ATP 3-94.2

Deep Operations

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Deep Operations

Contents

Figures

Tables

Preface

Army techniques publication (ATP) 3-94.2, *Deep Operations,* is designed to reintroduce the importance of the deep area and the fundamental responsibility of division and corps to shape conditions for subordinate units in the close area. This publication describes deep operations in the context of the operations process and offers techniques for identifying opportunities to exploit the enemy in the deep area. It describes the major capabilities and activities that support deep operations and provides special considerations that are required to effectively plan, prepare, execute, and assess deep operations. While the commander has a number of options available to set conditions in the deep area, this publication focuses specifically on artillery strikes and aviation attacks.

The principal audience for this publication is Army division and corps commanders and staffs executing the role of the Army senior tactical echelon. In this publication, the term corps refers to the corps only in its role of the Army's senior tactical echelon, not its other possible roles. Commanders and staffs of Army headquarters serving as joint task force or multinational headquarters should refer to applicable joint or multinational doctrine concerning joint or multinational interdiction. Trainers and educators throughout the Army will also use this publication as a guide for instructing deep operations.

Commanders, staffs, and subordinates ensure that their decisions and actions comply with applicable United States, international, and in some cases host-nation laws and regulations. Commanders at all levels ensure that their Soldiers operate in accordance with the law of war and the rules of engagement (see FM 27-10).

ATP 3-94.2 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text, the term is italicized, and the number of the proponent publication follows the definition. ATP 3-94.2 is not the proponent publication (the authority) for any terms.

ATP 3-94.2 applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the United States Army Reserve unless otherwise stated.

The proponent for ATP 3-94.2 is the United States Army Combined Arms Center. The preparing agency is the Combined Arms Doctrine Directorate, United States Army Combined Arms Center. Send comments and recommendations on DA Form 2028 (*Recommended Changes to Publications and Blank Forms*) to Commander, United States Army Combined Arms Center and Fort Leavenworth, ATTN: ATZL-MCD (ATP 3-94.2), 300 McPherson Avenue, Fort Leavenworth, KS 66027-2337; by e-mail to usarmy.leavenworth.mccoe.mbx.cadd-org-mailbox@mail.mil; or submit an electronic DA Form 2028.

Introduction

To comprehend the doctrine contained in this publication, readers must first understand the role and construct of division and corps in operations as described in FM 3-94. In addition, readers must understand the fundamentals of mission command described in ADRP 6-0 and have a solid foundation in various processes and procedures of mission command addressed in FM 6-0. Readers should also familiarize themselves with ADRP 3-0 and ADRP 3-90 since they establish doctrine for the conduct of decisive action and describe the operational art and the art and science of tactics.

ATP 3-94.2 contains three chapters:

Chapter 1 discusses deep operations with an introduction, operational framework, deep operations and capabilities, as well as characteristics for effective deep operations.

Chapter 2 discusses deep operations in the operations process, the commander's role, and planning, preparing, executing, and assessing.

Chapter 3 discusses staff responsibilities and planning with an introduction and a discussion of command post cells and planning of deep operations.

Based on current doctrinal changes, certain terms for which ATP 3-94.2 is proponent have been added, rescinded, or modified for purposes of this publication. The glossary contains acronyms and defined terms.

Chapter 1
Deep Operations Overview

Division and corps commanders conduct deep operations against uncommitted enemy forces to set the conditions for subordinate commanders conducting operations in the close area. This chapter provides an overview of deep operations. First, it summarizes the operational frameworks commanders use to visualize and describe operations. Next, it describes and lists the purposes of deep operations. A discussion of capabilities available to commanders for conducting deep operations follows. This chapter also provides characteristics for effective deep operations.

INTRODUCTION

1-1. Depth is the extension of operations in time, space, or purpose and is a tenet of unified land operations. Commanders strike enemy forces throughout their depth preventing the effective employment of reserves, command and control nodes, logistics, and other capabilities not in direct contact with friendly forces. Conducting operations in depth allows commanders to sustain momentum and take advantage of all available resources to attack enemy forces and capabilities simultaneously throughout the area of operation. See ADRP 3-0 for a detailed discussion of the tenants of unified land operations.

1-2. Deep operations extend operations in time, space, and purpose. As a part of a commander's concept of operations, deep operations include actions to divert, disrupt, delay, or destroy enemy forces and capabilities before they can be used effectively against friendly forces. They involve efforts to prevent or limit uncommitted enemy forces from being employed in a coherent manner. Deep operations involving air and ground maneuver forces in the deep area may be high risk activities. Commanders should carefully consider and balance the potential benefits with the risks associated with deep operations.

OPERATIONAL FRAMEWORK

1-3. Commanders are responsible for clearly articulating their concept of operations in time, space, purpose, and resources. An established framework and associated vocabulary assist greatly in this task. Commanders are assigned an area of operations (AO) for the conduct of operations. When visualizing how they will organize their AO for operations, commanders determine and consider their area of influence and area of interest. This understanding assists commanders in visualizing the physical arrangement of forces in time and space in the deep, close, and support area framework. Within this area framework, commanders then visualize decisive-shaping-sustaining operations that nest the operation in terms of purpose. Finally, commanders designate the main and supporting efforts to articulate the shifting prioritization of resources throughout the conduct of the operation.

AREA OF OPERATIONS

1-4. An *area of operations* is an operational area defined by the joint force commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces (JP 3-0). AO also refers to areas assigned to Army units by higher headquarters. The Army or land force commander is the supported commander within an AO designated by the joint force commander for land operations. Within their areas of operations, commanders integrate and synchronize the elements of combat power to accomplish tasks, achieve objectives, and obtain the operation's end state. Responsibilities within an assigned AO include:

- Terrain management.
- Information collection.

- Intelligence collection, integration, and synchronization.
- Civil affairs operations.
- Movement control.
- Clearance of fires.
- Security.
- Personnel recovery.
- Airspace control of assigned airspace.
- Minimum-essential stability tasks.

AREA OF INFLUENCE

1-5. A unit's area of influence is a critical consideration for the commander when assigning subordinate areas 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). Ideally, a unit's AO is not larger than its area of influence. An AO that is too large for a unit to control or influence provides the enemy sanctuary and allows the enemy to operate uncontested beyond the unit's area of influence unless the commander is augmented with additional assets.

AREA OF INTEREST

1-6. 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). The area of interest usually extends beyond a commander's boundaries and into another unit's AO. Commanders continually monitor activities in the area of interest to maintain situational awareness, facilitate understanding, and provide reaction time. Enemy developments in the area of interest may generate objectives for future deep operations to shape the close fight.

DEEP, CLOSE, AND SUPPORT AREAS

1-7. Commanders may establish a deep, close, and support area framework for the conduct of operations. The deep, close, and support framework is associated with organizational orientations. That is to say, the physical arrangement of forces within an AO. These areas are typically defined by the boundaries assigned by the higher headquarters. Boundaries may require adjustment based on actual and projected rates of maneuver or changes within the operational environment.

1-8. A commander's deep area is the area that extends beyond subordinate unit boundaries out to the higher commander's designated AO. The deep area is not assigned to subordinate units. The establishing commander is responsible for designating target priority, effects, and timing within the deep area. The establishing commander (division or corps), supported by their staff, plans and controls execution of all operations conducted in the deep area.

1-9. The close area is the portion of a commander's AO assigned to subordinate maneuver forces. Commanders plan to conduct decisive operations through maneuver and fires in the close area and position most of the maneuver force within it. Within the close area, depending on echelon, the commander may designate one unit to conduct the decisive operation while others conduct shaping or sustaining operations. The commander may redefine the boundaries of specific areas of operations as necessary to shape operations and reallocate resources to ensure subordinate headquarters can adequately cover their assigned areas of operations.

1-10. The support area is that area defined within the commander's AO providing a location to base sustainment assets and provide sustainment to the force. The commander assigned the AO within which the support area is designated is responsible to secure the support area. Commanders allocate sufficient combat power to include maneuver and fires to secure the support area.

1-11. An AO may be contiguous or noncontiguous and an operation may be linear or nonlinear in nature. When the AO is contiguous, a boundary separates subordinate AOs. When the AO is noncontiguous,

subordinate AOs do not share a boundary. See Figure 1-1 as an example of deep, close, and support area framework.

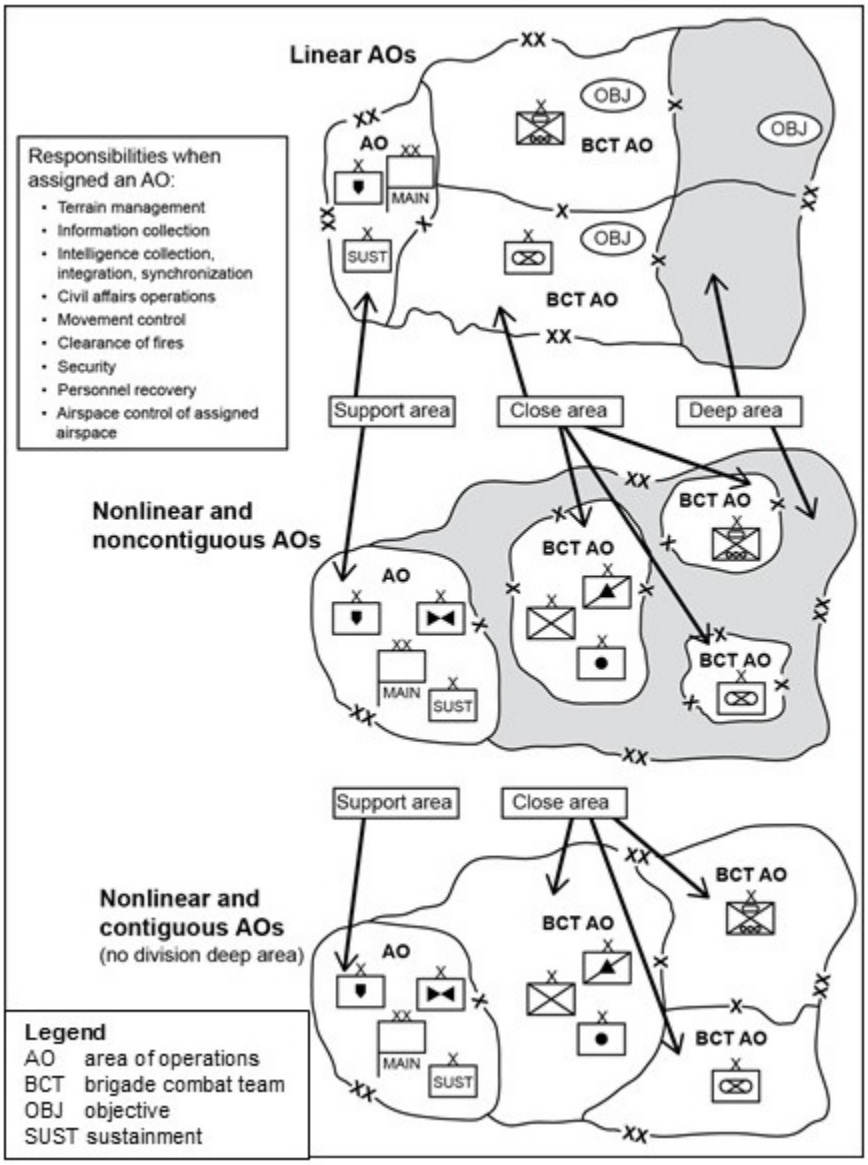

Figure 1-1. Example of deep, close, and support area framework

1-12. In linear operations, commanders direct and sustain combat power toward enemy forces in concert with adjacent units. Linear perspective refers primarily to the conduct of operations along lines of operations with identified forward lines of own troops. In linear operations, emphasis is placed on maintaining the position of maneuver units in relation to other friendly forces. This positioning usually results in contiguous operations where maneuver units share boundaries. Linear operations normally occur against a deeply arrayed, echeloned enemy force or when the threat to lines of communication (LOC) requires control of the terrain around those LOCs. In these circumstances, linear operations allow commanders to concentrate and integrate combat power more easily.

1-13. In nonlinear operations, forces orient on objectives without geographic reference to adjacent forces. Nonlinear operations can be conducted in contiguous or noncontiguous AOs. Nonlinear operations emphasize simultaneous operations along multiple lines of operation from selected bases. Activities orient more on lines of effort and designated objectives (for example, destroying an enemy force or seizing and

controlling critical terrain or population centers) and less on their geographic relationship to other friendly forces.

DECISIVE-SHAPING-SUSTAINING

1-14. Decisive-shaping-sustaining operations are conducted within the deep, close, and support area framework. Decisive operations lead directly to the accomplishment of a commander's mission. Commanders typically identify a single decisive operation but more than one subordinate unit may play a role in the decisive operation. Shaping operations create and preserve conditions for the success of the decisive operation. Commanders may designate more than one shaping operation. Sustaining operations enable the decisive operations by generating and maintaining combat power.

MAIN AND SUPPORTING EFFORTS

1-15. Designating the main and supporting efforts helps commanders prioritize efforts among subordinate units throughout the conduct of operations. The *main effort* is the designated subordinate unit whose mission at a given point in time is most critical to overall mission success (ADP 3-0). It is usually weighted with the preponderance of combat power. Typically, the main effort shifts one or more times during execution. A *supporting effort* is a designated subordinate unit with a mission that supports the success of the main effort (ADP 3-0). Commanders resource supporting efforts with the minimum assets necessary to accomplish the mission.

DEEP OPERATIONS

1-16. Deep operations are combined arms operations directed against uncommitted enemy forces or capabilities before they can engage friendly forces in the close fight. Deep operations also contribute to setting the conditions to transition to the next phase of an operation (for example, from defense to offense). Deep operations are not simply attacking an enemy force in depth. Instead, they are the sum of all activities that influence when, where, and in what condition enemy forces can be committed into the close and support area. Deep operations are normally planned and controlled at division and corps and typically include information collection, target acquisition, ground and air maneuver, fires, cyber electromagnetic activities, and information operations either singly or in combination.

1-17. The purpose of deep operations is to prevent uncommitted enemy forces or capabilities from being employed in an effective manner. Deep operations might aim to disrupt the movement of operational reserves or prevent the enemy from employing long-range cannon, rocket, or missile fires. In an operational environment where enemy forces recruit insurgents from within a population, deep operations might focus on interfering with the recruiting process, disrupting the training of recruits, or eliminating the underlying factors that enable the enemy to recruit.

1-18. During major operations, the effects of deep operations are typically more influential when directed against an enemy's ability to command, mass, maneuver, supply, and reinforce available conventional combat forces. Deep operations are more difficult against an enemy that employs a covert force structure, a simple logistic net, and unconventional tactics. However, with timely accurate intelligence and persistent operations, deep operations can disrupt enemy supply operations, destroy weapons caches, and deny sanctuary. Commanders may use any number of tactical tasks during the execution of deep operations to divert, disrupt, delay, and destroy enemy forces. These actions are not mutually exclusive, as actions associated with one effect may also support the others. For example, deep operations conducted to disrupt the enemy's movement may force the enemy commander to divert to an alternate avenue of approach and thereby delaying enemy advancement.

DIVERT

1-19. Deep operations can divert enemy forces, assets, capabilities, or attention away from areas where there are critical operational requirements for them. Its purpose is to consume resources or capabilities critical to enemy operations in a way that is advantageous to friendly operations. For example, a commander may conduct an envelopment in the deep area behind the enemy's first echelon to destroy specific enemy forces and interdict enemy withdrawal routes. This envelopment may cause the enemy commander to divert combat

power away from its primary objective to address multi-directional threats. Deep operations targeting vehicles or infrastructure such as bridges, roads, and railways, may also divert enemy engineering and personnel resources to the tasks of repairing and recovering damaged equipment, facilities and lines of communications (LOCs). Diversions prevent enemy forces and their support resources from being employed as the enemy commander intends.

DISRUPT

1-20. Deep operations supporting disruption will interfere with or inhibit the enemy commander's employment of forces, capabilities, or systems by upsetting the operational tempo, flow of information, or interaction of the enemy forces and their supporting systems. In place of a cohesive enemy effort, disruption can produce confusion, fear, and piecemeal resistance. Therefore, disrupting the enemy enables the commander to seize, retain, and exploit the initiative and maintain freedom of action. For example, a commander may conduct a deep operation to disrupt the enemy's fire-support system in order to allow subordinate commanders the freedom to maneuver and mass forces against the enemy in the close area without being engaged by the enemy's indirect-fire weapons. In this case, commanders may attack enemy forward observers, fire-direction centers, artillery systems, rocket systems, or ammunition stores. Other viable targets for disruption include reconnaissance and surveillance assets, command and control facilities, communication networks, logistics support nodes, transportation systems, and reserve forces. Degradation or destruction of any of these assets can disrupt (as well as delay) enemy operations.

DELAY

1-21. Deep operations can delay the time of arrival of enemy forces or capabilities or alter the ability of the enemy to project forces or capabilities. When deep operations delay the enemy, friendly forces gain time to continue preparation activities in the close area. The commander may use the additional time to reconstitute, reinforce, resupply, or maneuver forces as necessary to set the conditions required for success in the close fight. If a deep operation to delay enemy forces occurs too early or is not sufficiently sustained, the enemy may have time to recover and respond before friendly forces are able to complete preparations. For a delay to have a meaningful impact, it must enhance the effects of planned close operations.

DESTROY

1-22. Actions geared toward destruction will damage the structure, function, or condition of a target so that it cannot perform as intended or be restored to a usable condition. The destruction of enemy combat forces, support elements, or resources is the most direct form of deep operations. This level of deep operations may not always require follow up missions. Destroying transportation systems is usually not an end in itself but contributes to the delay, diversion, and disruption of enemy forces and materiel. It may force the enemy to use alternate less efficient routes or disperse critical assets. The enemy may also have to divert engineering resources from other tasks to prepare alternate routes in anticipation of possible attacks. However, it could produce unintended or undesirable effects For example, destruction of key enemy transportation infrastructure in and around friendly AOs could inhibit friendly freedom of action and hinder subsequent friendly operations. Commanders must be mindful that destruction is a resource intensive effort and as such, both time and resupply must be factored into any operations where destruction of enemy assets is the goal.

DEEP OPERATIONS CAPABILITIES

1-23. Corps and division commanders can employ a wide range of organic lethal and nonlethal capabilities to conduct deep operations. These capabilities include artillery strikes, aviation attacks, airborne and air assault operations, raids, reconnaissance in force, information operations, and cyber electromagnetic activities. Additionally, commanders may coordinate for assets from other unified action partners to support deep operations through strategic reconnaissance or lethal and nonlethal engagements. Commanders may use these capabilities individually or in combination to create the desired effect. Deep operations may assume high levels of risk when air or ground maneuver forces are employed. Therefore, the commander and staff must clearly understand the purpose and objectives of deep operations. They must also have knowledge of the capabilities of the friendly and enemy units and the experience and training to appreciate or justify the

risks involved in sending a force deep. Listed below are brief discussions on the capabilities available to the commander for employment in the deep area.

ARTILLERY STRIKES

1-24. Artillery strikes are very effective for engaging well-defended, high-payoff targets, day or night, in all weather conditions. They can conduct short-notice strikes without aviation support against targets in heavily defended areas where the probability of the loss of aircraft is too high. Artillery strikes are typically employed against soft stationary targets such as unhardened surface-to-surface missile sites, emplaced artillery batteries, air defense sites, logistics sites, and command and control facilities. Appropriate target areas include chokepoints along mobility corridors and areas through which hostile weapon systems and equipment must pass. Appendix A of this manual discusses artillery strikes in support of deep operations in more depth. See FM 3-09 for additional information.

AVIATION ATTACKS

1-25. Attack helicopters and armed unmanned aircraft systems (UAS) provide the commander a versatile maneuver force to conduct deep operations through aviation attacks with manned and unmanned teaming. Aviation attacks are effective at executing precision engagements against moving enemy forces, armored forces, hardened targets (such as bunkers), or targets located in terrain that restricts, prohibits, or degrades artillery strike accuracy and effectiveness. Commanders should provide guidance on the desired effects and necessary time considerations. This guidance serves to facilitate the combat aviation commander's determination of the size of the aviation attack force and the aviation employment method required to support the deep operation while conducting simultaneous operations throughout the rest of the AO. Additionally, commanders should provide the aviation attack force priority of fires and priority of support to mitigate the risks associated with maneuver forces operating in the deep area. Appendix B of this manual discusses aviation attacks in support of deep operations in greater detail. See FM 3-04 for additional information regarding aviation attacks.

AIRBORNE AND AIR ASSAULT OPERATIONS

1-26. Infantry units, Army aviation, and air component support can be fully integrated with other elements of the combined arms team to form powerful and flexible airborne and air assault task forces that can project combat power throughout the entire depth of the AO with little regard for terrain barriers. Airborne and air assault operations can attack enemy positions from any direction, delay a much larger force without becoming decisively engaged, overfly or bypass barriers and obstacles to strike objectives in otherwise inaccessible locations, or serve as part of a larger deception plan to divert enemy forces from their primary objective. However, these operations are vulnerable for a number of reasons. These forces are often separated from large weapon systems, equipment, and materiel that provide protection and survivability on the battlefield. Additionally, communication between the higher headquarters and adjacent or supporting units may be strained due to distance and terrain. During mission analysis, commanders should consider the possible contingencies that might affect follow-on extraction or link-up. For more detailed information, see FM 3-99.

RAIDS

1-27. Similar to airborne and air assault operations, the commander may carefully tailor a ground force with any necessary support specialists to conduct raids in the enemy support area to destroy vital facilities or to neutralize specific enemy forces. A *raid* is an operation to temporarily seize an area in order to secure information, confuse an adversary, capture personnel or equipment, or to destroy a capability culminating in a planned withdrawal (JP 3-0). Additionally, raids may be conducted to perform additional functions to include the demolition of bridges over major water obstacles or the recovery of attack helicopter pilots shot down beyond the forward line of own troops. Raids conducted by ground maneuver forces within the depths of the enemy's support areas tend to be audacious, rapid, and of short duration. Logistics support is minimal as units carry as much petroleum, oils, lubricants, and ammunition as possible and taking advantage of any captured enemy supplies. Once the raiding force crosses its line of departure, only limited emergency aerial resupply of critical supplies and medical evacuation are feasible because of the absence of a secure LOC.

The commander must thoroughly plan for aerial resupply of the raiding force since it entails greater risk than normal operations. For more detailed information, see FM 3-90-1.

RECONNAISSANCE IN FORCE

1-28. The commander may commit forces to the deep area to conduct reconnaissance as part of a focused effort to collect information on enemy activities and resources, geographical, hydrological, and meteorological characteristics, and civilian considerations. The information gained is used to inform the intelligence preparation of the battlefield, course of action development, and target development and refinement. Reconnaissance efforts, by nature, are not conducted with the expressed purpose to delay, disrupt, divert, or destroy enemy forces. However, the commander may achieve these ends by executing a reconnaissance in force (RIF). A *reconnaissance in force* is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information. The RIF is an aggressive reconnaissance that is conducted as an offensive operation (ADRP 3-90). A commander assigns a RIF mission when the enemy is known to be operating within an area and the commander cannot obtain adequate intelligence by any other means. Because of the lack of information about the enemy, a commander normally conducts a RIF as a movement to contact or a series of frontal attacks across a broad frontage. The RIF is typically assigned to a battalion task force or larger organization that is equipped and strong enough to develop the situation, protect the force, cause the enemy to react, and put the enemy at some risk. While the overall goal is to determine enemy weaknesses that can be exploited, the RIF may interrupt the enemy commander's operations or decision cycle. For more information on reconnaissance in force, refer to ADRP 3-90.

INFORMATION OPERATIONS

1-29. Commanders can incorporate information operations into deep operations to amplify their ability to influence the enemy's decision-making, as well as the cognitive processes or relevant audiences in the areas of operation, influence, and interest. *Information operations* is the integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own (JP 3-13). Information operations integrates information-related capabilities such as electronic warfare, military information support operations (MISO), and military deception to create effects in and through the information environment to include doubt and uncertainty that affect the enemy commander's decision-making processes. Information operations is also a means to influence the attitudes, opinions, and behaviors of other relevant audiences through words, images, posture, and positioning. Commanders leverage information operations to complement, support, and reinforce other lines of operation or effort and may at times make information operations the decisive operation. For a more detailed discussion on information operations and information-related capabilities, refer to FM 3-13.

CYBER ELECTROMAGNETIC ACTIVITIES

1-30. In addition to information operations, commanders integrate cyber electromagnetic activities into deep operations to maintain an informational advantage over the enemy. *Cyber electromagnetic activities* (CEMA) are activities leveraged to seize, retain, and exploit an advantage over adversaries and enemies in both cyberspace and the electromagnetic spectrum while simultaneously denying and degrading adversary and enemy use of the same and protecting the mission command system (ADRP 3-0). CEMA consists of cyberspace operations, electronic warfare, and spectrum management operations. CEMA provides the commander with capabilities to gain a decisive advantage in cyberspace and the electromagnetic spectrum. Cyberspace and electronic warfare capabilities ensure freedom of action enabling mission command. Effects in cyberspace and the electromagnetic spectrum may create complementary, reinforcing, or cascading effects in concert with other friendly capabilities against adversaries or enemies. Additionally, CEMA provides the commander capabilities to increase survivability and protect friendly networks and data. Divisions and corps have capability CEMA section to synchronize and integrate effects in cyberspace and the electromagnetic spectrum. The cyber planner in the CEMA section should coordinate with higher headquarters for cyberspace and electronic warfare support above the unit's organic capabilities. See FM 3-38 for more information.

JOINT SERVICE CAPABILITIES

1-31. Army forces usually operate as part of a larger joint force and the commander may coordinate for the use of joint assets through the joint force commander to compliment or reinforce deep operations or conduct attacks when the risk to land forces is too high, the enemy situation is too complex, the target is too far, or the target set can be more efficiently struck by joint assets. The joint community refers to deep operations which are not in close proximity to friendly ground forces as interdiction. Each of the joint force components maintains the ability to shape the AO in time, space, and purpose through both lethal and nonlethal means through the use of fires delivered by sub-surface, surface, and air assets.

1-32. In addition to interdiction operations, the joint force has assets noted for their specialized roles that can complement deep operations to include strategic attack; intelligence, surveillance, and reconnaissance; space operations; information operations; and strike coordination and reconnaissance. Joint capabilities are often better suited and better equipped to conduct deep operations than Army forces, especially in linear operations where the enemy territory may extend well beyond the ground force commander's area of influence. When joint capabilities are available, commanders should consider coordinating and integrating joint assets into their deep operations prior to committing Army forces. Refer to JP 3-03 for more information.

SPECIAL OPERATIONS

1-33. Commanders may coordinate for special operations to assist in the deep fight when conventional operations are inappropriate or infeasible. Special operations are generally unconventional in nature and often clandestine in character and are well suited for operating against irregular threats in the deep area. Special operations may target the enemy's rear operations area to disrupt or destroy key transitory targets. Such direct action operations typically involve an attack on critical targets such as lines of communication. Special operations may also degrade or obstruct the war making capability of an enemy by damaging, destroying, or diverting materiel, facilities, utilities, and resources. This sabotage may be the most effective, and sometimes the only means, of attacking specific targets that lie beyond the capabilities of conventional weapons systems. Special operations forces (SOF) are a potent interdiction force in their own right. However, their greatest contribution to deep operations may be their use as a force enabler and multiplier. SOF complement and support conventional deep operations by conducting special reconnaissance to provide intelligence, target cueing, guidance for precision guided munitions, and post attack assessment. Refer to ADRP 3-05 for more information about the special operations.

CHARACTERISTICS FOR EFFECTIVE DEEP OPERATIONS

1-34. Effective deep operations share a number of common characteristics that lead to the attainment of deep operation objectives. The mix of characteristics in each operation depends on variables such as the nature of the conflict, geographic location, weather, and enemy characteristics. In addition to the tenants of unified land operations, characteristics of effective deep operations include the following:

- Simultaneity.
- Combined arms effort.
- Accurate, reliable, and timely intelligence.
- Continuous target development and refinement.
- Deliberately planned.

SIMULTANEITY

1-35. Commanders determine the arrangement of activities throughout the AO's width, depth, and airspace over time. Successful operations in depth demand simultaneity. Simultaneity is the capability to execute multiple actions at the same time. It requires the ability to conduct and integrate operations in the deep, close, and support areas simultaneously so their timing produces greater effects than executing each in isolation, thereby exponentially increasing their effectiveness throughout an AO.

1-36. Simultaneous operations in depth present the enemy with multiple dilemmas, degrade his freedom of action, reduce his flexibility and endurance, and upset his plans and coordination. These operations place critical enemy functions at risk at the same time and deny the enemy the ability to synchronize or generate

combat power. The simultaneous application of combat power throughout the entirety of the AO is preferable to the attritional nature of sequential operations.

COMBINED ARMS EFFORT

1-37. *Combined arms* are the synchronized and simultaneous applications of arms to achieve an effect greater than if each arm was used separately or sequentially (ADRP 3-0). Combined arms integration involves the arrangement of battlefield actions in time, space, and purpose to produce maximum relative effects of combat power at a decisive place and time. Through force tailored organizations, commanders and their staffs integrate and synchronize the warfighting functions to achieve combined arms effects and accomplish the mission. Deep operations require the complementary and reinforcing capabilities of the warfighting functions, as well as information and leadership, and the explicit coordination among the various units and activities participating in the operations. Therefore, deep operations are combined arms operations which multiply Army forces' effectiveness in achieving the greatest potential outcome.

ACCURATE, RELIABLE, AND TIMELY INTELLIGENCE

1-38. Accurate, reliable, and timely intelligence about the enemy's support characteristics, force structure, and ability to adapt is critical to successful deep operations. Intelligence provides information about the enemy's probable course(s) of action, identifies interrelated target systems, allows the commander to anticipate enemy actions, and facilitates correct assessment. A prerequisite for planning deep operations is an understanding of the capabilities and limitations of the enemy and how the enemy is most likely to fight. Accurate intelligence allows commanders to develop achievable objectives, select appropriate targets, apply the appropriate weapon and delivery systems, and maintain situational awareness on the enemy's response. In order to accomplish this, commanders require information systems that facilitate exploitation and dissemination of real-time and near real-time intelligence. Such intelligence is particularly useful in dealing with targets that may have near or immediate effect on forces or whose location was not accurately known. Deep operations objectives should be identified and then prioritized in relation to their importance in achieving operational objectives.

CONTINUOUS TARGET DEVELOPMENT AND REFINEMENT

1-39. *Target development* is the systematic examination of potential target systems—and their components, individual targets, and even elements of targets—to determine the necessary type and duration of the action that must be exerted on each target to create an effect that is consistent with the commander's specific objectives. (JP 3-60). During target development, the commander and staff vet the accuracy of supporting intelligence and validate the target by ensuring it meets the objectives outlined in the commander's guidance and the attack of the target is in compliance with the law of war and rules of engagement. Continuous target development and refinement increases the probability of successful deep operations while also substantially mitigating risk. It facilitates detailed planning by ensuring the staff has a current understanding of the enemy's capability and strength. This allows the commander and staff to employ the correct mix of assets at the correct time and location to achieve the desired effects against the enemy.

DELIBERATELY PLANNED

1-40. Deep operations achieve their greatest impact when they are deliberately planned. They require a unity of effort to integrate the capabilities and actions of supporting units as well as the warfighting functions. The level of complexity, the intricate timing of actions, and the potential tactical risks necessitate a dedicated planning process to develop and synchronize the deep operation from concept through execution. While this planning process focuses specifically on the details of the deep operation, the commander and staff should continually assess the implications and risks these actions will have throughout the AO on both friendly and enemy forces. In order to accomplish this assessment, Army commanders must understand the battle rhythm of other component headquarters which possess the ability to influence the deep area.

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Chapter 2

Deep Operations in the Operations Process

Deep operations are not planned and executed in isolation. Instead, they contribute to the larger operational plan. Commanders, supported by their staffs, use the operations process to identify opportunities to conduct deep operations and integrate them into the concept of the operation. This chapter discusses the operations process and the commander's role within it. Additionally, this chapter describes how deep operations are nested into the four major activities of the operations process.

OPERATIONS PROCESS

2-1. The Army's framework for exercising mission command is the *operations process*—the major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation (ADP 5-0). 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 that are consistent with the Army Ethic; and direct, lead, and assess military operations as depicted in Figure 2-1.

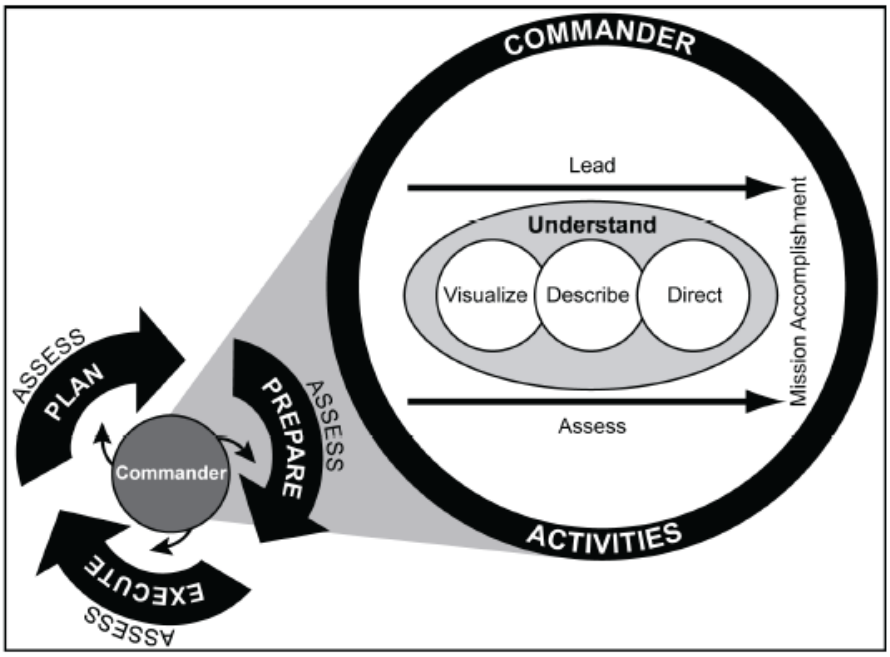

Figure 2-1. The operations process

2-2. The activities of the operations process are not discrete as they overlap and recur as circumstances demand. Planning starts an iteration of the operations process. Upon completion of the initial order, planning continues as leaders revise the plan based on changing circumstances. Preparation begins during planning and continues through execution. Execution puts a plan into action by applying combat power to seize, retain, and exploit the initiative to gain a position of relative advantage. Assessment is continuous and influences the other three activities. While simple in concept (plan, prepare, execute, and assess), the operations process is dynamic. Commanders and staffs use the operations process to integrate numerous tasks that are executed throughout the headquarters and with subordinate units. Deep operations are planned, prepared, executed,

and assessed within the unit's overall operations process. See ADRP 5-0 for a detailed discussion of the operations process.

COMMANDER'S ROLE

2-3. Commanders are the most important participants in the operations process. While staffs perform essential functions that amplify the effectiveness of operations, commanders play the central role in the operations process by applying the art of command and science of control to understand, visualize, describe, direct, lead, and assess operations. Through leadership—the process of influencing people by providing purpose, direction, and motivation—commanders drive the operations process.

2-4. Commanders rely on their education, experience, knowledge, and judgement as they make decisions and lead subordinates through the conduct of operations. For example, as commanders develop their situational understanding, they see patterns emerge, dissipate, and reappear in the operational environment. These patterns help them direct their own forces' actions with respect to other friendly forces, civilian organizations, the enemy, the terrain, and the population.

2-5. Additionally, commanders are required to take prudent risks, exercise initiative, and act decisively. Because uncertainty exists in all military operations, commanders incur risk when making decisions during the conduct of operations. The final decision, as well as the final responsibility, to execute operations remains with the commander.

UNDERSTAND

2-6. Success in operations demands timely and effective decisions based on applying judgment to available information and knowledge. Commanders, supported by their staffs, develop and improve their understanding of the situation throughout the operations process. *Situational understanding* is the product of applying analysis and judgment to relevant information to determine the relationships among the operational and mission variables to facilitate decision-making (ADP 5-0). Building and maintaining situational understanding is essential to developing the commander's visualization of an operation and making effective decisions during execution. Commanders continually strive to maintain their situational understanding and work through periods of reduced understanding as the situation evolves.

2-7. Developing and maintaining situational understanding of the deep area is challenging. The deep area is not assigned to a subordinate unit and is the responsibility of the establishing headquarters. As such, division and corps commanders dedicate significant resources to information collection (integrated with joint intelligence, surveillance, and reconnaissance capabilities) to build and maintain their situational understanding of the deep area (see paragraphs 2-49 to 2-50 for a discussion of information collection).

VISUALIZE

2-8. *Commander's visualization* is the mental process of developing situational understanding, determining a desired end state, and envisioning an operational approach by which the force will achieve that end state (ADP 5-0). Commander's visualization begins in planning and continues throughout the operations process until the force accomplishes the mission. During planning, commander's visualization provides the basis for the concept of operations and developing plans and orders. During execution, it helps commanders determine if, when, and what to decide as they adapt to changing conditions. As the situation changes, commanders modify their visualization to include how they intend to shape the deep area.

2-9. In developing their visualization, commanders use the operational framework to relate activities in time, space, and purpose as described in paragraphs 1-3 to 1-15. They visualize the types of forces necessary to allocate toward accomplishing envisioned tasks within the deep, close, and support areas and a general sequence for executing those tasks. Division and corps commanders envision operations in the deep area to set conditions for subordinate units conducting operations in the close area. They also visualize how to shape the deep area for follow-on phases of the operation. Commanders do not restrict their visualization to the employment of assigned or attached units and capabilities. Division and corps commanders visualize how to integrate joint capabilities, such as air interdiction and joint intelligence, surveillance, and reconnaissance, to shape their deep area.

DESCRIBE

2-10. Commanders describe their visualization to their staffs and subordinates to facilitate shared understanding and purpose. During planning, commanders ensure subordinates understand their visualization well enough to begin course of action development. During execution, commanders describe modifications to their visualization resulting in fragmentary orders that adjust the original order. Commanders describe their visualization in doctrinal terms, refining and clarifying it as circumstances require. Commanders express their visualization in terms of the following:

- Commander's intent.
- Planning guidance, including an operational approach.
- Commander's critical information requirements.
- Essential elements of friendly information.

2-11. Division and corps commanders collaborate and coordinate their visualization with higher and supporting commanders on ways to integrate joint capabilities throughout their areas of operation, especially for operations in the deep area. An important consideration for all Army commanders is maximizing the use of the operational reach of U.S. air power. To maximize the ability of the joint force air component to strike and interdict enemy forces, the corps commander collaborates with the joint force commander, supporting, and affected commanders to carefully select the appropriate fire support coordination measure (FSCM). Two permissive FSCMs that facilitate the joint force air component commander's ability to support division and corps deep operations are the fire support coordination line (FSCL) and the kill box.

2-12. A *fire support coordination line* is a fire support coordination measure established by the land or amphibious force commander to support common objectives within an area of operation beyond which all fires must be coordinated with affected commanders prior to engagement, and short of the line, all fires must be coordinated with the establishing commander prior to engagement (JP 3-09). While a FSCL does not divide an AO, it delineates the areas within the land component's AO in which the land component is conducting ground operations and areas in the senior tactical commander's AO where other service component commanders can employ maximum combat power in support of ground operations. Short of the FSCL, the senior tactical commander controls all air-to-ground and surface-to-surface operations in the AO. The optimum placement of the FSCL varies with the situation. Considerations for FSCL placement include the current ground force positioning and the anticipated scheme of maneuver during the effective time period of the FSCL, as well as their indirect fire support systems' range limits where the preponderance of lethal effects within the AO shift from the ground component to other components, most likely the air component.

2-13. Use of a FSCL is not mandatory. Forces engaging targets beyond an FSCL must inform all affected commanders in sufficient time to allow necessary reaction to avoid fratricide, both in the air and on the land. The FSCL applies to all air, land, and sea-based weapons systems using munitions against surface targets. In exceptional circumstances, the inability to complete this coordination does not preclude the engagement of targets beyond the FSCL. However, failure to do so increases the risk of fratricide (see JP 3-09). Additionally, forces maneuvering (ground or air) beyond the FSCL must also coordinate with all affected commanders to ensure that their maneuver does not conflict with other component's ongoing operations and to ensure that procedural and electronic combat identification procedures are coordinated in order to avoid fratricide.

DIRECT

2-14. Commanders direct all aspects of operations by establishing their commander's intent, setting achievable objectives, and issuing clear tasks to subordinate units. Throughout the operations process, commanders direct forces by—

- Preparing and approving plans and orders.
- Establishing command and support relationships.
- Assigning and adjusting tasks, control measures, and task organization.
- Positioning units to maximize combat power.
- Positioning key leaders at critical places and times to support exercise of mission command.
- Allocating resources to exploit opportunities and counter threats.
- Committing the reserve as required.

2-15. During execution, commanders direct adjustments to the plan based on changing circumstances. This includes refining their planning and targeting guidance and directing the execution of branch plans to exploit opportunities and counter threats in the deep areas.

LEADERSHIP

2-16. Through leadership, commanders provide purpose, direction, and motivation to subordinate commanders, their staff, and Soldiers. In many instances, a commander's physical presence is necessary to lead effectively. Where the commander locates within the AO is an important leadership consideration. Commanders balance their time between leading the staff through the operations process and providing purpose, direction, and motivation to subordinate commanders and Soldiers away from the command post. Attacks in the deep area may involve high risk, the final decision to execute such attacks is a key leadership decision by commanders.

ASSESS

2-17. Commanders continuously assess the situation to better understand current conditions and determine how the operation is progressing. Continuous assessment helps commanders anticipate and adapt the force to changing circumstances. Commanders incorporate the assessments of the staff, subordinate commanders, and unified action partners into their personal assessment of the situation. Based on their assessment, commanders modify plans and orders to adapt the force to changing circumstances. Commanders assess if activities in the deep area are effectively supporting operations in the close area. They also assess conditions in the deep area associated with decision points to include reattack decisions and a decision to transition the operations to a next phase.

PLANNING, PREPARING, EXECUTING, AND ASSESSING

2-18. Planning, preparing, executing, and assessing operations in-depth requires agility and teamwork among commanders, staffs, and subordinate units. Since the deep area is not assigned to a subordinate unit, the establishing headquarters (division or corps) is responsible for the detailed planning, supervision of preparation activities, execution, and assessment of operations in the deep area.

PLANNING

2-19. Initial planning for operations in the deep area occurs in the plans cells. The plans cells develop the initial operations order to include planned deep operations and decision points for potential deep operations as part of the commander’s concept of operations. Part of the initial order includes a detailed information collection plan and fire support plan (to include targets, high-payoff target list (HPTL), attack guidance matrix (AGM), and target selection standards) for the deep area.

2-20. The future operations cell, in coordination with the targeting working group and information collection working group, typically maintains the responsibility for adjusting operations in the deep according to commander’s intent, planning guidance, and targeting guidance. The future operations cell, targeting working group, and information collection working group focus on the mid-range planning horizon (see ADRP 5-0 for a discussion of planning horizons). The mid-range planning horizon is normally tied to the joint targeting cycle and joint collection management request and tasking timelines. This requires division and corps headquarters to work within the battle rhythm requirements of the joint force commander to ensure targets are nominated and joint capabilities (joint interdiction, air support, electronic warfare, joint suppression of enemy air defenses, joint personnel recovery) are requested on time to support operations in the deep area.

2-21. The complexity and risk of some deep operations (an aviation attack for example) may require a deep operation to follow an internal cycle of planning, preparing, executing, and assessment. Once identified for execution (through the military decisionmaking process [MDMP], targeting, or commander’s guidance), detailed planning to synchronize the operations is required. Staff responsibilities and techniques for organizing the staff to plan deep operations is discussed in detail in Chapter 3.

PREPARING

2-22. 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. Mission success depends as much on preparation as on planning. Higher headquarters may develop the best of plans, however, plans serve little purpose if subordinates do not receive them in time. Subordinates need enough time to understand plans well enough to execute them. Subordinates develop their own plans and preparations for an operation. After they fully comprehend the plan, subordinate leaders rehearse key portions of it and ensure Soldiers and equipment are positioned and ready to execute the operation. Key preparation activities are listed in Table 2-1.

Table 2-1. Preparation activities

Continue to coordinate and conduct liaison	Conduct confirmation briefs
Initiate information collection	Conduct rehearsals
Initiate security operations	Conduct plans-to-operations transitions
Initiate troop movement	Refine the plan
Initiate sustainment preparations	Integrate new Soldiers and units
Initiate network preparations	Complete task organization
Manage terrain	Train
Prepare terrain	Perform pre-operations checks and inspections
Manage airspace	Continue to build partnerships and teams

2-23. All the activities listed above occur as units prepare for deep operations. The current operations integration cell (COIC) monitors and coordinates preparation activities. Due to the dynamic nature of operations, units are often required to execute deep operations within short time constraints. Continuous coordination and exchange of liaisons is essential to both planning and preparing for the deep operations. Deep operations are often tightly synchronized by time and space and involve multiple units. Commanders ensure rehearsal time is built into the operational timeline to ensure the staff and subordinate units understand the concept of operations and commander's intent. Rehearsals also allow leaders to practice synchronizing the operation at times and places critical to mission success. See ADRP 5-0 for a detailed discussion of preparation activities.

EXECUTION

2-24. Execution is putting a plan into action by applying combat power to accomplish the mission. Commanders, staffs, and subordinate commanders focus their efforts on translating decisions into actions during execution. They apply combat power to seize, retain, and exploit the initiative to gain and maintain a position of relative advantage.

2-25. Commanders designate a specific command post (CP) to monitor and direct the execution of deep operations. Depending on the type of mission, commanders have several options. For deep operations involving a strike, the commander may choose to pass control of the operation to the division artillery (DIVARTY) or field artillery brigade. Commanders should consider the scope, complexity, and risk associated with the deep operation and the subordinate headquarters' capabilities when determining the appropriate level of control required.

2-26. When controlling deep operation from a forward CP, the COIC is the focal point for controlling execution. The senior tactical echelon's COIC with an established joint air ground integration center (JAGIC) greatly enhances collaborative efforts to integrate joint air-ground assets and coordinate airspace integration during deep operations. See ATP 3-91.1 for detailed information concerning the JAGIC.

2-27. Several tools assist the commander and staff during execution. Among the most important are the decision support template, decision support matrix, and execution matrix. A *decision support template* (DST)

is a combined intelligence and operations graphic based on the results of wargaming. The DST depicts decision points, timelines associated with movement of forces and the flow of the operation, and other key items of information required to execute a specific friendly course of action (JP 2-01.3). A DST graphically represents decision points, projected situations, and indicates when, where, and under what conditions a decision is most likely to be required to initiate a specific activity or event. A DST contains time phase lines, named areas of interest, targeted areas of interest, and decision points. Part of the DST is the decision support matrix. A *decision support matrix* (DSM) is a written record of a war-gamed course of action that describes decision points and associated actions at those decision points (ADRP 5-0). The DSM lists decision points, locations of decision points, criteria to be evaluated at decision points, actions that occur at decision points, and the units responsible to act on the decision points. It also lists the units responsible for observing and reporting information affecting the criteria for decisions.

2-28. Deep operations often require detailed synchronization of the timings of actions of multiple units within a short time window. For example, firing times for the suppression of enemy air defenses (SEAD) must be synchronized with electronic attack aircraft and transit times of Army aviation units. A detailed execution matrix developed on an H-hour sequence is an effective tool to control this type of operation and make rapid adjustments.

ASSESSING

2-29. Commanders, assisted by their staffs, assess the suitability and feasibility of the deep operation prior to execution. They also continuously assess the current situation and progress of deep operations and compare it with the concept of the operations, mission, and commander's intent. Based on their assessment, commanders direct adjustments, ensuring that the operation remains focused on the mission and higher commander's intent.

2-30. The staff makes assessments throughout the operations process. It includes the three tasks that follow:

- Continuously assessing the enemy's reactions and vulnerabilities.
- Continuously monitoring the situation and progress of the operation towards the commander's desired end state.
- Evaluating the operation against measures of effectiveness and measures of performance. See ATP 5-0.3 for multi-service tactics, techniques, and procedures for operation assessment.

2-31. A key aspect of assessing the effectiveness of deep operations is combat assessment. Combat assessment is composed of the three following elements:

- Battle damage assessment (BDA).
- Munitions effectiveness assessment.
- Reengagement recommendations.

2-32. In combination, BDA and munitions effectiveness assessment inform the commander of effects against targets and target sets. During the review of the effectiveness of operations, re-engagement recommendations are proposed or executed. See ATP 3-60 for a detailed discussion on combat assessment.

INTEGRATING PROCESSES AND CONTINUING ACTIVITIES

2-33. Throughout the operations process, commanders and staffs integrate the warfighting functions to synchronize the force in accordance with the commander's intent and concept of operations. Commanders and staffs use several integrating processes and continuing activities to do this.

Integrating Processes

2-34. In addition to the MDMP, commanders and staffs use several integrating processes to synchronize specific functions throughout the operations process. The integrating processes are—

- Intelligence preparation of the battlefield.
- Targeting.
- Risk management.

Intelligence Preparation of the Battlefield

2-35. 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 (see ATP 2-01.3).

2-36. 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.
- Evaluate the threat.
- Determine threat courses of action.

2-37. As an integrating process, IPB is integral to planning, targeting, information collection, and decision making during execution in the deep area. IPB results in intelligence products that aid in identifying options available to friendly and threat forces and selecting a course of action during the MDMP. IPB also aids in selection of decision points and the development of branch plans. The conclusions reached and products created during IPB are critical to planning information collection and targeting.

2-38. A key aspect of IPB is refinement. The conclusions made and the products developed during IPB are continually refined throughout the operation. This information is incorporated into the running estimate as new information is obtained and further analysis is conducted during situation development. This refinement ensures the commander's decisions are based on the most current information.

Targeting

2-39. *Targeting* is the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities (JP 3-0). The purpose of targeting is to integrate and synchronize all available capabilities with maneuver operations in accordance with the commander's targeting guidance. Targeting begins in planning and it is an iterative process that continues through preparation and execution. The steps of the Army's targeting process are—

- Decide.
- Detect.
- Deliver.
- Assess.

2-40. This methodology facilitates engagement of the right target, at the right time, with the most appropriate assets based on the commander's targeting guidance and objectives. Commanders establish the control measures and rules of engagement necessary to minimize the chance of fratricide and excessive collateral damage. These measures (such as FSCMs, no-strike list, airspace coordinating measures, airspace control capabilities and procedures, and others) are included in the operation order See ATP 3-60 for a detailed discussion of targeting.

2-41. The commander's intent, concept of operation, and targeting guidance provide the parameters in which the staff and targeting working group plan the engagement of targets. This includes how the commander intends to shape the deep area. The commander's targeting guidance helps the staff decide on which targets must be acquired and engaged in the deep area, and in turn, establishes requirements for information collection. Targeting develops options used to engage targets in the deep area. Options can be lethal or nonlethal, organic or supporting to include maneuver, electronic attack, attack aircraft, surface-to-surface fires, air-to-surface fires from manned or unmanned fixed- or rotary-wing aircraft, and various information-related capabilities.

2-42. Led by the chief of fires, members of the targeting working group perform the detailed staff work associated with targeting. Based on the commander's guidance and priorities, the targeting working group nominates which targets to engage and how, where, and when to engage them. The staff then recommends friendly capabilities to locate, track, and engage those targets to create the desired effect on each target.

Members present the results of their work to the commander at the targeting board for decision. Output from the targeting board includes the following:

- Commander's planning guidance to include updated targeting guidance.
- Approved high-payoff target list.
- Approved attack guidance matrix.
- Approved target selection standards.
- Approved targets.
- Changes to FSCMs.
- Fragmentary order as required.

2-43. Since deep operations often require joint assets to engage targets beyond the range of a division's organic capability, commanders should understand the joint operational planning process, the joint targeting methodology, and the air tasking cycle. The joint targeting cycle and associated timelines for submission requirements (such as target nominations and air support request,.) to the joint force headquarters are the primary drivers for the timing, frequency, and agenda of subordinate targeting boards and working groups.

Risk Management

2-44. *Risk management* is the process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk cost with mission benefits (JP 3-0). Identifying and accepting prudent risk is a principle of mission command. Throughout the operations process, commanders and staffs use risk management to identify and mitigate risks associated with all hazards that have the potential to injure or kill friendly and civilian personnel, damage or destroy equipment, or otherwise impact mission effectiveness. Like IPB and targeting, risk management begins during planning and continues through preparation and execution. Risk management consists of the following steps:

- Identify hazards.
- Assess hazards to determine risks.
- Develop controls and make risk decisions.
- Implement controls.
- Supervise and evaluate.

See ATP 5-19 for a detailed discussion on risk management.

2-45. Deep operations involving ground or air maneuver involve high risk. In these instances, division and corps commanders, supported by their staffs, develop controls to mitigate risk and ensure operations are well planned, synchronized, and rehearsed prior to execution.

Continuing Activities

2-46. While units execute numerous tasks throughout the operations process, commanders and staffs always plan for and coordinate the following continuing activities:

- Liaison.
- Information collection.
- Security operations.
- Protection.
- Terrain management.
- Airspace control.

Liaison

2-47. *Liaison* is that contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action (JP 3-08). Most commonly used for establishing and maintaining close communications, liaison continuously enables direct physical communications between commands. Commanders use liaison during operations to help facilitate communications between organizations, preserve freedom of action, and maintain flexibility. Effective liaison ensures commanders that subordinates understand implicit coordination. Liaison provides

commanders with relevant information and answers to operational questions, thus enhancing the commander's situational understanding. See FM 6-0 for a detailed discussion on liaison.

2-48. Liaison officers from subordinate brigades (aviation, field artillery) and air and special operations liaison officers greatly enhance the quality and speed of planning for deep operations. During execution, these liaison officers assist the chief of operations in the COIC in controlling operations and rapidly passing information.

Information Collection

2-49. *Information collection* is an activity that synchronizes and integrates the planning and employment of sensors and assets as well as the processing, exploitation, and dissemination of systems in direct support of current and future operations (FM 3-55). It integrates the functions of the intelligence and operations staffs focused on answering the commander's critical information requirements. Joint operations refer to this as intelligence, surveillance, and reconnaissance. Information collection is the acquisition of information and the provision of this information to processing elements. This includes the following:

- Plan requirements and assess collection.
- Task and direct collection.
- Execute collection.

2-50. Information collection activities help the commander understand and visualize the operation by identifying gaps in information, aligning assets and resources against those gaps, and assessing the collected information and intelligence to inform the commander's decisions. These activities also support planning, targeting, and decision-making during execution. The responsibility of the deep area is the establishing headquarters (division or corps). As such, information collection in the deep area is planned and controlled by the division or corps headquarters. Commanders allocate significant assets and coordinate for joint capabilities to help them understand the situation in the deep area.

Security Operations

2-51. Commanders and staffs continuously plan for and coordinate security operations across the range of military 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 five forms of security operations are screen, guard, cover, area security, and local security. See FM 3-90-2 for a detailed discussion of security operations.

2-52. Local security for units in the deep area (such as reconnaissance forces) and units supporting a deep operation (units establishing a forward refuel rearm point or field artillery units in forward positioning areas) are an important consideration. Planners look to augment these units by attaching additional security elements (infantry, military police) or assign tasks to subordinate brigades to provide local security.

Protection

2-53. *Protection* is the preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area (JP 3-0). Commanders and staffs synchronize, integrate, and organize capabilities and resources throughout the operations process in order to preserve combat power and mitigate the effects of threats and hazards. Protection is both a warfighting function and a continuing activity of the operations process. Commanders ensure the various tasks of protection are integrated into all aspects of operations to safeguard the force, personnel (combatants and noncombatants), systems, and physical assets.

Terrain Management

2-54. *Terrain management* is the process of allocating terrain by establishing areas of operation, designating assembly areas, and specifying locations for units and activities to deconflict activities that might interfere with each other. Throughout the operations process, commanders manage terrain within the boundaries of their assigned AO. Through terrain management, commanders identify and locate units in the area. The

operations officer, with support from others in the staff, deconflict operations, control movements, and deter fratricide as units execute their missions.

2-55. To conduct operations in the deep area, the division and corps may have to position assets and units within a subordinate's AO. In doing so, they ensure affected units are aware of the requirement and deconflict issues such as movements and positioning area.

Airspace Control

2-56. *Airspace control* is the capabilities and procedures used to increase operational effectiveness by promoting the safe, efficient, and flexible use of airspace (JP 3-52).Throughout the operations process, commanders and staffs must integrate and synchronize forces and warfighting functions within an AO (ground and air). Through airspace control, commanders and staffs establish both positive and procedural controls to maximize the use of airspace to facilitate air-ground operations.

2-57. The use and control of airspace are important considerations when planning and executing deep operations. Airspace is inherently joint and the Army processes and systems used to control and manage airspace are joint compliant. Deep operations require detailed airspace planning and the capability to collaborate with joint airspace elements controlling airspace above and outside of airspace controlled by Army elements. Artillery strikes usually require collaboration for the high altitude airspace over the division and corps AOs and for airspace beyond the FSCL or inside of kill boxes. Aviation deep operations beyond the FSCL should have procedural airspace control routes published on the airspace control order and full mission data published in the air tasking order (ATO). This provides the joint airspace/counter air control elements with the mission timing, procedural (routes), and electronic combat identification (identification friend or foe codes, call signs, and contact frequencies) for the Army aircraft operating in an area where unknown aircraft are normally assumed to be a threat. The Army's system for airspace control is the Army air-ground system. The Army air-ground system helps commanders and staffs integrate and synchronize Army airspace users with other unified action partner airspace users. See FM 3-52 for a detailed discussion of airspace control.

Chapter 3

Staff Responsibilities and Planning

Deep operations are part of the overall concept of the operation. As such, no single CP cell or staff section is exclusively responsible for the conduct of operations in the deep area. Various CP cells, staff sections, working groups, and boards assist the commander in planning, preparing, executing, and assessing deep operations. This chapter describes those staff duties and responsibilities and concludes with techniques for planning deep operations. Refer to FM 6-0 for a detailed description of the duties and responsibilities of the coordinating, special, and personal staff.

INTRODUCTION

3-1. The deep area is the portion of the commander's AO not assigned to subordinate units. The establishing commander (division or corps), supported by their staffs, is responsible for the planning, preparation, execution, and assessment of all operations conducted in the deep area. This requires commanders to continuously update their situational understanding and adjust their visualization of how they intend to shape the deep area in support of the close fight and to set conditions for transitioning to the next phase of the operation.

3-2. As the situation changes, commanders modify their visualization and issue guidance to the staff and subordinate commanders on ways to divert, disrupt, delay, and destroy enemy forces in the deep area. Commanders typically issue guidance concerning the deep area during plans update meetings, the targeting board, and commanders update briefs. The staff then incorporates the commander's guidance (to include targeting guidance) to adjust operations in the deep area to include modifying information collection plans and refining target nominations to the higher headquarters. If the commander directs a deliberate attack in the deep area (for example, an aviation attack, air assault, infiltration, or fires strike), the staff forms a planning team to develop a fully synchronized plan for the specific deep operation.

COMMAND POST CELLS

3-3. A staff section is a grouping of staff members by area of expertise lead by a coordinating, special, or personal staff officer. Commanders cross-functionally organize staff sections into CP cells to assist them in the exercise of mission command. A CP cell is a grouping of personnel and equipment organized by warfighting function or by planning horizon.

3-4. There are two types of CP cells of functional and integrating. Functional cells group personnel and equipment by warfighting function. Integrating cells group personnel and equipment by planning horizon or long-, mid-, and short-range. Not all staff sections permanently reside in one of the functional or integrating cells. The G-6 (S-6) signal, G-9 (S-9) civil affairs, cyber electromagnetic activities, and staff judge advocate staff sections are examples. These staff sections provide representation to different CP cells as required and coordinate their activities in various working groups, boards, and planning teams. Figure 3-1 on page 3-2 shows the basic organizational structure of a CP.

FUNCTIONAL CELLS

3-5. Staff sections and elements of staff sections (represented by gray boxes in Figure 3-1 on page 3-2) form functional cells. For example, the G-1 personnel, G-4 logistics, G-8 financial manager, and surgeon staff sections make up the sustainment cell. The functional cells (represented by the vertical ovals) are intelligence, movement and maneuver, fires, protection, and sustainment. There is no specific mission command cell because the entire CP assists the commander with exercising mission command.

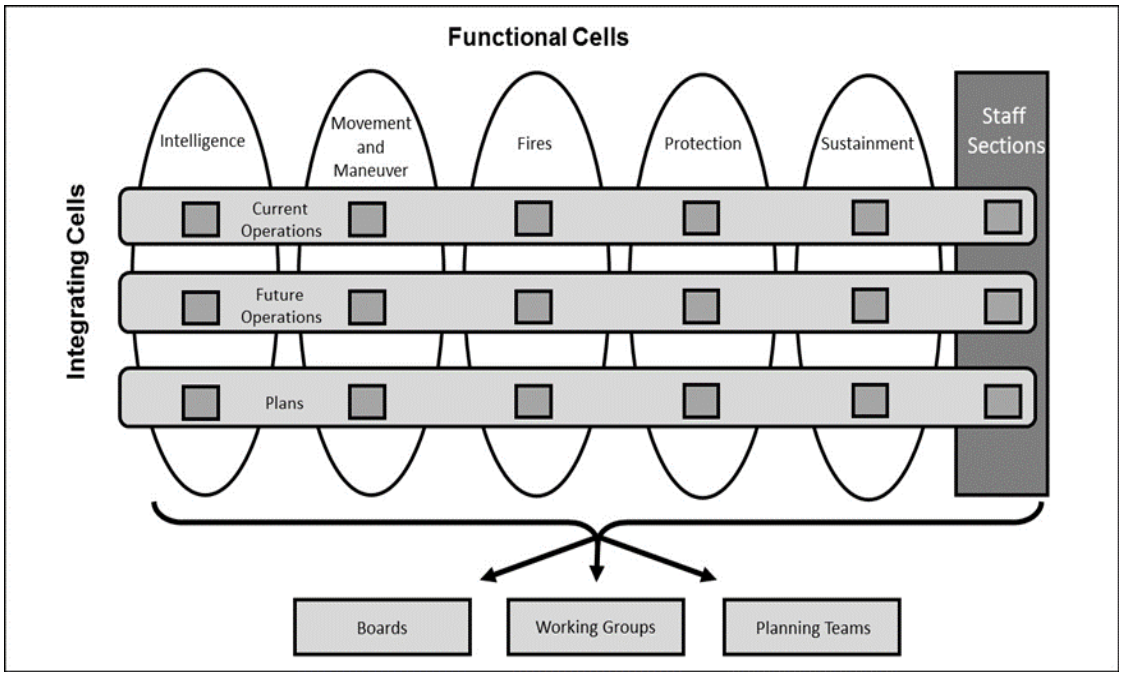

Figure 3-1. Functional and integrating cells

Intelligence Cell

3-6. Led by the G-2, the intelligence cell coordinates activities and systems that facilitate understanding of the threat, terrain and weather, and other relevant aspects of the operational environment in support of current and future operations. The intelligence cell consists of the majority of the intelligence staff and an attached U.S. Air Force weather team. Specific responsibilities of the intelligence cell for operations in the deep area include but are not limited to the following:

- Develop and maintain the intelligence running estimate in support of current and future operations.
- Provide intelligence support to deep operations planning to include:
  - Effects of weather and terrain on the enemy and friendly force to include the ability to detect, deliver, and assess enemy targets in the deep area.
  - Provide an assessment of threat capabilities, intentions, courses of action, and likely decision points in the deep area.
- Provide intelligence support to targeting.
- Lead the staff in battle damage assessment to determine if the correct target was attacked, the results of that attack, if re-attack is required, and the impact of the attack on enemy courses of action.
- Identify gaps in intelligence and developing collection strategies for the deep area.
- Assist the G-3 with developing and adjusting the information collection plan for the deep area.
- Chair the intelligence synchronization working group to coordinate intelligence requirements with lateral and subordinate units.
- Submit requests for joint intelligence, surveillance, and reconnaissance support for operations in the deep area.

Movement and Maneuver Cell

3-7. Led by the G-3, the movement and maneuver cell coordinates activities and systems that move forces to achieve a position of advantage. This includes tasks related to gaining a position of advantage by combining forces with direct fire or fire potential (maneuver) and force projection (movement).

3-8. Operations, airspace control, aviation, engineer, geospatial information service, information operations, military information support operations, and space support elements form this cell. Staff elements in the movement and maneuver cell also form the core of the current operations integrating cell—the primary integrating cell for controlling the execution of deep operations (see paragraphs 3-22 to 3-25). Specific responsibilities of the movement and maneuver cell for operations in the deep area include, but are not limited to the following:

- Develop and maintain the movement and maneuver running estimate in support of current and future operations.
- Assist in deep operations planning to include developing the task organization, scheme of maneuver, tasks to subordinate units, and coordinating instruction for specific deep operations.
- Develop information collection, airspace control, aviation, information operations, and space support portions of deep operations plans and orders.
- Provide movement and maneuver staff element representatives to targeting working group and board. Ensure targeting in the deep area supports the overall concept of operations and the scheme of maneuver.
- Chair the information collection working group to include integrating, synchronizing, and prioritizing information collection in the deep area.
- Chair the information operations working group to include synchronizing the effects of information related capabilities in the deep area.
- Provide movement and maneuver staff element representation to the current operations integration cell for controlling the execution of deep operations.

Fires Cell

3-9. Led by the chief of fires, the fires cell coordinates, plans, integrates, and synchronizes the employment and assessment of Army indirect fires, air and missile defense, and joint fires in support of current and future operations. The fires cell coordinates target acquisition, target dissemination, and target engagement functions for the commander. Specific responsibilities of the fire cell concerning operations in the deep area include but are not limited to the following:

- Develop and maintain the fires running estimate to include air and missile defense in support of current and future operations.
- Assist in planning deep operations to include developing a scheme of fires and recommending fire support coordination measures.
- Coordinate the positioning of fires assets in support of deep operations.
- Recommend counterfire and target engagement priorities in the deep area.
- Coordinate for, integrate, and synchronize joint and multinational fires in the deep area to include suppression of enemy air defense.
- Lead the targeting working group to:
  - Recommend targeting guidance and proposed changes to the high-payoff target list, target selection standards, and attack guidance matrix to the commander.
  - Recommend target nominations for joint fires.
  - Recommend changes and refinements to the air tasking order.

Protection Cell

3-10. Led by the chief of protection, the protection cell coordinates the activities and systems that preserve the force through risk management. This includes tasks associated with protecting personnel and physical assets. Elements of the following staff sections form this cell are: chemical, biological, radiological, and nuclear; engineer; personnel recovery; and provost marshal. The protection cell coordinates with the G-6 signal staff section to further facilitate the information protection task. Specific responsibilities of the protection cell concerning operations in the deep area include but are not limited to the following:

- Develop and maintain the protection running estimate in support of current and future operations.

- Assist in planning deep operations to include developing a scheme of protection and risk mitigation measures.
- Develop the personnel recovery plan for all deep operations.
- Assist the current operations integration cell in the execution of personnel recovery in the deep area.

Sustainment Cell

3-11. Led by the chief of sustainment, the sustainment cell coordinates activities and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance. It includes those tasks associated with logistics, personnel services, and health service support. The following staff sections form this cell: personnel, sustainment, financial management, and surgeon. They—

- Develop and maintain the sustainment running estimate in support of current and future operations to include operations in the deep area.
- Assist in planning deep operations to include developing a concept of support for specific deep operations.
- Develop the medical evacuation plan for all deep operations.

INTEGRATING CELLS

3-12. The integrating cells coordinate and synchronize the warfighting functions in accordance with the commander's intent and guidance for a specified planning horizon. A *planning horizon* is a point in time that commanders use to focus the organization's planning efforts to shape future events (ADRP 5-0). The three planning horizons are long-, mid-, and short-range and are associated with the plans cell, future operations cell, and current operations integration cell, respectively as shown in Figure 3-2 on page 3-5.

3-13. Each integrating cell consists of a core element with other CP cells and staff sections supporting the integrating cells as required. For example, a division future operations cell consists of a core group of planners. When directed, various CP cells and staff sections provide representatives to the future operations cell to plan a specific operation such as an aviation deep attack.

Plans Cell

3-14. Led by the G-5 plans officer, the plans cell is responsible for planning operations for the long-range planning horizons. The plans cell develops the initial operations order that provides the start point for the conduct of operations. During operations, the plans cell develops branch plans and sequels to the original order and performs other planning tasks as assigned.

3-15. Deep operations are part of the unit's concept of operations and are addressed in the initial order. The initial order contains specified tasks for shaping the deep area, decision points, and options for potential deep attacks. The initial order also includes the information collection plan and fire support plan (to include the high pay-off target list, attach guidance matrix, and target selection standards) to set the framework for engaging targets in the deep area.

3-16. During operations, the plans cell assists the commander in thinking in depth—both in time and space. Planning for adjusting the current phase of the operations is the responsibility of the future operations cell. Short-term planning, to include issuing minor changes in fragmentary orders, is the responsibility of current operations integration cell. Commanders focus the efforts of the plans cell on the next phase of the operations and the phase after that. As such, the plans cell focuses much of its efforts on developing options for the commander in the deep area.

3-17. Typically, the plans cell develops and maintains the decision support matrix for the commander. As the situation changes, the cell recommends changes to include adding decision points and associated actions for future operations in the deep area. Per the commander's guidance and planning priorities, the plans cell develops branch plans, often in concept form, for specific deep operations such as an airborne operation or an aviation attack. During plans updates and other meeting such as the targeting board, commanders direct further development of these plans based on the situation. Depending on available planning time and staff

workload, the chief of staff assigns the task to develop a detailed order for specific deep operations to the future operations or plans cell. Figure 3-2 shows the three planning horizons.

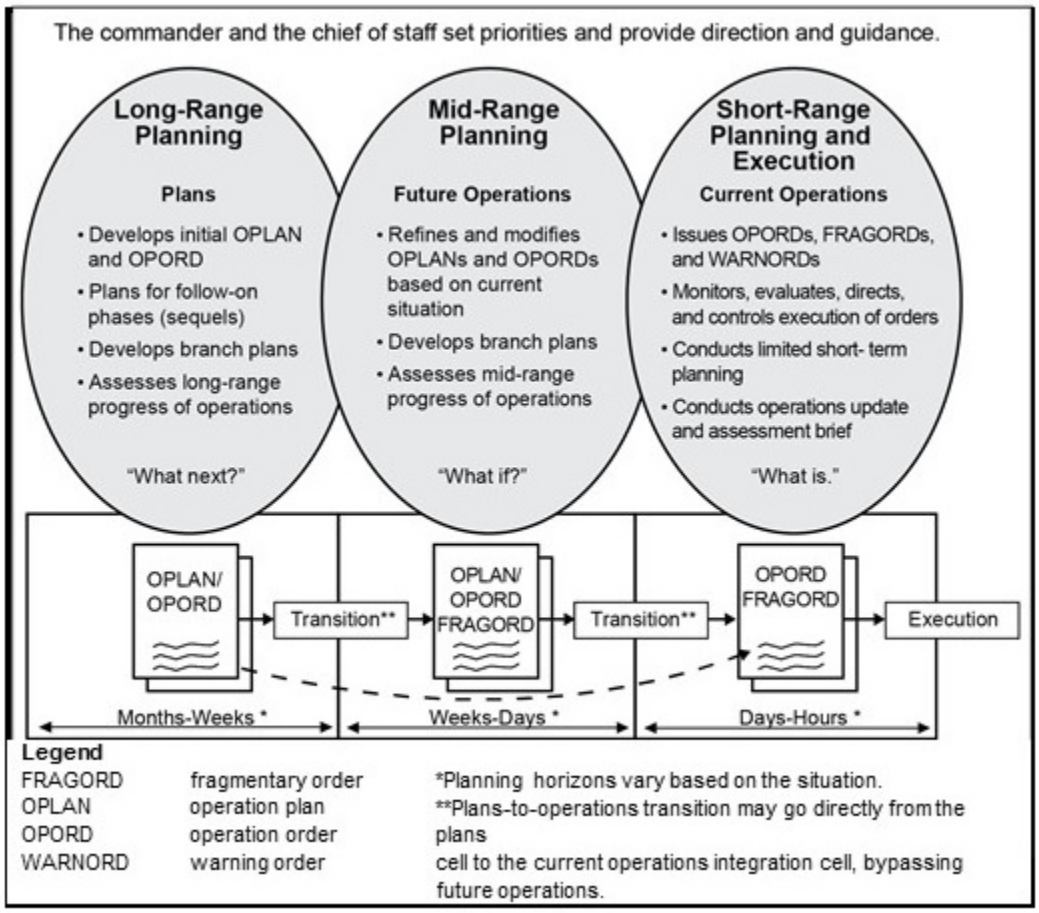

Figure 3-2. Integrating cells

Future Operations Cell

3-18. Led by the chief of future operations, the future operations cell is responsible for planning operations in the mid-range planning horizon. This cell focuses on adjustments to the current operation, including the positioning or maneuvering of forces in depth, which facilitate continuation of the current operation. The cell consists of a core group of planners led by the future operations officer. All staff sections assist as required.

3-19. The future operations cell serves as a bridge between the plans and current operations integration cells. The future operations cell monitors current operations and determines implications for operations within the mid-range planning horizon. In coordination with the current operations integration cell, the future operations cell assesses whether the ongoing operation must be modified to achieve the current phase's objectives. The commander directs adjustments to the operation or the cell may also recommend options to the commander. Once the commander decides to adjust the operation, the cell develops the fragmentary orders necessary to implement the change. The future operations cell also participates in the targeting working group since the same planning horizons normally concern them both. The future operations cell updates and adds details to the branch plans foreseen in the current operation and prepares any orders necessary to implement a sequel to the operation.

3-20. The future operations cell typically is responsible for the detailed planning of a specific deep operation such as an airborne, air assault, or aviation attack in the deep area. These types of operations are deliberately planned and require several days to plan, coordinate, and prepare for prior to execution. In addition, most deep operations require support from the higher headquarters and the joint force. The chief of future

operations ensures planning timelines are nested with the battle rhythm requirements of the joint force commander to ensure targets are nominated and joint capabilities (joint interdiction, air support, electronic warfare, joint suppression of enemy air defenses, and joint personnel recovery) are requested on time to support the deep operations.

3-21. Upon completion of the order and orders brief to subordinates, the future operations cell conducts a plans-to-operations handover to the current operations integration cell for preparation (to include rehearsals) and execution.

Current Operations Integration Cell

3-22. The current operations integration cell is the focal point for controlling the execution of operations throughout the unit's AO. This involves assessing the current situation while regulating forces and warfighting functions in accordance with the mission, commander's intent, and concept of operations. The chief of operations leads this cell. Elements or watch officers from each staff section and liaison officers from subordinate and adjacent units are who forms this cell. All staff sections are represented in the current operations integration cell, either permanently or on call.

3-23. The current operations integration cell assists the commander in preparation and execution of deep operations. The current operations integration cell facilitates rehearsals and monitors the preparation activities to ensure the force is prepared for execution. Commanders often retain decisions to insert and extract reconnaissance, crossing the line of departure, executing personnel recovery, and the decision to abort a deep operation. These decisions are based on conditions to include the status of the friendly forces, effects of shaping operations, weather, and enemy actions. Conditions and decision points are pre-planned. The current operations integration cell receives and consolidates reports and informs the commander on the current situation. The current operations integration cell facilitates the initial and final conditions check with subordinate headquarters and the commander prior to execution of a deep operation.

3-24. The COIC assists the commander in controlling the execution of deep operations. The execution of deep operations often requires detailed synchronization of the timings of actions of multiple units within a short time window. For example, firing times for suppression of enemy air defenses must be synchronized with electronic attack aircraft and based on the transit times of Army aviation units. A detailed execution matrix developed on an H-hour sequence is an effective tool to control this type of operation to include making rapid adjustments.

3-25. Located in the Army division COIC, the JAGIC provides commanders a technique to coordinate, integrate, and control operations in division-assigned airspace. The JAGIC co-locates decision-making authorities from the land and air component to support the supported maneuver commander's objectives and intent. The JAGIC facilitates effective mission execution while reducing the level of risk.

3-26. It is important that commanders and chiefs of staff ensure the entire current operations integration cell is not consumed with the execution of a deep operation. Operations in the close and support area are ongoing, requiring the COIC to monitor and direct activities. Based on the situation in the close area, it may be necessary to recommend to the commander to cancel, delay, or divert a deep attack in order to assist in the close fight.

MEETINGS, WORKING GROUPS AND BOARDS

3-27. The majority of staff work occurs within the functional and integrating cells. Staff members must also integrate their efforts with the commander and other CP cells and staff sections. Effective staff integration occurs when functional expertise from across the staff comes together in support of the commander's decision requirements. As such, commanders establish meetings and temporary groupings of staff members in working groups and boards. See FM 6-0 for detailed examples of the purpose, agenda, and participants of the major meetings, working groups, and boards convened at division and corps headquarters.

Meetings

3-28. Meetings are gatherings to present and exchange information, solve problems, coordinate action, and or obtain decisions. Meetings may involve members of the staff; the commander and staff; or the commander,

subordinate commanders, staff, and unified action partners. Meetings and identified staff leads that address deep operations include the following:

- Shift change briefings (current operations integration cell).
- Battle update briefings (current operations integration cell).
- Commander's update briefings (current operations integration cell).
- Operations synchronization meeting (current operations integration cell).
- Initial and final coordination checks (current operations integration cell).

Working Groups and Boards

3-29. The commander establishes boards and working groups to bring together cross-functional expertise to coordinate actions, solve problems, and make decisions. The primary difference between boards and working groups is the level of authority granted to boards by the commander. Commanders chair boards or grant decision making authority to boards within a specific functional area. Working groups coordinate actions and develop recommendations for approval by the commander or a board. Boards and working groups conduct meetings that are scheduled on the unit's battle rhythm.

Working Groups

3-30. Working groups address various subjects depending on the situation. Working groups may convene daily, weekly, monthly, or intermittently depending on the subject, situation, and echelon. Working groups and identified staff leads that address deep operations include the following:

- Assessment working group (plans cell).
- Airspace control working group (plans cell).
- Civil affairs operations working group (G-9 civil affairs).
- Cyber electromagnetic activities working group (CEMA staff section).
- Operations and intelligence working group (intelligence cell).
- Information operations working group (movement and maneuver cell).
- Protection working group (protection cell).
- Sustainment working group (sustainment cell).
- Targeting working group (fires cell).
- Knowledge management working group (chief of staff or executive officer)

Boards

3-31. Commanders establish boards and assign responsibilities and decision making authority for each board. The commander or a senior leader chairs boards with members of the board consisting of staff elements, subordinate commands, and other organizations representatives as required. There are two types of boards: command and functional. The commander chairs a command board and its purpose is to gain guidance or decision from the commander. A senior leader with delegated authority from the commander chairs functional broads. Boards and identified staff leads that address deep operations include the following:

- Operations assessment board (plans cell).
- Plans synchronization board (plans cell).
- Sustainment board (sustainment cell).
- Targeting board (fires cell).

PLANNING DEEP OPERATIONS

3-32. Commanders and staff use the military decisionmaking process to plan deep operations. Initial planning for operations in the deep area occurs in the plans cells. The base plan or order includes planned deep operations and decision points for potential deep operations as part of the commander's concept of operations. During operations, planning for operations in the deep area is continuous. Once an objective or target is identified for a deep operation, the headquarters must deliberately plan the operations.

3-33. Deep operations planning is as detailed as time permits and should include completion of written orders. Within time constraints, the commander carefully evaluates capabilities and limitations of the total force and develops a plan that communicates a common vision and synchronizes the action of forces in time, space, and purpose to achieve objectives and accomplish missions. The planning should be highly structured involving the commander, staff, subordinate commanders, and others to develop a fully synchronized plan or order.

DEEP-OPERATIONS PLANNING TEAM

3-34. A technique for planning a specific deep operation is to form a deep-operations planning team. This team is formed around the future operations cell and may be augmented by the following staff officers:

- G-2 planner.
- G-3 current operations representative.
- G-3 aviation planner.
- G-4 planner.
- G-5 planner.
- G-6 planner.
- G-9 planner.
- Air liaison officer.
- Naval liaison officer.
- Collection manager.
- Electronic warfare officer.
- Fire support planner.
- Targeting officer.
- Air missile defense planner.
- Special operations officer.
- Liaison officers (field artillery brigade, combat aviation brigade, others as required).

3-35. The deep-operations planning team is not a permanent or stand-alone organization. It is a temporary grouping of trained and familiar planners that convene to develop a synchronized plan for a specific deep operation. The team disengages after creating the plan and conducting a handover with the G-3 for approval. The G-3 publishes the operations order or fragmentary order and is responsible to manage the final plans-to-operations handover to the current operations integration cell for execution.

3-36. To do deep operations planning is to follow the seven steps of MDMP to incorporate as much detail as the available time, resources, experience, and situation permit. However, the time available to plan, coordinate for various joint capabilities, and prepare for deep operations is often limited. As such, the deep-operations planning team employs the following time-saving techniques when conducting the MDMP:

- Limit the number of courses of action or the commander could provide a directed course of action.
- Maximize parallel and collaborative planning with subordinates and supporting units.
- Exchange liaison officers.

3-37. Deep operations require top-down planning with bottom-up refinement. While the division and corps headquarters are responsible for the overall planning of the operation, subordinate and supporting organizations actively participate in the planning effort. The higher headquarters' planning staff collaborates with subordinate and supporting units to work out details ranging from reconnaissance insertion locations, routes, SEAD, and engagement area (EA) control. Subordinate and supporting organizations should provide a liaison officer early in the planning process. The liaison establishes and maintains close communication between commands and facilitates a shared understanding and purpose among organizations. Additionally, the liaison informs the gaining headquarters on the sending unit's current and future missions, disposition, capabilities, and limitations. The liaison acts on behalf of the sending commander to ensure its forces are appropriately tasked, organized, and supported as required.

PLANNING CONSIDERATIONS FOR DEEP OPERATIONS BY WARFIGHTING FUNCTIONS

3-38. A key to planning deep operations is to ensure all the warfighting functions are integrated and synchronized into the concept of operations. Commanders, staffs, and liaisons should consider additional activities that may contribute to the efficiency, effectiveness, and completeness of the operation. A non-exhaustive list of deep operations planning considerations by warfighting function is provided below:

Intelligence

- Effects of weather and light data.
- Priority intelligence requirements.
- Enemy objectives and decision points.
- Triggers for execution of the deep operation (time, event, location).
- Information collection plan.
- Observation of key named areas of interest with communications to sensor.
- Long range surveillance detachment (LRSD) and SOF locations.
- Enemy command and control capabilities.
- Enemy indirect fire in range of battle positions/attack by fire positions.
- Enemy direct fire in range of battle positions/attack by fire positions.
- Enemy wheeled, mechanized, or armored forces able to influence battle positions/attack by fire positions.
- Battle damage assessment plan and confidence level (focus on air defense artillery and other key weapons).
- Priority of higher collection effort.

Movement and Maneuver

- Minimum force requirements (to include recommended abort criteria).
- Task organization.
- Reconnaissance operations.
- Reserves.
- Security forces for forward arming and refuel point (FARP) and position area for artillery (PAA).
- Higher and adjacent unit assets available to reinforce/support operations.
- Triggers for the employment of forces and assets (time, event, and location).
- Time available (for planning and preparation).
- Priorities of employment.
- Objective area/EA.
- Primary and alternate battle positions/attack by fire positions.
- Primary and alternate air corridors for ingress and egress.
- Terrain management (FARPs, PAAs, and boundary adjustments).
- Maneuver control measures (phase lines, checkpoints, attack positions, and passage points).
- Bypass, engagement, and success criteria.
- Anti-fratricide measures.

Fires

- Priorities of fire.
- SEAD and joint-SEAD.
- Electronic warfare.
- Enemy command and control suppression.
- Fire support tasks.
- Close air support and air interdiction coordination.

- Aviation attack/fires strike on ATO.
- FSCMs.
- Airspace clearance and deconfliction of fires.
- Flank coordination (as required).
- Position area for artillery.
- Field artillery movement synchronization with scheme of maneuver.
- Radar coverage.
- Friendly and cross boundary air defense artillery locations and coverage coordination.
- High to medium altitude defense coverage of critical nodes (attack positions, FARPs, PAAs).
- Theater missile defense coverage of critical nodes (attack positions, FARPs, PAAs).
- Friend or foe identification procedures.
- Theater air-ground system coordination.
- Weapon control status.

Protection

- Personnel recovery and combat search and rescue scheme of maneuver.
- Line of communication security.
- Chemical, biological, radiological, and nuclear requirements.
- Decontamination assets available (as required).

Sustainment

- Priorities of support.
- Primary and alternate rapid refuel points and FARP locations.
- Essential transportation assets.
- Primary and alternate distribution methods.
- Sufficient stockage of supplies.
  - Class I - Subsistence (rations and water).
  - Class III - Petroleum, Oil, and Lubricants.
  - Class IV - Construction and barrier materials.
  - Class V – Ammunition.
  - Class VIII - Medical material.
- Resupply plan.
- Medical evacuation/casualty evacuation.
- Downed aircraft recovery team operations.
- Maintenance plan.
- Essential transportation assets.
- Mission, enemy, terrain and weather, troops available, time available, and civil considerations impacts on sustainment.

Mission Command

- Operational timeline.
- Liaison officer/teams to higher and adjacent.
- Key leaders and locations.
- CPs.
- Risk management.
- Commander’s critical information requirements.
- Rules of engagement.
- Operational security.

- Military information support operations.
- Military deception operations.
- Airspace control measures.
- Routes, restricted operating zones, and mission on airspace control order and ATO.
- Key nets and communications diagram.
- Primary, alternate, contingency emergency communications plan by phase.
- Communications retransmission.
- External communication assets.
- Communications exercise.
- Media plan.
- Conditions check.
- Go/No-Go check.
- Rehearsals.
- Abort criteria.

CONDITION CHECKS

3-39. Throughout the planning process, the commander and staff continually assess conditions to identify friction points to limit or mitigate risk to an acceptable level. Commanders must have adequate information about their forces and there must also be some assurance about terrain, weather, and the enemy. Once the commander understands the situation (and can recognize what is unknown), the combined arms forces can be applied to conduct terrain reconnaissance, check weather, and find and attack the enemy. Throughout this process, information must be verified and re-verified to enable the commander's understanding and decision-making processes.

3-40. To facilitate this information exchange, the staff conducts condition checks. Condition checks are coordination meetings led by the staff to update the commander on the status of conditions that must be set to execute the deep operation within the commander's risk tolerance. The exact conditions to be set are determined by the mission, enemy, terrain and weather, troops and support available, time available, and civil considerations, as is the degree of risk the commander is willing to accept with regard to each condition. The process starts as forces are planned and applied to determine what is known and how specific conditions will affect the equation. The commander and staff then implement controls, plan reinforcements, or identify alternate options to incorporate into the plan.

3-41. These conditions are monitored constantly throughout planning and preparation to ensure they exist prior to the execution of the deep operation. The final conditions check includes a review of the most current friendly, weather/terrain, and enemy situations. Additionally, the staffs provide a go/no-go assessment on each of the critical conditions that must be set to execute the deep operation. A no-go condition indicates a situation that places the mission at an extremely high potential of failure or creates an excessive risk to Soldiers' lives and equipment. At the conclusion of the final go/no-go conditions check, the commander may decide to execute, delay, or abort the deep operation. Table 3-1 on page 3-12 is a sample conditions matrix for an aviation attack.

Table 3-1. Example conditions check for an aviation attack

CONDITIONS	*STATUS*
Weather Conditions in Engagement Area	G: Ceiling > 2000' A: Ceiling > 1500' R: Ceiling > 800'
Weather Conditions in Enroute	G: Ceiling > 1000' A: Ceiling > 500' R: Ceiling > 300'
Enemy ADA Capability and Locations	G: Locations identified A: Locations templated R: Locations unknown
Combat Power Available	G: More than enough A: Adequate number R: Inadequate number
Target Specificity (Accuracy)	G: HUMINT A: SIGINT R: Templated
Target Specificity (Timeliness)	G: Target updated < 30 minutes A: Target updated < 2 hours R: Target updated < 4 hours
Class III/V Availability (FARP)	G: Support in place and operational now A: Support in place and operational within 30 minutes R: Support not in place or greater than 30 minutes
Class III/V Availability (FARP)	G: Adequate fuel and ammunition available A: Inadequate fuel or ammunition R: Fuel or ammunition not available
Lethal SEAD/JSEAD	G: SEAD planned, coordinated, and rehearsed A: SEAD planned, coordinated, but not rehearsed R: SEAD not planned or coordination incomplete
Nonlethal SEAD/JSEAD	G: Available and coordinated A: Available and coordination in progress R: Unavailable or not coordinated
Risk of Fratricide (Fires)	G: FSCM disseminated/conflicts resolved A: Dissemination in progress R: Not disseminated or unresolved
Risk of Fratricide (Air)	G: ACMs disseminated/conflicts resolved A: Dissemination in progress R: Not disseminated or unresolved
Risk of Fratricide (Air Defense)	G: Weapons tight A: Weapons free R: Unknown
Legend A Amber (Delayed, degraded, or moderate risk) ACM airspace coordinating measure ADA air defense artillery FARP forward arming and refuel point FSCM fire support coordination measure G Green (Planned, in progress, or low risk) HUMINT human intelligence JSEAD joint suppression of enemy air defenses R Red (Extremely high risk) SEAD suppression of enemy air defenses SIGNINT signals intelligence	

ABORT CRITERIA

3-42. During the development of a course of action, planners establish and propose deep operations abort criteria to the commander. Abort criteria are a predetermined set of circumstances, based on risk assessment, which makes the success of an operation no longer probable. As such, they become friendly force information requirements relating to the deep operation and require command consideration regarding mission continuation. These circumstances can relate to changes in safety, equipment or troops available, preparation or rehearsal time, weather, enemy, shaping operations prior to execution of the deep operation, or a combination of the above.

Considerations

3-43. Abort criteria are situationally dependent and are developed based on the capabilities and limitations of the forces attacking deep and the level of risk the commander is willing or authorized to accept. Common factors that the staff should consider when determining abort criteria are discussed below.

Weather

3-44. Forces maneuver on the battlefield using firepower, mobility, and the integration of aviation assets. Adverse weather conditions can make flying unsafe and ground maneuver difficult. Additionally, low cloud ceilings and restricted visibility can degrade the effectiveness of some weapon systems including precision guided munitions with high trajectories (such as the hellfire) and inhibit observation and target refinement by forward observers, long-range surveillance, UAS and other information collection platforms. AR 95-1 sets the minimum weather conditions for certain types of aviation operations over certain types of terrain. Commanders and staffs should also consider meteorological conditions that jeopardize the safety or effectiveness of forces attacking or operating in the deep area.

Time

3-45. Time refers particularly to daylight and darkness. A significant advantage is gained over most military forces in the world by operating at night. Unsophisticated air defense systems rely on visual target tracking and acquisition. Other types of combat power, such as AC-130 gunship support, are vulnerable during daylight hours. Abort criteria, in terms of execution times, may be established to ensure that friendly forces are in hostile territory under the cover of darkness. Abort criteria may also be established to prevent long delays that can lead to increased fatigue in Soldiers.

Mission Essential Combat Power

3-46. Planners use doctrine and experience to determine the minimum combat power necessary to ensure mission success. Abort criteria are used to ensure that friendly forces have the required combat ratio to continue execution throughout the deep operation.

Mission Criticality

3-47. Deep operations are conducted to set the conditions for subordinate commanders in the close area. They may also be conducted as part of the higher headquarters' attack. The success of future operations and other units depend on the success of the planned deep operation. Therefore, some deep operations may proceed despite the presence of circumstances that would normally abort the mission. Conversely, significant or unexpected decisive events in the close area may cause the commander to redirect forces from deep operations to reinforce other operations.

Enemy

3-48. Certain types of enemy activity may abort the deep operation. Abort criteria are usually stated in terms of the size or type of an enemy unit, the type of enemy equipment, and the proximity of the enemy to present or future friendly locations.

Decision Process

3-49. The approved abort criteria are monitored throughout the execution phase of the operation. If any criterion is met, a decision sequence is used prior to aborting the mission. The commander, unless otherwise delegated, retains the authority to delay, divert, or abort the mission.

- Delay. If time is available, a mission will be delayed in phase to correct a circumstance that may abort a mission or set the conditions for success. For example, deteriorating weather conditions in the EA may lead a commander to delay an aviation attack until conditions improve. Attack helicopters may occupy attack positions short of the forward line of troops (FLOT) or return to the aviation assembly area.
- Divert. If time is not available or a delay will not correct an abort criteria, the task force may execute a divert contingency. If, for example, a higher priority target is identified in the deep area by information collection assets, the commander may direct participating forces to divert to alternate flight routes, target reference points, or objectives.
- Abort. If an abort criterion exists and a delay or diversion to the mission will not correct it, the mission can be aborted by the commander. The commander may choose to abort a single effort from the mission or the mission in its entirety. For example, a commander may abort an aviation attack in the deep area while continuing to strike the target with artillery fires if the aviation attack force experiences significant combat losses. Further, the commander may abort the entire mission if it is determined that friendly forces no longer have the required firepower or combat ratio for the operation.

Appendix A

Fires in the Deep Area

The long range and flexibility of fires allows commanders to use the fire support system to destroy, neutralize, and suppress surface targets including enemy weapons, formations, facilities, and fires in the deep area. This chapter provides the techniques necessary to plan, prepare, execute, and assess artillery for deep target engagement. This chapter is not all-inclusive, but instead provides a starting point for development of other checklists and unit standard operating procedures.

OVERVIEW

A-1. The corps and division fires cell provides specified personnel to assist the deep-operations planning team in the planning, preparation, execution, and assessment for deep target engagement. To plan, prepare, execute, and assess deep targets, the fires cell conducts targeting and coordinates strike and SEAD in support of deep operations. The fires cell manages fire support resources for the commander under the fire support coordinator's supervision.

A-2. When planning for deep target engagements, targeting is a critical element. Targeting enables the commander and staff to take the initiative when selecting high-payoff targets in support of operations against the enemy's uncommitted forces or resources. Engagement of targets in the deep area will divert, disrupt, delay, or destroy enemy forces' capabilities or systems. This prevents the enemy commander from employing enemy forces and resources at the times and locations originally intended.

A-3. Field artillery, in conjunction with other Army systems and joint assets, provides shaping fires in depth. When used effectively, these fires may result in the significant disruption of enemy forces and create the effects necessary for the success of the decisive operation.

TARGETING FOR DEEP OPERATIONS

A-4. The fires cell provides specified personnel to the deep-operations planning team to assist in the planning, synchronization, and coordination of all deep indirect fires and directs the attack of targets by allocated fire support assets. Successful deep target engagement is supported by all personnel of the fires cell with the coordinating efforts of the fire support coordinator, G-5 Plans, G-3, G-2, and aviation element. Additional assistance is required from the deputy fire support coordinator, field artillery intelligence officer, targeting officer, information operations officer, cyberspace officer, electronic warfare officer, air defense officer, air liaison officer, G-3 Air, and military information support operations officer.

A-5. The targeting team within the division fires cell coordinates with the JAGIC and must contain personnel well versed in all aspects of targeting and directing fires on deep targets. They must know the capabilities and limitations of the fire support systems and engagement assets available to them and have the means to task and employ them. They must also have access to the targeting and fire support planning outputs (such as the HPTL, attack guidance matrix, and target selection standards). See ATP 3-91.1 for more information on JAGIC.

A-6. If deep targets are identified through targeting, specific personnel from the targeting team will be selected to support the deep-operations planning team. Targeting is continuous and is conducted in conjunction with the military decisionmaking process. The steps of targeting are: decide, detect, deliver, and assess. The targeting team must ensure that the decide, detect, deliver, and assess methodology fits into the appropriate higher headquarter battle rhythm and the joint targeting cycle.

DECIDE

A-7. During the decide step of targeting, the following occurs:

- Development of named areas of interest, target areas of interest, HPTLs, and AGMs to focus the collection plan and prioritize assets.
- Synchronization of the HPTL and AGM with the decision support template.
- Coordination of FSCMs (such as the FSCL) and necessary triggers for the engagement of deep targets.
- Nomination of targets that cannot be serviced by corps or division for execution by joint assets.
- Analysis of the enemy's courses of action (in conjunction with the G-2) and identification of high-value targets and high-payoff targets in support of deep target engagement.

DETECT

A-8. During the detect step of targeting, the following occurs:

- Synchronization of the corps and division sensors through the collection plan that are linked to the commander's critical information requirement.
- Synchronization of the corps and division sensors and engagement systems.
- Synchronization and requisition of UAS for target development.
- Submission of input into the ATO.
- Requisition for joint assets.
- Field Artillery Intelligence Officer provides input to and output from the air coordination element and the fires cell.
- Targets that are identified but cannot be engaged are assigned an available collection asset to track until the target can be engaged (coordinate with the G-2 collection manager).

DELIVER

A-9. During the deliver step of targeting, the following occurs:

- Coordination and synchronization of mass effects on the target.
- Engagement of targets using available lethal assets to include air interdiction, attack aviation, and indirect fires using munitions such as the Army Tactical Missile System, the Guided Multiple Launch Rocket System, cannon artillery, and naval fires.
- Engagement of targets with available nonlethal assets to include electronic warfare, cyber electromagnetic activities, military information support operations, and deception operations.
- Synchronization of lethal and nonlethal assets to ensure they do not conflict with each other.
- Verification that all engagements are simultaneous and in depth.
- Utilization of the AGM to synchronize the engagement of high-payoff targets.
- Coordination with other airspace users.

ASSESS

A-10. During the assess step of targeting, the following occurs:

- Coordination with the collection manager to ensure that there are sensor assets tasked to provide combat assessment to include battle damage assessment, munitions effects assessment, and reattack guidance on all identified target areas of interest to assess the effectiveness of the deep operation.
- Determination to conduct additional fires if the commander's desired effects have not been achieved.

STRIKE

A-11. *Strike* is an attack to damage or destroy an objective or a capability (JP 3-0). The Multiple Launch Rocket System (MLRS) or High Mobility Artillery Rocket System (HIMARS) units assigned to a field artillery brigade (FAB) or allocated to a division artillery are the typical units of choice to conduct field artillery strikes on targets in the deep area. A strike is generally focused on a specific enemy formation and is a deliberate task with a timeline of several hours to several days. It is not a fire mission against a target of opportunity.

A-12. A strike by field artillery has three primary advantages. First, there is reduced risk to aircrews or aviation assets conducting the strike. Second, there is very little delay between acquisition of the target and delivery which is usually minutes. Third, there is little the target can do to defend itself once acquired, except to move outside of the range of the lethal effects of long-range surface-to-surface fires; for many types of targets that is impossible. The primary disadvantage of a strike is that a maneuverable target may be able to avoid engagement.

A-13. The FAB employs Army fires, often complemented by attack aviation or joint fires, to conduct a strike, and it may be the supporting or supported command. A strike may include rapid and aggressive maneuver of FAB assets well forward in the supported higher headquarters AO to achieve range on the identified target. This is accomplished either by assigning a mission to a brigade combat team (BCT) to support the FAB's maneuver forward or by task-organizing maneuver or other security assets (for example, infantry, armor, military police, air defense artillery) to the FAB to allow the commander to position his forces. Strikes capitalize on the ability of Army forces to deliver precise effects of fires to the full depth and breadth of the division, corps, or other FAB supported command's AO.

A-14. To accomplish its mission, the FAB or DIVARTY must be interoperable with the joint battle command network. The corps or division may be allocated joint or multinational air, surface, and subsurface fires assets to attack targets to operational reach. The FAB and DIVARTY must also have the ability to pass targets among maneuver BCTs, support brigades, divisions, and joint, interagency, intergovernmental, and multinational partner sensors and attack systems. Additionally, the FAB and DIVARTY must be integrated into the corps, division, and BCT air defense coverage. The FAB and DIVARTY requires allocation of protection from the engineer brigade, as well as information operations capabilities and space support from the corps, division, and unified action partners.

A-15. The FAB commander exercises mission command, executes engagement of joint force commander time-sensitive targets and executes shaping strikes for the corps or division. Detailed planning and targeting is conducted by the fires cell to turn the supported commander's targeting guidance into specific targets and to develop a fire support plan. Sensor plans are developed to support the fire support shaping tasks. The FAB commander recommends measures of effectiveness and measures of performance to the supported maneuver commander.

A-16. Characteristics of the corps and division fires structure include networked fires consisting of fully integrated joint fire control networks. The corps and division have the capability to mass fires without having to mass the units themselves. Advanced fire direction, extended ranges, and position locating capabilities permit firing systems to be highly dispersed, including the effective conduct of fire missions by single platforms, without forfeiting the ability of the force to mass fires and provide mutual support between echelons.

A-17. Field artillery fire support systems provide highly integrated and automated fire planning systems and processes that ensure continuous fire support; optimize the allocation of internal and external resources; automatically deconflict the targeting process; simplify clearance of fires; ensure mutual support between echelons; sharply reduce latency; and achieve maximum effects for resources expended. Planning and coordination requires near-real time connectivity to organic and joint sensors. Fire cells provide integration of joint and multinational fires in support of operations from corps to battalion level and provide for the integration of lethal and nonlethal capabilities to meet the commander's intent.

A-18. The requirement for engagement with interdiction capabilities will increase, not diminish, over time. The long-sought goal remains one shot/one hit with potentially multiple kills. However, conditions will continue to arise in which area munitions remain the right choice for employment and for which the

employment of area munitions is an imperative. Similarly, nonlethal capabilities may be employed to achieve well-defined, measurable effects.

A-19. The supported commander's objectives, guidance, intent, and initiatives to establish conditions for decisive operations are the most important elements in planning and executing strike operations. The conditions that the supported maneuver commander establishes are equally important because they will make available joint or national systems, assets, and capabilities that commanders must incorporate to maximize execution of strike operations.

A-20. Long range offensive and defensive fires provide the commander the capability to strike ground targets at extended distances. These fires contribute to shaping operations and defeating or denying enemy capabilities that threaten joint and multinational forces. Offensive fires strike enemy capabilities before they come in contact with or are employed against U.S. forces or populations, enabling commanders to seize, retain, and exploit the initiative. These fires present the enemy with multiple dilemmas, limit options, and destroy or degrade capabilities. FAB strikes may be used as separate attacks or with maneuver forces. For example, if the division, corps, joint task force, or other FAB supported commander is seeking to dislocate the enemy, a BCT may conduct a turning movement (shaping) to expose an enemy force to FAB strikes to defeat the enemy force (decisive). In another operation, the strike may attack an enemy headquarters to disrupt an enemy force (shaping) so that a BCT may close with and destroy the enemy force (decisive).

SUPPRESSION OF ENEMY AIR DEFENSES

A-21. SEAD is critical to the survival of aviation assets. It must be accomplished quickly and efficiently in support of aviation operations, particularly in the deep area. It is an integral part of aviation mission planning synchronized with and integrated into overall corps and division operations. Lethal friendly fires suppress, neutralize, and destroy known and suspected threat air defense weapons, radars, warning sites, and command and control nodes.

A-22. SEAD must begin early to decrease the density of hostile air defense systems and make friendly aviation assets more effective and less vulnerable to enemy detection and engagement. Preemptive targeting against known and located threats is ideal, but the SEAD plan should also include provisions for reactive engagements against pop-up air defense threats as well. This is particularly critical since aviation assets are limited resources and will also be used and needed in support of the close fight.

A-23. The primary SEAD role of field artillery systems is to conduct localized SEAD to open corridors or suppress specific attack objectives in cross-forward line of own troops operations. Suppression will begin prior to friendly aircraft arrival and should continue as long as the aircraft are within range. Field artillery fires, either separately or in conjunction with joint fires, assist in the SEAD.

A-24. Egress routes are established and suppressed in a similar manner. Since the opening of corridors is a major operation requiring a heavy commitment of resources, only a limited number of corridors can be established in a given period of time.

A-25. The FAB and DIVARTY commanders work closely with corps and division G-3s and G-2s throughout the planning, preparation, and execution phases of an operation. The schemes of maneuver and of fires are developed at the same time based on the commander's intent. The corps fires cell passes this information to the supporting FAB and the division fires cell passes this information to the DIVARTY CP, which concentrates primarily on corps and divisional counterfires, other shaping fires, and SEAD.

A-26. To support corps and division aviation elements, the G-3, based on fires cell recommendations, may change the artillery's task organization and priority of fires. This may include a mix of units with command and support relationships, or assigning the aviation brigade priority of fires for a specific mission. Field artillery units may also be relocated to support their primary mission and to provide SEAD support in the form of planned and on-call fires.

A-27. The FAB or DIVARTY can suppress accurately located planned SEAD targets to the maximum range of indirect fire systems with unobserved fires. Fires must be coordinated with adjacent and subordinate units to ensure all suppression operations are mutually supportive along with joint efforts, where appropriate.

A-28. Cannon artillery, MLRS and HIMARS can be effective SEAD weapons by creating corridors at the FLOT. MLRS or HIMARS may engage several targets by using the launchers multiple-aim point capability against thin-skinned air defense weapons and radars. However, MLRS or HIMARS used in a SEAD role must consider the required safety distance for suppressing targets at the FLOT and in EAs, reload times for launchers, and normal relocation requirements after each launch as well as the maximum ordinate and munitions flight path.

A-29. Smart munitions and advanced sensors can also reduce target location difficulties if the location is within the sensor's range. Artillery-delivered smoke in support of SEAD operations can be both an advantage and disadvantage. Smoke can hide aircraft from enemy air defense weapons that use visual acquisition. However, smoke is ineffective as a countermeasure against electronic sensor-guided air defense systems and can also obscure targets and prevent friendly aircraft from identifying enemy air defense systems.

A-30. As an additional SEAD consideration, fires from mortars, cannon, and rocket artillery pose hazards to friendly aircraft activities. The highest probability of conflict between aircraft and surface-to-surface indirect fire occurs at relatively low altitudes in the immediate vicinity of firing units and target impact areas. Airspace coordinating measures must be designed to reduce any potential hazard. Airspace coordinating measures and current, and well as proposed firing locations and targets, should be disseminated to all participating forces to create shared understanding and reduce the risk of fratricide.

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Appendix B

Aviation in the Deep Area

Army aviation's inherent mobility, speed, range, flexibility, lethality, precision, and reconnaissance capabilities provide division and corps commanders multiple options for conducting operations in the deep area. This appendix provides an overview of Army aviation's contribution to deep operations. Additionally, this appendix discusses considerations for planning, preparing, executing, and assessing aviation assets in the deep area.

OVERVIEW

B-1. Deep operations involve efforts to prevent uncommitted enemy forces from being committed in an effective manner. The purpose of deep operations is frequently tied to other events distant in time and space. Aviation operations in deep areas may include the following:

- Attacks to destroy, defeat, disrupt, divert or delay enemy forces or high-payoff targets that are out of friendly contact using manned and unmanned teaming or independent unmanned aircraft system or UAS attack-reconnaissance operations.
- Reconnaissance operations by manned or unmanned aircraft to obtain combat information to answer priority intelligence requirements on the terrain, enemy or civilian populations.
- Air assaults of conventional or SOF to seize an objective, destroy an enemy force, or capture or kill a high-value individual.
- Infiltrations of conventional and SOF to emplace sensors, conduct raids, establish special reconnaissance positions, or to conduct partisan linkup.
- Air movements of supplies and personnel to ground maneuver units operating decentralized in deep areas.
- Evacuation of casualties from units operating in deep areas.
- Personnel recovery of designated isolated personnel in deep areas.

B-2. Army aviation attack reconnaissance units employing manned and unmanned teaming conduct attacks in support of offensive, defensive, and stability operations throughout the depth of the AO. This is done either as a decisive or shaping operation in support of ground forces.

B-3. Armed unmanned aircraft are uniquely equipped to autonomously detect targets and coordinate or perform attacks or reconnaissance on those targets. Leveraging the use of kill boxes, Army aircraft in coordination with other joint assets may attack surface targets without further coordination with the establishing commander and without the requirement for terminal attack control. See ATP 3-09.34 for additional information regarding kill boxes.

B-4. To ensure success, Army aviation attacks with the necessary combat power, tempo, and intensity to overwhelm the enemy force. Synchronizing joint fires with ground and air maneuver, maximizing the element of surprise, and audacity, speed, mass, and violence of execution are all essential components of successful Army aviation attacks.

B-5. These attacks are typically conducted at such a distance from friendly forces that detailed integration with ground forces during actions on the objective are not usually required. Based on the nature of the target and complexity of the AO, Army aviation attacks in the deep area may be conducted as hasty attacks but are most often deliberate attacks that require detailed planning and the full integration of manned aircraft and UAS, and the simultaneous or sequential employment of close air support, indirect fires, and other enabling capabilities to mass effects, isolate, and destroy key enemy forces and capabilities.

B-6. Based on the mission and operational variables, attacks in the deep area range from relatively low-risk to extremely high-risk operations. They may be conducted by attack reconnaissance elements ranging in size

from a single armed UAS up to one or more attack reconnaissance battalions or squadrons. The level of risk associated with distance, threat volume, enemy capability, and mission complexity require more detailed planning and integration by the division or corps headquarters. Additionally, higher mission risk requires the division or corps headquarters' prioritization of the necessary enabling capabilities to support continuous reconnaissance and target development, the utilization of joint fires with detailed rehearsals, and the completion of conditions checks prior to execution. Consideration should also be given to how long attack assets are committed to higher risk attacks and weighed against the totality of the operational risk to other ongoing or pending operations. The decision to execute attacks in the deep area must be based on the overall operational risk versus the reward of successful execution within the higher headquarters scheme of maneuver.

B-7. These attacks are typically deliberate; however, based on mission variables, they may also be executed as hasty attacks against emerging targets of opportunity. If an enemy target is a high-payoff target, the potential gains from its engagement outweighs the risk of friendly losses, or the threat to aviation is determined to be acceptable, hasty attacks in the deep area can be effective in seizing emerging opportunities to prevent the enemy from gaining a position of relative advantage.

B-8. Based on the depth of the attack, time allocated, echelon and size of the aviation attack force, and the supported commander's intent, forward arming and refueling points (FARPs) and UAS launch and recovery locations are positioned forward to support relief on station and maintain sustained attacks or support attacks at extended ranges.

B-9. When determining what level of planning and preparation is required to execute the attack, the commander should balance the time available versus the advantage of executing with tempo and surprise with the minimum mission essential information required to understand the friendly forces, terrain, weather, and enemy forces to achieve success. Taking too much time to develop perfect information can paralyze the operations process, enable the enemy to continue to prepare or move, or result in missed opportunities to seize the initiative. It is normally better to err on the side of speed, audacity, and momentum with the minimum mission essential information than waiting to gain complete situational understanding prior to conducting attacks.

PLANNING

B-10. The inherent risks with hasty and deliberate attacks in the deep area are driven by the predicted enemy situation enroute to, from, and in the AO; the depth and duration of the attack; the size and capabilities of the enemy force being attacked; the fidelity of the target location; the proximity and capabilities of adjacent enemy forces; the time of day and weather conditions; and the proximity and capabilities of friendly ground maneuver forces. To mitigate risk, and when time is available, the assigning higher headquarters and attack aviation staffs focus the operations process on the following:

- Target development, location, and refinement.
- Integration of joint fires and other enablers.
- Maximizing the use of UAS forward to confirm target location and disposition.
- Maximizing the use of terrain to mask maneuver along attack routes and in attack by fire positions.
- Developing and coordinating airspace control measures.
- Suppression of enemy air defenses.
- Planning and developing triggers and conditions to initiate the attack.
- Conducting detailed rehearsals.
- Employing communications relay packages, Army Aviation Command and Control System or Airborne Battle Command System aircraft to maintain situational understanding over extended distances.
- Positioning FARPs forward to maximize weapons loads and station time.
- Maximizing the element of surprise by attacking from unexpected directions and unexpected times with speed and audacity.
- Executing during hours of limited visibility.

B-11. To facilitate the successful execution of aviation operations in the deep area, commanders and staffs consider several planning factors. In order to establish the conditions for the successful execution of attacks and air assaults in the deep area, adequate time must be allotted for the integration and synchronization of enabling assets and other planning requirements. Time-sensitive factors, such as the ATO, are considered when identifying and planning for target engagement in the deep area. It is imperative that all aviation assets participating in deep operations are correctly reflected in the ATO and assigned validated identification codes to reduce the risk of fratricide from friendly integrated air defense systems. While extensive planning is conducted at the brigade, battalion, and company levels, the division and corps are also responsible for the inclusion and synchronization of the following warfighting functions:

- Mission command.
- Movement and maneuver.
- Intelligence.
- Fires.
- Sustainment.
- Protection.

MISSION COMMAND

B-12. To effectively exercise mission command in the deep area, commanders require specific considerations to allow aircrews to adapt, act decisively, and maintain the greatest possible freedom of action while executing operations over great distances from the command post responsible for the operation.

Airspace

B-13. Airspace control measures (ACM) increase operational effectiveness by ensuring the safe, efficient, flexible, and simultaneous use of airspace. ACMs facilitate the movement of air traffic to and from the target area, minimize the chance of fratricide, and assists air defense in identifying enemy or civilian aircraft. Digital integration of U.S. and allied joint fires systems enables timely execution of targets.

B-14. The airspace control authority develops the airspace control plan with input from the division or corps and promulgates it throughout the area of responsibility/joint operations area. Implementation of the airspace control plan through the airspace control order must be complied with by all components.

B-15. Army aviation assets operating in the deep area require detailed airspace control planning identifying necessary ACMs and FSCMs, airspace control agencies, and identification friend or foe procedures. Aircraft operating in portions of the deep area controlled by a JAGIC will coordinate their routes and maintain contact with the JAGIC during mission execution. Aircraft operating in the deep area not controlled by the JAGIC, such as above the coordinating altitude, beyond the FSCL, in a kill box, or in another unit's AO must coordinate with the airspace agency controlling that airspace. The division or corps airspace element will be the lead for this coordination. Aircraft outside of JAGIC controlled airspace will most likely require the ATO to contain full mission information in order to avoid fratricide and facilitate the integration of fires. The division or corps aviation element will be the lead for working with the battlefield coordination detachment to ensure the correct data is entered into the ATO.

B-16. Combat Identification is critical for aircraft operating in the deep area especially in areas not controlled by the JAGIC. Aircraft should use both procedural and electronic identification methods. Procedural methods include flying within ACMs published on the airspace control order and operating on a time schedule published on the ATO with ATO call signs and frequencies. Electronic identification methods include identification, friend or foe Mode 5 codes, blue force tracker and tactical digital information link J, now known as link 16 (if equipped). Any reduction in electronic identification capabilities such as turning off blue force tracker, link 16 or setting identification, friend or foe Mode 5 to standby should be coordinated with the area air defense command during planning.

B-17. In the deep area, Army aviation rotary-wing assets typically operate below the coordination level enabling freedom of maneuver through procedural means. Some Army unmanned aircraft systems (UAS) operate above the coordinating altitude and require detailed coordination to deconflict airspace users. Establishing FSCMs such as kill boxes allow UAS to operate within designated boundaries to collect

information or conduct lethal attacks against surface targets without additional coordination with the establishing commander and without the requirement for terminal attack control.

B-18. In the close area, Army aviation rotary-wing assets use procedural ACMs such as standard use Army aircraft flight routes to maneuver to and from the support area to the deep area to mitigate risk and maximize the use of division allocated airspace. For more information on airspace, see FM 3-52 and ATP 3-09.34.

Communications

B-19. An important consideration for any operation in the deep area is the ability of the headquarters to maintain communications with the attack force during the deep operation. This allows the controlling headquarters to maintain situational awareness regarding the progress and status of the mission, and it provides the commander the ability to adjust the mission, if required. The ability for the CP to maintain this communication is often strained due to the distance to the target and limited communications capabilities of the attack force aircraft. The use of external relay assets, such as UAS communications relay packages and retransmission nodes, may help eliminate some line-of-sight communication limitations.

MOVEMENT AND MANEUVER

B-20. Army aviation maneuvers to attack, air assault, or infiltrate ground forces to achieve a position of relative advantage over the enemy and other threats in the deep area. The mobility and speed of aviation forces allows the commander to shape the enemy in the deep area using of aviation direct fires before the enemy can be brought to bear effectively on friendly forces in the close area. While Army aviation enables movement and maneuver, route selection and passage of lines are critical for the employment of aviation assets.

B-21. Army aviation reconnaissance and security forces can conduct air route reconnaissance and acquire or confirm target compositions, dispositions, and locations. They also can screen the attacking forces' flanks during movement or while in battle positions in order to provide early and accurate warning of impending enemy force attacks.

Methods of Attack

B-22. Timing is critical to the successful employment of attacks in the deep area. Employed too early, enabling assets may not be able to adequately support the operation. Employed too late, it may miss all or part of the targeted enemy unit, consequently failing to destroy the enemy force at the designated time and/or place. The timing of the attacks should enhance the commander's scheme of maneuver. In order to effectively synchronize attacks in the deep area, three methods of employment may be used to include the following:

- Continuous attack.
- Phased attack.
- Maximum destruction.

B-23. Dependent on the size of the attack element and the level of risk the commander is willing to accept, the methods of employment may be used individually, simultaneously, or sequentially to achieve the desired effect. These considerations may also affect adjacent operations and support requirements. To maximize the effectiveness of the attacks, windows of opportunity are assessed against the periods when exposure to the enemy will be the greatest.

Continuous Attack

B-24. To exert constant pressure on the enemy force, multiple aviation units may be employed using the continuous attack method. This method ensures at least one aviation unit will be attacking at all times. While one unit is engaged in the battle, two or more other units prepare to relieve the engaged unit by maneuvering to the battle position or attack by fire position or by positioning at a holding area or FARP. The continuous attack method provides the commander with the most flexibility as well as the most efficient use of sustainment operations.

B-25. Employing a continuous attack in the deep area is a complex operation that requires careful consideration of time as it relates to the duration of the operation and the synchronization of resources. The

level of risk associated with a continuous attack increases with the number of attack iterations. The attacks may become predictable over time and increase the vulnerability of aviation forces. Additionally, controlling multiple elements that are maneuvering simultaneously increases the complexity of the operation. Therefore, decentralizing the execution may enhance the synchronization of the aviation forces.

Phased Attack

B-26. To exert increased initial firepower of the aviation force on the enemy force, one aviation force begins attacking the enemy and then quickly phases in the second aviation force from a different battle position or attack by fire position. The commander may choose to modify this method of employment. For example, one force may be employed to set the conditions for the other forces to exploit the attack. During the phased attack, it is important to minimize aircraft turnaround time at the FARP.

B-27. With a relative balance of risk and complexity, the phased attack maintains increased pressure on the enemy but does not over commit combat power and strain sustainment activities. This balance requires precise synchronization of resources and timing of attacks.

Maximum Destruction

B-28. The maximum destruction method exerts maximum combat power on the enemy force. To overwhelm the enemy force with massed fires, the aviation unit attacks the objective with all elements simultaneously. Sustainment planning should consider multiple FARPs for refueling and rearming after the initial engagement to reduce the time required to continue mission.

B-29. Maximum destruction attacks minimize risk during execution of the operation. The commander maintains maximum control over the attack and synchronization of the resources and can apply substantial combat power to overmatch the enemy on the battlefield. The commander has the ability to direct combat power as necessary to react to branches and contingencies in the operation overwhelm the enemy with multiple dilemmas. However, the commander should consider the inherent risk associated with committing all attack aviation assets forward simultaneously. Sustainment planning, preparation, and execution are critical to ensuring the commander has the necessary forces available to conduct follow-on missions by providing timely and reliable maintenance, arming, and fueling capability.

Strike Coordination and Reconnaissance

B-30. Strike coordination and reconnaissance (SCAR) missions, consisting of Army aviation and joint assets, are flown to detect targets so coordinated attacks or reconnaissance can be performed on those targets. SCAR missions occur in specific geographic areas, such as the deep area, to coordinate multiple flights, detect and attack targets, neutralize enemy air defenses, and provide BDA. Once an aircrew receives the task to conduct SCAR, no further authorization is required to deliver or direct delivery of ordnance on appropriate targets. A SCAR has the authority to direct aircraft to proceed against appropriate targets. For more information on SCAR, refer to ATP 3-60.2.

Route Selection

B-31. Route selection for an attack in the deep area must consider the time required for the mission and the possible threat encountered throughout all phases of the operation. Ingress and egress of the target area must be selected to enhance survivability and maintain the element of surprise. Planning for multiple routes must consider known or templated enemy locations. Route planning must include checkpoints to facilitate navigation.

B-32. Prior to the execution of the operation, the ingress route should be stealthily and deliberately reconnoitered for terrain, hazards, and enemy positions. A threat to enroute aircraft during an operation in the deep area may include enemy integrated air defense systems (IADS). An enemy IADS could include detection, command and control, and weapon systems integrated to actively or passively protect those assets critical to achieving their strategic, operational, and tactical objectives. If possible, a route identified to avoid enemy IADS should be developed or SEAD fires may be employed to neutralize or destroy the threat to ensure safe passage.

B-33. While the attack unit engages the target, information collection shifts to determine the status of the egress route. The location of enemy radar and air defense sites that were identified during the ingress and attack phases must be passed to the aviation unit and the fire support element to adjust the SEAD plan.

Passage of Lines

B-34. When transitioning to and from the deep area, aviation assets will conduct a passage of lines when crossing the FLOT. The passage of lines must be planned and rehearsed prior to execution.

B-35. When the attack force is transitioning the FLOT, the division or corps must coordinate the passage of lines by changing the air defense weapons status of the ground maneuver units. To defeat possible enemy air defense systems during the penetration of the enemy FLOT, aviation assets employ aircraft survivability equipment. Even under the best of circumstances, it is difficult to know the exact time aircraft will return across the FLOT.

B-36. Prior to conducting a passage of lines enroute to an attack in the deep area, the attack force will assemble in designated holding areas for timing, sequencing, and coordination with the most forward friendly element. Likewise, an attack force returning from an attack in the deep area will assemble in designated holding areas immediately after crossing the FLOT to sequence through the FARP.

Weaponeering

B-37. While EA development planning and execution occurs at and below the battalion/squadron level, corps and divisions may often establish the boundaries to an EA in order to separate fires during simultaneous operations in the deep area. With input and consideration from the supporting combat aviation brigade, division and corps planners must identify the EA, determine the most effective application of fire power, and deconflict and synchronize the operation with other activities. Deconfliction of fires maximizes simultaneity. Employing the appropriate platform for the attack, the correct type and quantity of lethal and nonlethal fires, as well as considering potential follow-on missions and adjacent missions, harmonizes and maximizes the effects on the desired targets.

INTELLIGENCE

B-38. Just as the successful employment of Army aviation in the deep area requires a detailed understanding of the enemy, terrain, and civil considerations, Army aviation provides such an understanding to the deep-operations planning team through the employment of reconnaissance assets. UAS mobility, range, and endurance facilitate information collection for the planning, execution, and assessment of operations in the deep area.

B-39. Intelligence considerations drive the aviation operation. They also drive route selection, SEAD, and the development of personnel recovery options.

INDIRECT FIRES

B-40. Field artillery provides indirect fires to suppress enemy air defense systems and the objective. While Army aviation assets require fires to ensure freedom of maneuver in the form of SEAD, they are also an ideal platform for calling for indirect fires on targets in the deep area. Joint fires can also be enabled by aviation deep operations. Aircraft conducting a SCAR mission can provide targetable information for continued or future indirect fires or fires strikes.

SUPPRESSION OF ENEMY AIR DEFENSES

B-41. SEAD is fundamental for the effective employment of attack aircraft in the deep area. Corps and division planners should determine what surface-to-air threats are enroute and in the target area to provide the most economical and capable assets to suppress those systems. There are various ways to suppress enemy air defense assets depending on the range and number of threats in the target area. Planners may be able to employ electronic warfare capabilities or coordinate with the fires cell for indirect fire weapons or joint air assets to suppress enemy surface-to-air systems. Indirect fire weapons should be considered as an effective

SEAD asset as long as the coordination and deconfliction are thoroughly conducted. However, those systems will then not be available for employment by the ground maneuver forces.

SUSTAINMENT

B-42. Conducting operations in the deep area may involve operating well outside the range and capabilities of support forces. This requires detailed planning and integration of support assets in order to extend the range of the attack forces as well as minimize the risk associated with operations in the deep area.

REFUEL/REARM

B-43. Attacks in the deep area often occur at distances well outside the reach of logistical support services such as refueling and rearming. It may be necessary to establish a FARP to increase the range of the aircraft or decrease sustainment turnaround times.

B-44. If FARPs are used, commanders must consider setup times, locations, duration of the operation, mobility, capabilities, and survivability. Security for FARPs beyond the FLOT should be a primary concern as the FARP may be a critical component to the attack operation. While the FARP may self-secure using internal assets, assigning external assets if available ensures adequate security for this high-value asset.

PROTECTION

B-45. Typically, a high-risk operation, conducting attacks in the deep area means ground maneuver forces may not be operating near or responsive to the deep operation. Therefore, a detailed personnel recovery plan should be in place to locate and recover isolated personnel should an aircraft be shot down. A dedicated personnel recovery aircraft should be identified, if possible, to support an immediate extraction of the isolated personnel.

B-46. Employing UAS forward to confirm or deny the existence of an enemy IADS does not expose aircrew to surface-to-air threats; however, employing manned aircraft in the deep area requires detailed planning to ensure the rapid recovery of isolated personnel while minimizing impact to the operation. Employing electronic warfare capabilities may suppress enemy air defense systems temporarily to allow safe passage during the ingress and egress phases of the operation. IADS that exploit limitations in current aircraft survivability equipment should be considered high-payoff targets and destroyed prior to deep operations.

PREPARATION

B-47. Allowing adequate time for subordinate units to prepare for the operation is critical to the execution of the operation. During preparation, the plan may be refined as information is collected. The subordinate units require time to plan and prepare their forces for the operation.

INFORMATION COLLECTION

B-48. While information collection operations are continuously being conducted during operations in the deep area, preparing for the operation requires increased surveillance of the objective and air route reconnaissance of the ingress and egress routes. Commanders should take every opportunity to improve their situational understanding of the enemy and terrain and provide a decision whether to execute the operation with a go/no-go brief prior to execution.

SUSTAINMENT PREPOSITIONING

B-49. Due to the additional force requirements and execution time required for sustainment support operations, sustainment support is pre-positioned and established prior to the execution of the operation. FARPs are deployed to the planned execution site, security is established, and the status of the FARP contributes to the go/no-go brief.

REHEARSALS

B-50. The integration of combined arms requires synchronization to increase the effectiveness of the operation and reduce the probability of fratricide. Effective rehearsals imprint a mental picture of the sequence of the operation's key actions and improve mutual understanding and coordination of subordinate and supporting leaders and units. The extent of rehearsals depends on available time; however, they must be conducted.

PLANS-TO-OPERATIONS TRANSITION

B-51. The transition of the plan to operations is critical to ensure successful execution and enable proper battle tracking. During this time, the responsibility for developing and maintaining the plan shifts from the planning cell to the current operations integration cell. It ensures members of the COIC fully understand the plan before execution. The transition briefing enables members of the COIC to understand the upcoming operation as well as identify friction points and issues to solve prior to execution.

TASK ORGANIZATION

B-52. During preparation, commanders organize their forces in accordance with command and support relationships outlined in the plan. This ensures adequate time to brief and rehearse the operation as a team to ensure a mutual understanding of the operation.

GO/NO-GO BRIEF

B-53. The go/no-go brief verifies the conditions are set for the successful execution of the operation. Based on the mission variables and the acceptable levels of risk, the commander determines what considerations are selected as go/no-go criteria. The staff confirms or denies the status of each criteria during the brief. The go/no-go brief should occur early enough to allow participating forces enough time to complete final preparations and mobilization. For example, the go/no-go decision for a deep operation oriented on a moving enemy force should accommodate aircraft run up, mission systems initialization, line-up procedures, and enroute flight time to the EA prior to the enemy force vacating the EA. Refer to Table 3-1, for an example go/no-go brief outlined by warfighting function.

EXECUTION

B-54. Execution translates decisions into actions, and deep operations often require detailed synchronization to ensure that the correct timing of actions occurs. During planning and preparation, the commander and staff identify milestones in the execution that assist in maintaining control by triggering another planned action. As the staff monitors and assesses the progression of the deep operation, they continuously update running estimates, analyze the operational priorities, and synchronize assets and efforts based on their original plan, required deviations, and available resources.

TRIGGERS

B-55. A trigger is an enemy or friendly action that initiates a planned response. Triggers drive the execution of deliberate attacks. For example, an enemy armored force that maneuvers into a named area of interest may trigger an attack reconnaissance company to depart the holding area to occupy attack by fire positions oriented on an EA. The initiation of SEAD may be triggered when the attack reconnaissance company crosses the FLOT enroute to the EA.

B-56. The execution of an air assault operation is time driven or event driven. Final coordination times for an air assault operation are synchronized between the executing air assault unit and the supported ground unit. An example trigger event for an air assault operation would be the completion of a successful deception operation in another part of the AO. The event shifts the enemy's focus and security away from the air assault objective.

RUNNING ESTIMATES

B-57. A *running estimate* is the continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. (ADP 5-0) Accurate running estimates are critical to aviation operations in the deep area to ensure effective synchronization of enabling assets such as SEAD and sustainment. For example, an attack reconnaissance battalion (ARB) conducting a continuous attack on an enemy force requires an immediate stock of munitions to ensure timely rearming. The ARB must accurately report its current expenditures while the G4 ensures adequate stockage of munitions based on the running estimates.

PRIORITIZING MISSION REQUIREMENTS

B-58. Division and corps staffs analyze priorities to permit the shifting of assets as the tactical situation develops. This includes prioritizing efforts such as fires, joint assets, intelligence, and sustainment.

SYNCHRONIZATION OF ASSETS AND ACTIONS

B-59. The COIC synchronizes assets and actions throughout all phases of the operation. While various assets are synchronized in specific phases, other assets such as airspace management and control, intelligence collection, and sustainment operations are synchronized continuously throughout the entire operation.

- **Planning and preparation.** An execution matrix is established to synchronize execution and includes intelligence, aviation maneuver, fires, joint assets, and mission command. The matrix includes the timeline in relation to the decision support template and infiltration. It also includes such key events as identifying the enemy at the named areas of interest and validating the execution matrix.
- **Infiltration**. Units involved with the operation must take part in planning and coordination to preclude fratricide. The division or corps must coordinate the passage of lines with subordinate units.
- **Maneuver to objective**. While maneuvering to the objective, intelligence updates the enemy air defense common operational picture as the aviation attack continues. Enemy air defense concentrations or significant changes, as well as situation reports, are reported to subordinate units.
- **Actions on the objective**. Critical to actions on the objective is that the intelligence collection continues and validates the commander's critical information requirements.
- **Exfiltration**. While the attack unit engages the target, intelligence collection begins to shift to the egress route. Locations of enemy air-defense systems that have been identified during the attack will used to update the SEAD plan. Any new concentrations of enemy air-defense systems will be reported to attacking units. Synchronization of a rearward passage of lines is critical to the prevention of fratricide.
- **Reconstitution and assessment**. The attack unit will require time to conduct post-mission sustainment and recovery operations. Division or corps staffs will analyze intelligence gathered during the mission to facilitate future operations.

ASSESSMENT

B-60. Combat assessment is conducted to evaluate the effectiveness of the operation. Based on this information, the enemy's ability to conduct further operations is continuously estimated. During the review of the effectiveness of the operations, further attacks are proposed. The assessments feed the targeting cycle and affect future operations in the deep and close areas.

BATTLE DAMAGE ASSESSMENT

B-61. For deep operations, UAS and other division or corps reconnaissance assets begin BDA as soon as the egress begins. Sensors obtain intelligence for the division and corps to estimate the enemy's combat effectiveness. They also provide probable courses of action and a window of opportunity for friendly maneuver.

MUNITIONS EFFECTIVENESS ASSESSMENT

B-62. Munitions effectiveness assessment is conducted concurrently and interactively with BDA. Planners assess the employment of the assets and munitions used to gauge the effect on the enemy and will adjust future operations based on the effectiveness of munitions.

REENGAGEMENT RECOMMENDATIONS

B-63. Based on the BDA and munitions effectiveness assessment analysis, the intelligence officer, in conjunction with fires and operations, consider the level to which objectives have been achieved and make recommendations to the commander. The commander must then decide whether to reengage the target or pursue another course of action.

Appendix C

Deep Operations Vignettes

As described in chapter one, commanders conduct deep operations in both contiguous and noncontiguous areas of operation to set the conditions for subordinate commanders in the close area. This appendix provides two vignettes that illustrate the planning, preparation, execution, and assessment required to conduct deep operations. The first vignette provides an example of a deep operation that occurs in a nonlinear, noncontiguous AO while the second vignette provides an example of deep operations that occurs in a linear, contiguous AO.

VIGNETTE #1: NONLINEAR, NONCONTIGUOUS AO

C-1. Army Aviation attacks, air assaults, and raids in the deep area are not limited to linear frameworks, but may also shape the enemy in a nonlinear and noncontiguous AO as well. Unbound by complex terrain and able to rapidly mass combat power to achieve the element of surprise, Army Aviation provides the ground maneuver commander the speed, mobility, and lethality required to gain a position of relative advantage during security operations.

C-2. In this scenario (refer to figure C-1 on page C-3), the 52d Infantry Division (ID) has secured key terrain in the littorals with brigade combat teams (BCTs) and is currently performing tasks in support of stability. Within the close area, the BCTs are conducting civil control and civil security operations while gray eagles from the ARB are conducting screen operations in the deep area to identify designated high payoff targets.

C-3. During the planning and subsequent targeting cycles, the targeting working group analyzed and nominated targets to the commander at the targeting board. The commander provided guidance, established priorities, and approved the high-payoff target list, attack guidance matrix, and target selection standards. The commander's decision to allocate resources to these selected targets located in the deep area may trigger the formation of the deep-operations planning team to plan, coordinate, and synchronize a deep operation.

C-4. In this scenario, the gray eagles observed a company formation of enemy technical vehicles moving into the 52d ID's AO from a neighboring state. This observation met the criteria of the HPTL, AGM, and target selection standards, and the commander determined the threat posed to friendly operations warranted preemptive action. Therefore, the deep-operations planning team convened to coordinate and synchronize complex attacks to destroy the observed enemy formation and prevent additional threats from influencing division operations.

C-5. The deep-operations planning team's concept of the operation include aviation attacks, air interdiction, and artillery strikes into EA SLEDGE to destroy the observed enemy vehicles. Simultaneous to these attacks, a company of infantry will conduct an air assault to establish a blocking position north of EA SLEDGE to prevent additional enemy forces from maneuvering into the division's AO and provide additional security for the division's stability operations. Additionally, a battery of towed artillery will move into and secure position area for artillery OR PAA 1 to extend the range of division fires, conduct strikes into EA SLEDGE and along the international border (not depicted) as required, and set the conditions for the subsequent seizure of objective (OBJ) RAM. An infantry battalion task force will execute a ground assault to seize OBJ RAM to establish a foothold for future stability operations.

C-6. Based on detailed mission analysis, parallel planning, and coordination with supporting units, the trigger to begin execution occurs when the lead enemy vehicle enters into EA SLEDGE. The ground assault, air assault, and aviation attack forces will simultaneously depart their respective attack positions and holding areas. The terrain and expected rate of movement will create the desired sequencing of events. Detailed event timings are captured on an execution matrix that the current operations integration cell will use to maintain situational awareness on the progress of the operation. Additionally, the deep-operations planning team will provide the COIC with a decision support matrix that will highlight anticipated decision points that may

result in branches, sequels, or rapid decision making. A planned transition between the deep-operations planning team and staff elements within current operations allows the chief of operations to ensure the COIC staff is prepare to provide the necessary support for successful mission accomplishment. An example decision point in this scenario includes the enemy situation near the landing zone. The aviation attack company providing reconnaissance and security for the air assault force will provide situation reports of enemy and civilian activity in vicinity of the landing area. If an unexpected large enemy force is identified, the commander may choose to continue the operation as planned, reinforce, delay or abort the air assault, or redirect air force assets or aviation attack forces from EA SLEDGE north to engage the observed formation.

C-7. To effectively integrate the joint enablers, the deep-operations planning team established a kill box. For this operation, a purple kill box (PKB) is utilized and is broken down into quadrants and keypads to deconflict and synchronize aviation maneuver, air interdiction, close air support, and fires in the deep area. This method of airspace control allows for the rapid application of air support and fires without further coordination and terminal attack control. The Army attack air mission commander will serve as the kill box coordinator and is responsible to manage and direct effective target engagements of the joint assets in EA SLEDGE.

C-8. PKB001AA2 keypads 1, 2, and 3 are designated as no fire areas (NFA) and assigned to UAS assets to screen to provide early warning of enemy forces. PKB001AA26 and PKB001AA29 are designated as NFAs to support the ingress and egress of aviation attack and assault forces. PKB001AA2 keypads 4, 5, 7, and 8 are designated as free fire areas (FFA) to facilitate the destruction of enemy forces.

C-9. Each aviation battalion task force currently has a four-point FARP located within the BCT AOs and is prepared to forward deploy an additional four-point FARP into the deep area to support future deep operations. The FARPs within the close area are self-secured by the aviation task forces' forward support companies; however, if ordered to emplace a FARP in the deep area, the FARP's security will be augmented with ground maneuver forces.

C-10. The integration and synchronization of enablers will facilitate the simultaneous execution of the attacks, air assault, and artillery raid. The kill box coordinator will provide increased control over maneuver and fires on the objective and leverage fire support and airspace control measures by ensuring the safe, efficient, and flexible use of airspace. The efforts of the deep-operations planning team will ensure that all warfighting functions are represented and synchronized into the operation, thereby resulting in the destruction of the enemy forces and the prevention of additional enemy forces from penetrating the division's AO. See Figure C-1 for an example of a deep operation in a nonlinear, noncontiguous AO.

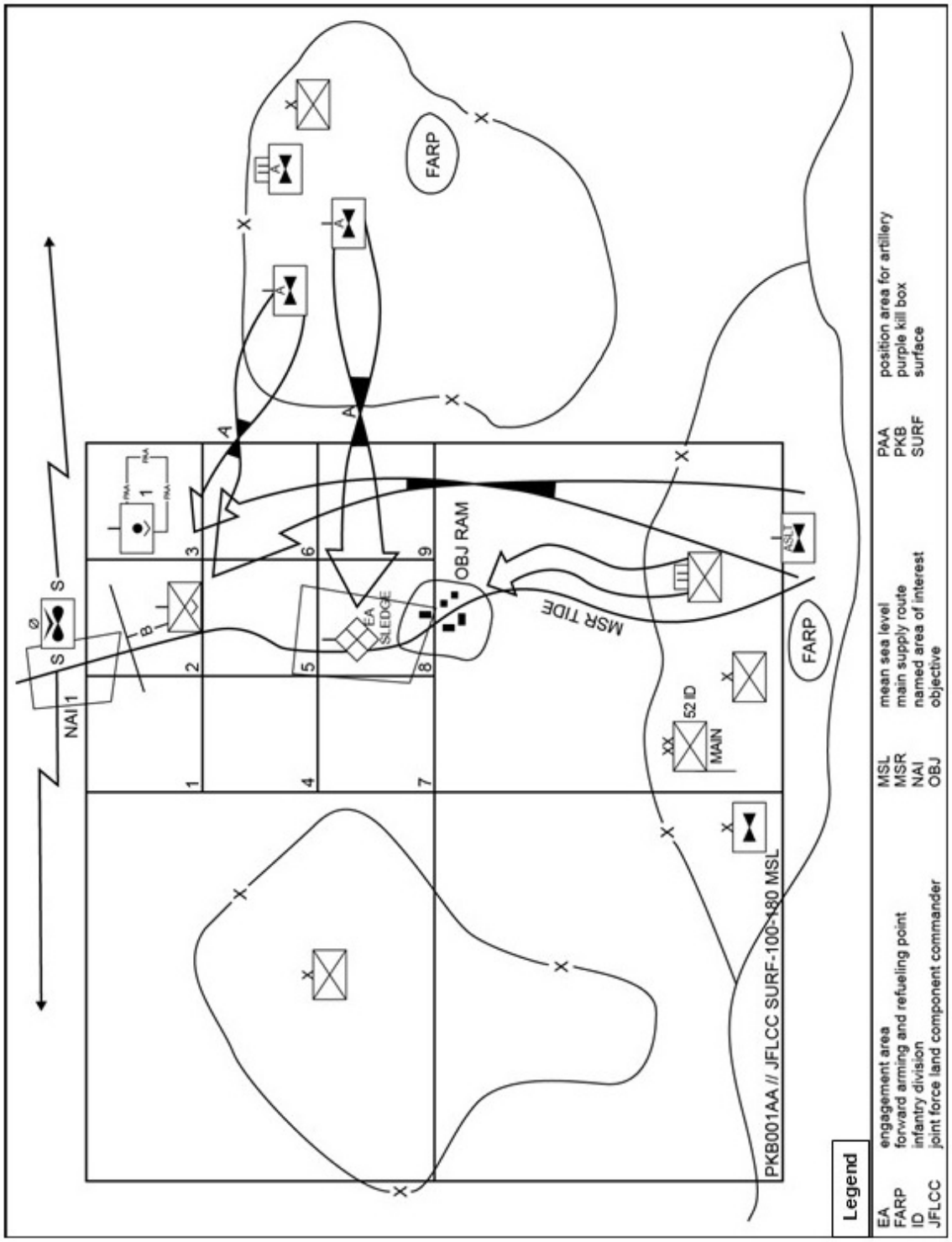

Figure C-1. Example of a deep operation in a nonlinear, noncontiguous AO

VIGNETTE #2: LINEAR, CONTIGUOUS AO

C-11. Army aviation operations and field artillery fire support in the deep area allows division and corps commanders to shape the enemy before the enemy closes with friendly forces. Army aviation coupled with field artillery strikes give corps and division commanders the ability to mass combat power rapidly against

enemy penetrations. Operations in the deep area allow friendly ground maneuver commanders to gain and maintain a position of relative advantage over the enemy.

C-12. In this scenario (refer to figure C-2 on page C-6), the 52d Infantry Division (ID) is in the defense securing a sea port of debarkation (SPOD) while the joint task force continues to build combat power. 52d ID is a supporting effort to the multinational division on the unit's eastern flank (not depicted).

C-13. Through terrain analysis, planners identified one main ground avenue of approach, depicted in the graphics as main supply route (MSR) CUBS, with the remaining terrain determined to be restricted and unconducive to a ground attack. Based on intelligence assessments and the commander's guidance, the targeting working group developed the high-payoff target list, attack guidance matrix, and target selection standards that received the commander's approval. These products then informed the information collection plan.

C-14. The targeting working group analyzed the observation, vetted and validated the target, and recommended lethal attacks against the identified enemy forces to ensure the security of the SPOD and the continued generation of combat power for the corps. The commander approved the target and the employment of aviation attacks and artillery strikes and provided additional guidance.

C-15. During early operations, an unmanned aircraft system (UAS) detected and identified elements of the enemy's 1114th Mechanized Infantry Brigade to include a mechanized infantry battalion and an armored battalion task force. The enemy forces were identified along MSR CUBS moving south towards the SPOD.

C-16. This observation triggered the assembly of the deep-operations planning team to continue development of the plan. The deep-operations planning team established additional named areas of interest to continue observation of the enemy. Based on more detailed terrain analysis and the enemy's calculated rate of movement, the deep-operations planning team recommended an EA. Through collaborative and parallel planning, the deep-operations planning team and the subordinate unit liaisons planned, integrated, and synchronized enablers, actions, and coordination measures to enhance the effects of the deep operation.

C-17. The fires cell, ARB, and combat aviation brigade (CAB) refined EA HAMMER and the associated ACMs, FSCMs, and graphic control measures for the 52d ID commander's approval. The fires cell identified the command and control elements of the enemy armor and mechanized infantry battalions as strike targets. The fires cell then coordinated with the G-3 and S-3 of the 3/52 BCT for multiple launch rocket system batteries to support strike and SEAD. The CAB also nominated attack routes, passage points, and submitted deviation requests for the established air corridors in the division AO in order to emplace a FARP near the FLOT to support the attack and a FARP in the support area to support the screen

C-18. During execution, elements of the attack reconnaissance squadron (ARS) screen forward of the BCTs at the FLOT while UAS from both the ARS and ARB conduct continuous reconnaissance in the deep area. Designated as the main effort of the attack, the ARB maneuvers through the close area, through passage points to cross the FLOT, and into the deep area to destroy enemy forces in the deep area beyond the FLOT. The organic field artillery battalions of the BCT provide on-call SEAD in support of the ARS screening along the FLOT. The corps commander allocated a MLRS battalion from the field artillery brigade to the DIVARTY to provide strike and SEAD fires in support of the division.

C-19. The MLRS battery located in PAA 2 strikes to disrupt the mechanized infantry command and control targets in EA HAMMER. The MLRS battery in PAA1 strikes command and control targets of the enemy armor battalion and provide SEAD to destroy the 2S6 unit in EA HAMMER. The ARB will attack to destroy both the mechanized infantry battalion and the armor battalion task force in order to enable the division to rapidly build combat power at the port and clear MSR CUBS for future BCT attacks in the 52d ID AO. To overwhelm the enemy with uninterrupted attacks, the ARB is conducting a continuous attack with the lead company focused on destroying the mechanized infantry battalion while the two follow-on companies and a UAS platoon designated to destroy the enemy armor-battalion task force.

C-20. The airspace for the operation that is assigned to the division headquarters and below the coordinating altitude is controlled by the JAGIC through the use of ACMs that integrate air traffic, fires, and joint assets. The JAGIC coordinates the MLRS battery platoon air hazard, target air hazard, and missile flight paths with the ARB. The MLRS fired over air corridors RAMBLER, DELOREAN, and above the elements of the ARS screening along the FLOT. The JAGIC coordinates with the air operations center for the use of airspace

above the coordinating altitude to support MLRS engagements (see ATP 3-52.1 for more information on missile fires airspace considerations). Multiple restricted operating zones were created to ensure freedom of maneuver for the UAS in the event engagements with the enemy were required. Primary and alternate routes are identified for the ARB to ingress and egress the deep area with holding areas established to ensure positive transition across the FLOT.

C-21. The extended range of the operation requires a FARP to be deployed near the FLOT. The CAB FARPs are positioned based on the capabilities of the aircraft and potential follow-on missions. Security for the FARPs is integrated with ground maneuver forces in the respective BCT areas of operation.

C-22. To facilitate an expedient exfiltration of the attack/reconnaissance aircraft, the BDA is conducted by the UAS. The BDA is relayed to the commander and staff to conduct a thorough, more in-depth analysis and reintegrate any remaining targets into the targeting cycle.

C-23. The detailed planning and integration across all warfighting functions allowed for the application of combat power in the deep area, which provided surprise, concentration, and audacity. The mobility and lethality of the ARB, compounded with the increased endurance and enhanced sensors of the UAS, facilitated the identification and destruction of the mechanized infantry battalion and armor battalion task force through precision air-to-ground and surface-to-surface fires. The 2S6 SEAD target destroyed by MLRS minutes prior to the first ARB elements arriving in their attack by fire positions, effectively neutralized a significant threat to the attack. The field artillery strikes on the enemy's command and control center in EA HAMMER disrupted the enemy's reaction and freedom of maneuver. The air-ground operation succeeded because of detailed, in-depth planning, synchronization, and rehearsals between all members of the combined arms team. Figure C-2 on page C-6 for an example of a deep operation in a linear, contiguous AO.

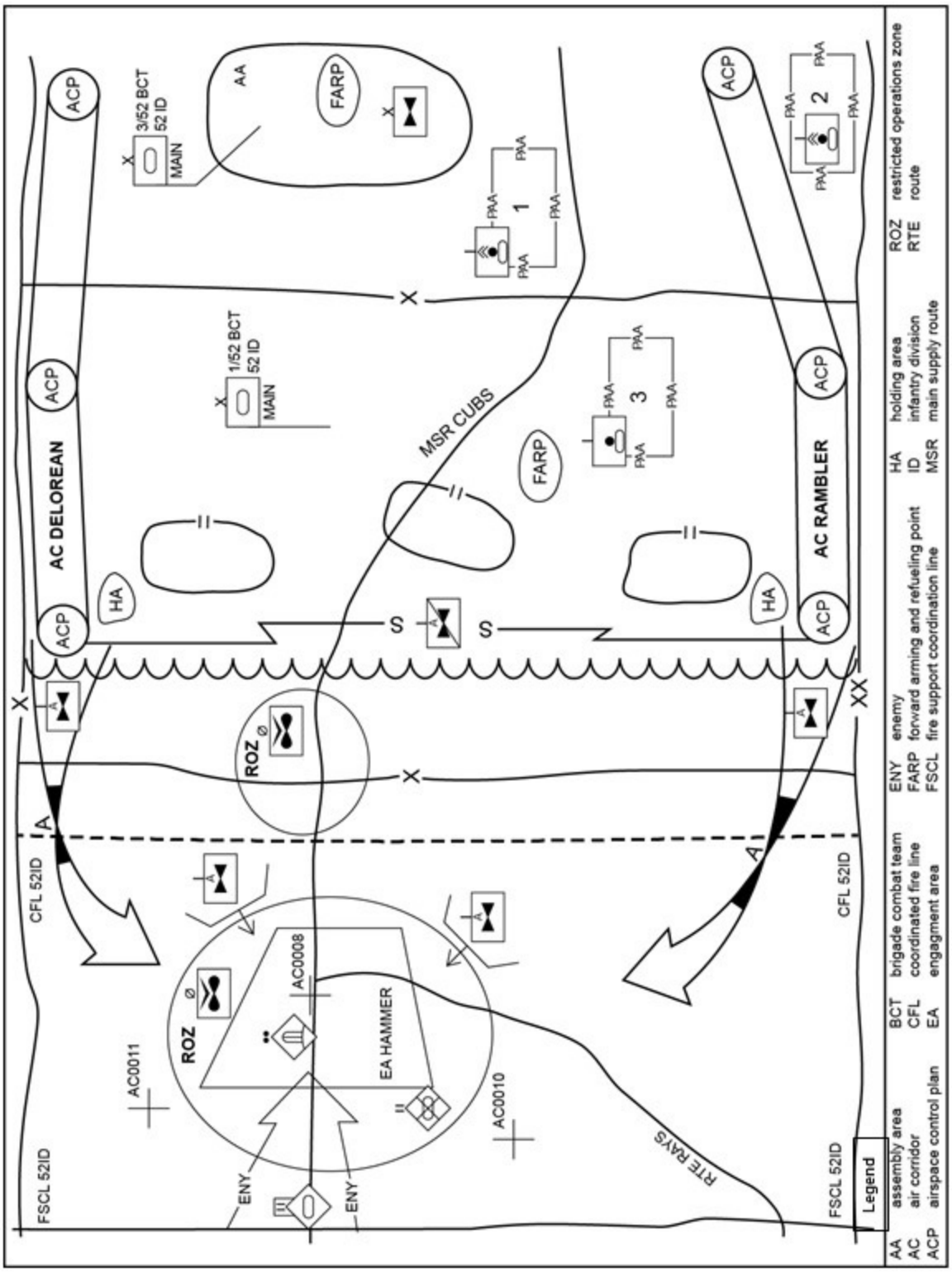

Figure C-2. Example of a deep operation in a linear, contiguous AO

Glossary

The glossary lists acronyms and terms with Army or joint definitions. Where Army and Joint definitions differ, (Army) precedes the definition. Terms for which ATP 3-94.2 is not the proponent publication (authority) for any terms.

SECTION I – ACRONYMS AND ABBREVIATIONS

ACM	airspace control measure
AGM	attack guidance matrix
AO	area of operaitions
ARB	attack reconnaissance battalion
ARS	attack reconnassance squadon
ATO	air tasking order
BCT	brigade combat team
BDA	battle damage assessment
CEMA	cyber electromagnetic acitivities
COIC	current operations integration cell
CP	command post
DIVARTY	division artillery
DSM	decision support matrix
DST	decision support template
EA	engagement area
FAB	field artillery brigade
FARP	forward arming and refueling point
FLOT	forward line of troops
FSCL	fire support coordination line
FSCM	fire support coordination measure
HIMARS	High Mobility Artillery Rocket System
HPTL	high-payoff target list
IADS	integrated air defense system
IPB	intelligence preparation of the battlefield
JAGIC	joint air ground integration center
LRSD	long range surveillance detachment
MDMP	military decisionmaking process
MISO	military information support operations
MLRS	multiple launch rocket system
PAA	position area for artillery
RIF	reconnaissance in force
SCAR	strike coordination and reconnaissance
SEAD	suppression of enemy air defense
SOF	special operations forces
UAS	unmanned aircraft system

SECTION II – TERMS

airspace control

Capabilities and procedures used to increase operational effectiveness by promoting the safe, efficient, and flexible use of airspace. (JP 3-52)

area of influence

A geographical area wherein a commander is directly capable of influencing operations by maneuver or fire support sytems normally under the commander's command or control. (JP 3-0)

area of interest

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)

area of operations

An operational area defined by the joint force commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces. (JP 3-0)

combined arms

The synchronized and simultaneous application of arms to achieve an effect greater than if each arm was used separately or sequentially. (ADRP 3-0)

commander's visualization

The mental process of developing situational understanding, determining desired end state, and envisioning an operatoin approach by which the force will achieve that end state. (ADP 5-0)

cyber electromagnetic activities

Activities leveraged to seize, retain, and exploit an advantage over adversaires and enemies in both cyberspace and the electromagnetic spectrum, while simultaneously denying and degrading adversary and enemy use of the same and protecting the mission command system. (ADRP 3-0)

decision support matrix

A written record of a war-gamed course of action that describes decision points and associated actions at those decision points. Also called DSM. (ADRP 5-0)

decision support template

A combined intelligence and operations graphic based on the results of wargaming that depicts decision points, timelines associated with movement of forces and the flow of the operation, and other key items of information required to execute a specific friendly course of action. Also called DST. (JP 2-01.3)

fire support coordination line

A fire support coordination measure established by the land or amphibious force commander to support common objectives within an area of operation; beyond which all fires must be coordinated with affected commanders prior to engagement, and short of the line, all fires must be coodinated with the establishing commander prior to engagement. Also called FSCL. (JP 3-09)

information collection

An activity that synchronzies and integrates the planning and employment of sensors and assets as well as the processing, exploitation, and dissemination systems in direct support of current and future operations. (FM 3-55)

information operations

The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrup, or usurp the decision-making of adversaires and potential adversaries while protecting our own. Also called IO. (JP 3-13)

liaison

That contact or intercommunication maintained between elements of military forces or other agenices to ensure mutual understanding and unity of purpose and action. (JP 3-08)

main effort

A designated subordinate unit whose mission at a given point in time is most critical to overall mission success. (ADRP 3-0)

operations process

The major mission command activities performed during operations: planning, preparing, executing and continuously assessing the operation. (ADRP 5-0)

planning horizon

A point in time commanders use to focus the organization's planning efforts to shape furture events. (ADRP 5-0)

protection

Preservation of the effectiveness and survivability of mission-related military and nonmmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area. (JP 3-0)

raid

An operation to temporarily seize an area in order to secure information, confuse and adversary, capture personnel or equipment, or to destroy a capabilitiy culminating with a planned withdrawal. (JP 3-0)

reconnaissance in force

A deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information. (ADRP 3-90)

risk management

The process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balace risk cost with mission benefits. Also called RM. (JP 3-0)

running estimate

The continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. (ADP 5-0)

security operations

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)

situational understanding

The product of applying analysis and judgment to relevant information to determine the relationshop among the operation and mission variables to facilitate decision-making. (ADP 5-0)

supporting effort

A designated subordinat unit with a mission that supports the success of the main effort. (ADRP 3-0)

target development

The systematic examination of potential target systems—and their components, individual targets, and even elements of targets—to determine the necessary type and duration of the action that must be exerted on each target to create an effect that is consistent with the commander's specitice objectives. (JP 3-60).

targeting

The process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities. (JP 3-0)

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Index

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1 September 2016

By Order of the Secretary of the Army:

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Chief of Staff

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