through task organization and support relationships. Commanders allocate the employment of joint capabilities to subordinate echelons; integrating these capabilities requires an understanding of joint processes. The degree to which commanders effectively integrate joint and Army capabilities at all echelons directly influences success during operations.

3-16. Military forces comprise a wide variety of components that leaders must arrange into a coherent and effective whole. Army leaders integrate—

- Joint capabilities.
- Multinational, interagency, and interorganizational capabilities.
- Echelons and staffs.
- Different types of units to achieve a combined arms approach.

3-17. Almost every leader activity, in some way, orients on integrating parts of the force to achieve unity of purpose and unity of effort. There are many intellectual tools leaders use to facilitate integration. Common ones include—

- The joint and Army targeting processes (which includes working groups, boards, and other activities to help integrate joint intelligence, surveillance, and reconnaissance [ISR] and fires).
- Mission analysis to integrate the activities of multiple staff proponents.
- The nesting concept advocated for in the mission command approach to C2 that helps lower echelons integrate their purpose with higher echelons.
- Reception, staging, onward movement, and integration (RSOI) for new forces entering an operation.
- Engagement area development to integrate all weapons systems into a defense.

Synchronization

3-18. Once leaders have integrated the right capabilities, they must synchronize their employment and effects. *Synchronization* is the arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time (JP 2-0).

3-19. Understanding the following factors enables leaders to determine when to initiate employment of a capability and how to adapt to changes in the operational environment during execution:

- The desired overall effect over time.
- How the individual effects complement each other over time.
- The time it takes each capability or formation to generate its individual effects from the start of employment.
- Whether each individual effect is enduring, simultaneous, or sequenced with the other effects.
- The consequences of an individual effect not occurring at the planned time.

3-20. Individual effects can be enduring, simultaneous, or sequential. Enduring effects provide a continuous impact on the threat until they are no longer necessary. Enduring effects can have a debilitating effect on enemy forces, but they may require significant resources to sustain. *Simultaneity* is the execution of related and mutually supporting tasks at the same time across multiple locations and domains (ADP 3-0). Simultaneous effects, the result of attacking enemy forces in multiple domains at the same time and across the depth of the enemy's echelons, can have a paralyzing effect on enemy decision making and the effectiveness of the enemy's most critical systems for a limited period of time. They can degrade enemy reactions and facilitate the path to eventual culmination and defeat. Sequencing effects against a threat can create successive dilemmas and opportunities for deception when enemy forces begin to expect a pattern.

3-21. Leaders synchronize actions and effects through C2 and the operations process. The mission, commander's intent, and concept of operations form the basis for detailed synchronization. Commanders determine the degree of control necessary to synchronize operations. They balance synchronization with agility and initiative, but they never surrender the initiative for the sake of synchronization. Excessive synchronization can lead to too much control, which limits the initiative of subordinates and undermines mission command.

Achieving Convergence

3-22. Achieving convergence requires detailed, centralized planning and mission orders that enable decentralized execution. Redundant and resilient communications enable synchronized action. However, leaders must anticipate degraded communications and be prepared to rely on mission orders, accept risk, and make decisions to accomplish the mission. During execution, leaders seek to maintain the conditions of convergence through rapid transitions, adjusting priorities, shifting the main effort, or adapting to maintain momentum. Longer periods of convergence allow for greater opportunities to expand advantages and achieve objectives.

3-23. Leaders must understand the various processes for requesting joint capabilities and integrating them with ground maneuver. Air, space, and cyberspace tasking cycles operate on different time horizons and have different requirements for requesting effects. These cycles may vary depending on the theater and the situation. Whenever possible, leaders anticipate requirements for these effects during planning and provide ample time for the joint force to generate them. Leaders may request effects on shorter timelines, but they should not make them essential to mission success.

3-24. During competition, the theater army establishes conditions for convergence that enable deterrence, provide options during crisis, and enable success at the outset of armed conflict. Intelligence, sustainment, positioning of forces, and other activities to set the theater facilitate situational understanding, decision making, integration, and synchronization during armed conflict. The theater army requests cyberspace and space effects through the combatant command to ensure there is enough time to integrate and synchronize these capabilities. The theater army balances the use of these capabilities during competition with the need to preserve them for use by Army formations during crisis or armed conflict. When armed conflict occurs in a theater, the theater army continues to facilitate convergence by providing capabilities to the land component command and shaping the operational environment outside the joint operational area.

3-25. During armed conflict, the land component command apportions joint capabilities to subordinate echelons. Corps integrate joint capabilities with ground maneuver at the appropriate echelon where forces employ them to achieve convergence and achieve objectives. The advantages provided by maritime, air, space, and cyberspace capabilities will not be available all the time, so tactical echelons must be ready to exploit their effects when generated. (See FM 3-14 for more information on space effects. See FM 3-12 for more information on cyberspace effects.)

3-26. Convergence is most effective when its effects accrue and create a cycle of expanding opportunity. Employing multiple and redundant methods of attack increases the probability of success by avoiding dependence on a single method of detecting, tracking, and attacking. Success causes enemy forces to react and activate more of their capabilities, creating another opportunity in one or more domains. The corps and its subordinate echelons align their operations on land with the opportunities created by the effects generated by the other components of the joint force, preserving combat power to maximize their ability to exploit the opportunities convergence presents.

ENDURANCE

3-27. ***Endurance*** **is the ability to persevere over time throughout the depth of an operational environment.** Endurance enhances the ability to project combat power and extends operational reach. Endurance is about resilience and preserving combat power while continuing operations for as long as is necessary to achieve the desired outcome. During competition, Army forces improve endurance by setting the theater across all warfighting functions and improving interoperability with allies and other unified action partners.

3-28. Endurance reflects the ability to employ combat power anywhere for protracted periods in all conditions, including environments with degraded communications, chemical, biological, radiological, and nuclear (CBRN) contamination, and high casualties. Endurance stems from the ability to organize, protect, and sustain a force, regardless of the distance from its support area and the austerity of the

Leaders account for the requirement to preserve combat power while sustaining people, systems, and formations over the time and distance necessary throughout the depth of an area of operations.

environment. Endurance involves anticipating requirements and making the most effective and efficient use of resources.

3-29. As forces fight through successive engagements, maintaining mutual support among units helps prevent them becoming isolated, being defeated in detail, and culminating early. Protection prevents or mitigates enemy effects and preserves combat power, postponing culmination and prolonging effective operations. One way Army forces preserve combat power is by maintaining dispersion to the greatest degree possible. Leaders can mass combat power from dispersed positions and generate the desired effects without concentrating forces any more than is necessary. During operations, commanders and staffs integrate, synchronize, and simultaneously apply protection capabilities.

3-30. Leadership and tactics contribute to endurance. Plans that allow for different units to be the main effort using follow and support or follow and assume techniques prevent early culmination in the units first committed to close combat. Realistically determining what tempo friendly forces can maintain given enemy resistance, weather, and physical distances and the impact they have on Soldiers, leaders, and equipment increases endurance over time. Schemes of maneuver that avoid enemy strengths and preserve combat power are less likely to negatively affect morale.

3-31. Sustainment operations are essential to endurance. Using all methods for continuously delivering sustainment through land, maritime, and air capabilities improves endurance. When possible, sustainment units employ a space- and cyberspace-enabled communications network to transmit sustainment requirements and coordinate the delivery of materiel or services. However, leaders must anticipate degraded communications and combine analog systems for communication with predictive analysis and disciplined initiative to ensure commanders can maintain acceptable tempo for as long as necessary.

DEPTH

3-32. *Depth* is the extension of operations in time, space, or purpose to achieve definitive results (ADP 3-0). While the focus of endurance is on friendly combat power, the focus of depth is on enemy locations and dispositions across all domains. Commanders achieve depth by understanding the strengths and vulnerabilities of the enemy's echeloned capabilities, then attacking them throughout their dispositions in simultaneous and sequential fashion. Although simultaneous attacks through all domains in depth are not possible in every situation, leaders seek to expand their advantages and limit enemy opportunities for sanctuary and regeneration. Leaders describe the depth they can achieve in terms of operational reach.

3-33. *Operational reach* is the distance and duration across which a force can successfully employ military capabilities (JP 3-0). Staffs assess operational reach based on available sustainment, the range of capabilities and formations, and courses of action compared with the intelligence estimates of enemy capabilities and courses of action. This analysis helps the commander understand the limits on friendly operations, the risks inherent in the mission, and likely points in time and space for transitions.

3-34. Below the threshold of armed conflict, the theater army creates depth by improving the infrastructure for force projection and by improving interoperability with multinational forces to the degree required by operation plans (OPLANs) and contingency operations. It also adds depth to its operations by expanding influence with allies and partners, populations, and other relevant actors through joint exercises, sustained forward positioning of advisor teams, and forward basing of combat formations.

3-35. During armed conflict, the JFLCC creates depth by facilitating access to Army and other joint capabilities, especially space and cyberspace capabilities that improve the protection of tactical formations and degrade enemy integrated air defense systems. The JFLCC also requests that the JFC influence the extended deep area in support of land operations. The corps directs fires into its deep area to defeat enemy long-range fires, disrupt enemy sustainment and C2, separate maneuver echelons, and shape the success of future close operations. Special operations forces operating in the extended deep area can detect targets and enable the employment of joint fires to support conventional operations.

3-36. Leaders enhance the depth of their operations by orchestrating effects in one dimension to amplify effects in the others. For example, a commander might decide to destroy an elite enemy formation first because it undermines the confidence of the enemy's other units. Commanders exploit this through information activities to reduce the will of other enemy forces to fight.

IMPERATIVES

3-37. Imperatives are actions Army forces must take to defeat enemy forces and achieve objectives at acceptable cost. They are informed by the operational environment and the characteristics of the most capable threats Army forces can encounter. Imperatives include—

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

SEE YOURSELF, SEE THE ENEMY, AND UNDERSTAND THE OPERATIONAL ENVIRONMENT

3-38. Commanders visualize operational environments in terms of the factors that are relevant to decision making. Operational environments are dynamic and contain vast amounts of information that can overload C2 systems and impede decision making. Commanders simplify information collection, analysis, and decision making by focusing on how they see themselves, see the enemy, and understand the operational environment. These three categories of factors are interrelated, and leaders must understand how each one relates to the others in the current context.

3-39. As part of the operations process, Army leaders use different methodologies to understand and weigh options. These methodologies include the Army design methodology, the military decision-making process, and the rapid decision-making and synchronization process. Each methodology provides a process that allows commanders and staffs to see themselves, see the enemy, and understand the operational environment. (See ADP 5-0 and FM 5-0 for more information on Army planning methodologies.)

See Yourself

3-40. Commanders develop an understanding of their forces relative to mission requirements, enemy capabilities, and impacts from the operational environment. This understanding helps to inform current and potential future advantages relative to enemy forces, allowing staffs to develop and adapt courses of action that exploit advantages and mitigate disadvantages. Commanders and staffs maintain this understanding of their forces through running estimates, subordinate commander updates, and friendly forces information requirements (known as FFIRs): A *friendly force information requirement* is information the commander and staff need to understand the status of friendly force and supporting capabilities (JP 3-0). Friendly force information requirements identify the information the commander considers most important to make critical decisions during the execution of operations. The operations officer manages friendly force information requirements for the commander.

3-41. Leaders attempt to see themselves from the enemy perspective, in part by understanding essential elements of friendly information. An *essential element of friendly information* is a critical aspect of a friendly operation that, if known by a threat would subsequently compromise, lead to failure, or limit success of the operation and therefore should be protected from enemy detection (ADP 6-0).

3-42. Leaders see their formation in relation to their mission and in the broader context of the higher command, adjacent unit, and all domains. Part of "seeing yourself" is understanding how land-based operations enable operations in the other domains, and how capabilities from all domains can enable operations on land. (See paragraphs 2-66 through 2-67 for a discussion of joint interdependence.)

See the Enemy

3-43. Commanders see the enemy in terms of its combat power, advantages, and intentions within the operational environment and broader strategic context. Commanders develop their understanding of enemy forces from their individual knowledge, experience, and judgment honed through self-study, training, and education. From this base of knowledge commanders and staffs build shared understanding of enemy forces and environment through intelligence preparation of the battlefield. *Intelligence preparation of the battlefield* is the systematic process of analyzing the mission variables of enemy, terrain, weather, and civil considerations in an area of interest to determine their effect on operations (ATP 2-01.3).

3-44. Intelligence preparation of the battlefield provides commanders with awareness of information gaps about enemy forces and the operational environment. Staffs translate these gaps into information requirements and assist the commander in determining priority intelligence requirements. A *priority intelligence requirement* is the intelligence component of commander's critical information requirements used to focus the employment of limited intelligence assets and resources against competing demands for intelligence support (JP 2-0). More importantly, priority intelligence requirements (known as PIRs) identify information about the threat and operational environment that a commander considers most important to making decisions in a specific context. Intelligence about civil considerations may be as critical as intelligence about enemy forces in some cases. The intelligence officer, in coordination with the rest of the staff, manages priority intelligence requirements for the commander.

3-45. Enemy forces attempt to hide from, deceive, disrupt, and deny friendly collection efforts to prevent friendly forces from perceiving the enemy's true intentions. This requires commanders plan to develop the situation through action and fight for information. Information collection operations may require the commander to assume significant risk to determine enemy dispositions and anticipate enemy intentions.

3-46. Leaders do not limit their understanding of the enemy to those forces in their assigned area. Enemy forces are capable of employing capabilities from great distances and multiple domains. Leaders must be aware of those capabilities so they can take appropriate action. (See paragraphs 3-75 through 3-79 for more information on making enemy contact.)

Understand the Operational Environment

3-47. Leaders view the operational environment in terms of domains, dimensions, operational variables, and mission variables that are relevant to their decisions. The most difficult aspect of an operational environment to understand is how the different factors interact to affect operations.

3-48. *Understanding* is, in the context of decision making, knowledge that has been synthesized and had judgment applied to comprehend the situation's inner relationships, enable decision making, and drive action (ADP 6-0). Understanding is judgment applied to knowledge in the context of a particular situation. Understanding is knowing enough about a situation to make an informed decision. Judgment is based on experience, expertise, and intuition—and it informs what decision to make.

Situational Understanding

3-49. Successful operations demand timely and effective decisions based on the information available. As such, commanders and staffs seek to build and maintain situational understanding throughout an operation. *Situational understanding* is the product of applying analysis and judgment to relevant information to determine the relationships among the operational and mission variables (ADP 6-0). Situational understanding allows commanders to make effective decisions and enables commanders and staffs to assess operations accurately. Commanders and staffs continually strive to maintain their situational understanding and work through periods of uncertainty, accepting that they cannot eliminate them. They train their staffs and subordinates to function in uncertain environments.

Shared Understanding

3-50. A critical challenge for commanders, staffs, and unified action partners is creating common understanding of an operational environment, an operation's purpose, its challenges, and the approaches to

solving those problems. Shared understanding of the situation, which requires effective flow of information between echelons, forms the basis for unity of effort and subordinate initiative.

3-51. Effective decentralized execution depends on shared understanding. Shared understanding starts with Army doctrine and leader development that instill a common approach to the conduct of operations, a common professional language, and a common understanding of the principles of mission command. It is this shared understanding that allows even hastily task-organized units to operate effectively. Commanders and staffs actively create shared understanding throughout the operations process (of planning, preparation, execution, and assessment). They collaboratively frame an operational environment and its problems, and then they visualize approaches to solving those problems. (See ADP 6-0 for a more detailed description of shared understanding.)

Common Operational Picture

3-52. A common operational picture (COP) is key to achieving and maintaining shared situational understanding in all domains and making effective decisions faster than the threat. The *common operational picture* is a display of relevant information within a commander's area of interest tailored to the user's requirements and based on common data and information shared by more than one command (ADP 6-0). Although the COP is ideally a single display, it may include more than one display and information in other forms, such as graphic representations or written reports.

3-53. The COP facilitates collaborative planning and helps commanders at all echelons achieve shared situational understanding. The COP must account for relevant factors in domains affecting the operation, and it provides and enables a common understanding of the interrelationships between actions and effects through the physical, information, and human dimensions. Shared situational understanding allows commanders to visualize the effects of their decisions on other elements of the force and the overall operation.

3-54. Command posts draw on a common set of shared and relevant information to create a digital COP. Units always maintain an analog COP in the event that the digital COP is compromised. During large-scale combat operations, communications are likely to be degraded or denied during the course of operations. Army forces maintain shared situational understanding by updating physical maps and graphics, and using rehearsed and reliable primary, alternate, contingency, and emergency (known as PACE) communication plans. Command posts are typically responsible for maintaining the digital and analog COP. Units develop standard operating procedures (known as SOPs), reporting timelines, and battle rhythm events to ensure the COP is accurate, relevant, and current.

3-55. The difficulty of maintaining a COP in a multinational environment varies based on training level, language differences, level of data sharing, technical compatibility of systems, restrictions based on classification, and other national caveats. Unified action partners may not have the technical capability or compatible systems to create and share a digital COP. Commanders must recognize and plan for this possibility by using alternate methods, such as liaison officers, messengers, and voice communication.

Account for Being Under Constant Observation and All Forms of Enemy Contact

That which can be detected can be targeted for attack and killed.

3-56. Air, space, and cyberspace capabilities increase the likelihood that threat forces can gain and maintain continuous visual and electromagnetic contact with Army forces. Enemy forces possess a wide range of space-, air-, maritime-, and land-based ISR capabilities that can detect U.S. forces. Leaders must assume they are under constant observation from one or more domains and continuously ensure they are not providing lucrative targets for the enemy to attack.

3-57. Leaders consider nine forms of contact in multiple domains. They are—

- Direct: interactions from line-of-sight weapon systems (including small arms, heavy machine guns, and antitank missiles).
- Indirect: interactions from non-line-of-sight weapons systems (including cannon artillery, mortars, and rockets).

- Non-hostile: neutral interactions that may degrade or compromise military operations (including civilians on the battlefield).
- Obstacle: interactions from friendly, enemy, and natural obstacles (including minefields and rivers).
- CBRN: interactions from friendly, enemy, and civilian CBRN effects (including chemical attacks, nuclear attacks, industrial accidents, and toxic or hazardous industrial materials).
- Aerial: interactions from air-based combat platforms (including attack helicopters, armed unmanned aircraft systems [UASs], air interdiction, and close air support).
- Visual: interactions from acquisition via the human eye, optical, or electro-optical systems (including ground reconnaissance, telescopic, thermal, and infrared sights on weapons and sensor platforms such as unmanned aircraft systems and satellites).
- Electromagnetic: interactions via systems used to acquire, degrade, or destroy using select portions of the electromagnetic spectrum (including radar, jamming, cyberspace, space, and electromagnetic systems).
- Influence: interactions through the information dimension intended to shape the perceptions, behaviors, and decision making of people relative to a policy or military objective (including through social media, telecommunications, human interaction, and other forms of communication).

3-58. In all contexts, direct, indirect, non-hostile, CBRN, and aerial contacts are sporadic. However, Army forces are typically in continuous visual, electromagnetic, and influence contact with adversaries. Army forces are under persistent visual surveillance by space and other capabilities. Army forces and individuals are in constant electromagnetic contact with adversaries who persistently probe and disrupt individual, group, and Army capabilities dependent on space and cyberspace. Army forces are subject to adversary influence through disinformation campaigns targeting Soldiers and their family and friends through social media and other platforms.

3-59. During competition, adversary forces employ multiple methods of collecting on friendly forces to develop an understanding of U.S. capabilities, readiness status, and intentions. They do this in and outside the continental United States. They co-opt civilians and employ space-based surveillance platforms to observe unit training and deployment activities. They also penetrate networks and gain access to individual and group cyberspace personas to create options for future intimidation, coercion, and attack. Soldiers and their families should use telecommunications, the internet, and social media in ways that do not make them or their units vulnerable to adversary surveillance.

3-60. During armed conflict, enemy networked land-, maritime-, air-, and space-based capabilities enable threats to detect and rapidly target friendly forces with fires. Forces that are concentrated and static are easy for enemy forces to detect and destroy. Dispersing forces has multiple survivability benefits. It increases opportunities to use cover and concealment to reduce probability of detection. In the event the enemy detects elements of the friendly force, dispersion acts as a form of deception, helping to conceal the intentions of the friendly force. Leaders only concentrate forces when necessary and balance the survivability benefits of dispersion with the negative impacts dispersion has on mission effectiveness. In addition to dispersion, leaders integrate and synchronize deception, operations security, and other actions to thwart enemy detection efforts. (See JP 3-13.3 and ATP 3-13.3 for detailed information on operations security. See FM 3-13.4 for more information on deception.)

3-61. Command posts are extremely vulnerable to detection from air and space, as well as in the electromagnetic spectrum. Army forces must ensure their command posts are difficult to detect, dispersed to prevent a single strike from destroying more than one node, and rapidly displaceable. Once a command post is detected it has only a few minutes to displace far enough to avoid enemy indirect fire effects. Leaders should focus command posts on the minimum functions necessary to retain their mobility and do everything possible to avoid detection. When the risk of enemy fires is high, commanders consider making their operations more decentralized, dispersing command post nodes into smaller component nodes, and greater dispersion of electromagnetic signatures. Use of existing hardened structures and restrictive terrain to conceal headquarters equipment and vehicles, instead of tents organized in standard configurations, are options commanders have to improve command post survivability.

Account for Constant Enemy Observation

3-62. Enemy forces possess a wide range of space-, air-, maritime-, and land-based reconnaissance and surveillance capabilities that can detect U.S. forces. To counter these robust and persistent capabilities requires counterintelligence efforts and the disciplined application of operations security.

3-63. Enemy forces employ UASs in large numbers and with a diverse array of capabilities. Leaders account for enemy capabilities and likely reconnaissance objectives as they develop their counter-UAS plan. Leaders implement techniques and procedures for countering enemy UASs based on their organic capabilities, attached capabilities, and the mission variables.

3-64. Leaders combine multiple measures, including deception, to make it more difficult for enemy forces to detect friendly forces. These measures include—

- Counterreconnaissance, including counter-UAS operations.
- Cover and concealment, both natural and manmade.
- False battle positions and deception obstacles.
- Obscuration.
- Dispersion.
- Noise and light discipline.
- Limited visibility operations, particularly for sustainment functions and large unit movements.
- Electromagnetic emission control and masking, to include social media and personal communication discipline.

3-65. Because Army forces employ an increasing number of capabilities that emit electromagnetic radiation that enemies can target, leaders must apply emission control measures, balancing the risks to the force with the risks to the mission. As risk to the force increases, leaders increase their emission control measures. There may be times that the risk of friendly emissions being detected and targeted is assessed as too high, causing Army forces to use methods of communications with no electromagnetic signature. Understanding threat systems, their capabilities, and their disposition supports effective planning and the execution of emission control measures including—

- Minimizing length and frequency of radio transmissions.
- Dispersing formations and command posts.
- Using lowest effective power settings.
- Establishing and enforcing the primary, alternate, contingency, and emergency communication plan.
- Using remote antennas.
- Using brevity codes, pro-word execution matrices, and communications windows.
- Using secure landlines.
- Using directional antennas.
- Using data-burst transmissions.
- Using proper encryption and equipment configuration.
- Moving command posts and formations.
- Masking emissions using terrain and manmade structures.
- Recognizing and reporting jamming of Global Positioning System, radar, and satellite communications.
- Employing deceptive emitters.

Implementing Dispersion

3-66. Leader efforts to preempt and mitigate enemy detection are essential, but they cannot eliminate the risk of enemy massed and precision fires, including CBRN and weapons of mass destruction. To improve survivability from enemy indirect fires, Army forces maintain dispersion and remain as mobile as possible to avoid presenting themselves as lucrative targets to the enemy's most capable systems. When mission

demands require units to remain static for more than short periods of time, those units must dig in to increase survivability. (See ATP 3-37.34 for information on survivability positions.)

3-67. Commanders have options for achieving dispersion. At the operational level, commanders maintain dispersion by employing multiple staging areas and multiple lines of communications. At the tactical level, commanders maintain dispersion by increasing the distance between subordinate formations and among the elements in those formations. In the attack, they use multiple routes and longer march intervals between formations to the objective and only concentrate forces enough to mass effects or generate favorable force ratios during close combat. In the defense, forces occupy areas away from prepared defensive positions until contact is imminent to prevent their detection and destruction by enemy deep fires. Defending forces also maximize dispersion by using terrain and employing the maximum supporting ranges and distances within acceptable risk criteria.

3-68. When concentrating forces is unavoidable or necessary, units remain concentrated at the lowest level and for the shortest time possible and then rapidly disperse. When the desired level of dispersion is not achievable, commanders place greater emphasis on imposing multiple, simultaneous dilemmas on enemy forces as they move within range of enemy weapons systems. This can reduce the risk of enemy forces efficiently massing their effects. Commanders also use speed and violence of action when dispersion is not possible to minimize exposure in high-risk areas.

Second Nagorno Karabakh War: September–November 2020

During the six-week war, Azerbaijan exploited its technological advantage with lethal efficiency against Armenian forces. Azerbaijan used its UASs, in conjunction with Israeli loiter munitions and modified old Soviet AN-2 planes, to defeat Armenia's older air defense systems. Azerbaijani forces flew the remotely piloted AN-2s to trigger engagements from Armenia's air defense systems, while Azerbaijan's UASs and loiter munitions remained at higher altitudes undetected or out of range. When the air defense systems engaged targets, Azerbaijan pinpointed the air defense systems locations and destroyed those systems with UASs, loiter munitions, or indirect fires. Azerbaijan's tactics caused Armenia's air defense network to collapse, and Azerbaijan gained local air superiority over the battlefield.

With air superiority, Azerbaijan placed Armenian forces under continuous surveillance with its UASs. In addition, Azerbaijani forces had infiltrated special operations forces to conduct surveillance of Armenian positions. Armenian forces were unable to remain hidden, and Azerbaijan began destroying Armenian tanks, artillery, and vehicles at a significant rate. Although battle damage assessments vary, multiple sources reported that Azerbaijan destroyed hundreds of Armenian tanks, armored fighting vehicles, artillery systems, multiple launch rocket systems, and air defense systems. The inability to hide and fear of destruction had a demoralizing effect on Armenian soldiers.

Create and Exploit Relative Physical, Information, and Human Advantages in Pursuit of Decision Dominance

3-69. The employment of lethal force is based on the premise that destruction and other physical consequences compels enemy forces to change their decision making and behavior, ultimately accepting defeat. The type, amount, and ways in which lethal force compels enemy forces varies, and this depends heavily on enemy forces, their capabilities, goals, and the will of relevant populations. Understanding the relationship between physical, information, and human factors enables leaders to take advantage of every opportunity and limit the negative effects of undesirable and unintended consequences.

3-70. Actions taken focused on one dimension can create advantages in the other dimensions. The physical dimension dominates tactical actions and the employment of destructive force to compel an outcome. Physical actions, particularly the employment of violence, usually generate cognitive effects in the human

dimension. Information dimension factors inform and reflect the interaction between human and physical factors. The information dimension deals with how relevant actors and populations communicate what is happening in the physical and human dimensions. The human dimension is where perceptions, decision making, and behavior is determined, and is therefore the dimension that ultimately determines human will. Commanders combine, reinforce, and exploit advantages through all the dimensions, expanding them as they accrue over time. (See Chapter 1 for more information about physical, information, and human advantages.)

3-71. During competition and crisis, Army forces set conditions for armed conflict and physically exhibit combat readiness through training and exercises which is communicated by various means to create a deterrent effect in the human dimension. During armed conflict, tactical leaders typically focus on generating physical advantages and the immediate physical and cognitive effects they produce. However, leaders maintain awareness of the overall purpose of physical effects, ensuring they commit combat power to necessary objectives that produce advantageous results in all dimensions. At the strategic level, leaders focus more heavily on the information and human impacts of physical effects and how to convert them into desirable policy outcomes.

3-72. Successful military operations often depend on a commander's ability to gain and maintain the operational initiative by achieving decision dominance—a desired state in which a force generates decisions, counters threat information warfare capabilities, strengthens friendly morale and will, and affects threat decision making more effectively than the opponent. Decision dominance requires developing a variety of information advantages relative to that of the threat and then exploiting those advantages to achieve objectives. Commanders employ relevant military capabilities from all warfighting functions to create and exploit decision dominance.

3-73. Decision dominance is aspirational, situationally dependent, and always relative to an opponent. The goal is to understand, decide, and act faster and more effectively than the threat. It is not absolute speed that matters, but speed relative to the threat. Commanders can achieve this by interfering with an enemy force's C2 while enhancing, protecting, and sustaining their own C2. An advantage need not be large. A small advantage exploited repeatedly can contribute decisively to the success of Army forces. The ability and desire to generate a higher tempo does not mean commanders should act when the situation calls for waiting. The aim is meaningful—not merely rapid—action. A decision to act is meaningful only if the resulting actions by friendly forces create an advantage relative to the threat.

3-74. Adversaries and enemies pursue their own relative advantages, typically in asymmetric ways, while continually attempting to achieve decision dominance over friendly forces. Because threat forces adapt, and situations evolve, decision dominance is relative and transitory. Commanders therefore continuously make assessments to determine which forms of relative advantage are most important to pursue over time.

MAKE INITIAL CONTACT WITH THE SMALLEST ELEMENT POSSIBLE

3-75. Army forces are extremely vulnerable when they do not sufficiently understand the disposition of enemy forces and become decisively engaged on terms favorable to enemy forces. To avoid being surprised and incurring heavy losses, leaders must set conditions for making enemy contact on terms favorable to the friendly force. They anticipate when and where to make enemy contact, the probability and impact of making enemy contact, and actions to take on contact. Quickly applying multiple capabilities against enemy forces while preventing the bulk of the friendly force from being engaged itself requires an understanding of the forms of contact.

Units seek to make contact using sensors or unmanned systems first to minimize risk to Soldiers and key capabilities.

3-76. During armed conflict at the tactical level, commanders seek to gain and maintain contact with the enemy using the smallest element possible, enabling rapid development of situational understanding, and using maneuver and fires to attack enemy forces in the most advantageous way. Judicious employment of all available reconnaissance and security capabilities is the most effective way to make direct contact with the smallest possible friendly force. Friendly forces should attempt to make contact with sensors and unmanned systems first, incorporating them into their movement techniques. Employment of UAS and other platforms activates enemy systems and enables their detection without creating risks to manned friendly reconnaissance and maneuver forces. After detecting an enemy

capability, Army forces cue intelligence platforms from other domains to improve their understanding of enemy force dispositions and engage those forces on advantageous terms.

3-77. Identifying enemy locations may not provide enough information for Army forces to discern enemy intentions. Commanders develop the situation through action when they deliberately place forces in contact. Small maneuver forces are often the most effective way to compel enemy forces to react and show their intentions. Leaders exercise tactical patience and set conditions for success. They synchronize maneuver with complementary and reinforcing capabilities through the depth of an operational environment to generate situational awareness and detect opportunities to exploit. By combining friendly speed with multiple dilemmas, it is possible to rapidly disintegrate the coherence of an enemy formation before it can effectively respond.

3-78. Using capabilities from multiple domains, such as air and ground, commanders cause threat systems to activate or emit electromagnetic signals that reveal their capabilities and the locations of their critical nodes, such as sensors, shooters, and command posts. During competition, commanders and staffs use this information to improve understanding, update target lists, and refine plans for attacking threat vulnerabilities. By doing this, commanders and staffs set conditions for success during armed conflict.

3-79. There are situations in which it is not advisable to make contact with the smallest possible element. When commanders are confident they have superior forces, have the element of surprise, and know the enemy's disposition and course of action, they make contact with as much combat power as possible to maximize surprise and shock effect against enemy forces.

Impose Multiple Dilemmas on the Enemy

3-80. Imposing multiple dilemmas on enemy forces complicates their decision making and forces them to prioritize among competing options. It is a way of seizing the initiative and making enemy forces react to friendly operations. Simultaneous operations encompassing multiple domains—conducted in depth and supported by deception—present enemy forces with multiple dilemmas. Employing capabilities from multiple domains degrades enemy freedom of action, reduces enemy flexibility and endurance, and disrupts enemy plans and coordination. The application of capabilities in complementary and reinforcing ways creates more problems than an enemy commander can solve, which erodes both enemy effectiveness and the will to fight.

3-81. Deception contributes to creating multiple dilemmas, achieving operational surprise, and maintaining the initiative. Deception efforts by tactical formations seek to delay enemy decision making until it is too late to matter, or to cause an enemy commander to make the wrong decision. Deception requires an understanding of how to surprise enemy forces; time to plan, prepare, execute, and assess a deception operation; and the ability to properly resource the deception effort.

3-82. Deception inhibits effective enemy action by increasing the time, space, and resources necessary to understand friendly courses of action. Well-executed deception begins a cumulative effect on enemy decision-making cycles, and it can cause inaction, delay, misallocation of forces, and surprise as enemy forces react to multiple real and false dilemmas. Attempts to mislead enemy forces are fundamental to all courses of action development wherever possible. While commanders and staffs integrate deception as part of course of action development, they take operations security measures to obscure friendly intentions, make enemy forces account for multiple friendly courses of action for as long as possible, and ensure that enemy forces do not become aware of the deception effort. (See JP 3-13.4 and FM 3-13.4 for more information on military deception.)

3-83. Forcible entry operations and envelopments into locations offset from how enemy defenses are oriented can create multiple dilemmas by dislocating enemy forces' prepared operational approach or exceeding their capability to respond. The capability to project power across operational distances presents enemy forces with difficult decisions about how to array their forces in time and space. Rapid tactical maneuver to exploit a penetration or envelopment defeats enemy attempts to reposition integrated fires networks or integrated air defense systems, which in turn are typically less effective when moving.

3-84. Creating multiple dilemmas requires recognizing exploitable opportunities. Understanding enemy dispositions, systems, and vulnerabilities, and the characteristics of the terrain and population, informs