrine fundamentals (JP 1), joint operations (JP 3-0 w/Chg 1), an expanded discussion of joint functions, joint planning (JP 5-0), joint logistics (JP 4-0), joint task forces (JP 3-33), joint force operations (JPs 3-30, 3-31, 3-32 & 3-05), multinational operations (JP 3-16), interorganizational cooperation (JP 3-08), & more!

C. Army Forces in Large-Scale Combat Operations

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), pp. 5-3 to 5-6.

The Army provides the JFC significant and sustained landpower. Landpower is the ability—by threat, force, or occupation—to gain, sustain, and exploit control over land, resources, and people (ADRP 3-0). The Army supports the joint force by providing capability and capacity for the application of land power through maneuver, fires, special operations, cyberspace operations, EW, space operations, sustainment, and area security.

The JFC applies Army capabilities to neutralize enemy integrated defenses by systematically destroying key nodes and capabilities essential to their coherence. Conventional, special operations, and joint force interdependence is an important part of this effort.

Army SOF can engage high value targets to achieve operational and strategic level effects, while Army intelligence capabilities facilitate information collection for all unified action partners and reinforce the idea of interdependence.

During large-scale combat operations, Army forces defeat the enemy. Defeat of enemy forces in close-combat operations is normally required to achieve campaign objectives and national strategic goals after the commencement of hostilities. Planning for sequels to consolidate gains at higher levels should be informed by combat operations and vice versa. However, the demands of large-scale combat operations consume all available staff capability at the tactical level.

In large-scale combat operations against a peer threat, commanders conduct decisive action to seize, retain, and exploit the initiative. This involves the orchestration of many simultaneous unit actions in the most demanding of operational environments. Large-scale combat operations introduce levels of complexity, lethality, ambiguity, and speed to military activities not common in other operations. Large-scale combat operations require the execution of multiple tasks synchronized and converged across multiple domains to create opportunities to destroy, dislocate, disintegrate, and isolate enemy forces.

Army forces defeat enemy organizations, control terrain, protect populations, and preserve joint force and unified action partner freedom of movement and action in the land and other domains. Corps and division commanders are directly concerned with those enemy forces and capabilities that can affect their current and future operations. Accordingly, joint interdiction efforts with a near-term effect on land maneuver normally support land maneuver. Successful corps and division operations may depend on successful joint interdiction operations, including those operations to isolate the battle or weaken the enemy force before battle is fully joined.

During large-scale combat operations, Army forces enable joint force freedom of action by denying the enemy the ability to operate uncontested in multiple domains. Army leaders synchronize the efforts of multiple unified action partners to ensure unity of effort. Army forces adapt continuously to seize, retain, and exploit the initiative. Army forces use mobility, protection, and firepower to strike the enemy unexpectedly from multiple directions, denying the enemy freedom to maneuver and creating multiple dilemmas that the enemy commander cannot effectively address.

Commanders consider potential future enemy moves and what actions friendly forces may take to counter those moves. Planners anticipate the use of cyberspace operations that can disrupt enemy command and control nodes. Army and joint forces concentrate combat power rapidly from dispersed locations to attack critical enemy assets and exploit opportunities, and then disperse quickly enough to avoid becoming lucrative targets themselves. This provides protection against an enemy with long range fires advantages. The initial Army forces to arrive within a JOA may need to fight outnumbered to buy time for and protect follow-on forces. This requires those initial forces to have tactical mobility, firepower, and resilience.

Army forces generally constitute the preponderance of land combat forces, organized into corps and divisions, during large-scale combat operations. Army forces seize the initiative, gain and exploit positions of relative advantage in multiple domains to dominate an enemy force, and consolidate gains. Corps and divisions execute decisive action tasks, where offensive and defensive tasks make up the preponderance of activities. Commanders must explicitly understand the lethality of large-scale combat operations to preserve their combat power and manage risk. Commanders leverage cyberspace operations, space capabilities, and information-related capabilities in a deliberate fashion to support ground maneuver.

BCTs and subordinate echelons concentrate on performing offensive and defensive tasks and necessary tactical enabling tasks. During large-scale combat operations they perform only those minimal essential stability tasks necessary to comply with the laws of land warfare. They do not conduct operationally significant consolidate gains activities unless assigned that mission in a consolidation area. BCT commanders orchestrate rapid maneuver to operate inside an enemy's decision cycle and create an increasing cascade of hard choices for the enemy commander.

Commanders employ the appropriate form of maneuver to close with an enemy to mitigate disadvantages in the capabilities of weapon systems and vehicle protection. This typically requires rapid movement through close or complex terrain during periods of limited visibility. Subordinate unit combat formations move in as dispersed a manner as possible while retaining the capability to mass effects against enemy forces at opportune times and places. Joint enablers become more effective when an enemy has no time to focus on singular friendly capabilities in just one or two domains. Units perform attacks that penetrate enemy defenses or attack them frontally or from a flank. Depending on the situation, they also infiltrate enemy positions, envelop them, or turn enemy forces out of their current positions. Those units then exploit success to render enemy forces incapable of further resistance.

It is likely that Army forces will be required to defend against enemy forces with locally superior capabilities at the beginning of large-scale combat operations. Enemy forces are most likely to attack when they have a position of relative advantage and friendly forces are most vulnerable, particularly when conditions make effective employment of joint force capabilities difficult.

Army forces may conduct large-scale combat operations in urban areas within the JOA or theater of operations. Currently more than 50 percent of the world's population lives in urban areas, and this is likely to increase to 70 percent by 2050, making large-scale combat operations in cities likely. Commanders may conduct urban operations because they provide a tactical, political, or economic advantage, or when not doing so threatens the joint campaign. Army forces conduct large-scale combat operations in urban areas either as a specific, unique operation, or more typically, as one of a larger series of operations in a joint campaign. Urban operations focus on the threat to or within the urban area and allow other forces to conduct operations elsewhere. Conducting operations in dense urban terrain is complex and resource intensive.

The performance of offensive tasks is traditionally associated with a favorable combat-power ratio. Combat multipliers often provide positions of relative advantage, even when Army forces are outnumbered. Numerical superiority is not a precondition for performing offensive tasks. Rather, commanders must continuously seek every opportunity to seize the initiative through offensive tasks, even when the force as a whole is on the defense. This requires commanders to perform economy of force measures to adequately resource their decisive operations or main efforts. Mobility, surprise, and aggressive execution are the most effective means for achieving tactical success when performing both offensive and defensive tasks. Bold, aggressive tactics may involve significant risk; however, greater gains normally require greater risks. A numerically inferior force capable of bold and aggressive action can create opportunities to seize and exploit the initiative.

II. Tactical Enabling Tasks

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), pp. 5-9 to 5-20.

Commanders direct tactical enabling tasks to support the performance of all offensive, defensive, and stability tasks. Tactical enabling tasks are usually employed by commanders as part of shaping operations or supporting efforts. The tactical enabling tasks are reconnaissance, security, troop movement, relief in place, passage of lines, encirclement operations, and mobility and countermobility operations.

Reconnaissance

Reconnaissance is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area (JP 2-0). Reconnaissance primarily relies on human beings rather than technical means. Reconnaissance is a focused collection effort. It is performed before, during, and after other operations to provide information used in the intelligence preparation of the battlefield process and by commanders in order to formulate, confirm, or modify a course of action. There are five forms of reconnaissance operations. They are route reconnaissance, zone reconnaissance, area reconnaissance, reconnaissance in force, and special reconnaissance. See pp. 4-23 to 4-26.

Security Operations

Security operations are those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force (ADRP 3-90). The ultimate goal of security operations is to protect the force from surprise and reduce the unknowns in any situation. Security operations may also protect the civilian population, civil institutions, and civilian infrastructure within the unit's AO. Security operations can be either offensive or defensive. A commander may conduct security operations to the front, flanks, or rear of the friendly force. The main difference between security operations and reconnaissance operations is that security operations orient on the force or facility being protected, while reconnaissance is enemy and terrain oriented. Security operations are shaping operations. As a shaping operation, economy of force is often a consideration when planning tactical security operations. Security operations encompass five tasks—screen, guard, cover, area security, and local security. See p. 2-79.

Troop Movement

The ability of a commander to posture friendly forces for a decisive or shaping operation depends on the commander's ability to move that force. The essence of battlefield agility is the capability to conduct rapid and orderly movement to concentrate combat power at decisive points and times. Successful movement places troops and equipment at their destination at the proper time, ready for combat. Transition from movement to maneuver occurs when enemy contact is expected. Troop movement is the movement of troops from one place to another by any available means (ADRP 3-90). Troop movements are made by different methods; such as dismounted and mounted marches using organic combat and tactical vehicles; motor transport; and air, rail, and water means in various combinations.

Relief In Place

A relief in place is an operation in which, by the direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and the assigned zone of operations are transferred to the incoming unit (JP 3-07.3). (Note. The Army uses AO instead of a zone of operations.) The incoming unit continues the operation as ordered. A commander conducts a relief

in place as part of a larger operation, primarily to maintain the combat effectiveness of committed units. The higher echelon headquarters directs when and where to conduct a relief and establishes the appropriate control measures. Normally, during the conduct of large-scale combat operations, the unit being relieved is defending. However, a relief may set the stage for resuming the offense. A relief may also serve to free the relieved unit for other tasks, such as decontamination, reconstitution, routine rest, resupply, maintenance, specialized training, or redeployment. Sometimes, as part of a larger operation, a commander wants an enemy force to discover the relief, because that discovery might cause an enemy to do something in response that is contrary to its interests, such as move reserves from an area where the friendly commander wants to conduct a penetration. There are three techniques for conducting a relief: sequentially, simultaneously, or staggered.

Passage Of Lines

Passage of lines is an operation in which a force moves forward or rearward through another force's combat positions with the intention of moving into or out of contact with the enemy (JP 3-18). A passage may be designated as a forward or rearward passage of lines. A commander conducts a passage of lines to continue an attack or conduct a counterattack, retrograde, or security operation when one unit cannot bypass another unit's position. The conduct of a passage of lines potentially involves close combat. It involves transferring the responsibility for an AO between two commanders. That transfer of authority usually occurs when roughly two thirds of the passing force has moved through the passage point. If not directed by higher authority, the two unit commanders determine, by mutual agreement, the time to transfer command. They disseminate this information to the lowest levels of both organizations.

Encirclement Operations

Encirclement operations are operations where one force loses its freedom of maneuver because an opposing force is able to isolate it by controlling all ground lines of communications and reinforcement (ADRP 3-90). A unit can conduct offensive encirclement operations designed to isolate an enemy force or conduct defensive encirclement operations as a result of the unit's isolation by the actions of an enemy force. Encirclement operations occur because combat operations involving modernized forces are likely to be chaotic, intense, and highly destructive, extending across large areas containing relatively few units as each side maneuvers against the other to obtain positional advantage.

Mobility and Countermobility Operations

Freedom to move and maneuver within an operational area is essential to the application of combat power and achieving results across the range of military operations. An OE will present numerous challenges to movement and maneuver. These are typically overcome through the integration of combined arms mobility and countermobility in support of mission requirements. Countermobility operations are those combined arms activities that use or enhance the effects of natural and man-made obstacles to deny enemy freedom of movement and maneuver (ATP 3-90.8). The primary purposes of countermobility operations are to shape enemy movement and maneuver and to prevent the enemy from gaining a position of advantage.

See pp. 4-27 to 4-36 for further discussion of mobility and countermobility operations from ADRP 3-90.



Refer to SUTS3: The Small Unit Tactics SMARTbook, 3rd Ed., completely updated with the latest publications for 2019. Chapters and topics include tactical fundamentals, the offense; the defense; train, advise, and assist (stability, peace & counterinsurgency ops); tactical enabling tasks (security, reconnaissance, relief in place, passage of lines, encirclement, and troop movement); special purpose attacks (ambush, raid, etc.); urban and regional environments (urban, fortified areas, desert, cold, mountain, & jungle operations); patrols & patrolling.

Mission Command Overview

Ref: ADP 6-0, Mission Command (Jul '19) and ADP 3-0, Operations (Jul '19), p. 5-3.

I. Command & Control Warfighting Function

The command and control warfighting function is the related tasks and a system that enable commanders to synchronize and converge all elements of combat power (ADP 3-0). The primary purpose of the command and control warfighting function is to assist commanders in integrating the other elements of combat power to achieve objectives and accomplish missions. The command and control warfighting function consists of the command and control warfighting function tasks and the command and control system.



Ref: ADP 6-0 (Jul '19), Figure 1-2. Combat power model.

The command and control warfighting function tasks focus on integrating the activities of the other elements of combat power to accomplish missions. Commanders, assisted by their staffs, integrate numerous processes and activities within their headquarters and across the force through the mission command warfighting function:

- Command forces (see p. 3-10)
- Control operations (see p. 3-10)
- Drive the operations process (see p. 3-14)
- Establish the command and control system (see p. 3-12)



Refer to BSS5: The Battle Staff SMARTbook, 5th Ed. for further discussion. BSS5 covers the operations process (ADRP 5-0); commander's activities (Understand, Visualize, Describe, Direct, Lead, Assess); the military decisionmaking process and troop leading procedures (FM 6-0: MDMP/TLP); integrating processes and continuing activities (IPB, targeting, risk management); plans and orders (WARNOs/FRAGOs/OPORDs); mission command, command posts, liaison; rehearsals & after action reviews; and operational terms & symbols.

Mission Command: Command and Control of Army Forces

Ref: ADP 6-0, *Mission Command* (May '12), preface and introduction.

ADP 6-0, *Mission Command: Command and Control of Army Forces*, provides a discussion of the fundamentals of mission command, command and control, and the command and control warfighting function. It describes how commanders, supported by their staffs, combine the art and science of command and control to understand situations, make decisions, direct actions, and lead forces toward mission accomplishment.

This revision to ADP 6-0 represents an evolution of mission command doctrine based upon lessons learned since 2012. The use of the term mission command to describe multiple things—the warfighting function, the system, and a philosophy—created unforeseen ambiguity. Mission command replaced command and control, but in practical application it often meant the same thing. This led to differing expectations among leadership cohorts regarding the appropriate application of mission command during operations and garrison activities. Labeling multiple things mission command unintentionally eroded the importance of mission command, which is critical to the command and control of Army forces across the range of military operations. Differentiating mission command from command and control provides clarity, allows leaders to focus on mission command in the context of the missions they execute, and aligns the Army with joint and multinational partners, all of whom use the term command and control.

Command and control—the exercise of authority and direction by a properly designated commander over assigned and attached forces—is fundamental to the art and science of warfare. No single specialized military function, either by itself or combined with others, has a purpose without it. Commanders are responsible for command and control. Through command and control, commanders provide purpose and direction to integrate all military activities towards a common goal—mission accomplishment. Military operations are inherently human endeavors, characterized by violence and continuous adaptation by all participants. Successful execution requires Army forces to make and implement effective decisions faster than enemy forces. Therefore, the Army has adopted mission command as its approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation.

Mission command requires tactically and technically competent commanders, staffs, and subordinates operating in an environment of mutual trust and shared understanding. It requires building effective teams and a command climate in which commanders encourage subordinates to take risks and exercise disciplined initiative to seize opportunities and counter threats within the commander's intent. Through mission orders, commanders focus their subordinates on the purpose of an operation rather than on the details of how to perform assigned tasks. This allows subordinates the greatest possible freedom of action in the context of a particular situation. Finally, when delegating authority to subordinates, commanders set the necessary conditions for success by allocating resources to subordinates based on assigned tasks.

Commanders need support to exercise command and control effectively. At every echelon of command, commanders are supported by the command and control warfighting function—the related tasks and a system that enables commanders to synchronize and converge all elements of combat power. Commanders execute command and control through their staffs and subordinate leaders.

ADP 6-0 provides fundamental principles on mission command, command and control, and the command and control warfighting function. Key updates and changes to this version of ADP 6-0 include—

- Combined information from ADP 6-0 and ADRP 6-0 into a single document.
- Command and control reintroduced into Army doctrine.

- An expanded discussion of command and control and its relationship to mission command.
- Revised mission command principles.
- Command and control system reintroduced, along with new tasks, and an updated system description.
- Expanded discussion of the command and control system.

Mission Command (Logic Map)

Nature of War

Military operations are inherently human endeavors representing a contest of wills, characterized by violence and continuous adaption by all participants, conducted in dynamic and uncertain operational environments to achieve a political purpose.

Operations must account for the nature of war. As such the Army's operational concept is...

Unified Land Operations

The simultaneous execution of offense, defense, stability, and defense support of civil authorities across multiple domains to shape operational environments, prevent conflict, prevail in large-scale ground combat, and consolidate gains as part of unified action.

The Army's operational concept is enabled by...

Mission Command

The Army's approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation.

Enabled by the principles of...

Competence | Mutual trust | Shared understanding | Commander's intent
Mission orders | Disciplined initiative | Risk acceptance

Command and control is fundamental to all operations...

Command and Control

Command and control is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of a mission.

Elements of Command

- Authority
- Responsibility
- Decision making
- Leadership

Elements of Control

- Direction
- Feedback
- Information
- Communication

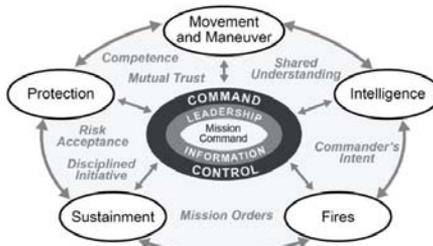
Executed through...

Command and Control Warfighting Function

The related tasks and a system that enables commanders to synchronize and converge all elements of combat power.

Tasks

- Command forces
- Control operations
- Drive the operations process
- Establish the command and control system



Command and Control System

- People
- Processes
- Networks
- Command posts

Ref: ADP 6-0 (Jul '19), Introductory figure-1. Logic map.

I. Command & Control Warfighting Tasks

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), pp. 2-23 to 2-34.

The command and control warfighting function is the related tasks and a system that enable commanders to synchronize and converge all elements of combat power (ADP 3-0). The primary purpose of the command and control warfighting function is to assist commanders in integrating the other elements of combat power to achieve objectives and accomplish missions.

**Editor's Note: FM 3-0 (w/Chg 1), Operations (Dec '17) predates the more recent ADP 6-0, Mission Command (Jul '19) which renamed the "Mission Command Warfighting Function" to the "Command and Control Warfighting Function." For clarity, the following material from FM 3-0 still uses the term "mission command" when discussing warfighting function tasks.*

Command & Control Warfighting Tasks (from FM 3-0*)

While staffs perform essential functions, commanders are ultimately responsible for accomplishing assigned missions. Throughout operations, commanders encourage disciplined initiative through a clear commander's intent while providing enough direction to integrate and synchronize the force at the decisive place and time. To this end, commanders perform three primary mission command warfighting function tasks. The commander tasks are—

- Drive the operations process through the activities of understanding, visualizing, describing, directing, leading, and assessing operations.
- Develop teams, both within their own organizations and with unified action partners.
- Inform and influence audiences, inside and outside their organizations.

Staffs support commanders in the exercise of mission command by performing four primary mission command warfighting function tasks. The staff tasks are—

- Conduct the operations process: plan, prepare, execute, and assess.
- Conduct knowledge management, information management, and foreign disclosure.
- Conduct information operations.
- Conduct cyberspace electromagnetic activities.

Six additional tasks reside within the mission command warfighting function. These tasks are—

- Conduct CA operations.
- Conduct military deception.
- Install, operate, and maintain the DODIN.
- Conduct airspace control.
- Conduct information protection.
- Plan and conduct space activities.

An overview and discussion of commander, staff and additional functions can be found on pp. 3-8 to 3-12.

See following pages (pp. 3-13 to 3-24) for specific discussion of key warfighting function tasks from FM 3-0, Operations (Oct '17).

Information Operations (IO)

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), pp. 2-26 to 2-28.

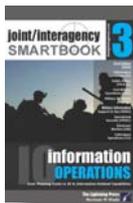
Commanders and their units must coordinate what they do, say, and portray. The development of themes and messages in support of a military operation is fundamental to that process. A theme is a unifying or dominant idea or image that expresses the purpose for military action. Themes are tied to objectives, lines of effort, and end state conditions. Themes are overarching and apply to the capabilities of public affairs activities, MISO, and Soldier and leader engagements. A message is a verbal, written, or electronic communication that supports a theme focused on a specific actor and in support of a specific action. Commanders approve and employ themes and messages as part of planned activities designed to influence specific foreign audiences for various purposes that support current or planned operations.

Staffs synchronize information operations throughout the operations process. Information operations specialists must effectively synchronize various information-related capabilities to support the concept of operations. The use of messaging is a critical supporting effort during large-scale combat operations. As in previous wars and conflicts, the message legitimizing why U.S. forces are there and why they fight must be communicated and understood across all echelons and audiences. Commanders must communicate and enforce a positive narrative and be aware that an enemy may lead with information effects and only support them with physical effects.

While all unit operations, activities, and actions affect the information environment, information related capabilities requiring synchronization and coordination as part of information operations include—

- Military deception (MILDEC).
- MISO.
- Soldier and leader engagement, including police engagement.
- CA operations.
- Combat camera.
- OPSEC.
- Public affairs.
- Cyberspace Operations.
- EW.
- Space operations.
- Special technical operations.

See related discussion of information operations (as it relates to the fires warfighting function) on p. 6-20.



Refer to Joint/Interagency SMARTbook 3: Information Operations (Multi-Domain Guide to IO & Information-Related Capabilities), when published. All military activities produce information. Informational aspects affect the perceptions and attitudes that drive behavior and decision making. The JFC leverages informational aspects of military activities to gain an advantage; failing to leverage those aspects may cede this advantage to others. Leveraging the informational aspects of military activities ultimately affects strategic outcomes.

Army Command & Support Relationships

Ref: FM 6-0 (C2), Commander and Staff Organization and Operations (Apr '16), app. B.

Army command and support relationships are similar but not identical to joint command authorities and relationships. Differences stem from the way Army forces task-organize internally and the need for a system of support relationships between Army forces.

Another important difference is the requirement for Army commanders to handle the administrative support requirements that meet the needs of Soldiers

A. Command Relationships

Army command relationships define superior and subordinate relationships between unit commanders. By specifying a chain of command, command relationships unify effort and enable commanders to use subordinate forces with maximum flexibility. Army command relationships identify the degree of control of the gaining Army commander. The type of command relationship often relates to the expected longevity of the relationship between the headquarters involved and quickly identifies the degree of support that the gaining and losing Army commanders provide.

Cmd & Control
(ADP 6-0)

If relationship is:	Then inherent responsibilities:							
	Have command relationship with:	May be task-organized by: ¹	Unless modified, ADCON have responsibility through:	Are assigned position or AO by:	Provide liaison to:	Establish/maintain communications with:	Have priorities established by:	Can impose on gaining unit further command or support relationship of:
Organic	All organic forces organized with the HQ	Organic HQ	Army HQ specified in organizing document	Organic HQ	N/A	N/A	Organic HQ	Attached; OPCON; TACON; GS; GSR; R; DS
Assigned	Combatant command	Gaining HQ	Gaining Army HQ	OPCON chain of command	As required by OPCON	As required by OPCON	ASCC or Service-assigned HQ	As required by OPCON HQ
Attached	Gaining unit	Gaining unit	Gaining Army HQ	Gaining unit	As required by gaining unit	Unit to which attached	Gaining unit	Attached; OPCON; TACON; GS; GSR; R; DS
OPCON	Gaining unit	Parent unit and gaining unit; gaining unit may pass OPCON to lower HQ ¹	Parent unit	Gaining unit	As required by gaining unit	As required by gaining unit and parent unit	Gaining unit	OPCON; TACON; GS; GSR; R; DS
TACON	Gaining unit	Parent unit	Parent unit	Gaining unit	As required by gaining unit	As required by gaining unit and parent unit	Gaining unit	TACON; GS; GSR; R; DS

Note: ¹In NATO, the gaining unit may not task-organize a multinational force. (See TACON.)

ADCON	administrative control	HQ	headquarters
AO	area of operations	N/A	not applicable
ASCC	Army Service component command	NATO	North Atlantic Treaty Organization
DS	direct support	OPCON	operational control
GS	general support	R	reinforcing
GSR	general support-reinforcing	TACON	tactical control

Ref: FM 6-0 (C2), Commander and Staff Organization and Operations, table B-2, p. B-5.

B. Support Relationships

Table B-3 on the following page lists Army support relationships. Army support relationships are not a command authority and are more specific than the joint support relationships. Commanders establish support relationships when subordination of one unit to another is inappropriate. Commanders assign a support relationship when—

- The support is more effective if a commander with the requisite technical and tactical expertise controls the supporting unit, rather than the supported commander. The echelon of the supporting unit is the same as or higher than that of the supported unit. For example, the supporting unit may be a brigade, and the supported unit may be a battalion. It would be inappropriate for the brigade to be subordinated to the battalion, hence the use of an support relationship.
- The supporting unit supports several units simultaneously. The requirement to set support priorities to allocate resources to supported units exists. Assigning support relationships is one aspect of mission command.

If relationship is:	Then inherent responsibilities:							
	Have command relationship with:	May be task-organized by:	Receive sustainment from:	Are assigned position or an area of operations by:	Provide liaison to:	Establish/maintain communications with:	Have priorities established by:	Can impose on gaining unit further command or support relationship by:
Direct support ¹	Parent unit	Parent unit	Parent unit	Supported unit	Supported unit	Parent unit; supported unit	Supported unit	See note ¹
Reinforcing	Parent unit	Parent unit	Parent unit	Reinforced unit	Reinforced unit	Parent unit; reinforced unit	Reinforced unit; then parent unit	Not applicable
General support-reinforcing	Parent unit	Parent unit	Parent unit	Parent unit	Reinforced unit and as required by parent unit	Reinforced unit and as required by parent unit	Parent unit; then reinforced unit	Not applicable
General support	Parent unit	Parent unit	Parent unit	Parent unit	As required by parent unit	As required by parent unit	Parent unit	Not applicable

Note: ¹ Commanders of units in direct support may further assign support relationships between their subordinate units and elements of the supported unit after coordination with the supported commander.

Ref: FM 6-0 (C2), *Commander and Staff Organization and Operations*, table B-3, p. B-6.

Army support relationships allow supporting commanders to employ their units' capabilities to achieve results required by supported commanders. Support relationships are graduated from an exclusive supported and supporting relationship between two units—as in direct support—to a broad level of support extended to all units under the control of the higher headquarters—as in general support. Support relationships do not alter administrative control. Commanders specify and change support relationships through task organization.

Direct support is a support relationship requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance (ADRP 5-0). A unit assigned a direct support relationship retains its command relationship with its parent unit, but is positioned by and has priorities of support established by the supported unit.

General support is that support which is given to the supported force as a whole and not to any particular subdivision thereof (JP 3-09.3). Units assigned a GS relationship are positioned and have priorities established by their parent unit.

Reinforcing is a support relationship requiring a force to support another supporting unit (ADRP 5-0). Only like units (for example, artillery to artillery) can be given a reinforcing mission. A unit assigned a reinforcing support relationship retains its command relationship with its parent unit, but is positioned by the reinforced unit. A unit that is reinforcing has priorities of support established by the reinforced unit, then the parent unit.

General support-reinforcing is a support relationship assigned to a unit to support the force as a whole and to reinforce another similar-type unit (ADRP 5-0). A unit assigned a general support-reinforcing (GSR) support relationship is positioned and has priorities established by its parent unit and secondly by the reinforced unit.

III. CP by Echelon and Type of Unit

Ref: FM 3-0 (w/Chg 1), Operations (Dec '17), table 2-2, p. 2-35.

Echelon or Type of Unit	Description	Command Posts
Theater army	A theater army headquarters is the Army Service component command assigned to a geographic combatant commander. It is organized, staffed, and equipped to perform three roles: <ul style="list-style-type: none">Theater army for a geographic combatant commander.Joint task force headquarters (with augmentation) in crisis response and limited contingency operations.Joint force land component headquarters (with augmentation) for crisis response and limited contingency operations.	Main command post (CP) Contingency CP Mobile command group
Field army	A field army headquarters is the Army component assigned to a subordinate unified command. The field army headquarters is staffed and equipped to perform three roles: <ul style="list-style-type: none">Army component and ARFOR for a subordinate unified commander.Joint force land component headquarters (with augmentation) for large-scale combat operations.Joint task force headquarters (with augmentation) for crisis response and limited contingency operations.	Main CP Operational CP Mobile command group
Corps	A corps headquarters is the Army's most versatile headquarters. The corps headquarters is staffed and equipped to— <ul style="list-style-type: none">Serve as the joint force land component commander (or multinational) headquarters (with augmentation) in crisis response and limited contingency operations.Serve as a joint task force headquarters in a crisis response or limited contingency operation.Serve as a tactical headquarters in large-scale combat operations.	Main CP Tactical CP Support area CP Early entry CP Mobile command group
Division	A division headquarters operates as a tactical headquarters under operational control of an Army corps or Marine expeditionary force headquarters. The division headquarters is staffed and equipped to— <ul style="list-style-type: none">Serve as a tactical headquarters in large-scale combat operations.Serve as the joint force land component headquarters (or multinational) headquarters (with augmentation) in crisis response and limited contingency operations.Serve as a joint task force headquarters in a crisis response or limited contingency operation.	Main CP Tactical CP Support area CP Early entry CP Mobile command group
Brigade combat team	The brigade combat team headquarters operates as a tactical headquarters normally under operational control of an Army division.	Main CP Tactical CP +Mobile command group
Multifunctional brigade	A multifunctional brigade headquarters coordinates support for brigade combat teams and other forces.	Main CP Tactical CP
Functional brigades and battalions	Functional brigade and battalion headquarters coordinate a single function or capability.	Main CP Tactical CP
Combined arms and infantry battalions	Combined arms and infantry battalion headquarters operate as tactical headquarters assigned or attached to a brigade combat team.	Main CP Tactical CP Combat trains CP Field trains CP

FM 3-0, table 2-2 lists the types of CPs typically employed by echelon and type of unit. Specific echelon and type of unit publications provide detailed information on CP organization and operations for specific units. For example, FM 3-96 provides doctrine for the organization and employment of the brigade main CP. (Organization varies extensively. See specific doctrine for each type of unit.)

Cmd & Control
(ADP 6-0)

Movement & Maneuver Warfighting Function

Ref: ADP 3-0, Operations (Jul '19), p. 5-4

The movement and maneuver warfighting function is the related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats. Direct fire and close combat are inherent in maneuver. The movement and maneuver warfighting function includes tasks associated with force projection. Movement is necessary to disperse and displace the force as a whole or in part when maneuvering. Maneuver directly gains or exploits positions of relative advantage. Commanders use maneuver for massing effects to achieve surprise, shock, and momentum. Effective maneuver requires close coordination of fires and movement. Both tactical and operational maneuver require sustainment support. The movement and maneuver warfighting function includes these tasks:

- Move.
- Maneuver.
- Employ direct fires.
- Occupy an area.
- Conduct mobility and countermobility.
- Conduct reconnaissance and surveillance.
- Employ battlefield obscuration.

The movement and maneuver warfighting function does not include administrative movements of personnel and materiel. Those movements fall under the sustainment warfighting function.

Editor's note: Tactical commands normally employ a combination of the six basic forms of maneuver—envelopment, flank attack, frontal attack, infiltration, penetration, and turning movement—in their performance of the four offensive tasks (see pp. 2-85). Forms of the maneuver are discussed on pp. 2-90 to 2-91. Tactical enabling tasks are addressed on pp. 2-66 to 2-67; tactical mission tasks are on pp. 4-17 to 4-22.

For the purposes of The Army Operations & Doctrine SMARTbook, an overview of the following tasks of decisive action (see pp. 1-36 to 1-37) and topics are represented as they relate to the movement and maneuver warfighting function:

- I. *Offense and Defense*, pp. 4-2 to 4-3.
- II. *Stability Operations*, pp. 4-4 to 4-5.
- III. *Defense Support of Civil Authorities*, pp. 4-6 to 4-7.
- IV. *Special Operations*, pp. 4-7 to 3-8.
- V. *Deployment/Force Projection Operations*, p. 4-10.



Refer to SUTS3: The Small Unit Tactics SMARTbook, 3rd Ed., completely updated with the latest publications for 2019. Chapters and topics include tactical fundamentals, the offense; the defense; train, advise, and assist (stability, peace & counterinsurgency ops); tactical enabling tasks (security, reconnaissance, relief in place, passage of lines, encirclement, and troop movement); special purpose attacks (ambush, raid, etc.); urban and regional environments (urban, fortified areas, desert, cold, mountain, & jungle operations); patrols & patrolling.

I. Offense and Defense (Decisive Action)

Ref: ADP 3-90, *Offense and Defense* (Jul '19).

ADP 3-90, *Offense and Defense*, articulates how Army forces conduct the offense and defense. It contains the fundamental tactics related to the execution of these elements of decisive action. Tactics employs, orders arrangement of, and directs actions of forces in relation to each other. Commanders select tactics that place their forces in positions of relative advantage. The selected tactics support the attainment of goals. Tactics create multiple dilemmas for an enemy allowing the friendly commander to defeat the enemy in detail. Successful tactics require synchronizing all the elements of combat power.

Tactics is the employment, ordered arrangement, and directed actions of forces in relation to each other. Tactics always require judgment and adaptation to a situation's unique circumstances. Techniques and procedures are established patterns or processes that can be applied repeatedly with little judgment to various circumstances. Together, tactics, techniques, and procedures (TTP) provide commanders and staffs with the fundamentals to develop solutions to tactical problems. The solution to any specific problem is a unique combination of these fundamentals, current TTP, and the creation of new TTP based on an evaluation of the situation. Commanders determine acceptable solutions by mastering doctrine and current TTP. They gain this mastery through experiences in education, training, and operations.

The Tactical Level of War

The tactical level of warfare is the level of warfare at which battles and engagements are planned and executed to achieve military objectives assigned to tactical units or task forces (JP 3-0). Activities at this level focus on achieving assigned objectives through the ordered arrangement, movement, and maneuver of combat elements in relation to each other and to enemy forces. The strategic and operational levels of warfare provide the context for tactical operations. Without this context, tactical operations become disconnected from operational end states and strategic goals.

The Offense

The offense is the decisive form of war. The offense is the ultimate means commanders have of imposing their will on enemy forces. Army forces conduct the offense to defeat and destroy enemy forces as well as gain control of terrain, resources, and population centers. Commanders may also conduct the offense to deceive or divert an enemy force, develop intelligence, or hold an enemy force in position. Commanders seize, retain, and exploit the initiative when conducting the offense. Specific operations may orient on an enemy force or terrain objective to achieve a position of relative advantage. Taking the initiative from an enemy force requires the conduct of the offense, even in the defense.

The main purposes of the offense are to defeat enemy forces, destroy enemy forces, and gain control of terrain, resources, and population centers. Additionally, commanders conduct the offense to secure decisive terrain, to deprive the enemy of resources, to gain information, to deceive and divert the enemy, to hold the enemy in position, to disrupt his attack, and to set the conditions for future successful operations.

The Defense

While the offense is more decisive, the defense is usually stronger. However, the conduct of the defense alone normally cannot determine the outcome of battles. Army forces generally conduct the defense to create conditions favorable for the offense.

The purpose of the defense is to create conditions for the offense that allows Army forces to regain the initiative. Other reasons for conducting the defense include retaining decisive terrain or denying a vital area to an enemy, attriting or fixing an enemy as a prelude to the offense, countering enemy action, and increasing an enemy's vulnerability by forcing an enemy commander to concentrate subordinate forces.

A defensive operation is an operation to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability operations (ADP 3-0).

The inherent strengths of the defense are the defender's ability to occupy positions before an attack and use the available time to improve those defenses. A defending force stops improving its defensive preparations only when it retrogrades or begins to engage enemy forces.

Enabling Operations

Commanders perform enabling operations to help in the planning, preparation, and execution of any of the four elements of decisive action. Enabling operations are never decisive operations. Enabling operations discussed in ADP 3-90 include reconnaissance, security, troop movement, relief in place, passage of lines, encirclement operations, and urban operations. Other publications discuss other enabling operations. For example, FM 3-13 discusses information operations, ATP 3-90.4 discusses mobility operations, and ATP 3-90.8 discusses countermobility operations.

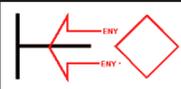
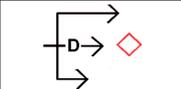
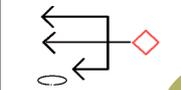
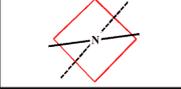
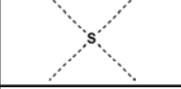
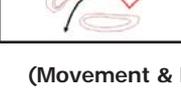
Elements of Decisive Action			
Offensive operations <ul style="list-style-type: none"> • Movement to Contact • Search and Attack • Cordon and Search • Attack <ul style="list-style-type: none"> • Ambush • Counterattack • Demonstration • Feint • Raid • Spoiling attack • Exploitation • Pursuit <ul style="list-style-type: none"> • Frontal • Combination 	Defensive operations <ul style="list-style-type: none"> • Area Defense • Mobile Defense • Retrograde <ul style="list-style-type: none"> • Delay • Withdraw • Retirement 	Stability operations tasks <ul style="list-style-type: none"> • Establish civil security • Support to civil control • Restore essential services • Support to governance • Support to economic and infrastructure development • Conduct security cooperation 	Defensive support of civil authorities tasks <ul style="list-style-type: none"> • Provide support for Domestic disasters • Provide support for domestic chemical, biological, radiological, and nuclear incidents • Provide support for domestic civilian law enforcement agencies • Provide other designated domestic support
Enabling operations			
<ul style="list-style-type: none"> • Reconnaissance <ul style="list-style-type: none"> • Area • Reconnaissance in force • Route • Special • Zone 	<ul style="list-style-type: none"> • Passage of lines <ul style="list-style-type: none"> • Forward • Rearward • Troop movement <ul style="list-style-type: none"> • Administrative movement • Approach march • Tactical road march 	<ul style="list-style-type: none"> • Relief in place <ul style="list-style-type: none"> • Sequential • Simultaneous • Staggered 	<ul style="list-style-type: none"> • Security <ul style="list-style-type: none"> • Screen • Guard • Cover • Area
Tactical Mission Tasks			
<ul style="list-style-type: none"> • Ambush • Attack by fire • Block • Breach • Bypass • Canalize 	<ul style="list-style-type: none"> • Clear • Contain • Control • Counterreconnaissance • Destroy • Defeat 	<ul style="list-style-type: none"> • Disengagement • Disrupt • Exfiltrate • Fix • Follow and assume • Follow and support 	<ul style="list-style-type: none"> • Interdict • Isolate • Neutralize • Occupy • Reduce • Retain
<ul style="list-style-type: none"> • Secure • Seize • Support by fire • Suppress • Turn 			
Forms of Maneuver and Forms of the Defense			
<ul style="list-style-type: none"> • Envelopment • Frontal assault • Infiltration • Penetration • Turning movement 	<ul style="list-style-type: none"> • Defense of a linear obstacle • Perimeter defense • Reverse slope defense 		

Ref: ADP 3-90, *Offense and Defense* (Jul '19), Figure 2-1. Taxonomy of Army tactics.



Refer to SUTS3: *The Small Unit Tactics SMARTbook (Planning & Conducting Tactical Operations)* for complete discussion of offensive and defensive operations. Related topics include tactical mission fundamentals, stability & counterinsurgency operations, tactical enabling operations, special purpose attacks, urban operations & fortifications, and patrols & patrolling.

B. Effect on Enemy Forces

Block		<i>Block</i> is a tactical mission task that denies the enemy access to an area or prevents his advance in a direction or along an avenue of approach.
		<i>Block</i> is also an engineer obstacle effect that integrates fire planning and obstacle effort to stop an attacker along a specific avenue of approach or prevent him from passing through an engagement area.
Canalize		<i>Canalize</i> is a tactical mission task in which the commander restricts enemy movement to a narrow zone by exploiting terrain coupled with the use of obstacles, fires, or friendly maneuver.
Contain		<i>Contain</i> is a tactical mission task that requires the commander to stop, hold, or surround enemy forces or to cause them to center their activity on a given front and prevent them from withdrawing any part of their forces for use elsewhere.
Defeat	<i>No graphic</i>	<i>Defeat</i> occurs when an enemy has temporarily or permanently lost the physical means or the will to fight. The defeated force is unwilling or unable to pursue his COA, and can no longer interfere to a significant degree. Results from the use of force or the threat of its use.
Destroy		<i>Destroy</i> is a tactical mission task that physically renders an enemy force combat-ineffective until it is reconstituted. Alternatively, to destroy a combat system is to damage it so badly that it cannot perform any function or be restored to a usable condition without being entirely rebuilt.
Disrupt		<i>Disrupt</i> is a tactical mission task in which a commander integrates direct and indirect fires, terrain, and obstacles to upset an enemy's formation or tempo, interrupt his timetable, or cause his forces to commit prematurely or attack in a piecemeal fashion.
		<i>Disrupt</i> is also an engineer obstacle effect that focuses fire planning and obstacle effort to cause the enemy to break up his formation and tempo, interrupt his timetable, commit breaching assets prematurely, and attack in a piecemeal effort.
Fix		<i>Fix</i> is a tactical mission task where a commander prevents the enemy from moving any part of his force from a specific location for a specific period. Fixing an enemy force does not mean destroying it. The friendly force has to prevent the enemy from moving in any direction.
		<i>Fix</i> is also an engineer obstacle effect that focuses fire planning and obstacle effort to slow an attacker's movement within a specified area, normally an engagement area.
Isolate		<i>Isolate</i> is a tactical mission task that requires a unit to seal off-both physically and psychologically-an enemy from his sources of support, deny him freedom of movement, and prevent him from having contact with other enemy forces.
Neutralize		<i>Neutralize</i> is a tactical mission task that results in rendering enemy personnel or materiel incapable of interfering with a particular operation.
Suppress		<i>Suppress</i> is a tactical mission task that results in the temporary degradation of the performance of a force or weapon system below the level needed to accomplish its mission.
Turn		<i>Turn</i> is a tactical mission task that involves forcing an enemy element from one avenue of approach or movement corridor to another.
		<i>Turn</i> is also a tactical obstacle effect that integrates fire planning and obstacle effort to divert an enemy formation from one avenue of approach to an adjacent avenue of approach or into an engagement area.

III. Reconnaissance

Ref: ADP 3-90, Offense and Defense (Jul '19), chap 5, pp. 5-1 to 5-2 and FM 3-90-1, Reconnaissance, Security, and Tactical Enabling Tasks, Vol. 2 (Mar '13), chap. 1.

Reconnaissance is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographical, or geographical characteristics of a particular area (JP 2-0). Reconnaissance accomplished by small units primarily relies on the human dynamic rather than technical means. Reconnaissance is a focused collection effort. It is performed before, during, and after operations to provide commanders and staffs information used in the intelligence preparation of the battlefield (IPB) process so they can formulate, confirm, or modify courses of action (COAs).



Reconnaissance is a process of gathering information to help the commander shape his understanding of the battlespace. Reconnaissance uses many techniques and technologies to collect this information, but it is still largely a human endeavor. (Dept. of Army photo.)

Reconnaissance Objective

Commanders orient their reconnaissance assets by identifying a reconnaissance objective within an area of operations (AO). The reconnaissance objective is a terrain feature, geographic area, enemy force, adversary, or other mission or operational variable about which the commander wants to obtain additional information. Every reconnaissance mission specifies a reconnaissance objective that clarifies the intent of the effort, and prioritizes those efforts, by specifying the most important information to obtain. Commanders assign reconnaissance objectives based on priority information requirements resulting from the IPB process and the reconnaissance asset's capabilities and limitations. A reconnaissance objective can be information about a specific geographical location, such as the cross country trafficability of a specific area, to confirm or deny a specific activity of a threat, or to specify a specific location of a threat.

Reconnaissance

Ref: ADP 3-90, *Offense and Defense* (Jul '19), pp. 5-1 to 5-2.

Reconnaissance is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographical, or geographical characteristics of a particular area (JP 2-0). Reconnaissance accomplished by small units primarily relies on the human dynamic rather than technical means. Reconnaissance is a focused collection effort. It is performed before, during, and after operations to provide commanders and staffs information used in the intelligence preparation of the battlefield (IPB) process so they can formulate, confirm, or modify courses of action (COAs).

Types of Reconnaissance

The five types of reconnaissance: route, zone, area, reconnaissance in force, and special.

Forms of Reconnaissance

- A** Route Reconnaissance
- B** Zone Reconnaissance
- C** Area Reconnaissance
- D** Reconnaissance in Force
- E** Special Reconnaissance

The responsibility for accomplishing reconnaissance does not reside solely with reconnaissance units. Every unit has an implied mission to report information about the terrain, civilian activities, and friendly and enemy dispositions. Troops in contact with an enemy and reconnaissance patrols of maneuver units, at all echelons, collect information on enemy units and activities. In echelon support and consolidation areas, reserve maneuver forces, functional and multifunctional support and sustainment elements, other governmental agencies, and multinational forces observe and report civilian, adversary, and enemy activity and significant changes in terrain trafficability. Although all units conduct reconnaissance, ground cavalry, aviation attack reconnaissance units, scouts, and special forces are specifically trained to conduct reconnaissance operations. Some branches, such as the Corps of Engineers and Chemical Corps, conduct specific reconnaissance operations that complement the force's overall reconnaissance effort. However, BCT, division, and corps commanders primarily use their organic or attached reconnaissance—ground or air—and intelligence elements to accomplish reconnaissance.

Intelligence Warfighting Function

Ref: ADP 2-0, *Intelligence* (Jul '19), chap. 2; ADP 3-0, *Operations* (Jul '19), pp. 5-4 to 5-5; and FM 3-0 (w/Chg 1), *Operations* (Dec '17), pp. 2-42 to 2-45.

The intelligence warfighting function is the related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operations environment. Specifically, other significant aspects of an operational environment include threats, adversaries, and operational variables, depending on the nature of operations. The intelligence warfighting function synchronizes information collection with the primary tactical tasks of reconnaissance, surveillance, security, and intelligence operations. Intelligence is driven by commanders and is more than just collection. Developing intelligence is a continuous process that involves analyzing information from all sources and conducting operations to develop the situation. The Army executes intelligence, surveillance, and reconnaissance through the operations and intelligence processes, with an emphasis on intelligence analysis and leveraging the larger intelligence enterprise, and information collection. The intelligence warfighting function includes the following tasks:

- Provide support to force generation.
- Provide support to situational understanding.
- Conduct information collection.
- Provide intelligence support to targeting and information operations.

Fighting for Intelligence

Information collection begins immediately following receipt of mission. Units must be prepared to fight for intelligence against a range of threats, enemy formations, and unknowns. These challenges include integrated air defense systems (IADSS) and long range fires, counter reconnaissance, cyberspace and EW operations, deception operations, and camouflage. It may be necessary for commanders to allocate maneuver, fires, and other capabilities to conduct combat operations to enable information collection.

Priority intelligence requirements, information requirements, and targeting requirements inform the integrated information collection plan. All units (maneuver, fires, maneuver support, and sustainment units) are part of the information collection effort. Commanders and staffs integrate and synchronize all activities that provide useful information as a part of the information collection effort, including Soldier and leader engagements, patrols, observation posts and listening posts, convoys, and checkpoints.

During planning, combat information and intelligence is especially useful in determining the viability of potential courses of action. For example, a commander who lacks the intelligence to know where most of the enemy's units and systems are located cannot conduct a deliberate attack. The unit must collect more information, conduct a reconnaissance in force, a more risky movement to contact, or a hasty attack.

During the execution phase of the operations process, a layered and continuous information collection effort ensures detection of any enemy formations, lethal fires capabilities, or specialized capabilities that provide the enemy advantage. In turn, this allows the commanders and staffs to adjust the scheme of maneuver and fires as the enemy situation develops.

I. Intelligence Overview

Ref: ADP 2-0, Intelligence (Jul '19), preface and pp. 1 to 2.

Operations and intelligence are closely linked. The intelligence process is continuous and directly drives and supports the operations process. This principle will remain true well into the future. Intelligence will continue to be a critical part of the conduct-planning, preparing, executing, and assessing--of operations. Future operations will be difficult. They will occur in complex operational environments against capable peer threats, who most likely will start from positions of relative advantage. U.S. forces will require effective intelligence to prevail during these operations.

Intelligence supports joint and Army operations across unified action, the Army's strategic roles, unified land operations, and decisive action at each echelon--from the geographic combatant command down to the battalion level. Specifically, intelligence supports commanders and staffs by facilitating situational understanding across all domains and the information environment. Commanders and staffs use situational understanding to identify and exploit multi-domain windows of opportunity and to achieve and exploit positions of relative advantage.

Intelligence is inherently joint, interagency, intergovernmental, and multinational. Every aspect of intelligence is synchronized, networked, and collaborative across all unified action partners. This synchronization occurs through national to tactical intelligence support. The Army both benefits from and contributes to national to tactical intelligence and focuses the Army intelligence effort through the intelligence warfighting function, which is larger than military intelligence. Critical participants within the function include commanders and staffs, decision makers, collection managers, and intelligence leaders.

Despite a thorough understanding of intelligence fundamentals and a proficient staff, an effective intelligence effort is not assured. Large-scale ground combat operations are characterized by complexity, chaos, fear, violence, fatigue, and uncertainty. The fluid and chaotic nature of large-scale ground combat operations causes the greatest degree of fog, friction, and stress on the intelligence warfighting function. Threat forces will attempt to counter friendly collection capabilities by using integrated air defense systems, long-range fires, counterreconnaissance, cyberspace and electronic warfare operations, camouflage and concealment, and deception.

Ensuring an effective intelligence effort is a challenge described as fighting for intelligence.

Intelligence Preparation of the Battlefield (IPB)

Intelligence preparation of the battlefield (IPB) is a systematic, continuous process of analyzing the threat and other aspects of an operational environment within a specific geographic area. Led by the intelligence officer, the entire staff participates in IPB to develop and sustain an understanding of the enemy, terrain and weather, and civil considerations. IPB helps identify options available to friendly and threat forces. IPB consists of four steps. Each step is performed or assessed and refined to ensure that IPB products remain complete and relevant. The four IPB steps are—

- Define the Operational Environment
- Describe Environmental Effects On Operations/*Describe The Effects On Operations*
- Evaluate the Threat/*Adversary*
- Determine Threat/*Adversary* Courses Of Action

See p. 1-54 for discussion of IPB as an integrating process.

IV. Intelligence Support to Commanders and Decisionmakers

Ref: Adapted from ADP 2-0, *Intelligence* (Aug '12), pp. 2 to 3.

Commanders provide guidance and resources to support unique requirements of the staffs and subordinate commanders. Although commanders drive operations, as the principal decisionmakers, their relationship with their staffs must be one of close interaction and trust. This relationship must encourage initiative within the scope of the commander's intent. Independent thought and timely actions by staffs are vital to mission command.

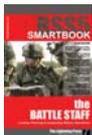
Commanders provide guidance and continuous feedback throughout operations by—

- Providing direction
- Stating clear, concise commander's critical information requirements (CCIRs)
- Synchronizing the intelligence warfighting function
- Participating in planning
- Collaborating with the G-2/S-2 during the execution of operations

Teamwork within and between staffs produces integration essential to effective mission command and synchronized operations. While all staff sections have clearly defined functional responsibilities, they cannot work efficiently without complete cooperation and coordination among all sections and cells. Key staff synchronization and integration occur during—

- **Intelligence preparation of the battlefield (IPB).** The G-2/S-2 leads the IPB effort with the entire staff's participation during planning.
- **Army design methodology, the military decisionmaking process, and the rapid decisionmaking and synchronization process.** Intelligence provides important input that helps frame operational problems and drives decisionmaking processes.
- **Information collection.** The G-2/S-2 staff provides the analysis, supporting products, and draft plan necessary for the G-3/S-3 to task the information collection plan.
- **Targeting.** Intelligence is an inherent part of the targeting process and facilitates the execution of the decide, detect, deliver, and assess functions.
- **Assessments.** The G-2/S-2 staff collaborates closely with the rest of the staff to ensure timely and accurate assessments occur throughout operations.

The staff performs many different activities as a part of the intelligence warfighting function. This effort is extremely intensive during planning and execution. After the commander establishes CCIRs, the staff focuses the intelligence warfighting function on priority intelligence requirements and other requirements. The staff assesses the situation and refines or adds new requirements, as needed, and quickly retasks units and assets. It is critical for the staff to plan for and use well-developed procedures and flexible planning to track emerging targets, adapt to changing operational requirements, and meet the requirement for combat assessment.



Refer to BSS5: *The Battle Staff SMARTbook (Leading, Planning & Conducting Military Operations)* for further discussion of the intelligence warfighting function as it relates to the operations process -- to include warfighting function tasks, intelligence core competencies, the intelligence process, and types of intelligence products.

The Intelligence Disciplines

Ref: ADP 2-0, *Intelligence* (Jul '19), pp. 4-3 to 4-10.

In joint operations, the intelligence enterprise is commonly organized around the intelligence disciplines. The intelligence disciplines are—

Intelligence Disciplines

- **Counterintelligence (CI)**
- **Geospatial Intelligence**
- **Human Intelligence (HUMINT)**
- **Measurement and Signature Intelligence (MASINT)**
- **Open-Source Intelligence (OSINT)**
- **Signals Intelligence (SIGINT)**
- **Technical Intelligence (TECHINT)**

The intelligence disciplines are integrated to ensure a multidiscipline approach to intelligence analysis, and ultimately all-source intelligence facilitates situational understanding and supports decisionmaking. Each discipline applies unique aspects of support and guidance through technical channels.

Refer to JP 2-0.1.

Counterintelligence (CI)

CI counters or neutralizes intelligence collection efforts through collection, CI investigations, operations, analysis, production, and technical services and support. CI includes all actions taken to detect, identify, track, exploit, and neutralize multidiscipline intelligence activities of foreign intelligence and security services (FISS), international terrorist organizations, and adversaries, and is the key intelligence community contributor to protect U.S. interests and equities.

The mission of Army CI is to conduct aggressive, comprehensive, and coordinated investigations, operations, collection, analysis and production, and technical services. These functions are conducted worldwide to detect, identify, assess, counter, exploit, or neutralize the FISS, international terrorist organization, and adversary collection threat.

Refer to ATP 2-22.2-1.

Geospatial Intelligence

Geospatial intelligence is the exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth. Geospatial intelligence consists of imagery, imagery intelligence, and geospatial information (JP 2-03). (Section 467, Title 10, USC [10 USC 467], establishes GEOINT.) Note. GEOINT consists of any one or any combination of the following components: imagery, IMINT, and geospatial information and services.

For more information on GEOINT, refer to ATP 2-22.7, ATP 3-34.80, and AR 115-11.

Human Intelligence (HUMINT)

Human intelligence is the collection by a trained human intelligence collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, and capabilities (FM 2-0).

A HUMINT source is a person from whom foreign information is collected for the purpose of producing intelligence. HUMINT sources can include friendly, neutral, or hostile personnel. The source may either possess first- or second-hand knowledge normally obtained

Fires Warfighting Function

Ref: ADP 3-19, Fires (Jul '19), chap. 1 and ADP 3-0, Operations (Jul '19), p. 5-5.

Editor's Note: In addition to combining information from ADP 3-09 and ADRP 3-09 into one publication, the redesignated publication ADP 3-19 (Jul '19) redefined the fires warfighting function (as outlined below) from what was originally presented in FM 3-0. ADP 3-19 also includes discussion on all capabilities that contribute to create effects, including Army, joint, and multinational capabilities.

I. The Fires Warfighting Function

The fires warfighting function is the related tasks and systems that create and converge effects in all domains against the threat to enable actions across the range of military operations (ADP 3-0). These tasks and systems create lethal and nonlethal effects delivered from both Army and Joint forces, as well as other unified action partners. The fires warfighting function does not wholly encompass, nor is it wholly encompassed by, any particular branch or function. Many of the capabilities that contribute to fires also contribute to other warfighting functions, often simultaneously. For example, an aviation unit may simultaneously execute missions that contribute to the movement and maneuver, fires, intelligence, sustainment, protection, and command and control warfighting functions. Additionally, air defense artillery (ADA) units conduct air and missile defense (AMD) operations in support of both fires and protection warfighting functions.

Commanders must execute and integrate fires, in combination with the other elements of combat power, to create and converge effects and achieve the desired end state. Fires tasks are those necessary actions that must be conducted to create and converge effects in all domains to meet the commander's objectives. The tasks of the fires warfighting function are:

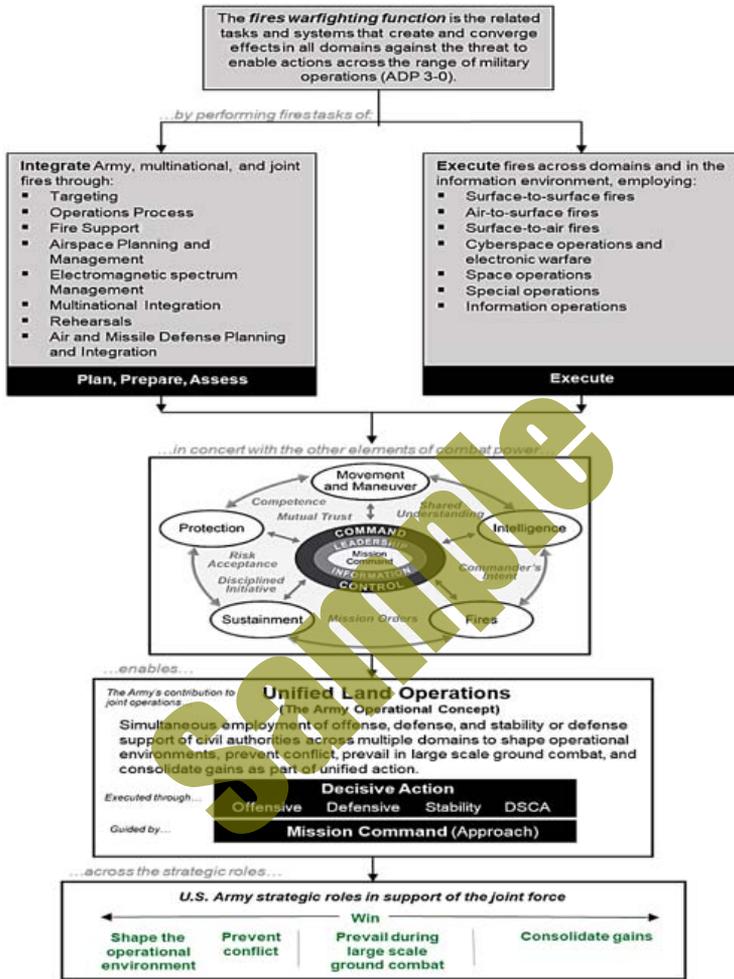
Integrate Army, multinational, and joint fires through:

- Targeting.
- Operations process.
- Fire support.
- Airspace planning and management.
- Electromagnetic spectrum management.
- Multinational integration.
- Rehearsals.
- Air and missile defense planning and integration.

Execute fires across all domains and in the information environment, employing:

- Surface-to-surface fires.
- Air-to-surface fires.
- Surface-to-air fires.
- Cyberspace operations and EW.
- Space operations.
- Multinational fires.
- Special operations.
- Information operations.

Fires Logic Diagram



Fires (ADP 3-19)

Ref: ADP 3-19, Fires (Jul '19), introductory figure, ADP 3-19 Logic chart.

During large-scale combat operations, multiple Army echelons must synchronize and deconflict their activities, including the creation of effects. The use of deep and close areas can help with dividing responsibilities among echelons within an AO. The close area is the portion of the commander's area of operations where the majority of subordinate maneuver forces conduct close combat (ADP 3-0). The deep area is where the commander sets conditions for future success in close combat (ADP 3-0). Commanders may focus the effects of fires in their deep area to execute shaping operations against enemy forces not in contact with friendly forces in the close area, while subordinate units are responsible for creation of effects in the close area the commander has assigned to them.

III. Fires Across the Domains

Ref: ADP 3-19, Fires (Jul '19), pp. 1-4 to 1-5. See also pp. 6-11 to 6-20.

The Army operates within all **domains**: land, air, maritime, space, and cyberspace (including the electromagnetic spectrum) as well as in the information environment.

Commanders use fires to create effects in support of Army and joint operations.

Cross-domain fires are fires executed in one domain to create effects in a different domain. Cross-domain fires provide commanders with the flexibility to find the best system to create the required effect and to build redundancy into their plan.

Multi-domain fires are fires that converge effects from two or more domains against a target. Multi-domain fires may produce synergistic effects that are greater than the sum of the individual effects that would have been created separately. Surface-based fires converged with other effects across domains creates multiple dilemmas, taxing the enemy's ability to effectively respond. For example, a commander may employ offensive cyberspace operations to attack an enemy air defense network while surface-to-surface fires destroy enemy air defense radars and air-to-surface fires destroy the air defense command and control nodes. The converged effects provide reduced risk to allied operational aircraft.

The **land domain** is the area of the Earth's surface ending at the high water mark and overlapping with the maritime domain in the landward segment of the littorals (JP 3-31). The joint force land component commander (JFLCC) is the supported commander within the land area of operations (AO) designated by the joint force commander (JFC). Within the designated AO, the JFLCC has the authority to designate target priority, effects, and timing of fires in order to integrate and synchronize maneuver, fires, and interdiction.

The **air domain** is the atmosphere, beginning at the Earth's surface, extending to the altitude where its effects upon operations become negligible (JP 3-30). The JFC normally assigns joint force air component commander responsibilities to the component commander having the preponderance of forces and the ability to effectively plan, task, and control joint air operations. In addition, as all component commands will need to utilize the air domain to some extent, the JFC normally designates the joint force air component commander as the airspace control authority to promulgate airspace coordinating measures to deconflict the multiple users on behalf of the JFC. The Army air-ground system is the Army's system to synchronize, coordinate, and integrate air-ground operations, joint air support, and airspace.

The **maritime domain** is the oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals (JP 3-32). Naval and maritime forces operate on (surface), under (subsurface), or above the sea (air). Fires from the maritime domain support the land scheme of fires with traditional naval surface fires, and joint fires to include cruise missile and anti-ship missiles, as well as protecting global shipping lanes and friendly maritime assets to maintain freedom of maneuver.

The **space domain** is the space environment, space assets, and terrestrial resources required to access and operate in, to, or through the space environment (FM 3-14). Space is a physical domain where military operations are conducted. Space capabilities include the ability to access information collection; environmental monitoring; early warning, satellite based sensors and communications; and positioning, navigation, and timing.

Cyberspace is a global domain within the information environment consisting of the interdependent networks of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers (JP 3-12.) Commanders will generally create effects in the cyberspace domain through offensive and defensive cyberspace operations. However, they may also create effects on the physical network layer of cyberspace.

I. Fires in Unified Land Operations

Ref: ADP 3-19, *Fires* (Jul '19), pp. 1-5 to 1-9.

The Army operational concept for conducting operations as part of a joint team is unified land operations. Unified land operations is the simultaneous execution of offense, defense, stability, and defense support of civil authorities across multiple domains to shape operational environments, prevent conflict, prevail in large-scale ground combat, and consolidate gains as part of unified action (ADP 3-0). The goal of unified land operations is to achieve the JFC's end state by applying landpower as part of unified action. Commanders employ fires to set conditions for the successful employment of other elements of combat power to conduct unified land operations. The targeting process can help commanders and staffs to prioritize and integrate assets to create effects that allow for achievement of the commander's objectives within unified land operations.

The Army's primary mission is to organize, train, and equip its forces to conduct prompt and sustained land combat to defeat enemy ground forces and seize, occupy, and defend land areas. During the conduct of unified land operations, Army forces support the joint force through four strategic roles:

- Shape OEs.
- Prevent conflict.
- Prevail during large-scale ground combat.
- Consolidate gains.

I. Fires in Support of Operations to Shape

Army operations to shape consist of various long-term military engagements, security cooperation, and deterrence missions, tasks, and actions intended to assure friends, build partner capacity and capability, and promote regional stability. Operations to shape typically occur in support of the geographic combatant commander's theater campaign plan or the theater security cooperation plan. These operations help counter actions by adversaries that challenge the stability of a nation or region contrary to U.S. interests. (see FM 3-0).

Operations to shape begin at home station. These activities include maintaining operational readiness through training and contingency planning. Army organizations and personnel are forward based or deploy in support of operations to shape a theater. Operations to shape set the conditions to stabilize a nation or region and potentially deter adversarial aggression or attacks. During operations to shape, commanders employ fires to counter adversary attempts to gain positions of advantage as well as participate in regional security cooperation operations and security force assistance, key leader engagements, and training, advising, and equipping foreign forces.

Units conduct combined arms exercises and interoperability training with joint and multinational units. Interoperability training is essential to finding technical solutions to integrate fires, for example by establishing integrated fire control networks. In addition to conducting military exchange and liaison programs, personnel and schools train foreign students at home station and abroad. Foreign military sales contribute to multinational interoperability and enhance partner capacity.

Security cooperation is all department of defense interactions with foreign security establishments to build security relationships that promote specific United States

Operations Process & Targeting Relationship

Fires are an integral part of the operations process—the major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation (ADP 5-0). The commander drives the operations process.

Army targeting uses the functions decide, detect, deliver, and assess (D3A) as its methodology. Its functions complement the planning, preparing, executing, and assessing stages of the operations process. Army targeting addresses two targeting categories—deliberate and dynamic.

Operations Process		D3A	Targeting Task
Continuous Assessment	Planning	Decide	<ul style="list-style-type: none"> Perform target value analysis to develop fire support, high-value targets, and critical asset list. Provide fires running estimates and information/influence to the commander's targeting guidance and desired effects.
			<ul style="list-style-type: none"> Designate potential high-payoff targets. Deconflict and coordinate potential high-payoff targets. Develop high-payoff target list/defended asset list. Establish target selection standards and identification matrix (air and missile defense). Develop attack guidance matrix, fire support, and cyber/electromagnetic activities tasks. Develop associated measures of performance and measures of effectiveness.
			<ul style="list-style-type: none"> Refine high-payoff target list. Refine target selection standards. Refine attack guidance matrix and surface-to-air-missile tactical order. Refine fire support tasks. Refine associated measures of performance and measures of effectiveness. Develop the target synchronization matrix. Draft airspace control means requests.
			<ul style="list-style-type: none"> Finalize the high-payoff target list. Finalize target selection standards. Finalize the attack guidance matrix. Finalize the targeting synchronization matrix. Finalize fire support tasks. Finalize associated measures of performance and measures of effectiveness. Submit information requirements to staff and subordinate units.
Preparation	Detect	<ul style="list-style-type: none"> Collect information (surveillance, reconnaissance). Report and disseminate information. Update information requirements as they are answered. Focus sensors, locate, identify, maintain track, and determine time available. Update the high-payoff target list, attack guidance matrix, targeting synchronization matrix, identification matrix (air and missile defense) and surface-to-air-missile tactical order as necessary. Update fire support tasks. Update associated measures of performance and measures of effectiveness. Target validated, deconfliction and target area clearance resolved, target execution/engagement approval. 	
		<ul style="list-style-type: none"> Order engagement. Execute fires in accordance with the attack guidance matrix, the targeting synchronization matrix, identification matrix (air and missile defense), and surface-to-air-missile tactical order. Monitor/manage engagement. 	
Execution	Deliver	<ul style="list-style-type: none"> Order engagement. Execute fires in accordance with the attack guidance matrix, the targeting synchronization matrix, identification matrix (air and missile defense), and surface-to-air-missile tactical order. Monitor/manage engagement. 	
Assess	Assess	<ul style="list-style-type: none"> Assess task accomplishment (as determined by measures of performance). Assess effects (as determined by measures of effectiveness). Reporting results. Reattack/reengagement recommendations. 	

Legend: D3A – decide, detect, deliver, and assess

Ref: Adapted from ADRP 3-09, Fires (Aug '12), table 3-2, p. 3-2 (not provided in ADP 3-19).



Refer to BSS5: The Battle Staff SMARTbook (Leading, Planning & Conducting Military Operations) for discussion of the fires and targeting (D3A - decide, detect, deliver and assess) as it relates to the operations process. In-depth topics include high-payoff target list, intelligence collection plan, target selection standards, attack guidance matrix, attack of targets, tactical and technical decisions, and combat assessments.

Fires (ADP 3-19)

The Sustainment Warfighting Function

Ref: ADP 4-0, Sustainment (Jul '19), chap. 1 and ADP 3-0, Operations (Jul '19), pp. 5-5 to 5-6.

The sustainment warfighting function is the related tasks and systems that provide support and services to ensure freedom of action, extended operational reach, and prolong endurance (ADP 3-0). Sustainment determines the depth and duration of Army operations (ADP 3-0). Successful sustainment enables freedom of action by increasing the number of options available to the commander. Sustainment is essential for retaining and exploiting the initiative. The sustainment warfighting function consists of four elements: logistics, financial management, personnel services and health service support as shown in the sustainment warfighting function logic chart:

- Logistics
- Financial management
- Personnel services
- Health service support

A. Logistics

Logistics is planning and executing the movement and support of forces. It includes those aspects of military operations that deal with: design and development; acquisition, storage, movement, distribution, maintenance, and disposition of materiel; acquisition or construction, maintenance, operation, and disposition of facilities; and acquisition or furnishing of services. The explosive ordnance disposal tasks are discussed under the protection warfighting function. Army logistics elements are:

- Maintenance
- Transportation
- Supply
- Field Services
- Distribution
- Operational contract support
- General engineering

See pp. 7-7 to 7-10 for discussion of logistics.

B. Financial Management

Financial management leverages fiscal policy and economic power across the range of military operations. Financial management encompasses finance operations and resource management.

See pp. 7-11 to 7-12 for discussion of financial management.



Refer to SMFLS4: Sustainment & Multifunctional Logistics SMARTbook (Warfighter's Guide to Logistics, Personnel Services, & Health Services Support) -- updated with the latest doctrinal references (ADRP 4-0 Sustainment, ATP 4-93 Sustainment Brigade, JP 4-0 Joint Logistics, and more than 20 other joint and service publications) -- for complete discussion of strategic, operational, and tactical logistics, force projection, deployment and redeployment, and RSO&I operations.

C. Personnel Services

Personnel services are those sustainment functions related to Soldiers' welfare, readiness, and quality of life. Personnel services complement logistics by planning for and coordinating efforts that provide and sustain personnel. Personnel services include—

- Human resources support
- Legal support
- Religious support
- Band support

See pp. 7-13 to 7-14 for discussion of personnel services.

D. Health Service Support

Army Health System (AHS) support includes both health service support and force health protection that are critical capabilities embedded within formations across all warfighting functions. The force health protection mission falls under the protection warfighting function and will not be covered in this publication (see ADP 3-37).

Health service support encompasses all support and services performed, provided, and arranged by the Army Medical Department to promote, improve, conserve, or restore the behavioral and physical well-being of Army personnel and as directed, unified action partners (UAPs). Health service support includes the following—

- Casualty care, which encompasses a number of medical functions, including:
 - Medical treatment (organic and area medical support).
 - Hospitalization.
 - Dental care (treatment aspects).
 - Behavioral health/neuropsychiatric treatment.
 - Clinical laboratory services.
 - Treatment of chemical, biological, radiological, and nuclear patients).
- Medical evacuation (including medical regulating).
- Medical logistics (including blood management).

See pp. 7-15 to 7-18 for discussion of health service support.

(I. Elements of Sustainment)

A. Logistics

Ref: ADP 4-0, Sustainment (Jul '12). pp. 1-5 to 1-9.

Logistics is planning and executing the movement and support of forces. It includes those aspects of military operations that deal with design and development; acquisition, storage, movement, distribution, maintenance, and disposition of materiel; acquisition or construction, maintenance, operation, and disposition of facilities; and acquisition or furnishing of services. For the sustainment warfighting function, explosive ordnance disposal tasks are discussed under protection and intelligence warfighting functions (ADP 3-37 and FM 2-0.) Army logistics include the following—

A. Maintenance

Maintenance is all actions taken to retain materiel in a serviceable condition or to restore it to serviceability. The Army utilizes a tiered, two-level maintenance system composed of field and sustainment maintenance. Command teams, maintenance personnel and planners must have a complete understanding of two-level maintenance fundamentals in order to properly plan and execute their mission. Maintenance is necessary for endurance and performed at the tactical through strategic levels of war. Refer to ATP 4-33 for more information.

1. Field Maintenance

Field maintenance is on or near system maintenance, repair and return of equipment to the user including maintenance actions performed by operators (ATP 4-33). It often includes replaceable line unit and component replacement, and battle damage assessment, repair, and recovery. It is focused on returning a system to an operational status. Field level maintenance is not limited to remove and replace, but also provides adjustment, alignment, and fault/failure diagnoses. It includes battle damage assessment, repair, and recovery tasks performed by either the crew or support personnel to maintain systems in an operational state. Field maintenance includes all actions performed at unit level to maintain equipment readiness.

2. Sustainment Maintenance

Sustainment maintenance is off-system component repair and/or end item repair and return to the supply system or by exception to the owning unit, performed by national-level maintenance providers (ATP 4-33). The intent is to perform commodity-oriented repairs on all supported items to one standard that provides a consistent and measurable level of reliability. Off-system maintenance consists of overhaul and remanufacturing activities designed to return components, modules, assemblies, and end items to the supply system or units, resulting in extended or improved operational life expectancies. Sustainment maintenance includes all actions usually performed by an authorized special repair activity to conduct off-system maintenance.

B. Transportation

Army transportation units play a key role in facilitating endurance. Transportation units move sustainment from ports through the system to points of employment, and they retrograde materiel as required. The tenets of transportation operations include centralized control and decentralized execution, forward support, fluid and flexible movements, effective use of assets and carrying capacity, in-transit visibility, regulated movements and interoperability.

For additional information, refer to FM 4-95.

1. Movement Control

Movement control is the dual process of committing allocated transportation assets and regulating movements according to command priorities to synchronize distribution flow over lines of communications to sustain land forces. Movement control balances requirements against capabilities and requires continuous synchronization to integrate military, HN, and commercial movements by all modes of transportation to ensure seamless transitions from the strategic to the tactical level of an operation. Proper management of the movement control function aids the operational commander in applying control over the depth of the battlefield. It is a means of providing commanders with situational understanding to control movements in their operational area.

Refer to ATP 4-16 for more information on movement control.

2. Intermodal Operations

Intermodal operations is the process of using multimodal capabilities (air, highway, rail, sea) and conveyances (truck, barge, containers, pallets) to move troops, supplies and equipment through expeditionary entry points and the network of specialized transportation nodes to sustain land forces (ATP 4-13). Intermodal operations consist of facilities, transportation assets, and materials-handling equipment required to support the deployment and distribution enterprise. Included under this function are terminal operations and container management.

- **Terminal operations** are the reception, processing, and staging of passengers; the receipt, transit, storage and marshalling of cargo; the loading and unloading of transport conveyances; and the manifesting and forwarding of cargo and passengers to a destination (JP 4-01.5). They are essential in supporting deployment, redeployment, and sustainment operations. The three types of terminals are air, water, and land (ATP 4-13).
- **Container management** is the process of establishing and maintaining visibility and accountability of all cargo containers moving within the Defense Transportation System. *ATP 4-12 provides additional information on container management.*

3. Mode Operations

Mode operations are the execution of movements using various conveyances (truck, lighterage, railcar, aircraft) to transport cargo and personnel. They include the administrative, maintenance, and security tasks associated with the operation of the conveyances. There are two transportation modes of operation, surface and air, available to support military operations. The surface mode includes motor, water, and rail. The air mode consists of fixed-wing and rotary-wing aircraft.

Intermodal operations are covered in ATP 4-13.

Theater distribution is the flow of personnel, equipment, and materiel within a theater to meet the geographic combatant commander's missions (JP 4-09). Theater distribution is a process of synchronizing all elements of the logistics system to deliver the right things to the right place at the right time to support the geographic combatant commander (GCC). Theater distribution begins at the port of debarkation and ends at the unit. Personnel and materiel enter the theater by surface (land or water) or by air and move through the various transportation modes/hubs/nodes to their destination or point of use.

C. Supply

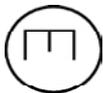
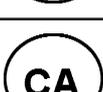
Supply is essential for enhancing Soldiers' quality of life. Supply provides the materiel required to accomplish the mission. Supply classes for the North Atlantic Treaty Organization (NATO) differ from U.S. supply classes. Additional information on NATO supply classes can be found in the NATO Logistics Handbook.

See facing page for a listing and further discussion of the classes of supply.

Classes of Supply

Ref: ADP 4-0, Sustainment (Jul '12), table 1-1, pp. 1-7 to 1-8.

The Army divides supply into ten classes for administrative and management purposes.

Class I		Subsistence, including health and welfare items.
Class II		Clothing, individual equipment, tentage, organizational tool sets and kits, hand tools, administrative and housekeeping supplies and equipment (including maps).
Class III		POL, petroleum and solid fuels, including bulk and packaged fuels, lubricating oils and lubricants, petroleum specialty products; solid fuels, coal, and related products.
Class IV		Construction materials, to include installed equipment and all fortification/barrier materials.
Class V		Ammunition of all types (including chemical, radiological, and special weapons), bombs, explosives, mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants, associated items.
Class VI		Personal demand items (nonmilitary sales items).
Class VII		Major items: A final combination of end products which is ready for its intended use.
Class VIII		Medical material, including medical peculiar repair parts.
Class IX		Repair parts and components, including kits, assemblies and subassemblies, repairable and non repairable, required for maintenance support of all equipment.
Class X		Material to support nonmilitary programs; such as, agricultural and economic development, not included in Class I through Class IX.

B. Theater Opening

Ref: ADP 4-0, Sustainment (Jul '19), pp. 3-6 to 3-9.

Theater opening is the ability to establish and operate ports of debarkation (air, sea, and rail), to establish a distribution system and sustainment bases, and to facilitate port throughput for the reception, staging, onward movement and integration of forces within a theater of operations. Preparing for theater opening operations requires unity of effort among the various commands and a seamless strategic-to-tactical interface. It is a complex joint process involving the GCC and strategic and joint partners such as USTRANSCOM and DLA. Theater opening functions set the conditions for effective support and lay the groundwork for subsequent expansion of the theater distribution system.

When given the mission to conduct theater opening, a sustainment brigade, and a mix of functional battalions and multi-functional CSSBs are assigned based on mission requirements. The sustainment brigade will participate in assessing and acquiring available HN infrastructure capabilities and contracted support and coordinating with military engineers for general engineering support.

For additional information refer to ATP 4-93 and ATP 4-0.1.

Port Opening

Port opening is a subordinate function of theater opening. Port opening is the ability to establish, initially operate and facilitate throughput for ports of debarkation to support unified land operations.

The port opening process is complete when the port of debarkation and supporting infrastructure is established to meet the desired operating capacity for that node. Supporting infrastructure can include the transportation needed to support port clearance of cargo and personnel, holding areas for all classes of supply, and the proper in-transit visibility systems established to facilitate force tracking and end-to-end distribution.

Port opening and port operations are critical components for preparing and conducting theater opening. Commanders and staffs coordinate with the HN to ensure seaports and aerial ports possess sufficient capabilities to support arriving vessels and aircraft. USTRANSCOM is the port manager for deploying U.S. forces (ATP 4-0.1).

Joint Task Force Port Opening (JTF-PO)

The joint task force-port opening is a joint capability designed to rapidly deploy and initially operate aerial and seaports of debarkation, establish a distribution node, and facilitate port throughput within a theater of operations (JP 4-0). It is a standing task force that is a jointly trained, ready set of forces constituted as a joint task force at the time of need. The Army contribution to the Joint Task Force-Port Opening is the rapid port opening element which deploys within hours to establish air and seaports of debarkation in contingency response operations. The rapid port opening element also provides in-transit visibility and cargo clearance.

The joint task force-port opening facilitates joint reception, staging, onward movement, and integration and theater distribution by providing an effective interface with the theater joint deployment and distribution operations center and the sustainment brigade for initial aerial port of debarkation (APOD) operations. It is designed to deploy and operate for up to 60 days. As follow-on theater logistics capabilities arrive, the joint task force-port opening will begin the process of transferring mission responsibilities to arriving sustainment brigade forces or contracted capabilities to ensure the seamless continuation of airfield and distribution operations.

Seaports

USTRANSCOM's SDDC is the single port manager for all common user seaports of debarkation (SPODs) and as the single port manager it develops policy and advises the GCC on port management, recommends ports to meet operational demands, and is primarily

responsible for the planning, organizing, and directing the operations at the seaport. The TSC and its subordinate sustainment brigades, terminal battalions and seaport operating companies perform the port operator functions at SPODs. These functions can include port preparations and improvement, cargo discharge and upload operations, harbor craft services, port clearance and cargo documentation activities. If the operational environment allows, SDDC may have the ability to contract locally for port operator support eliminating or decreasing the requirement for the TSC and its subordinate units.

The single port manager may have OPCON of a port support activity that is an ad hoc organization consisting of military and/or contracted personnel with specific skills to add in port operations. The TSC and SDDC will coordinate the port support activity requirements. It assists in moving unit equipment from the piers to the staging/marshaling/loading areas, assisting the aviation support element with movement of helicopters in preparation for flight from the port, providing limited maintenance support for equipment being offloaded from vessels, limited medical support, logistics support, and security for port operations.

Ideally, the SPOD will include berths capable of discharging large medium speed roll-on/roll-off ships. The SPOD can be a fixed facility capable of discharging a variety of vessels, an austere port requiring ships to be equipped with the capability to conduct their own offloading, or beaches requiring the conducting of joint logistics over-the-shore operations. Whatever the type of SPOD, it should be capable of accommodating an armored BCT.

When vessels arrive at the SPOD, the TSC and/or SDDC is responsible for discharging the unit equipment, staging the equipment, maintaining control and in-transit visibility, and releasing it to the unit. This includes minimum standards that are critical for the physical security/processing of DOD sensitive conventional arms, ammunition, and explosives, including non-nuclear nuclear missiles and rockets.

The theater gateway personnel accounting team and supporting HR company and platoons will normally operate at the SPOD as well as movement control teams to facilitate port clearance of personnel and equipment. The movement control team that has responsibility for the SPOD, coordinates personnel accounting with the supporting CSSB or sustainment brigade for executing life support functions for personnel who are transiting into or out of the theater.

Aerial Ports

Airfields supporting strategic air movements for deployment, redeployment, and sustainment are designated aerial ports. Aerial ports are further designated as either an aerial port of embarkation for departing forces and sustainment, or as an APOD for arriving forces and sustainment. Reception at the APOD is coordinated by the senior logistics commander and executed by an Air Force contingency response group/element and an arrival/departure airfield control group. It is an ad hoc organization established to control and support the arrival and departure of personnel, equipment, and sustainment cargo at airfields and must be a lead element when opening an APOD. Elements of a movement control team and an inland cargo transfer company typically operate the arrival/departure airfield control group however; any unit can perform the mission with properly trained personnel and the appropriate equipment. USTRANSCOM's Air Mobility Command is the single port manager for all common user APODs

Basing

A base camp is an evolving military facility that supports military operations of a deployed unit and provides the necessary support and services for sustained operations (ATP 3-37.10). Basing directly enables and extends operational reach, and involves the provision of sustainable facilities and protected locations from which units can conduct operations. Army forces typically rely on a mix of bases and/or base camps to deploy and employ combat power to operational depth. Options for basing range from permanent basing in CONUS to permanent or contingency (non-permanent) basing OCONUS. A base camp is an evolving military facility that supports military operations of a deployed unit and provides the necessary support and services for sustained operations.

See p. 7-35 for further discussion of basing.

Protection Warfighting Function

Ref: ADP 3-37, Protection (Jul '19) and ADP 3-0, Operations (Jul '19), p. 5-7.

Protection safeguards friendly forces, civilians, and infrastructure and is inherent to command. The protection warfighting function enables the commander to maintain the force's integrity and combat power through the integration of protection capabilities throughout operational preparation, operations to shape, operations to prevent, large-scale ground combat operations, and operations to consolidate gains.

I. The Protection Warfighting Function

The protection warfighting function is the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission. Commanders incorporate protection when they understand and visualize threats and hazards in an operational environment. This allows them to synchronize and integrate all protection capabilities to safeguard bases, secure routes, and protect forces. Preserving the force includes protecting personnel (combatants and noncombatants) and physical assets of the United States, unified action partners, and host nations. The protection warfighting function enables the commander to maintain the force's integrity and combat power. Protection determines the degree to which potential threats can disrupt operations to counter or mitigate those threats before they can act. However, protection is not a linear activity—planning, preparing, executing, and assessing protection is a continuous and enduring activity. Effective physical security measures, like any defensive measures, overlap and deploy in depth. Prioritization of protection capabilities are situationally dependent and resource-informed. Protection activities include developing and maintaining the protection prioritization list.

The protection warfighting function includes the following tasks:

- Conduct survivability operations.
- Provide force health protection.
- Conduct chemical, biological, radiological, and nuclear operations.
- Provide explosive ordnance disposal support.
- Coordinate air and missile defense support.
- Conduct personnel recovery.
- Conduct detention operations.
- Conduct risk management.
- Implement physical security procedures.
- Apply antiterrorism measures.
- Conduct police operations.
- Conduct population and resource control.
- Conduct area security.
- Perform cyberspace security and defense.
- Conduct electromagnetic protection.
- Implement operations security.

See pp. 8-5 to 8-20 for an overview and further discussion of these protection tasks.

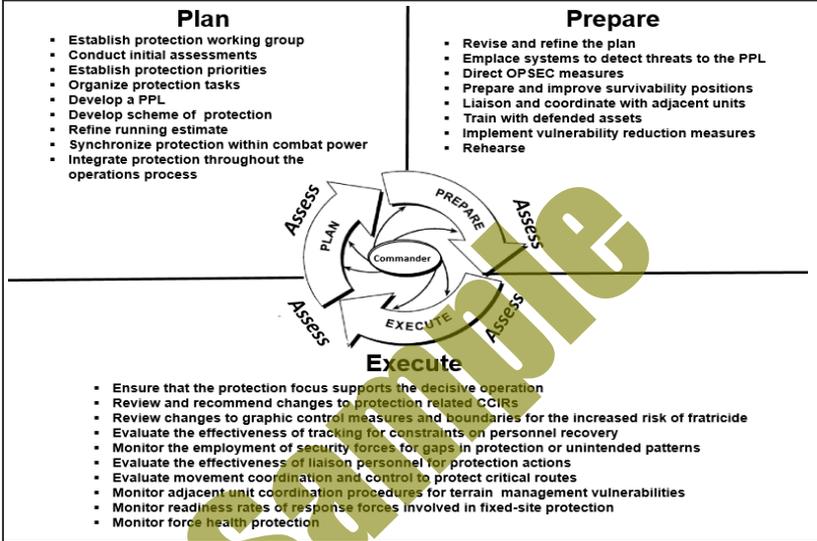
Protection closely relates to endurance and momentum. It also contributes to the commander's ability to extend operations in time and space.

III. Protection Integration in the Operations Process

Ref: ADP 3-37, Protection (Jul '19), fig. 1-2, p. 1-4.

Protection is integrated throughout the operations process to provide a synchronization of efforts and an integration of capabilities. The protection warfighting function tasks are incorporated into the process in a layered and redundant approach to complement and reinforce actions to achieve force protection.

Protection within the Operations Process



Ref: ADP 3-37 (Jul '19), fig. 1-2. Integration of protection throughout the operations process.

A. Plan (see pp. 8-21 to 8-30). Planning is the first step toward effective protection. Commanders consider the most likely threats and hazards and decide which personnel, physical assets, and information to protect.

B. Prepare (see pp. 8-31 to 8-34). During the preparation phase, protection focuses on deterring and preventing the enemy or adversary from actions that would affect combat power and the freedom of action. The implementation of protection tasks with ongoing preparation activities assists in the prevention of negative effects.

C. Execute (see pp. 8-35 to 8-36). The continuous and enduring character of protection makes the continuity of protection tasks and systems essential during execution. Commanders implement control measures and allocate resources that are sufficient to ensure protection continuity and restoration.

D. Assess (see pp. 8-37 to 8-38). Assessing protection is an essential, continuous activity that occurs throughout the operations process. While a failure in protection is typically easy to detect, the successful application of protection may be difficult to assess and quantify.

I. Primary Protection Tasks

Ref: ADP 3-37, Protection (Jul '19), chap. 2.

Army operations and missions are executed through tactical tasks. Commanders incorporate protection tasks when they understand and visualize available protection capabilities. Protection tasks enable commanders to maintain their force's integrity and combat power by preserving the force, safeguarding critical assets and information, and securing routes.

I. Primary Protection Warfighting Function Tasks

Military operations are inherently complex. Commanders incorporate protection when they understand and visualize threats and hazards in the OE. Protection determines the degree to which potential threats can disrupt operations in order to counter or mitigate those threats before they can act. Protection is not a linear activity—planning, preparing, executing, and assessing protection is a continuous and enduring activity. Commanders synchronize and integrate all protection capabilities throughout the entire operation to safeguard bases, secure routes, and protect forces. Prioritization of protection capabilities are situationally dependent and resource-informed.

Primary Protection Tasks

A Conduct Survivability Operations	I Implement Physical Security Procedures
B Provide Force Health Protection	J Apply Antiterrorism Measures
C Conduct Chemical, Biological, Radiological, and Nuclear (CBRN) Ops	K Conduct Police Operations
D Provide Explosive Ordnance Disposal Support	L Conduct Populace & Resources Control
E Coordinate Air And Missile Defense Support	M Conduct Area Security
F Conduct Personnel Recovery	N Conduct Cyberspace Security & Defense
G Conduct Detention Operations	O Conduct Electromagnetic Protection
H Conduct Risk Management	P Implement Operations Security

Commanders must deliberately plan and integrate the ethical application of military force against an enemy while protecting the force and preserving combat power. Commanders develop protection strategies for each phase of an operation or major activity. They integrate and synchronize protection tasks and systems to reduce risk, mitigate identified vulnerabilities, and act on opportunity. When properly integrated and synchronized, the tasks and systems that comprise the protection warfighting function increase the probability of mission success. Units must consider all protection tasks and systems and apply them as appropriate. Each task and its associated system are typically associated with a staff or staff proponent that performs specific duties.

(Protection) I. Primary Tasks 8-5 *

Primary Protection Tasks

Ref: ADP 3-37, Protection (Jul '19), table 1-1, pp. 1-5 to 1-6.

The Army accomplishes its mission by supporting the joint force in four strategic roles: shape OEs, prevent conflict, conduct large-scale ground combat, and consolidate gains. The strategic roles clarify the enduring reasons for which the United States (U.S.) Army is organized, trained, and equipped. The Army conducts operations across multiple domains and the information environment. All Army operations are multi-domain operations, and all battles are multi-domain battles. Multi-domain operations include airborne and air assault operations, air and missile defense, fire support, aviation, cyberspace electro-magnetic activities, information operations, space operations, military deception, and information collection. Large-scale ground combat operations such as these entail significant operational risk, synchronization and capabilities convergence, and high operational tempo. Protection is a key consideration for operating in multiple domains.

Protection emphasizes the importance of planning and expanding protection priorities, to include protecting mission partners, civilian populations, equipment, resources, infrastructure, and cultural landmarks across the range of military operations. The synchronization, integration, and organization of protection capabilities and resources to preserve combat power from the effects of threats and hazards are essential. When properly integrated and synchronized, the tasks and systems that relate to protection effectively protect the force, preserve combat power, and increase the probability of mission success.

Table 1-1 below outlines a complete list of primary protection tasks:

Primary Protection Tasks	
Primary Protection Task	Tasks
Conduct Survivability Operations (ATP 3-37.34, ATP 3-34.20, ATP 3-90.4)	<ul style="list-style-type: none">• Employ camouflage, cover, and concealment• Establish fighting positions• Harden facilities• Construct protective works for explosive hazards• Clear routes and areas of explosive hazards
Provide Force Health Protection (ATP 4-02.8)	<ul style="list-style-type: none">• Provide preventive medicine• Provide veterinary service• Provide combat and operational stress control• Provide preventive dentistry• Conduct area medical laboratory support
Conduct CBRN Operations (FM 3-11, ATP 3-11.32, ATP 3-11.36)	<ul style="list-style-type: none">• Conduct CBRN information collection• Provide hazard awareness and understanding• Conduct CBRN defense• Respond to CBRN events
Provide EOD Support (ATP 4-32.1, ATP 4-32.3)	<ul style="list-style-type: none">• Identify and collect information on explosive ordnance and hazards• Render-safe and dispose of explosive ordnance and hazards• Post blast investigations
Coordinate Air and Missile Defense Support (FM 3-01, FM 3-27)	<ul style="list-style-type: none">• Plan ballistic missile defense• Conduct ballistic missile defense• Manage system configuration• Perform asset management• Provide global missile defense capabilities
Conduct Personnel Recovery (FM 3-50)	<ul style="list-style-type: none">• Apply the fundamentals of Army personnel recovery• Support the Commander and Staff Organization and Operations• Coordinate Knowledge Management• Manage the Unit Personnel Recovery Program

M. Conduct Area Security

Ref: ADP 3-37, Protection (Jul '19), pp. 2-9 to 2-12.

Security operations prevent surprise, reduce uncertainty, and provide early warning of enemy activities. Security is a dynamic effort that anticipates and thwarts enemy collection efforts. When successful, security operations allow the force to maintain the initiative. The synchronization and integration of area and local security tasks are essential to protecting the force. Forces engaged in area security protect the force, installation, route, area, or asset. Although vital to the success of military operations, area security is normally an economy-of-force mission, often designed to ensure the continued conduct of sustainment operations and to support decisive and shaping operations by generating and maintaining combat power.

Area Security

Area security is a security task conducted to protect friendly forces, installations, routes, and actions within a specific area (ADP 3-90). Area security may be the predominant method of protecting the support areas and consolidation areas that are necessary to facilitate the positioning, employment, and protection of resources required to sustain, enable, and control forces. When designated, a consolidation area refers to an AO assigned to an organization that extends from its higher headquarters boundary to the boundary of forces in close operations. It requires a purposefully task-organized, combined-arms unit to conduct area security and stability tasks and to employ and clear fires.

Area security is often an effective method of providing civil security and control during the consolidation of gains. Forces engaged in area security can saturate an area or position on key terrain to provide protection through early warning, reconnaissance, or surveillance and to guard against unexpected enemy or adversary attack with an active response. This early warning, reconnaissance, or surveillance may come from ground- and space-based sensors. Area security may focus on named areas of interest in an effort to answer commander's critical information requirements, aiding in tactical decision making and confirming or denying threat intentions. Area security preserves the commander's freedom to move reserves, position fire support means, provide for command and control, conduct sustaining operations, and contribute to other consolidation of gains activities. Forces engaged in area security are typically organized in a manner that emphasizes their mobility, lethality, and communications capabilities. However, area security takes advantage of the local security measures performed by all units, regardless of their location in the AO.

All commanders apportion combat power and dedicate assets to protection tasks and systems based on an analysis of the OE, the likelihood of threat action, and the relative value of friendly resources and populations. Based on their assessments, joint force commanders may designate the Army to provide a joint security coordinator to be responsible for designated joint security areas. Although all resources have value, the mission variables of METT-TC make some resources, assets, or locations more essential to successful mission accomplishment from enemy or adversary and friendly perspectives. Commanders rely on the risk management process and other specific assessment methods to facilitate decision making, issue guidance, and allocate resources. Criticality, vulnerability, and recoverability are some of the most significant considerations in determining protection priorities that become the subject of commander guidance and the focus of area security. Area security often focuses on the following activities:

- **Tactical assembly area security.** In large-scale ground combat operations, protection is critical for forces that are arrayed in tactical assembly areas and do not possess comprehensive, organic protection capabilities or are focused on other mission objectives.

- **Base/base camp defense.** Base defense consists of the local military measures, both normal and emergency, required to nullify or reduce the effectiveness of enemy attacks on, or sabotage of, a base, to ensure that the maximum capacity of its facilities is available to United States forces (JP 3-10). A division or corps may be required to protect multiple support areas, bases, or base camps. Units may be assigned base defense operations within the support area on a permanent or rotating basis, depending on the mission variables.
- **Critical asset security.** Critical asset security is the protection and security of personnel and physical assets or information that is analyzed and deemed essential to the operation and success of the mission and to resources required for protection.
- **Node protection.** Command posts and operations centers are often protected through area security techniques that involve the employment of protection and security assets in a layered, integrated, and redundant manner.
- **High-risk personnel security.** High-risk personnel are personnel who, by their grade, assignment, symbolic value, or relative isolation, are likely to be attractive or accessible terrorist targets (JP 3-07.2). Special precautions are taken to ensure the safety and security of these individuals and their family members. When units identify a significant risk to selected personnel, the local commander normally organizes security details from internal resources.
- **Movement corridor.** A movement corridor is a designated area established to protect and enable ground movement along a route. The establishment of a movement corridor is, by necessity, a combined arms technique that could be listed as a mobility operation and a security operation because it extracts multiple supporting tasks and activities from both. In many ways, this is simply a special area security mission. Units establish a movement corridor to set the conditions to protect and enable the movement of traffic along a designated surface route. Units conduct synchronized operations (reconnaissance, security, mobility, information collection) within the movement corridor for forces that require additional command and control, protection, and support to enable their movement. A movement corridor may be established to facilitate the movement of a single element, or it may be established for a longer period of time to facilitate the movement of a number of elements along a given route.
- **Response force operations.** Response force operations expediently reinforce unit organic protection capabilities or complement that protection with maneuver capabilities based on the threat. Response force operations include planning for the defeat of Level I and II threats and the shaping of Level III threats until a designated tactical combat force arrives for decisive operations. Response force operations use a quick-reaction force with appropriate fire support (usually designated by the area commander) to deal with Level II threats in the AO. (See FM 3-39 for more information on response force operations.)
- **Lines of communications security.** The security and protection of lines of communications and supply routes are critical to military operations because most support traffic moves along these routes. The security of lines of communications and supply routes (rail, pipeline, highway, and waterway) presents one of the greatest security challenges in an AO. Route security operations are defensive in nature and are terrain-oriented.
- **Checkpoints and combat outposts.** It is often necessary to control the freedom of movement in an AO for a specific period of time or as a long-term operation. This may be accomplished by placing checkpoints and combat outposts along designated avenues and roadways or on key terrain identified through METT-TC.
- **Convoy security.** A convoy security operation is a specialized type of area security operation conducted to protect convoys. Units conduct convoy security operations when there are insufficient friendly forces to continuously secure routes in an AO

Continued on next page

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II. Scheme of Protection Development

Ref: ADP 3-37, Protection (Jul '19), pp. 3-9 to 3-10.

The scheme of protection describes how protection tasks support the commander's intent and concept of operations, and it uses the commander's guidance to establish the priorities of support to units for each phase of the operation. A commander's initial protection guidance may include protection priorities, civil considerations, protection task considerations, potential protection decisive points, high-risk considerations, and prudent risk.

The protection cell (supported by the protection working group) develops the scheme of protection after receiving guidance and considering the principles of protection in relation to mission variables, the incorporation of efforts, and the protection required. The scheme of protection is based on the mission variables, thus it includes protection priorities by area, unit, activity, or resource. It addresses how protection is applied and derived during all phases of an operation. For example, the security for routes, bases/base camps, and critical infrastructure is accomplished by applying protection assets in dedicated, fixed, or local security roles; or it may be derived from economy-of-force protection measures, such as area security techniques. It also identifies areas and conditions where forces may become fixed or static and unable to derive protection from their ability to maneuver. These conditions, areas, or situations are anticipated; and the associated risks are mitigated by describing and planning for the use of response forces.

The protection cell considers the following items, at a minimum, as it develops the scheme of protection:

- Protection priorities.
- Work priorities for survivability assets.
- Air and missile defense positioning guidance.
- Specific terrain and weather factors.
- Information focus and limitations for security efforts.
- Areas or events where risk is acceptable.
- Protected targets and areas.
- Civilians and noncombatants in the AO.
- Vehicle and equipment safety or security constraints.
- Personnel recovery actions and control measures.
- FPCON status.
- Force health protection measures.
- Mission-oriented protective posture guidance.
- Environmental guidance.
- Scheme of information operations.
- Explosive ordnance and hazard guidance.
- Ordnance order of battle.
- OPSEC risk tolerance.
- Fratricide avoidance measures.
- Rules of engagement, standing rules for the use of force, and rules of interaction.
- Escalation of force and nonlethal weapons guidance.
- Operational scheme of maneuver.
- Military deception.
- Obscuration.
- Radiation exposure status.
- Contractors in the AO.

III. Protection Prioritization List

Ref: ADP 3-37, Protection (Jul '19), pp. 3-6 to 3-9.

Protection prioritization lists are organized through the proper alignment of critical assets. The commander's priorities and intent and the impacts on mission planning determine critical assets. A critical asset is a specific entity that is of such extraordinary importance that its incapacitation or destruction would have a very serious, debilitating effect on the ability of a nation to continue to function effectively (JP 3-07.2). Critical assets can be people, property, equipment, activities, operations, information, facilities, or materials. For example, important communications facilities and utilities, analyzed through criticality assessments, provide information to prioritize resources while reducing the potential application of resources on lower-priority assets. Stationary weapons systems might be identified as critical to the execution of military operations and, therefore, receive additional protection. The lack of a replacement may cause a critical asset to become a top priority for protection.

Protection Priorities

Criticality, vulnerability, and recoverability are some of the most significant considerations in determining protection priorities (*previous page*) that become the subject of commander guidance and the focus of area security operations. The scheme of protection is based on the mission variables and should include protection priorities by area, unit, activity, or resource.

Although all military assets are important and all resources have value, the capabilities they represent are not equal in their contribution to decisive operations or overall mission accomplishment. Determining and directing protection priorities may involve the most important decisions that commanders make and their staffs support. There are seldom sufficient resources to simultaneously provide the same level of protection to all assets.

Most prioritization methodologies assist in differentiating what is important from what is urgent. In protection planning, the challenge is to differentiate between critical assets and important assets and to further determine what protection is possible with available protection capabilities.

The protection cell and working group use information derived from the commander's guidance, the intelligence preparation of the battlefield, targeting, risk management, warning orders, the **critical asset list (CAL)** and **defended asset list (DAL)**, and the mission analysis to identify critical assets. Critical assets at each command echelon must be determined and prioritized.

The protection prioritization list is a key protection product developed during initial assessments. The protection cell and working group must use criticality, threat vulnerability, and threat probability to prioritize identified critical assets. Once the protection working group determines which assets are critical for mission success, it recommends protection priorities and establishes a protection prioritization list. It is continuously assessed and revised throughout each phase or major activity of an operation:

Criticality

Criticality is the degree to which an asset is essential to accomplish the mission. It is determined by assessing the impact that damage to, or destruction of, the asset will have on the success of the operation. Damage to an asset may prevent, delay, or have no impact on the success of the plan.

- **Catastrophic.** Complete mission failure or the inability to accomplish the mission, death or total disability, the loss of major or mission-critical systems or equipment, major property or facility damage, mission-critical security failure, or unacceptable collateral damage.
- **Critical.** Severely degraded mission capability or unit readiness; total disability, partial disability, or temporary disability; extensive damage to equipment or systems; significant damage environment; security failure; or significant collateral damage.
- **Marginal.** Degraded mission capability or unit readiness; minor damage to equipment or systems, property, or the environment; lost days due to injury or illness; or minor damage to property or the environment.
- **Negligible.** Little or no adverse impact on mission capability, first aid or minor medical treatment, slight equipment or systems damage (remaining fully functional or serviceable), or little or no property or environmental damage.

Threat Vulnerability

Threat vulnerability measures the ability for a threat to damage the target (asset) using available systems (people and material). An asset's vulnerability is greater if a lower-level threat (Level I) can create damage or destruction that would result in mission failure or severely degrade its mission capability. If an asset can withstand a Level I or Level II threat, its vulnerability ability is less and may not require additional protection assets, depending on the asset's criticality. The following mitigating factors must be considered when assessing the vulnerability of a target: survivability (the ability of the critical asset to avoid or withstand hostile actions by using camouflage, cover [hardening], concealment, and deception), the ability to adequately defend against threats and hazards, mobility and dispersion, and recoverability (which measures the time required for the asset to be restored, considering the availability of resources, parts, expertise, manpower, and redundancies).

- **Level I threat.** Agents, saboteurs, sympathizers, terrorists, civil disturbances.
- **Level II threat.** Small tactical units. Irregular forces may include significant standoff weapons threats.
- **Level III threat.** Large tactical force operations, including airborne, heliborne, amphibious, infiltration, and major air operations.

Threat Probability

Threat probability assesses the probability that an asset will be targeted for surveillance or attack by a credible/capable threat. Determinations of the intent and capability of the threat are key in assessing the probability of attack.

- **Frequent.** Occurs very often; known to happen regularly. Examples are surveillance, criminal activities, cyberspace attacks, indirect fire, and small-arms fire.
- **Likely.** Occurs several times; a common occurrence. Examples are explosive booby traps/improvised explosive devices, ambushes, and bombings.
- **Occasional.** Occurs sporadically, but is not uncommon. Examples are air-to-surface attacks or insider threats, which may result in injury or death.
- **Seldom.** Remotely possible; could occur at some time. Examples are the release of CBRN hazards or the employment of WMD.
- **Unlikely.** Presumably, the action will not occur, but it is not impossible. Examples are the detonation of containerized ammunition or the use of a dirty bomb.



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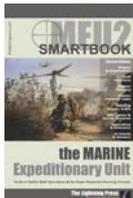
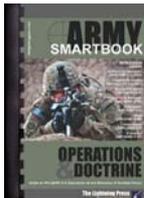


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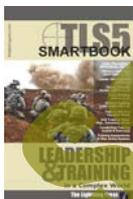
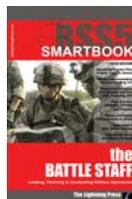
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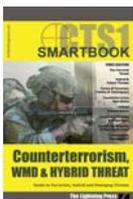
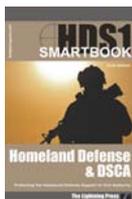
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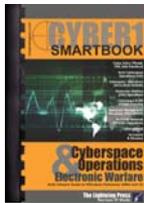
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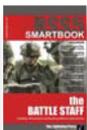
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