

Chapter 8

Defensive Operations

Little minds try to defend everything at once, but sensible people look at the main point only; they parry the worst blows and stand a little hurt if thereby they avoid a greater one. If you try to hold everything, you hold nothing.

Frederick the Great

8-1. Army forces defend until they gain sufficient strength to attack. Defensive operations defeat an enemy attack, buy time, economize forces, or develop conditions favorable for offensive operations. Alone, defensive operations normally cannot achieve a decision. Their purpose is to create conditions for a counter-offensive that allows Army forces to regain the initiative. Although offensive operations are usually required to achieve decisive results, it is often necessary, even advisable at times, to defend. Commanders defend to buy time, hold terrain, facilitate other operations, preoccupy the enemy, or erode enemy resources.

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PURPOSES OF DEFENSIVE OPERATIONS

8-2. The purpose of defensive operations is to defeat enemy attacks. Defending forces await the attacker's blow and defeat the attack by successfully deflecting it. Waiting for the attack is not a passive activity. Army commanders seek out enemy forces to strike and weaken them before close combat begins.

8-3. Operationally, defensive operations buy time, economize forces, and develop conditions favorable for resuming offensive operations. Therefore, major operations and campaigns combine defensive operations with offensive

operations. Operational-level defensive operations normally include offensive, stability, and support operations.

8-4. During force projection, defensive operations by in-theater or early arriving forces can maintain the operational initiative for joint or multinational forces. If conditions do not support offensive operations, initial-entry forces defend the lodgment while the joint force commander builds combat power. Initial-entry forces should include sufficient combat power to deter, attack, or defend successfully.

CHARACTERISTICS OF DEFENSIVE OPERATIONS

8-5. Successful defenses are aggressive; they use direct, indirect, and air-delivered fires; information operations (IO); and ground maneuver to strike the enemy. They maximize firepower, protection, and maneuver to defeat enemy forces. Static and mobile elements combine to deprive the enemy of the initiative. The defender resists and contains the enemy. Defending commanders seek every opportunity to transition to the offensive.

8-6. While the fundamentals of the defense continue to apply to a modernized force, advanced technology systems modify the way commanders conduct defensive operations. Greater understanding of friendly and enemy situations and the fusion of command and control (C2); intelligence, surveillance, and reconnaissance (ISR); long-range precision fires; and combat service support (CSS) technologies make the mobile defense even more lethal and effective. Whenever practical, commanders of modernized forces use the mobile defense because it takes maximum advantage of Army force strengths.

8-7. An effective defense engages the enemy with static and mobile forces. It combines the elements of combat power to erode enemy strength and create conditions for a counterattack. Defenders seek to increase their freedom to maneuver while denying it to the attacker. The enemy falters as losses increase and the initiative shifts to the defender, allowing counterattacks. Counterattack opportunities rarely last long; defenders strike swiftly to force the enemy to culminate. Preparation, security, disruption, massing effects, and flexibility all characterize successful defensive operations.

PREPARATION

8-8. The defense has inherent strengths. The defender arrives in the area of operations (AO) before the attacker and uses the available time to prepare. Defenders study the ground and select positions that allow massing fires on likely approaches. They combine natural and manmade obstacles to canalize attacking forces into engagement areas. Defending forces coordinate and rehearse actions on the ground, gaining intimate familiarity with the terrain. They place security and reconnaissance forces throughout the AO. These preparations multiply the effectiveness of the defense. Preparation ends only when defenders retrograde or begin to fight. Until then, preparations are continuous. Preparations in depth continue, even as the close fight begins.

SECURITY

8-9. Commanders secure their forces principally through security operations, force protection, and IO. Security operations help deceive the enemy as to

friendly locations, strengths, and weaknesses. They also inhibit or defeat enemy reconnaissance operations. These measures provide early warning and disrupt enemy attacks early and continuously. Force protection efforts preserve combat power. Offensive IO inaccurately portray friendly forces and mislead enemy commanders through military deception, operations security, and electronic warfare. These measures contribute to the defender's security.

DISRUPTION

8-10. Defenders disrupt attackers' tempo and synchronization with actions designed to prevent them from massing combat power. Disruptive actions attempt to unhinge the enemy's preparations and, ultimately, his attacks. Methods include defeating or misdirecting enemy reconnaissance forces, breaking up his formations, isolating his units, and attacking or disrupting his systems. Defenders never allow attackers to fully prepare. They use spoiling attacks before enemies can focus combat power, and counterattack before they can consolidate any gains. Defenders target offensive IO against enemy C2 systems and constantly disrupt enemy forces in depth.

MASSING EFFECTS

8-11. Defenders seek to mass the effects of overwhelming combat power where they choose and shift it to support the decisive operation. To obtain an advantage at decisive points, defenders economize and accept risk in some areas; retain and, when necessary, reconstitute a reserve; and maneuver to gain local superiority at the point of decision. Defenders may surrender some ground to gain time to concentrate forces.

8-12. Commanders accept risk in some areas to mass effects elsewhere. Obstacles, security forces, and fires can assist in reducing risk. Since concentrating forces increases the threat of large losses from weapons of mass destruction (WMD), commanders use deception and concealment to hide force concentrations. They also protect their forces with air and missile defenses.

FLEXIBILITY

8-13. Defensive operations require flexible plans. Planning focuses on preparations in depth, use of reserves, and the ability to shift the main effort. Commanders add flexibility by designating supplementary positions, designing counterattack plans, and preparing to counterattack.

TYPES OF DEFENSIVE OPERATIONS

8-14. The three types of defensive operations are the mobile defense, area defense, and retrograde. All apply at both the tactical and operational levels of war. *Mobile defenses* orient on destroying attacking forces by permitting the enemy to advance into a position that exposes him to counterattack. *Area defenses* orient on retaining terrain; they draw the enemy in an interlocking series of positions and destroy him largely by fires. *Retrogrades* move friendly forces away from the enemy to gain time, preserve forces, place the enemy in unfavorable positions, or avoid combat under undesirable conditions. Defending commanders combine the three types to fit the situation.

8-15. All three types of defense use mobile and static elements. In mobile defenses, static positions help control the depth and breadth of the enemy penetration and retain ground from which to launch counterattacks. In area defenses, commanders closely integrate patrols, security forces and sensors, and reserve forces to cover gaps among defensive positions. They reinforce positions as necessary and counterattack as directed. In retrograde operations, some units conduct area or mobile defenses or security operations to protect other units that execute carefully controlled maneuver or movement rearward. They use static elements to fix, disrupt, turn, or block the attackers. They use mobile elements to strike and destroy the enemy.

MOBILE DEFENSE

8-16. The *mobile defense* is a type of defensive operation that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force (see Figure 8-1). A mobile defense requires defenders to have greater mobility than attackers. Defenders combine offensive, defensive, and delaying actions to lure attackers into positions where they are vulnerable to counterattack. Commanders take advantage of terrain in depth, military deception, obstacles, and mines while employing fires and maneuver to wrest the initiative from the attacker.

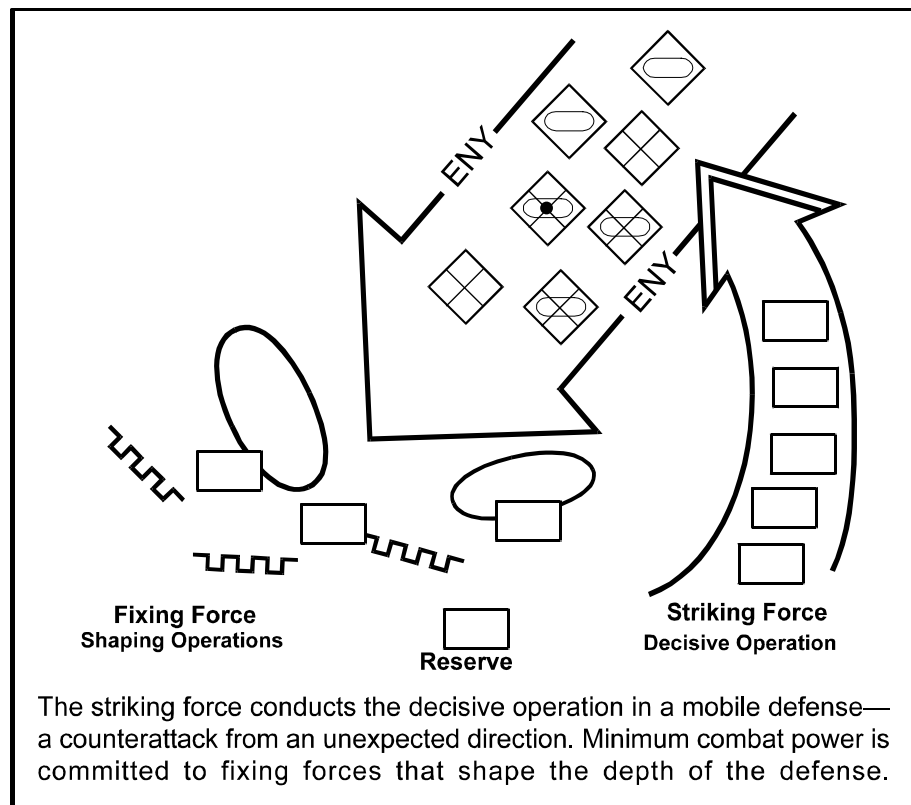


Figure 8-1. Mobile Defense

8-17. Commanders commit the minimum force necessary to purely defensive tasks. They place maximum combat power in a striking force that

counterattacks as the enemy maneuvers against friendly positions. Striking forces are considered committed throughout the operation. They have one task: plan, prepare, and execute the decisive operation—the counterattack. Defenders draw attackers into terrain that enables the striking force to counterattack from an unexpected direction. They press the counterattack with overwhelming force and violence.

A *striking force* is a committed force organized to conduct the decisive attack in a mobile defense. It normally comprises the maximum combat power available to the commander at the time of the attack.

8-18. In planning a counterattack, commanders consider enemy options and the likely locations of possible follow-on forces. Commanders decide where to position the striking force, what routes and avenues of approach to use, what fire support is necessary, and what interdiction or attack on follow-on forces will isolate the enemy. They combine military deception and security operations to render enemy reconnaissance ineffective.

8-19. In addition to the striking force, commanders designate a reserve, if forces are available. Reserves are uncommitted forces and may execute numerous missions. They give the commander flexibility. Reserves support fixing forces, ensuring that the defense establishes conditions for success of the counterattack. If the reserve is available after the commander commits the striking force, it exploits the success of the striking force.

AREA DEFENSE

8-20. The ***area defense*** is a type of defensive operation that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright (see Figure 8-2, page 8-6). The bulk of defending forces combine static defensive positions, engagement areas, and small, mobile reserves to retain ground. Keys to successful area defenses include effective and flexible control, synchronization, and distribution of fires. Area defenses employ security forces on likely enemy avenues of approach. Commanders employ a reserve with priority to the counterattack. Other potential reserve missions include blocking enemy penetrations and reinforcing other portions of the defense. Area defenses can also be part of a larger mobile defense.

8-21. Area defenses vary in depth, design, and purpose according to the situation. Commanders deny or retain key terrain if the friendly situation gives no other option or friendly forces are outnumbered. Lower-echelon tactical units may position their forces in battle positions on suitable terrain. On occasion, commanders may use a strong point to deny key terrain to the enemy and force his movement in a different direction. Constructing a strong point requires considerable time and engineer support.

RETROGRADE

8-22. A ***retrograde*** is a type of defensive operation that involves organized movement away from the enemy. The three forms of retrograde operations are withdrawals, delays, and retirements. Commanders use

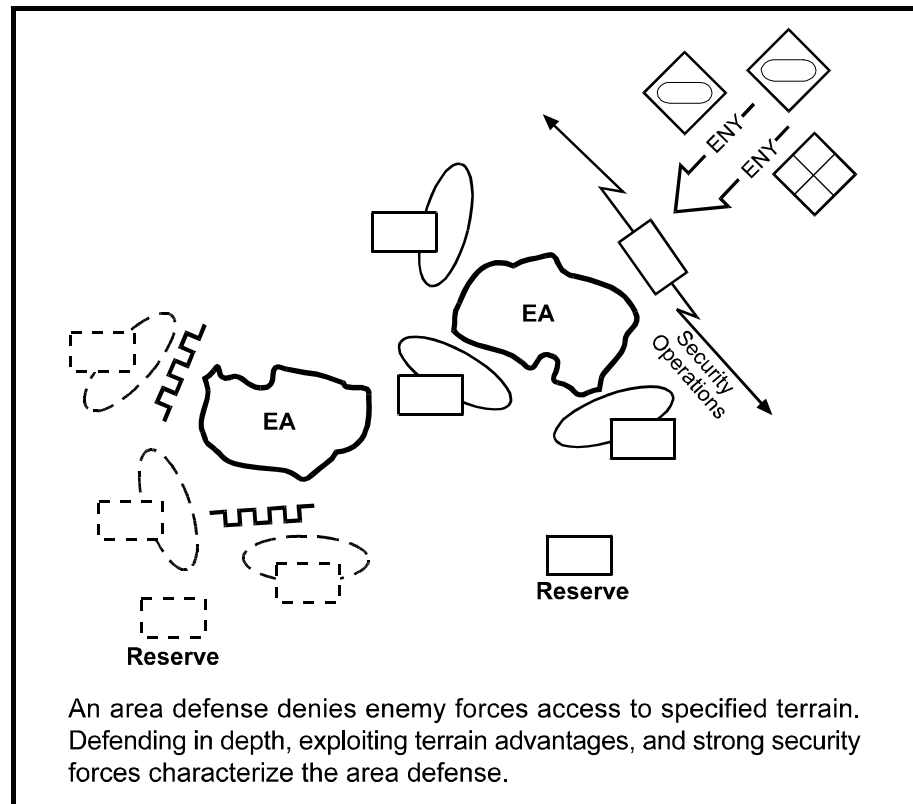


Figure 8-2. Area Defense

retrogrades as part of a larger scheme of maneuver to create conditions to regain the initiative and defeat the enemy. Retrogrades improve the current situation or prevent a worse situation from occurring. Operational-level commanders may execute retrogrades to shorten lines of communications (LOCs).

Withdrawal

8-23. A *withdrawal*, a form of retrograde, is a planned operation in which a force in contact disengages from an enemy force. Withdrawals may involve all or part of a committed force. Commanders conduct withdrawals to preserve the force, release it for a new mission, avoid combat under undesirable conditions, or reposition forces. Enemy pressure may or may not be present during withdrawals. At tactical echelons, withdrawing forces may be unassisted or assisted by another friendly force.

8-24. In a corps or division withdrawal, commanders organize a security force and a main body. The security force prevents the enemy from interfering with the withdrawal. The main body forms behind the security force and moves away from the enemy; the security force remains between the enemy and the main body and conceals main body preparations and movement. If the withdrawal begins without being detected, the security force may remain in position to prolong the concealment. After the main body withdraws a safe distance, the security force moves to intermediate or final positions. If the enemy detects the withdrawal and attacks, the security force delays to allow

the main body to withdraw. Main body units may reinforce the security force if necessary. They will themselves delay or defend if the security force fails to slow the enemy.

8-25. Commanders plan for and employ air and ground reserves, indirect and missile counterfire, and air defenses. Corps and division reserves remain near main body units to assist withdrawing units by fire and maneuver, if needed. Corps and division reserves may execute spoiling attacks to disorganize and delay the enemy or to extricate encircled or decisively engaged forces.

8-26. Commanders use IO and security operations when withdrawing to deny the enemy information and present false information. They avoid moving forces prematurely or revealing other actions that could signal their withdrawal plans. For example, relocating combat support (CS) and CSS facilities, emplacing obstacles, and destroying routes may signal a withdrawal. To seize the initiative, commanders direct offensive IO that include measures to conceal withdrawal preparations.

8-27. Commanders dedicate resources and plan for future operations when withdrawing. The ability to conduct a timely withdrawal is especially dependent upon sufficient transport. CSS planners assist in developing courses of action and adjust sustaining operations to conform to the commander's decisions. A withdrawal ends when the force breaks contact and transitions to another operation. Forces may withdraw into a defended area and join its defense, withdraw into a secure area and prepare for future operations, or continue away from the enemy in a retirement.

Delay

8-28. A *delay* is a form of retrograde in which a force under pressure trades space for time by slowing the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged. Delays gain time for friendly forces to—

- Establish defenses.
- Cover defending or withdrawing units.
- Protect friendly unit flanks.
- Contribute to economy of force.
- Draw the enemy into unfavorable positions.
- Determine the enemy main effort.

8-29. Commanders direct delays when their forces are insufficient to attack or conduct an area or mobile defense. A delay is also appropriate as a shaping operation to draw the enemy into an area for subsequent counterattack. Commanders specify the critical parameters of the delay:

- Its duration.
- Terrain to retain or deny.
- The nature of subsequent operations.

8-30. Delays can involve units as large as a corps and may be part of a general withdrawal. Divisions may conduct delays as part of a corps defense or withdrawal. In a delay, units may fight from a single set of positions or delay using alternate or successive positions. A delay ends when—

- Enemy forces halt their attack. Friendly forces can then maintain contact, withdraw, or counterattack.
- Friendly forces transition to the defense.
- The delaying force completes its mission and passes through another force or breaks contact.
- The friendly force counterattacks and transitions to the offense.

8-31. Delaying units should be at least as mobile as attackers. Commanders take measures to increase friendly mobility and decrease enemy mobility. Open, unobstructed terrain that provides friendly force mobility requires major engineering efforts to hinder enemy mobility. Close or broken terrain slows the enemy but also makes it more difficult to maintain contact and may hinder friendly movement.

Retirement

8-32. A retirement is a form of retrograde in which a force not in contact with the enemy moves away from the enemy. Typically, forces move away from the enemy by executing a tactical road march. Retiring units organize to fight but do so only in self-defense. Retirements are usually not as risky as delays and withdrawals.

Risk in Retrograde

8-33. Retrogrades require firm control and risk management. They increase psychological stress among soldiers, who may see movement away from the enemy as a sign of defeat. Unless held in check, such concerns can lead to panic and a rout. Successful retrogrades require strong leadership, thorough planning, effective organization, and disciplined execution. Friendly troops move swiftly but deliberately. A disorganized retrograde in the presence of a strong enemy invites disaster. Commanders manage risk during retrogrades with these measures:

- Avoiding decisive engagement. Reserves and massed indirect and joint fires can assist in accomplishing this.
- Preparing plans to enhance rapid, controlled execution.
- Denying the enemy information on unit movement.
- Avoiding surprise with continuously updated intelligence.
- Combining deception and delaying actions to prevent the enemy from closing in strength.

DEFENSIVE OPERATIONS WITHIN THE OPERATIONAL FRAMEWORK

8-34. Commanders use the operational framework (AO, battlespace, and battlefield organization) to conduct defensive operations (see Figure 8-3). Commanders base their framework on METT-TC and an understanding of their battlespace. They conduct simultaneous and sequential decisive, shaping, and sustaining operations in depth by synchronizing their forces in time, space, resources, purpose, and action. Commanders may designate deep, close, and rear areas when conducting operations that are generally linear and contiguous.

repeatedly to defeat an attack. If they correctly anticipate enemy actions, commanders can execute their plan for the decisive operation despite shifting the main effort. They always designate the decisive operation as the main effort at the decisive point.

8-38. Reserves preserve commanders' flexibility and provide a hedge against uncertainty. Once, the reserve is committed, its operation becomes the main effort. If commanders commit their reserve, they should immediately designate another from uncommitted forces or forces in less threatened areas. Commanders may employ reserves throughout the operation. Typical reserve missions include counterattacking, reinforcing, blocking, and destroying a penetration. Commanders avoid assigning tasks to the reserve other than those required to support planning and preparing for their be-prepared missions. Reserves are best used to reinforce and expedite victory rather than prevent defeat. The concept of operations determines the reserve's primary mission. Unless otherwise delegated, the commander designating the reserve retains authority for its commitment.

Decisive Defensive Operations—Pusan, Korea

By the end of August 1950, the North Korean People's Army (NKPA) occupied most of the Republic of Korea (ROK), less the Pusan pocket on the southeast portion of the peninsula. President Kim Il Sung was amazed at the speed with which the NKPA had moved south, and he assembled 98,000 more troops to crush the Eighth Army. Precariously held, the Pusan pocket contained about 120,000 US and ROK soldiers. The operation became hundreds of large and small engagements marked by thousands of casualties.

The NKPA struck at numerous points along the perimeter, expending men and resources in an effort to create a penetration. But the line held and fresh United Nations (UN) forces arrived to bolster the defense. Sensing that an opportunity was slipping away, the NKPA attacked with increased intensity on 31 August 1950. Despite tremendous punishment by UN air force bombing and strafing, the North Koreans breached the defensive lines in several areas. The 24th Infantry Division counterattacked, while the 1st Cavalry Division and the 1st ROK Division held at Taegu. Two enemy divisions struck the 25th Infantry Division in a bloody fight that saw Sobuk Ridge change hands 13 times in less than a month. The line held despite US units giving ground or fighting in isolation. While the NKPA made impressive gains along the perimeter, the defense held and the ports remained open.

The defense of the Pusan perimeter proved decisive in that it broke the North Korean will to continue the attack and fixed remaining enemy forces. Further north, US forces executed Operation Chromite at Inchon, a turning movement that trapped the NKPA, threatened it with imminent destruction, and allowed UN forces in the Pusan pocket to break out and resume offensive operations.

SHAPING OPERATIONS IN THE DEFENSE

8-39. Shaping operations executed simultaneously throughout the AO support the conduct of the defender's decisive operation by upsetting the attacker's design. They selectively suppress or neutralize the enemy's BOS and disrupt his synchronization. IO shape enemy perceptions and can influence the decision to attack. Fires contribute to shaping operations by attacking high-payoff targets and create conditions for successful decisive operations. Shaping operations in the defense include—

- Countermobility and mobility operations.
- Reconnaissance and security operations.
- Aerial-delivered and long-range precision indirect fires.
- Passages of lines (forward and rearward).
- Actions of fixing forces that shape to support the decisive operation.
- Movements of units that directly facilitate other shaping operations and the decisive operation.
- Actions by reserve forces before their commitment.

8-40. Security forces perform critical functions in the defense. They secure gaps between defending units, protect the force from surprise, meet the leading enemy forces, strip away reconnaissance and security elements, report enemy strengths and locations, and help identify the enemy decisive operation. They harass and slow attacking forces to gain time and space for shaping enemy actions and protecting LOCs, headquarters, fire support units, and reserves.

Shaping Defensive Operations—2d SANG Brigade at Khafji

Defensive operations often have significant political implications. During the evening of 29 January 1991, the Iraqi 5th Mechanized Division launched several large probes across the Saudi Arabian border. Elements of the 2d Saudi Arabian National Guard (SANG) Brigade—a force accompanied by American advisors and a Marine air/naval gunfire liaison company—met them at the town of Khafji, Saudi Arabia. The Iraqis seized the town, cutting off two Marine reconnaissance teams, who evaded capture while continuing to call in air and field artillery support. The next day, the 2d SANG Brigade attempted to retake Khafji without success. However, on 31 January, the brigade attacked again, and by 1 February succeeded in clearing Iraqi resistance.

This relatively small tactical action was important because it convinced the theater commander that the Iraqis could not conduct complex operations and were vulnerable to air interdiction. This information helped to shape future coalition operations. The action, by demonstrating that the Saudi forces would fight aggressively, strengthened the coalition and bolstered its will. Lastly, the operation demonstrated that US and coalition forces could conduct successful multinational operations, a discovery with strategic implications.

SUSTAINING OPERATIONS IN THE DEFENSE

8-41. Sustaining operations in the defense occur throughout the AO. Commanders ensure freedom of action and continuity of the defense by conducting CSS operations, rear area and base security, LOC maintenance, movement control, and terrain management.

8-42. Security for sustaining operations is a primary concern. Commanders organize forces and terrain to protect sustaining operations and retain freedom of action. Commanders group forces performing sustaining operations into bases and base clusters for protection and security. Base and base clusters organize for self-defense. Commanders designate response forces and tactical combat forces (TCFs) to augment base cluster self-defense capabilities (see FM 3-90; FM 3-100.7).

8-43. Force projection operations present distinct security challenges for sustaining operations. To protect combat power buildup, combat, CS, and CSS forces operate in the same area while establishing the initial lodgment. Forces conducting sustaining operations take increased active and passive self-protection measures until combat forces are available. Commanders assess threat capabilities, decide where and when to accept risk, and assign units to protect and sustain the force.

CONSIDERATIONS FOR NONLINEAR DEFENSIVE OPERATIONS

8-44. Commanders may conduct nonlinear defensive operations in contiguous and noncontiguous AOs. In both cases, defenders focus on destroying enemy forces, even if it means losing physical contact with other friendly units. Successful nonlinear defenses require all friendly commanders to understand the higher commander's intent and share a current common operational picture (COP). They also favor use of a battlefield organization based on decisive, shaping, and sustaining operations rather than deep, close, and rear areas. Noncontiguous defenses are generally mobile defenses; however, some subordinate units may conduct area defenses to hold key terrain or canalize attackers into engagement areas. Even mobile defenses that begin as linear operations often evolve into nonlinear operations. Area defenses are typically more linear operations because of their orientation on terrain.

8-45. Nonlinear defenses place a premium on reconnaissance and surveillance to maintain contact with the enemy, produce relevant information, and develop and maintain a COP. The defending force focuses almost exclusively on defeating the enemy force in depth rather than retaining large areas due to the size of the AO. All forces conducting nonlinear defenses require robust communications and sustainment capabilities. Noncombatants and the fluidity of nonlinear defensive operations require commanders to exercise judgment in clearing fires, both direct and indirect.

CONDUCTING DEFENSIVE OPERATIONS

8-46. Before deciding how to defend, commanders assess the situation and begin to plan. A simple concept of operations flexible enough to meet the enemy wherever he chooses to attack is essential for success in the defense. Operational-level defenses combine all three types of defensive actions. If defense of a specified area is not required, commanders may draw the enemy

deep into their AO and strike his flanks and rear. They use spoiling attacks if conditions favor them.

PLANNING FOR DEFENSIVE OPERATIONS

8-47. In planning a defense, operational commanders identify their own and the enemy's centers of gravity and related decisive points. They also identify the likely way the enemy will attack. Commanders estimate where the enemy will conduct his decisive operation and how to defeat it while maintaining the coherence of the defense. Operational commanders allocate resources and assign AOs to subordinate tactical units. They decide where and when to defend and generally match friendly strength to enemy strength.

8-48. Commanders consider the factors of METT-TC as they plan their defense. They choose defensive positions that force the enemy to make costly attacks or conduct time-consuming maneuvers to avoid them. Commanders plan IO to gain information superiority. Information superiority allows commanders to hide their intentions and deceive the enemy, while degrading the enemy's ability to synchronize his attack. Commanders plan defensive and counteroffensive operations in depth of time, space, and purpose.

Mission

8-49. The mission flows from the higher headquarters concept of operations. Commanders must understand how their defensive operation contributes to the success of the higher headquarters operation. The nature of the AO and subsequent missions affect the missions commanders assign to subordinates.

Enemy

8-50. Commanders and staffs estimate enemy offensive capabilities, vulnerabilities, and operational design. At tactical levels, commanders estimate enemy strengths, weaknesses, and intent. They infer potential enemy courses of action and focus their estimates on the most dangerous and most likely of them. Commanders and units respect, but are not paralyzed by, enemy capabilities. Defending commanders view themselves and their AOs through the enemy commander's eyes and anticipate how he might attempt to seize terrain or destroy friendly forces.

8-51. Defending commanders conduct a thorough intelligence preparation of the battlefield (IPB) as part of their visualization. IPB enables commanders and staffs to anticipate the enemy's objectives and courses of action and helps determine what control measures to use. In particular, planners anticipate enemy use of indirect approaches and capability to attack friendly C2 and sustaining operations.

8-52. Commanders use every resource available to offset attackers' numerical advantages, identify threats, and mass combat power against their vulnerabilities. Victory requires accurate and timely in-depth targeting of enemy units, facilities, and systems. Real-time fusion of information among C2, ISR, fire support, engineer, aviation, and CSS elements helps commanders do this. A successful defense compels enemies to commit to a course of action before they want to and creates opportunities for friendly forces.

Terrain and Weather

8-53. Defenders analyze the terrain to decide where they can best kill the enemy. Defending large AOs requires commanders to take risks and accept gaps. Smaller AOs may restrict maneuver and limit flexibility. Subordinate unit AOs should extend far enough toward the enemy to give commanders time to assess enemy capabilities and intentions, visualize the operation, decide on a course of action, and execute it. Operational-level commanders consider large-scale geographic features and choose the best terrain for defending based on their mission. The geography should hinder operational mobility of large enemy formations and provide advantages for the operational defense. A defense lacks value if the enemy can readily bypass it, unless the defensive focus is to retain that terrain. Commanders also consider friendly LOCs. Geography determines LOC capacity and the size force LOCs can support. Operational commanders commit significant resources to improve LOCs and friendly mobility, and to degrade enemy operational mobility.

8-54. The commander's personal reconnaissance is essential. Tactical commanders focus on identifying probable enemy assembly areas, CSS dispositions, field artillery locations, and ground favoring an attack. They also determine the area most advantageous for the enemy decisive operation. Terrain characteristics may determine the shape of the defense. Tactical commanders seek positions that offer effective cover and concealment. The defending force exploits any aspect of terrain that can slow enemy momentum or make it difficult for the enemy to mass effects or conduct maneuver.

8-55. Defenders seek to engage attackers at points where the terrain places them at the greatest disadvantage. Defending commanders use manmade obstacles to improve natural obstacles; to fix, disrupt, turn, or block enemy movement; and to protect friendly positions and maneuver. Some terrain may be so significant to the defense that its loss would prove decisive. In such cases, commanders focus their plan on retaining it.

8-56. Weather and visibility affect how defenders use terrain. Commanders plan for the effects of adverse or limited visibility on weapons systems and optical and thermal devices. A plan that succeeds in clear conditions may be less effective during bad weather. Branches to the basic plan should address necessary modifications to the defense during periods of reduced visibility. Commanders and staffs need local tactical weather information as well as the more general theater-level forecasts.

Troops and Support Available

8-57. As they visualize the operation, commanders consider the capabilities of their force, teamwork, state of training, and leader experience. The firepower, mobility, protection, health, morale, and training of troops determine, to some extent, how they defend. Differences in unit tables of organization and equipment, mobility, training, and leadership make some units more suitable for some missions than for others. In multinational operations, for example, particular defensive arrangements may be necessary to accommodate national pride or interests. Defenders exploit relative strengths in tactics and capabilities that give defenders advantages over the attackers. These may include air

assault and attack helicopter capabilities, night combat experience, long-range precision fires, intelligence, and battle command.

Time Available

8-58. The time available to prepare is a crucial factor. The defense is more effective when time is available to plan decisive, shaping, and sustaining operations; conduct reconnaissance and deliberately occupy positions; fortify the ground, plan fires, and install obstacles; coordinate maneuver, fires, and CSS; and rehearse. Commanders at all echelons manage their resources to prepare the best defense time allows. They establish priorities of support that focus work on the unit designated to conduct the decisive operation. They set priorities to focus units on the most important tasks.

8-59. Small units train to defend with minimal preparation when necessary; however, strong defenses take time to organize and prepare. To gain time for the main body to organize the defense, commanders may order a delay by a covering force or a spoiling attack by ground or air units. Lack of time and uncertainty about factors such as the enemy order of battle, main effort, and objectives may compel commanders to designate a larger reserve or accept greater risk. It may also determine the type of defense to be employed.

Civil Considerations

8-60. International law and moral imperatives require Army forces to consider the effects of operations on civilian populations. The defense of national boundaries may require operational commanders to defend in less depth than they would like. The presence of culturally, economically, and politically significant assets may limit the range of options. Countermobility operations directed at economically important roads, railways, and bridges might be prohibited. When Army forces must damage areas that are important to civilians, they ensure that civilian leaders and populations understand why these actions are necessary.

8-61. AOs with large civilian populations often require a portion of the force to conduct support operations. Units may expend significant resources to evacuate endangered populations. Commanders implement restrictive fire support coordinating measures to protect civilian facilities and areas, consistent with rules of engagement (see FM 3-09). Army forces must consider civilian movements when emplacing minefields.

PREPARING FOR DEFENSIVE OPERATIONS

8-62. Defensive preparations begin as early as possible and continue throughout the operation. Parallel planning facilitates simultaneous preparation at all command levels. As staffs prepare plans, leaders conduct a personal reconnaissance. There is no substitute for actually seeing and walking the defensive area. Commanders at all echelons integrate adjustments resulting from preparation activities. All echelons refine their plans in parallel.

8-63. A thorough rehearsal contributes to effective execution. At tactical levels, rehearsals usually take place on prominent terrain overlooking the defensive area, with a terrain model or a map. At the operational level, they involve simulations and command post exercises. Such rehearsals preceded

Operations Just Cause, Desert Shield, and Uphold Democracy. Joint exercises are often operational-level rehearsals. Rehearsals allow subordinate commanders and staffs to review what they are required to do and when. They aid mutual understanding and promote synchronized actions. Rehearsals permit adjustments to the plan and refinement of responsibilities for actions and contingencies at critical points in the operation.

8-64. The most important preparation activities include—

- Conducting rehearsals.
- Developing engagement areas.
- Executing shaping IO, including military deception operations.
- Taking force protection measures, to include strengthening air and missile defenses of critical assets.
- Executing security operations.
- Conducting reconnaissance and surveillance missions to collect information on the enemy and AO.
- Preparing reserves.
- Designating counterattack forces.
- Organizing the force for movement and support.
- Positioning forces in depth.
- Improving terrain to favor the defender.

EXECUTING DEFENSIVE OPERATIONS

8-65. Commanders consider several factors as they exercise battle command during defensive operations. Army forces conduct operations in depth; commanders consider how best to employ their force throughout the AO. Defending in depth may result in enemy penetrations or parts of the force becoming encircled; commanders visualize how to deal with these situations. Elements of the force conduct sustaining operations throughout the AO; commanders make provisions for protecting them. If WMD are present, commanders prepare the force to counter their effects. Finally, commanders visualize how they will use a counterattack to terminate the defense and transition to offensive operations.

Battle Command

8-66. Commanders position themselves at the critical place at the critical time. In the defense, this may include moving with the counterattacking force or locating with the committed reserve. Commanders should anticipate and provide for the means to exercise C2 on the move.

Operations in Depth

8-67. In both area and mobile defenses, commanders direct simultaneous operations in depth to ensure success of the decisive operation. Simultaneous shaping operations throughout the AO limit enemy options, disrupt his synchronization and affect follow-on element arrival times. Reconnaissance, surveillance, security, air elements, and special operations forces all have roles in the defense. As attackers approach, these forces monitor their activities

and track committed units. They determine the avenues of approach being used, identify the greatest threat, and gain time for the main body to act.

Enemy Penetrations

8-68. Commanders use all available means to contain or destroy enemy penetrations. In an area defense, commanders block and eliminate penetrations as quickly as possible. In a mobile defense, commanders may allow a significant penetration to position attackers for destruction by the striking force. Commanders shift their main effort to counter enemy actions and create conditions that favor the decisive operation. This may require adjusting boundaries, repeatedly committing and reconstituting reserves, and executing branches to the original plan.

Encirclements and Breakouts

8-69. Units may be unintentionally cut off from friendly forces. In that case, the senior commander among the encircled units assumes control of all encircled elements and assesses the defensive posture of the force. The commander rapidly reorganizes, consolidates, and determines whether the next higher commander wants the force to break out or defend in place. If the force can break out and that action meets the higher commander's intent, it does so before the enemy has time to block escape routes.

8-70. To break out, the commander designates or organizes a force to create a penetration toward other friendly forces while the other encircled units continue defending. When the penetration is created, the defending units break contact and follow the attacking unit to rejoin friendly forces. If the force cannot break out, it continues to defend while the commander coordinates a linkup with a relieving force.

Protecting Sustaining Operations

8-71. Uninterrupted sustaining operations ensure freedom of maneuver and continuity of operations. Threats to sustaining operations may require forces and facilities to reposition. Response forces from CSS and CS units are responsible for countering threats from small tactical units. When response forces are insufficient, commanders may commit a TCF (see FM 3-90; FM 3-100.7). Because threats to sustaining operations can divert combat power from the decisive operation, commanders carefully weigh the need for such diversions against the possible consequences and decide where to accept risk.

Weapons of Mass Destruction

8-72. When present in the theater of operations, WMD present a major threat. These weapons can completely destroy the strongest defensive positions as well as obstruct maneuver. In situations where WMD may be used, commanders take both offensive and defensive actions. They attack enemy WMD C2, delivery systems, and storage areas. They protect the force through dispersion, theater missile defense, survivability positions, and individual protective measures. Commanders also adjust their operations and tactics. They fight from dispersed locations and concentrate their forces only as needed to mass the effects of fires.

Counterattacks

8-73. Counterattacks seek to wrest the initiative from the attacker. Timing is critical. Executed too soon, a counterattack may expend resources needed later for a more urgent contingency. Executed too late, it may be ineffective.

8-74. Commanders anticipate circumstances that favor counterattacks and establish information requirements that help them determine when those circumstances occur. To make these decisions wisely, commanders require relevant information about both friendly and enemy forces. Errors in computing movement and deployment times can upset the timing of the counterattack. Late or inaccurate reports about attackers can lead to executing too soon or too late. Training and experience, combined with effective information management, give commanders the relevant information needed to make the right decisions.

Terminating the Defense

8-75. Attackers culminate through friction caused by their own maneuvers, losses, errors, exhaustion, skillful friendly defenses, and other factors. At that point, the initiative passes to the defender. Commanders then designate a counterattack as the decisive operation, finish destroying the enemy force, and transition to the offense.

THE IMPACT OF TECHNOLOGY

8-76. Improved technology provides commanders increased flexibility for defensive operations. The fusion of information from C2, ISR, fire support, and CSS systems—combined with the commander's judgment—allows commanders to understand their battlespace and conduct fluid noncontiguous operations from widely dispersed locations. A COP based on this fused information helps commanders make better and quicker decisions. The increasing range and precision of direct and indirect fires allow Army forces to weaken attackers and shape the situation before entering close combat. Improved C2 and ISR systems allow commanders to disperse their forces without losing the ability to mass effects at the decisive time and place. Dispersed Army forces present tactical challenges to attackers. If attackers disperse their forces, they expose themselves to swift concentration of more mobile friendly forces. If attackers concentrate against a portion of the friendly force, the remaining friendly units maneuver in depth to isolate the enemy force and destroy it. Modern technology provides the means to conduct more flexible and deadly defensive operations than ever before. Trained soldiers and decisive leaders apply those means in uncertain situations to defeat enemies and transition to offensive operations that achieve the desired end state.